Appendix W

Draft EIS Comments and Responses

Point Thomson Project EIS - Draft EIS Comment Period Summary

The Draft Environmental Impact Statement (EIS) was posted on the project Web site November 8, 2011. Sections available to the public online included:

- Executive Summary
- Table of Contents
- Chapters 1-11
- Appendices A-U

A 45-day comment period for the Draft EIS began November 18, 2011 with the publishing of the Notice of Availability in the Federal Register. The end of comments was originally scheduled for January 3, 2012, but requests were submitted to extend the comment period. On December 22, the U.S. Army Corps of Engineers (Corps) announced a 15-day extension, moving the close of the comment period to January 18, 2012. The public notice for the 404 permit also was announced and ran concurrently with the Draft EIS comment period.

Approximately 60 copies of the Draft EIS Executive Summary (with CDs containing the Draft EIS and appendices) were sent to parties on the mailing list. Sixteen print copies of the complete Draft EIS (with appendices) were also sent to certain agencies that requested full printed copies. Copies of the Executive Summary were made available at public meetings. In addition, public meetings were followed up by the distribution of requested copies of the visual simulation CD.

PUBLIC COMMUNICATION

In addition to a Federal Register notice, announcements of availability and meeting notices were published in the newspapers shown in Table 1.

Table 1: Notice of Availability Published			
Publication Date	Venue		
November 9, 2011	Anchorage Daily News		
November 9, 2011	Fairbanks Daily News Miner		
November 10, 2011	Arctic Sounder		
November 13, 2011	Petroleum News		

The project team used a variety of ways to inform the public of project updates and meetings:

- Public service announcements were provided on local radio stations
- Community flyers were posted
- The What's Up email distribution list was used to distribute a comment period announcement
- Email notifications were sent to the project's mailing list.

Table 2 provides a list of when and where public open houses, meetings, and the project Web site were advertised.

Table 2: Advertisements and Announcements			
Publication Date	Venue		
November 13, 2011	Fairbanks Daily News Miner		
November 24, 2011	Arctic Sounder		
	Public Service Announcements		
	What's Up email distribution list		
Community flyers in the villages of Kaktovik, Nuiqsut, and Barrow			
November 28, 2011	Anchorage Daily News		
November 29, 2011 Email to agency mailing list			

Newsletter

The Draft EIS was introduced through a newsletter, which also announced the public open house meetings associated with the NEPA process. The four-page newsletter provided a description of the NEPA steps and how to comment on the Draft EIS. It was distributed by mail to a list of approximately 585 individuals on December 9, 2011. Copies of the newsletter were made available at public meetings and posted on the project Web site.

Topics covered in the newsletter included:

- Public meetings announced
- How to submit effective NEPA comments
- The NEPA process
- Project simulation available to view during the public meetings and on the Web site
- The review schedule
- December public meetings
- Call for public involvement
- Contact information

MEETINGS

During the Draft EIS comment period, public meetings were held that were open to everyone. The Corps met separately with tribal representatives and also had meetings with state and federal agencies.

Public Meetings

Five public open house meetings were held in December 2011. The Corps identified the villages of Kaktovik, Nuiqsut, and Barrow for public meetings because of the proximity to the proposed development area and potential for outreach to potentially impacted parties. Anchorage and Fairbanks were included because of the statewide interest in developing the project and potential indirect effects on

these communities, as well as to maximize efforts to engage the federal and state agencies in these communities.

Table 3: Public Meetings			
Date	Location	Number of Participants	Number of Testifiers*
December 5, 2011	Z.J. Loussac Library, Anchorage	90	30
December 7, 2011	Wedgewood Resort, Fairbanks	60	18
December 12, 2011	Marsh Creek Inn, Kaktovik	25	0
December 13, 2011	Trapper School, Nuiqsut	10	1
December 15, 2011	Hopson Middle School, Barrow	25	2

^{*} Some people who testified did so more than once.

The format for the public meetings was an open-house informational opportunity with poster displays, followed by the Corps' presentation of the environmental review process and an audio-visual presentation of the proposed project by the Applicant. These meetings provided opportunity for the public to make comments and ask questions with responses from the Corps, the Applicant, and associated entities. An on-site court reporter transcribed the comments, questions, and responses. An Inupiaq language translator was provided in Nuiqsut and Barrow to facilitate questions and comments.

Comment forms were available for submission of written comments at the meeting or for submission via mail at a later time. Copies of informational handouts distributed at the meeting are included as an attachment to this appendix.

Twenty-two posters were printed and taken to all eight meetings. The posters detailed the commenting process as well as the meeting agenda and had information about many specific components of the Point Thomson project.

Included in the Corps presentation at both the public and agency meetings was a demonstration and explanation on how to use the computer simulation model and its applications, which could be found on the project Web site (www\pointthomsonprojectEIS.com).

Tribal Government Meetings

The Corps met with the tribal governments listed in Table 4 to discuss the Draft EIS and explain the comment process. The Corps Project Manager met with tribal council members of the Native Village of Kaktovik, Native Village of Nuiqsut, and Iñupiat Community of the Arctic Slope to distribute printed copies of the Executive Summary and CD copies of the computer simulation model.

Table 4: Tribal Meetings			
Date	Tribal Government Meetings	Location	Attendees
December 12, 2011	Native Village of Kaktovik (NVK)	NVK office	HDR, USACE, NVK
December 14, 2011	Native Village of Nuiqsut (NVN)	NVN office	USACE, NVN
December 15, 2011	Inupiat Traditional Government Native Village of Barrow (NVB)	NVB office	HDR, USACE, NVB
December 16, 2011	Iñupiat Community of the Arctic Slope (ICAS)	ICAS office	HDR, USACE, ICAS

The Corps Project Manager also met with members of the Native Village of Barrow at their tribal office. Specific comments from NVB focused on the need to receive project information in a timely manner, concern relating to the Department of Interior, Bureau of Indian Affairs not being a Cooperating Agency, concern for native allotments, concerns related to the comment deadline, and interest in being part of the Section 106 consultation process.

Agency Meetings

The U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (USFWS), and the Alaska Department of Natural Resources (ADNR) Office of Project Management and Permitting serve as cooperating agencies for the Point Thomson Project EIS. The Corps also invited agencies with regulatory jurisdiction over land development, and/or permitting to participate in the scoping process. Participating agencies included:

- Alaska Department of Environmental Conservation (ADEC)
- Alaska Department of Fish and Game (ADF&G)
- Alaska Department of Health and Social Services (ADHSS)
- North Slope Borough (NSB)

Three agency meetings were held to discuss the Draft EIS, review the range of alternatives, and to share the project computer simulation model. The locations for the meetings were selected in an effort to maximize the agency participation. Table 5 lists dates, locations, and participants for the agency meetings. The Corps requested agencies to submit formal scoping comments in writing but also provided a question and answer period during the meetings. Official agency comments can be reviewed in the Comment /Response section of this appendix. In addition, some agency representatives attended and commented at the public meetings.

Table 5: Agency Meetings			
Date Location Agencies Attending			
December 5, 2011	HDR Office, Anchorage	EPA, ADNR, ADEC, ADHSS	
December 7, 2011	Wedgewood Resort, Fairbanks	EPA, ADNR, ADFG, ADEC, USFWS, ADHSS	
December 14, 2011	Ilisgavik College, Barrow	EPA, ADNR, ADFG, ADEC, USFWS, NSB	

COMMENTS RECEIVED

As shown in Table 6, comments came in different formats. Comment documents contained anywhere from 1 to over 100 individual comments. The individual comments were categorized to facilitate the response process.

Table 6: Comment Documents Received			
Format of Comment	Number Received		
Letter	43		
Public meeting transcript	62		
Email (direct to Corps)	16		
E-filing (via Web site)	118		
Comment form	8		
Total	247		

Table 7 is a list of categories and the number of individual comments received within that category. A total of 666 individual comments were recorded.

Table 7: Comments Received by Category				
Comment Category Number Received				
Air Quality	13			
Alternatives / Project Description	42			
Arctic Refuge	42			
Birds	10			
Contaminated Site and Spills	23			
Cultural Resources	10			
Cumulative Impacts	15			
EIS General	17			
Environmental Justice	7			
Fish and Invertebrates	25			
Human Health / HIA	6			
Hydrology	20			
Land Use, Ownership, Management	13			
Marine Mammals	24			
Mitigation	14			
Noise	7			
Not a Comment on the EIS	14			
Permits and Coordination	3			
Physical Oceanography / Coastal Processes	2			
Purpose and Need	5			
Recreation	19			
References	3			
Socioeconomics	3			
Statement of Opposition	1			
Statement of Support	223			
Subsistence and Traditional Land Use	26			
Terrestrial Mammals	14			
Vegetation and Wetlands	19			
Visual Aesthetics	34			
Waste Management	3			
Water Quality	9			
Total	666			

Table 8 lists the comment documents received, along with information on the commenter and the specific comments in each document, by number.

	Table 8: Comments Received by Document Number			
Comment Document Number	Agency, Organization, or Business Name (if applicable)	Commenter Name	Comment Numbers	
0001	-	Lorali Simon	94	
0002	-	Patrick Egger	96	
0003	-	Derek Miller	97	
0004	-	Gary Jenkins	99	
0005	-	Genevieve Schok	100	
0006	-	David McArthur	598	
0007	-	Alan Coulter	101, 102	
8000	-	Charles Baker	599	
0009	-	Michael Miller	104	
0010	-	Daniel Anderson	106	
0011	-	Jean Public	107	
0012	-	Joe Spink	109	
0013	-	Kim Skipper	112	
0014	-	Wyche Ford	600	
0015	-	Annette Stibinski	113	
0016	-	Charles Hardman	115	
0017	-	Christen Van Treek-Dwiggins	116	
0018	-	David Truitt	117	
0019	-	Diane Lowe	118	
0020	-	Donna Riordan	120	
0021	-	Eric Stephenson	601	
0022	-	Eugene O'Neal	215	
0023	-	Janette Miranda	216	
0024	-	Jay Baldwin	217	
0025	-	Jeremy Miller	218	
0026	-	Kisha Jackson	219	
0027	-	Lauren Fleming	220	
0028	-	Leona Sprinkle	221	
0029	-	Lisa Marquiss	222	
0030	-	Nicole Mikes	223	
0031	Nave Consulting	Paul Nave	224	
0032	-	Peggy Spittler	225	

Table 8: Comments Received by Document Number			
Comment Document Number	Agency, Organization, or Business Name (if applicable)	Commenter Name	Comment Numbers
0033	-	Samantha Savage	226
0034	-	Tammi Alexander	227
0035	-	Clyde Carey	228
0036	-	Dan Parrish	229
0037	-	Darald Morgan	230
0038	-	Don Taylor	231
0039	-	Jared Norton	232
0040	-	Ken	233
0041	-	Mike Walls	234
0042	-	Theo McNamara	235
0043	Carlile Transportation	William Ayers, Midwest Regional Manager	236
0044	-	Frances Bowman	237
0045	City of Fairbanks	Jerry Cleworth, Mayor	238
0046	-	Lin Milby	239
0047	-	Lukas Leary	240
0048	-	Shawna Vaivai	241
0049	-	Stan Halvarson	242
0050	-	Cindy Hallum	243
0051	-	Gary Swoffer	244
0052	-	Kevin Sibley	245
0053	-	Ryan Williams	246
0054	-	Jim Plaquet	247
0055	-	Rada Khadijinova	248
0056	-	Adriany Vargas	249
0057	-	Amy Harty	250
0058	-	Bobbie	251
0059	-	Bobby Fontenot	252
0060	-	Brent Petersen	253
0061	-	Carl Trexler	254
0062	-	Cheryl Burns	597
0063	-	Christine McCormick	255
0064	-	Connie Morelos	256
0065	-	David Johnston	257

Table 8: Comments Received by Document Number			
Comment Document Number	Agency, Organization, or Business Name (if applicable)	Commenter Name	Comment Numbers
0066	-	Desiree Doster	258
0067	-	Erica Matich	259
0068	-	Gary Mcconnell	260
0069	-	Harry McDonald	261
0070	-	Jarid Lane	262
0071	-	Judy Chadwick	263
0072	-	Kathleen Graham	264
0073	-	Lane Keator	265
0074	-	Mary Boston	266, 267
0075	-	Matthew Sievert	268
0076	-	Meagan Wright	269
0077	-	Rose Odess	270
0078	-	Sherri	271
0079	-	Tammy Roeder	272
0800	-	Teresa Baty	273
0081	-	Terry Smith	274
0082	-	Tony Vitoff	275
0083	-	Veronica Bykonen	276
0084	-	Vickie Wingate	277
0085	-	William Lanning	278
0086	-	Curt Goodwin	279
0087	Carlile Transportation	Linda Leary, President	280
0088	-	Ryan Groth	281
0089	-	Cassie Sheehan	282
0090	-	Jimmy Goranson	283
0091	-	Mike Desmond	284
0092	-	Rhonda Mellinger	285
0093	-	Steve Duwa	286
0094	Airport Equipment Rentals, Inc	Jon Cook	287
0095	-	Darrell Koontz	288
0096	-	Lee Holmes	289, 290
0097	-	Kirk Jackson	291
0098	-	Onika Brown	292

Table 8: Comments Received by Document Number			
Comment Document Number	Agency, Organization, or Business Name (if applicable)	Commenter Name	Comment Numbers
0099	-	Lance Roberts	293
0100	-	Bill Cessnun	294
0101	-	Ray Powell	295
0102	-	Vera Williams	296
0103	-	Paul Koop	297
0104	-	Thane Fisher	298
0105	State of Alaska	Sean Parnell, Governor	299-405
0106	Alaska State Legislature	Charlie Huggins, Senator, Senate District II	406
0107	Alaska State Legislature	Charisse Millett, Representative, House District 30	407
0108	-	Karl Gohlke	408
0109	ADNR Division of Parks & Outdoor Recreation, Office of History and Archaeology	Judith Bittner, State Historic Preservation Officer	409-417
0110	Arctic Slope Regional Corporation	Richard Glenn, Executive Vice President Lands and Natural Resources	418-421
0111	-	Bill Vivlamore	422
0112	-	Mike Huston	423
0113	-	Kent Patterson	424-425
0114	-	Steve Hickman	426-427
0115	Northern Alaska Environmental Center	Pamela Miller, Arctic Program Director	756
0116	Resource Development Council for Alaska, Inc.	Carl Portman, Deputy Director	428-432
0117	Alaska State Legislature	Anna Fairclough, Representative, House District 17	433
0118	Bureau of Ocean Energy Management, Alaska Region	Deborah Cranswick, Chief, Environmental Analysis Section I	434-435
0119	-	Michelle Holland	436
0120	-	Mark Symonds	437
0121	-	Christina Hollibone	438
0122	-	Judy McClean	439
0123	-	Jodi Dingle	440
0124	-	Elke Joos	441-442

Table 8: Comments Received by Document Number				
Comment Document Number	Agency, Organization, or Business Name (if applicable)	Commenter Name	Comment Numbers	
0125	-	Scott Marler	443	
0126	-	Shell Schwenn	444	
0127	-	John Ellsworth	445	
0128	-	Mike Murphy	446	
0129	-	Lucas Olive	447	
0130	-	David Chaput	448	
0131	-	Linda Brown	449-451	
0132	-	Brett Ard	452	
0133	-	Chris Ledgerwood	453	
0134	Alaska Trucking Association	Aves Thompson, Executive Director	92	
0135	-	Bill Binford	93	
0136	NANA Oilfield Services Company	Brad Osborne, President	95	
0137	-	Bryan Clemenz	98	
0138	Resource Development Council for Alaska, Inc.	Carl Portman, Department Director	103	
0139	-	Charisse Millet	105	
0140	Cruz Companies	Dave Cruz, CEO	108	
0141	-	David Tetreau	110	
0142	SolstenXP	Eric Dompeling, Manager	111	
0143	-	Floyd Damron	114	
0144	-	Gawain Brumfield	119	
0145	NANA Management Services	Ivalu Eric Fox, Vice President of Operations for Camp Services	121	
0146	Consumer Energy Alliance and the Governor's Resources, Energy and Environmental Transition Team	Jason Brune, President and Co-chair	122	
0147	Udelhoven Oilfield Systems Services	Jim Gilbert, President	123	
0148	ADNR	Joe Balash, Deputy Commissioner	124-127	
0149	NANA Development Corporation	Joe Mathis, Vice President of External Affairs	128	
0150	-	John Shively	129	
0151	-	John Sturgeon	130	

Table 8: Comments Received by Document Number					
Comment Document Number	Agency, Organization, or Business Name (if applicable)	Commenter Name	Comment Numbers		
0152	Alaska Oil and Gas Association	Kate Williams, Regulatory Affairs Representative	133		
0153	-	Kenton Braun	134-136		
0154	Silver Agency and Allstate Agency	Keith Silver, Owner	138		
0155	-	Larry Houle	139		
0156	-	Leslie Simmons	140		
0157	Alaska State Legislature	Lindsay Williams, representing State Senator Cathy Giessel	141		
0158	The Wilderness Society	Lois Epstein, Arctic Program Director	142-144		
0159	-	Lorali Simon	606		
0160	Hawk Consulting, LLC	Maynard Tupp, Founding Member	145		
0161	-	Mila Umanskaya	146		
0162	-	Moriah Miles	147		
0163	-	David Tetreau	603		
0164	-	Kenton Braun	604		
0165	-	Jeanine St. John	605		
0166	-	Peter Maxie	148		
0167	Alaska State Chamber of Commerce	Rachel Petro, President and CEO	149		
0168	-	Reed Christensen	150		
0169	Anchorage Chamber of Commerce	Sami Glascott	151		
0170	-	Steve Connelly	152		
0171	Carlile Transportation Systems and Alaska Support Industry Alliance	Tom Hendrix, Vice President of Strategic Business Development and President	153		
0172	CH2M HILL	Tom Maloney, Alaska Area Manager	154		
0173	-	Zeb Woodman	155		
0174	Doyon Associated	Warren Christian, President	156		
0175	Faribanks Chamber of Commerce Resource Committee and Pacific Rim Geological Consulting	Tom Bundtzen	157		
0176	Laborer's Local 942 and Alaska State District Council of Laborers	Tim Sharp, Business Manager	158-159		
0177	-	Shawn Lowry	160-162		

Table 8: Comments Received by Document Number				
Comment Document Number	Agency, Organization, or Business Name (if applicable)	Commenter Name	Comment Numbers	
0178	-	Scott Eickholt	163	
0179	-	Roger Burggraf	164	
0180	-	Paul Metz	165-166	
0181	Northern Alaska Environmental Center	Pam Miller, Program Director	209	
0182	Greater Fairbanks Chamber of Commerce	Lisa Herbert, Executive Director	167	
0183	-	Kevin Pomeroy	168	
0184	Laborer's International Union of North America, Local 942	John Swortfigeur, Member	169	
0185	-	Jim Plaquest	170	
0186	-	Jenna Hertz	171-179	
0187	-	Doug Isaacson	180-184	
0188	-	Diane Shoemaker	185, 210	
0189	-	Debbie Miller	186-187	
0190	-	Cathy Jones	188	
0191	-	Carl Weed	189-190	
0192	North Pole Economic Development Corporation	Buzz Otis, Executive Director	191-192	
0193	-	Amy Cook	193	
0194	-	Vera Williams	194-195	
0195	-	Rosemary Ahtuangaruak	211-214	
0196	-	Forrest Olemann	196	
0197	-	Ernest Nageak	197	
0198	-	Ed Nukapigak	198-203	
0199	-	Scott Thorson	204	
0200	U.S. Department of the Interior, Office of Environmental Policy and Compliance	Pamela Bergmann, Regional Environmental Officer, Alaska	205	
0201	-	Cynthia Allen	206	
0202	United Association of Plumbers and Pipefitters Local 375	Bret Helms, Training Director	207	
0203	-	Judy Patrick	208	
0204	North Star Terminal and Stevedore Co. LLC and North Star Equipment Services	Steve Post, Vice President	607	

Table 8: Comments Received by Document Number				
Comment Document Number	Agency, Organization, or Business Name (if applicable)	Commenter Name	Comment Numbers	
0205	-	Jeremy Bryant	608	
0206	SteelFab	Richard Faulkner. President	454	
0207	-	Seth Soto	455	
0208	-	Malcom Markwell	456	
0209	-	Brandond Spaulding	457	
0210	-	Nick Faughnan	458	
0211	-	Steven Riley	459	
0212	-	Joe Khotesouvan	460	
0213	-	David Miller	461	
0214	-	Robert Johnson	462	
0215	-	Rick Euscher	463	
0216	-	Tou Thampithak	464	
0217	-	Thomas Olemaun	465	
0218	-	Larry Larson	466	
0219	-	Kevin Mesceda	467	
0220	Alaska Miners Association, Inc	Fred Parady, Executive Director	468-469	
0221	EPA, Region 10	Christine Reichgott, Manager, Environmental Review and Sediments Management Group	470-486, 744-746	
0222	Kuukpik Corporation	Isaac Nukapigak, President	487-492	
0223	Fairbanks Pipeline Training Center	Jim Sampson, Director	493	
0224	Alaska State Legislature	Mike Hawker, Representative, House District 32	494	
0225	USFWS, Fairbanks Field Office	Sarah Conn, Field Supervisor	495-502, 731-735	
0226	Alaska Oil and Gas Association	Kate Williams, Regulatory Affairs Representative	503-505	
0227	Plumbers and Pipefitters Local 375	James Laiti, Business Manager	506	
0228	Iñupiat Community of the Arctic Slope	George Edwardson, President	526-546, 729, 730, 747-749, 751-754	
0229	BP Exploration (Alaska) Inc	Clair Fitzpatrick, CFO	507	
0230	Exxon Mobil Corporation	R. Lee Bruce, Agent and Attorney-in- Fact	609-726, 741, 742, 3444-3446	

	Table 8: Comments R	Received by Document Number	
Comment Document Number	Agency, Organization, or Business Name (if applicable)	Commenter Name	Comment Numbers
0231	Northern Alaska Environmental Center et al.	Pamela Miller, Arctic Program Director	547-591, 743
0232	-	Bob Barndt	508
0233	-	Matthew Cronin	509
0234	-	Ron Kahlenbeck	510
0235	NSB	Charlotte Brower, Mayor	511-515, 736, 737
0236	-	Ray Smith	592
0237	-	Steve Percy	593
0238	NOAA, National Marine Fisheries Service (NMFS)	Robert Mecum (for) James W. Balsiger, Ph.D., Administrator, Alaska Region	516-521, 750
0239	Fairbanks North Star Borough	Chris Storhok, Economic Development Specialist	522
0240	Fairbanks North Star Borough	Luke Hopkins, Mayor	523
0246	Shell Exploration & Production	Susan Childs	738-740
0247	-	Jimmy Parrish	755

Attachments

Attachment 1 – Comment Form

Attachment 2 – Fact Sheet

Attachment 3 – Public Notice of Application for Permit

Attachment 4 – ExxonMobil Handout

Attachment 5 –Comment Documents/Responses

Attachment 1 – Comment Form



Comment Form

Your input is important to this project. Please provide your comments below and mail to the address preprinted on the back of this page. You may attach additional sheets. Comments can also be dropped in the box at the public meetings, submitted on the Web site at http://www.pointthomsonprojecteis.com, emailed to Comments@PointThomsonProjectEIS.com, or faxed to (907) 644-2022. To be considered in the Draft EIS, comments are due by January 18, 2012, by 5 PM Alaska Standard Time.

Email: Iddress: City: Comments (Ple	Please Pri	int):				Sta	te:	Zi	ip:	
City:	Please Pri	rint):				Sta	ite:	Zi	ip:	
City:	Please Pri	rint):				Sta	tte:	Zi	ip:	
	Please Pri	int):				Sta	ite:			
omments (Ple	Please Pri	rint):								
Comments (Ple	Please Pri	int):								



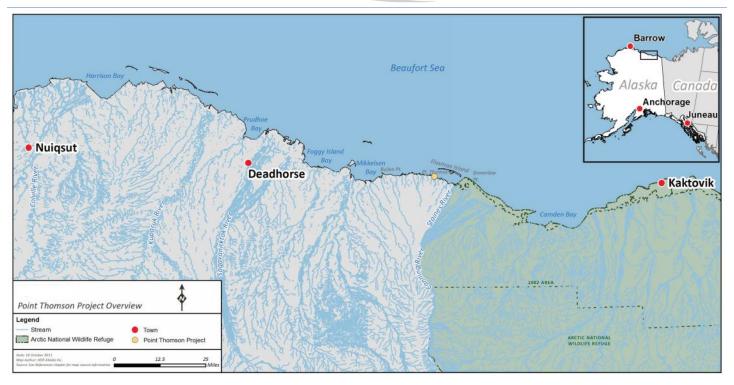
www.pointthomsonprojecteis.com

Place postage here

Rosetta Alcantra, Public Involvement Lead HDR Alaska, Inc. Attn: Point Thomson Project EIS 2525 C Street, Suite 305 Anchorage, AK 99503-2632

Attachment 2 – Fact Sheet





Project Scope and Purpose

ExxonMobil is applying for approval to construct and operate a gas cycling facility to produce liquid hydrocarbons that would be located on the Beaufort Sea coast between Deadhorse and Kaktovik, Alaska (see map above). Before construction may begin, the applicant must obtain all needed permits and approvals, including a permit from the U.S. Army Corps of Engineers (Corps) that would allow the applicant to place fill material in waters of the United States. As a result of this permit application, the Corps has developed an Environmental Impact Statement (EIS) to analyze potential impacts associated with the proposed project.

The primary hydrocarbon resource at Point Thomson is natural gas and gas condensate from the Thomson Sand Reservoir; a thin oil rim is also present. Evaluating these hydrocarbon resources is part of the proposed action and would include identifying and assessing the location, size, and characteristics of the reservoir and the resources contained therein, as well as determining the commercial viability of producing those resources.

Common components to the action alternatives include:

- Construction and operation of at least five wells drilled from three onshore pads;
- Long reach drilling from onshore pads to the offshore portions of the reservoir;
- Processing and support facilities;
- An airstrip and in-field gravel roads;
- A gravel mine;
- Ice roads;
- In-field gathering pipelines; and
- A new export pipeline west to connect with the Trans Alaska Pipeline System.

Project Purpose and Need

The overall purpose of the project is to produce liquid hydrocarbons from the Thomson Sand Reservoir and further evaluate and delineate the reservoir and evaluate the Brookian Group sandstones.



Project Participants

Lead Federal Agency—*U.S. Army Corps of Engineers* (Corps)

The Corps has responsibility to approve or deny authorization for the placement of fill material in waters of the United States. As part of this permit review process, the Corps is the lead federal agency for the development of this Draft Environmental Impact Statement (EIS) and consulting with other agencies and Tribal governments.

Applicant—ExxonMobil

ExxonMobil has prepared a permit application to the Corps for authorization of development in the Point Thomson area.

Cooperating Agencies—

- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- State of Alaska Department of Natural Resources

Cooperating agencies have jurisdiction by law (such as enforcing the Endangered Species Act, Clean Air Act, or Clean Water Act) or special expertise in regard to any potential environmental impact to be addressed in the EIS. Cooperating agency responsibilities include assisting the Corps in identifying issues of concern and providing meaningful and timely comment and input throughout the NEPA process.

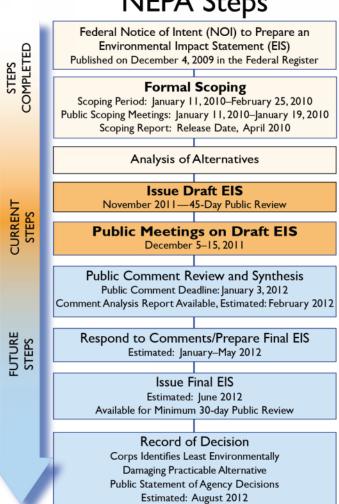
Consulting Team—*HDR Alaska, Inc.*

HDR Alaska, Inc. is the environmental team hired to assist the Corps in developing the EIS. The consulting team operates under the direction of the Corps.

Comment Period

From now until January 3, 2012, the Corps is accepting comments on the Draft EIS. Agencies, Tribal governments, and the public are encouraged to comment in writing, by email, or through the project Web site during the review period. Substantive comments will be responded to in the Final EIS, which is scheduled for publication in mid-2012.

NEPA Steps



Bold text indicates public input opportunities

For More Information, Contact:

Hank Baij, Project Manager U.S. Army Corps of Engineers P.O. Box 6898 CEPOA-RD-N JBER, Alaska 99506-0898

Phone: (907) 753-2784

Toll-free in Alaska: (800) 478-2712

Email: comments@pointthomsonprojecteis.com



Visit the project Web site at:

www.pointthomsonprojecteis.com

Attachment 3 – Public Notice of Application for Permit



Public Notice of Application for Permit

ANCHORAGE Regulatory Division (1145) CEPOA-RD Post Office Box 6898 JBER, Alaska 99506-0898

PUBLIC NOTICE DATE:

November 18, 2011

EXPIRATION DATE:

January 3, 2012

REFERENCE NUMBER:

POA-2001-1082-M1

WATERWAY:

Beaufort Sea

The public in hereby notified a Department of the Army (DA) permit application has been received for proposed work in waters and navigable waters of the United States (US), including streams, wetlands, and marine waters, as described below and shown on the enclosed project drawings.

Comments on the described work noting US Army Corps of Engineers (USACE) file number POA-2001-1082-M1, Beaufort Sea, need to be submitted no later than the expiration date of this Public Notice (shown above) to become part of the administrative record and be considered in our permit decision. Please submit comments to the USACE Project Manager listed immediately below by the communication method of your choice.

USACE PROJECT MANAGER: Harry A. Baij Jr. Submit comments to the US Mail address above, by calling 907-753-2784 (office), 907-350-5097 (cell), toll free in Alaska at 800-478-2712, by fax at 907-753-5567, or by e-mail address at harry.a.baij@usace.army.mil. Comments and requests for information can be sent directly to Mr. Baij at the above e-mail address.

APPLICANT: Exxon Mobil Corporation and PTE Pipeline LLC.

APPLICANT'S AGENT: Mr. Lee Bruce, Senior Project Manager, Point Thomson Project, ExxonMobil Development Company (EMDC), a wholly-owned subsidiary of ExxonMobil Pipeline Company; 3301 C Street, Suite 400, Anchorage, AK 99503; telephone 832-868-2270.

APPLICANT'S POINT OF CONTACT: Mr. Brien Reep, Environmental and Regulatory Manager, ExxonMobil Development Company, Point Thomson Project, Post Office Box 190267, Anchorage, AK 99519-0267, telephone 907-564-3617.

LOCATION: Alaska's Beaufort Sea coastline, North Slope Borough, approximately 60 miles east of Prudhoe Bay and 60 miles west of Kaktovik, Alaska. The development would consist of 3 coastal gravel pads:

- 1. The Central Pad would be located at approximate Latitude 70.1713° N., Longitude 146.2568° W. in Sec. 34, T. 10 N., R. 23 E. and Sec. 03, T. 09 N., R. 23 E., Umiat Meridian.
- 2. The East Pad would be located at approximate Latitude 70.1467° N., Longitude 146.1084° W., in Sec. 8, T. 09 N., R. 24 E., Umiat Meridian.
- 3. The West Pad would be located at approximate Latitude 70.1806° N., Longitude 146.4394° W., in Sec. 36, T. 10 N., R. 22 E., Umiat Meridian.
- 4. A proposed export pipeline would extend west 22 miles from the Central Pad to connect with an existing common carrier pipeline to the Trans Alaska Pipeline System.
- 5. The airstrip, mine site, and support pad would be located approximately 2.5 miles south of the Central Pad.

Vicinity and smaller scale maps are attached. Tabs 15, 16, and 17 of the permit application provide additional information on the geographic coordinates and legal description of the other proposed facilities. These include gravel fill roads, gravel pads, airstrip, mine site, elevated pipelines, processing facilities, and supporting infrastructure.

APPLICANT'S PURPOSE: Initiate commercial hydrocarbon production (natural gas condensate) and delineate and evaluate hydrocarbon resources in the Point Thomson area.

PROPOSED WORK: Total acreage of wetland fill would be approximately 267.5 acres. Fill would include gravel for drilling/production pads and connecting roads, airstrip, gravel mine and overburden replacement, vertical support members (VSM's) for in-field pipelines and an export pipeline, and pilings for a proposed barge offloading facility and service pier. Fill material would come from a new mine site located at approximately 2.5 miles inland at approximate Latitude 70.146.65° N. and Longitude 146.2528° W. Minor dredging and screeding in marine waters will be required in the barge docking area offshore of the Sealift Bulkhead and Service Pier with a small amount of fill placed onshore.

The project comprises the two major components of production facilities and an export pipeline. These include three gravel pads, 5 development wells, infield gathering lines, 12 miles of infield gravel roads, a 5,600 foot airstrip, a gravel mine, and processing facilities and support infrastructure. Two of the wells were drilled from the existing Central Pad in 2009-2010 under State and local approval and did not require new fill or additional DA authorization.

The use of Long Reach Direction Drilling (LRDD) allows development of the primarily offshore Thomson Sand Reservoir from three onshore pads located near the coast. The Central Pad (total 56 acres including 13.2 acres of existing fill) involves the expansion of an existing pad (Point Thomson Unit No. 3) to accommodate additional drilling, processing facilities, and support infrastructure (e.g. camps, utilities, warehouses, storage, and waste management facilities). At the Central Pad, processing facilities will separate hydrocarbon liquids from the natural gas, re-inject residual gas, and stabilize the liquid hydrocarbons for transport in the Point Thomson Export Pipeline.

The West and East Pads are strategically located to access the western and eastern extents of the Thomson Sand Reservoir. The West Pad (approximately 19 acres) would be a new pad to support drilling and production. It would be located 4 miles west of the Central Pad at 20+ feet elevation. The East Pad would include a new 11-acre pad on the sea coast at 17+ feet elevation connected to the existing 4.6 acre North Staines River No. 1 exploration pad, which will be utilized for temporarily staging equipment and camps during drilling. Gathering pipelines would be elevated a minimum of 7 feet above the wetland tundra surface on VSMs to transport hydrocarbons produced from the West and East Pads to the Central Processing Facility at the Central Pad.

Other proposed production infrastructure includes:

- A 5,600-foot gravel airstrip for all-season transportation;
- An onshore bulkhead and offshore mooring dolphins for offloading facility modules from sealift barges;
- ullet A service pier and mooring dolphins for offloading smaller coastal re-supply barges;
 - · A boat launch to support access by emergency response vessels;
- An infield gravel road network (approximately 12 miles) for transport of personnel, equipment (including drilling rigs), materials and supplies between the three Pads and other field locations in support of drilling, operations and emergency response;
 - · A gravel mine site; and
- A Class I injection well (already permitted) for disposal of produced water, domestic wastewater and other authorized waste streams.

Construction activities are proposed to commence in the winter of 2012/13 and be completed by the winter of 2015/2016. Civil construction, including gravel placement and gravel mining, would be mainly conducted during the winters of 2012/13 and 2013/14. Production infrastructure construction would commence in early 2013 and be completed in winter 2015/2016. Sealift of large processing facility modules would take place in the summer of 2015. Drilling operations are planned to commence in early 2015 and be completed in early 2017. Facility module installation, commissioning, and startup are planned in 2015 to early 2016 followed by production and construction demobilization in 2016.

The export pipeline would be a common carrier pipeline and therefore subject to additional regulation (Federal Energy Regulatory Commission) from the infield gathering pipelines. The 22-mile long, 12-inch nominal diameter export pipeline would receive processed liquid hydrocarbons from the Central Processing Facility to a connection with the British Petroleum's Badami Facility, Sales Oil Pipeline. The export pipeline would also be elevated a minimum of 7 feet above the wetland tundra surface on VSMs. Other export pipeline facilities would include a small dill pad at Badami for a leak detection and metering skid and a small pipeline crossing pad to allow ice road crossings. The export pipeline construction would be conducted from ice roads over two winter seasons in 2012/13 and 2013/14.

ADDITIONAL INFORMATION: Additional information is available from the Environmental Impact Statement (EIS) website established by the USACE for this proposal at www.pointthomsonprojecteis.com, or by contacting the USACE Project Manager above.

More information is also contained in the complete DA permit application, including a more detailed description of proposed facilities, additional technical plans and figures, and proposed mitigation. The complete application is available at the above cited website and published in the Draft EIS under the file number POA-2001-1082-M1, Beaufort Sea.

In addition, the Applicant has provided the USACE with supporting documentation to supplement its permit application. This documentation includes:

- 1. Point Thomson Project, Project Description (October 2009), as updated by the Point Thomson Project Addendum (September 13, 2010) and Point Thomson Project Update (February 11, 2011).
- 2. Point Thomson Project Environmental Report (November 2009) provides Applicant's analysis of relevant environmental impacts of the Project.
- 3. Point Thomson Project Export Pipeline Right-of-Way Lease Application (August 4, 2010).
 - 4. Point Thomson Project Environmental Mitigation Report (June 17, 2011).
- 5. Point Thomson Project Section 404(b) (1) Practicability Analysis of Point Thomson Project Preliminary Draft Environmental Impact Statement Alternatives (May 13, 2011).
 - 6. The Point Thomson Oil Spill Preparedness Report (June 17, 2011).
- 7. Applicant has also supported the National Environmental Policy Act and USACE Regulatory Program processes with submissions of technical information, responses to requests for information, and workshops, including a Hydrology Workshop (March 8, 2011), and a Gravel Mining and Rehabilitation Plan Workshop (March 15, 2011).

APPLICANT PROPOSED MITIGATION: The Applicant has proposed mitigation measures to avoid and minimize impacts to waters of the US from activities involving discharge of dredged or fill material in the Point Thomson Environmental Mitigation Report (June 17, 2011). The major avoidance, minimization, and compensatory mitigation measures are outlined below.

- a. Avoidance: Avoid the use of significant offshore development structures and facilities to minimize impacts in the Beaufort Sea. The three pad configuration on the coast provides the optimal location for development of the predominantly offshore reservoir using LRDD and is intended to avoid the need for additional drilling pads to accommodate any potential future full field development.
- b. Minimization: Project design, supported by wetlands, hydrology, and other studies, has been focused on minimizing environmental impacts. This includes minimizing the total area of wetlands fill and construction in marine/navigable waters. Examples include:

- 1 Remote project development without proposed permanent gravel road construction to the Prudhoe Bay infrastructure by reliance on seasonal ice roads, a gravel airstrip, and barging with minimal offloading facilities.
- 2 Use of three existing gravel pads, minimizing the need for new overall tundra wetland fill footprint by more than 20 acres.
- $\,$ 3 Minimizing gravel pad size through optimization of facility and equipment layout.
- 4 Designing and locating pads, roads, bridges, and culverts to maintain natural drainage patterns and stream flows to the extent practicable.
- $\,$ $\,$ $\,$ Routing the infield gravel roads to minimize overall length and fill footprint, with consideration for hydrology impacts and wetlands values.
- 6 Limiting permanent structures in marine waters to vertical piles for the service pier, mooring dolphins, sealift barge ramp, and small boat launching ramp.
- c. Compensatory Mitigation: Payment of an in-lieu fee to The Conservation Fund (TCF). TCF is the only in-lieu fee sponsor currently authorized to provide compensatory mitigation for impacts to waters of the US on Alaska's North Slope. The Applicant would work with TCF and the USACE to develop an appropriate Mitigation Plan to satisfy compensatory mitigation requirements. This would include opportunities which may be available on the North Slope.

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800) require Federal agencies to consider the effects of their undertakings on cultural resources that are eligible for the National Register of Historic Places. Consultation with the State Historic Preservation Officer (SHPO), tribes and other parties regarding plans to avoid, minimize, or mitigate any impacts to eligible cultural resources occurs throughout the Section 106 process. Issuance of a Federal permit qualifies as an "undertaking" under Section 106; therefore the impacts of the proposal on historical, cultural, and archaeological resources are being addressed in the EIS and will be considered in the decision whether to issue a permit. The USACE, as Lead Federal Agency for the Point Thomson Project EIS, has initiated consultation with the SHPO.

The Applicant has prepared and submitted a Cultural Resource Management Plan (CRMP), including a data gap analysis and fieldwork, to identify cultural resources in the project area. The CRMP was reviewed by North Slope Borough (NSB), Inupiat History, Language, and Culture (IHLC) Division and the Alaska Office of History and Archaeology (OHA) during its preparation. There are potentially eligible properties in the project area and a determination of effect will be made in consultation with the SHPO. Review of the applicant's CRMP and review of the Alaska Heritage Resources Survey (AHRS) constitutes the extent of cultural resource investigations by the USACE at this time. Any comments the SHPO or other

consulting parties may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

ENDANGERED SPECIES: The project area is within the known range of the Spectacled eider (Somateria fischeri) and Polar bear (Ursus maritimus). The project area is also within the historical range of Steller's eider (Polystic stelleri). All three species are listed as threatened under the Endangered Species Act (ESA) of 1973. One other species that may occur near the Project, the Yellow-billed Loon (Gavia adamsii), is a candidate for listing under the ESA.

The project area is also within the range of the Bowhead whale (Balaena mysticetus), Ringed seal (Phoca hisipida), and Bearded seal (Erignathus barbatus). Bowhead whales are listed as endangered, while Ringed and Bearded seals have been proposed for listing by NMFS as threatened under the ESA.

The Applicant has been designated by the USACE as the non-federal representative to prepare Biological Assessments (BAs) for the listed species, subject to review and approval by the USACE, to support the ESA Section 7 consultation process. Two BAs have been drafted for approval by the USACE for consultation with the USFWS and NMFS respectively:

- Point Thomson Project Biological Assessment of the Polar bear (Ursus maritimus), Spectacled eider (Somateria fischeri), Steller's eider (Polysticta stelleri), and Yellow-Billed loon (Gavia adamsii) October 2011
- Biological Assessment of the Bowhead whale (Balaena mysticetus), Ringed seal (Phoca hispada), and Bearded seal (Erignathus barbatus) - October 2011

These draft BAs provide data on the distribution, abundance and habitat use of the listed and candidate species, and describe the effects of the project and proposed mitigation to minimize impacts on those species.

For species under the jurisdiction of US Fish and Wildlife Service, it has been preliminarily determined the proposal is "not likely to adversely affect" the Polar bear, Spectacled eider, and the Yellow-billed loon. The preliminary determination for the Steller's eider is "not likely to affect". It has also been preliminarily determined the activity "may affect, but is not likely to cause destruction or adverse modification" of designated Polar bear critical habitat.

Preliminarily, a determination of "not likely to adversely affect" the Bowhead whale, Ringed seal, and Bearded seal has been made in the draft BA for the National Marine Fisheries Service.

This application is being coordinated with the USFWS and the NMFS. Any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

A review of fish species and studies in the Point Thomson Project area and a preliminary determination with respect to potential Project impacts on fish and EFH is included in the Point Thomson Project Draft EIS (DEIS).

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by the proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This Public Notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

<u>PUBLIC HEARING</u>: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing. The USACE has public meetings to receive comments on the Point Thomson Project Draft EIS Barrow, Nuiqsut, Kaktovik, Fairbanks, and Anchorage, beginning on 05 December in Barrow.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving Clean Water Act Section 404 discharges (dredged and fill materials), a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b) (1) Guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see USACE regulations at 33 CFR Parts 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The USACE is soliciting comments from the public; Federal, State, and local agencies and officials; Alaska Native Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the USACE to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are

used to assess impacts on endangered species, historic properties, water quality, general environmental affects, and other public interest factors listed above. Comments are used in the preparation of the Environmental Impact Statement for the proposal pursuant to the National Environmental Policy Act. Comments will also be used to determine the overall public interest of the proposed activity.

The USACE has determined the proposal may have significant impacts to the quality of the human environment, and required an EIS be prepared. A Notice of Intent to Prepare an EIS was published in the Federal Register on December 4, 2009. The EIS process is ongoing and the public notice for this application is being published concurrently with the Point Thomson Project Draft EIS.

AUTHORITY: This permit will be issued or denied under the following authority:

- (X) Perform work in or affecting navigable waters of the United States Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- (X) Discharge dredged or fill material into waters of the United States Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404 (b) of the Clean Water Act (40 CFR 230) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

Project drawings and Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander U.S. Army, Corps of Engineers

Enclosures

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION DIVISION OF WATER 401 Certification Program Non-Point Source Water Pollution Control Program

ANCHORAGE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION WQM/401 CERTIFICATION 555 CORDOVA STREET ANCHORAGE, ALASKA 99501-2617 PHONE: (907) 269-7564/FAX: (907) 334-2415

NOTICE OF APPLICATION FOR STATE WATER QUALITY CERTIFICATION

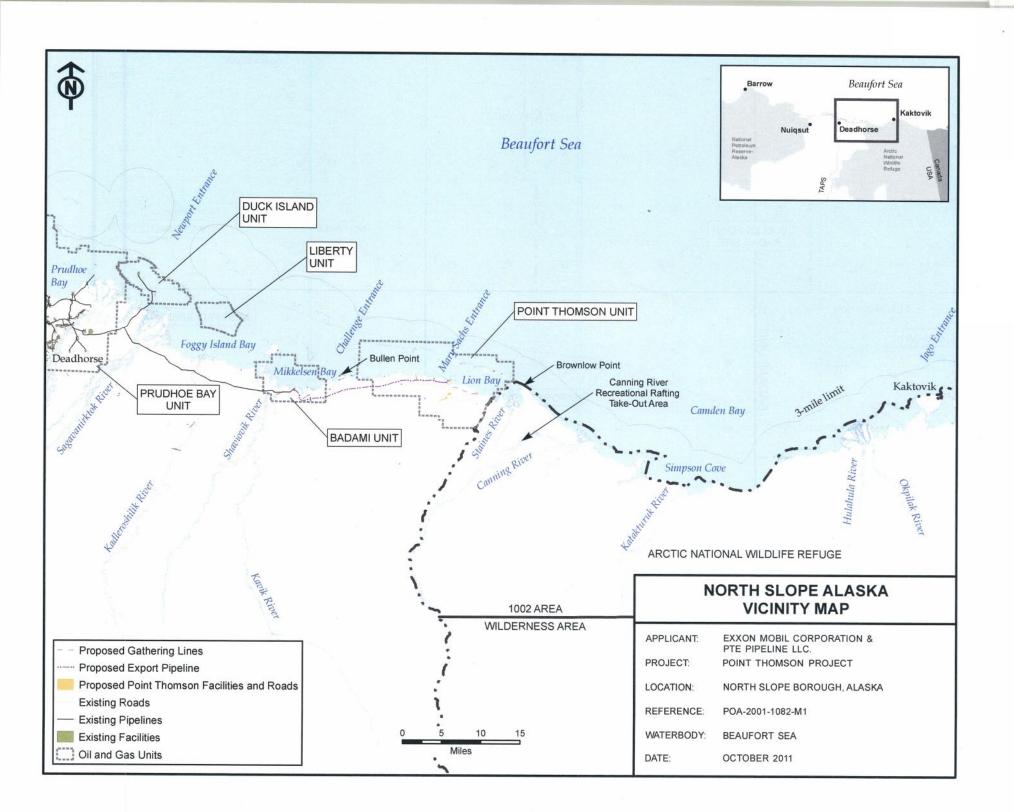
Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice No. **POA-2001-1082-M1, Beaufort**Sea, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

After reviewing the application, the Department may certify there is reasonable assurance the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project, with respect to Water Quality Certification, may submit written comments to the address above by the expiration date of the Corps of Engineer's Public Notice.

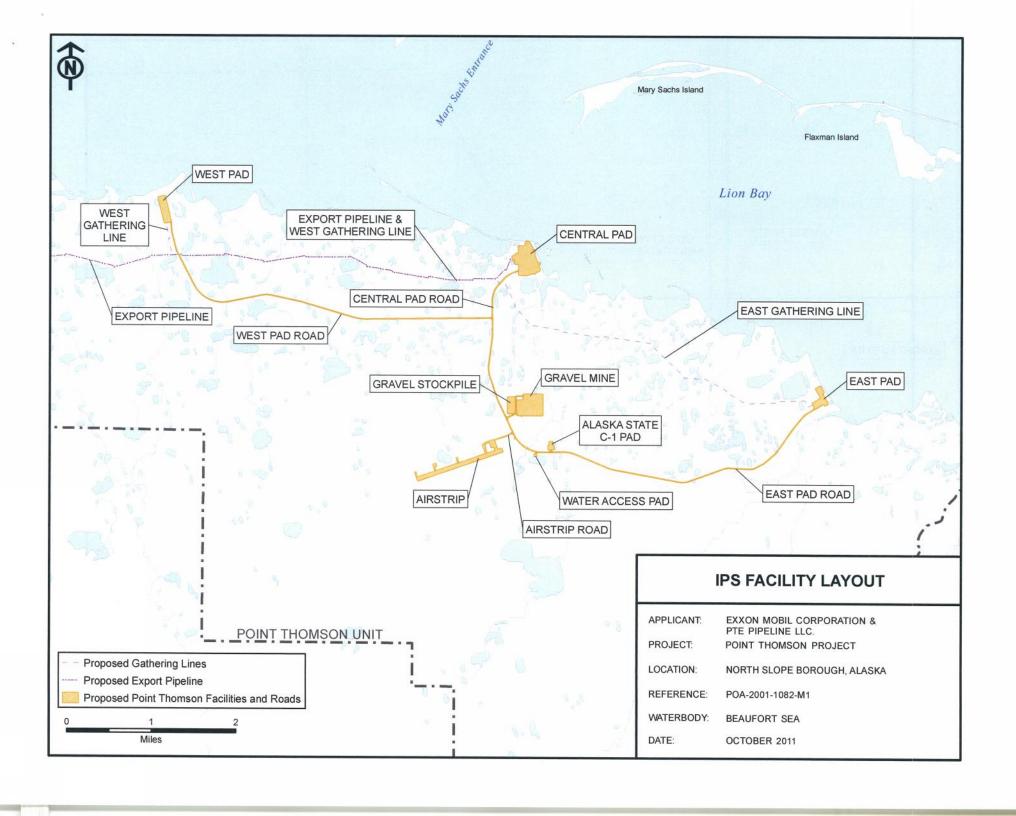
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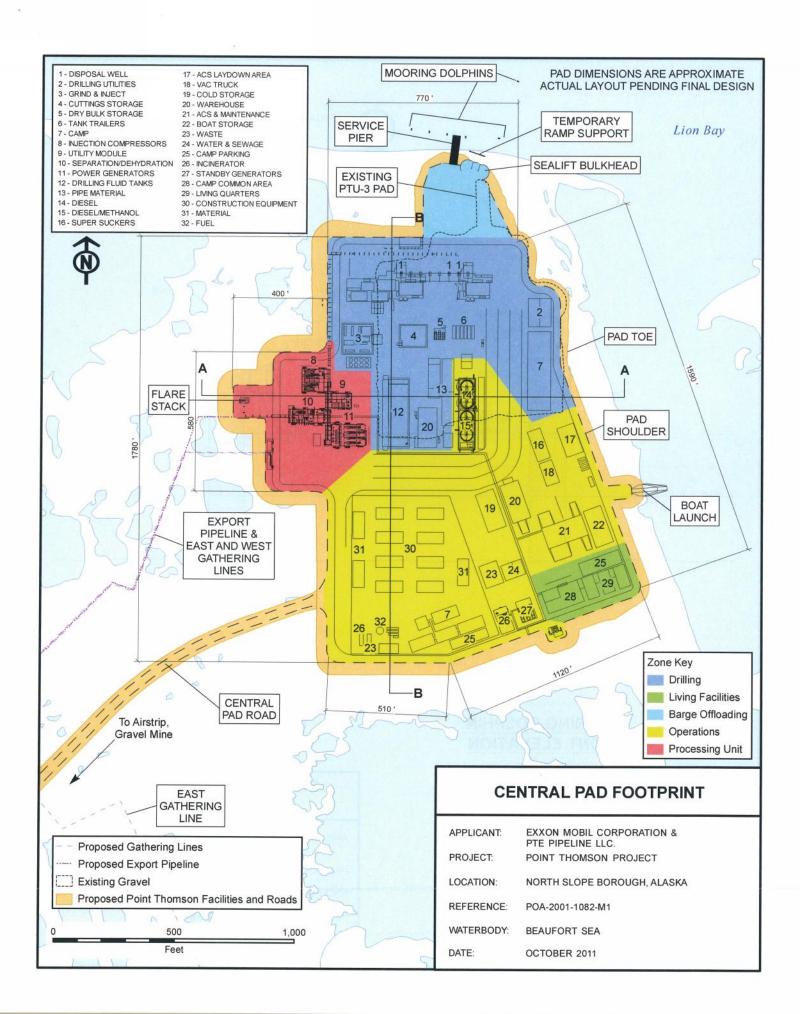


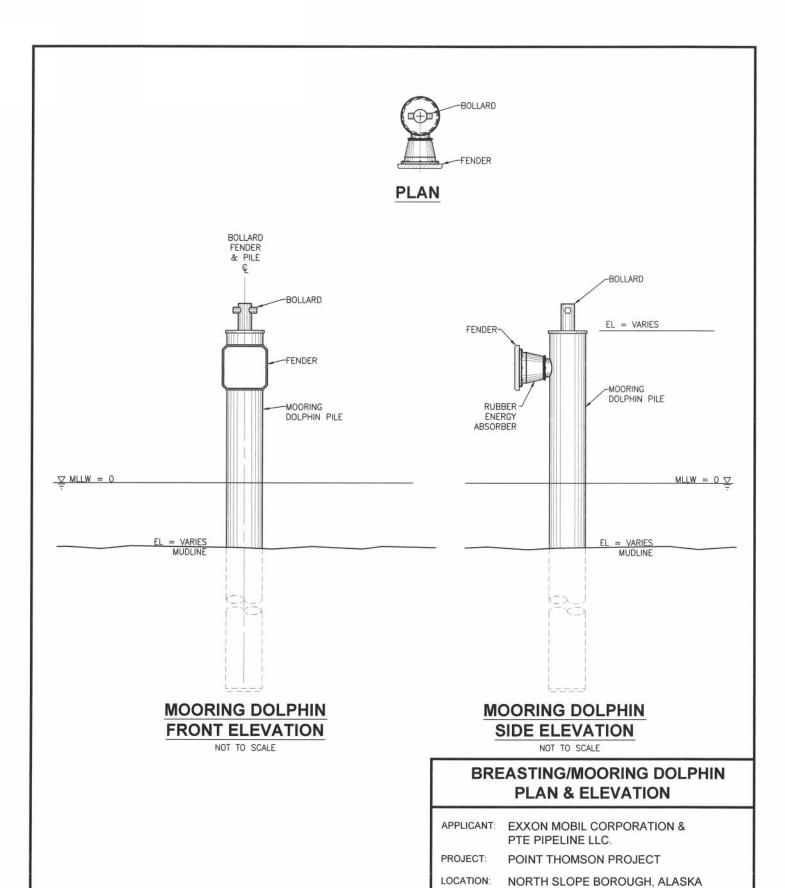
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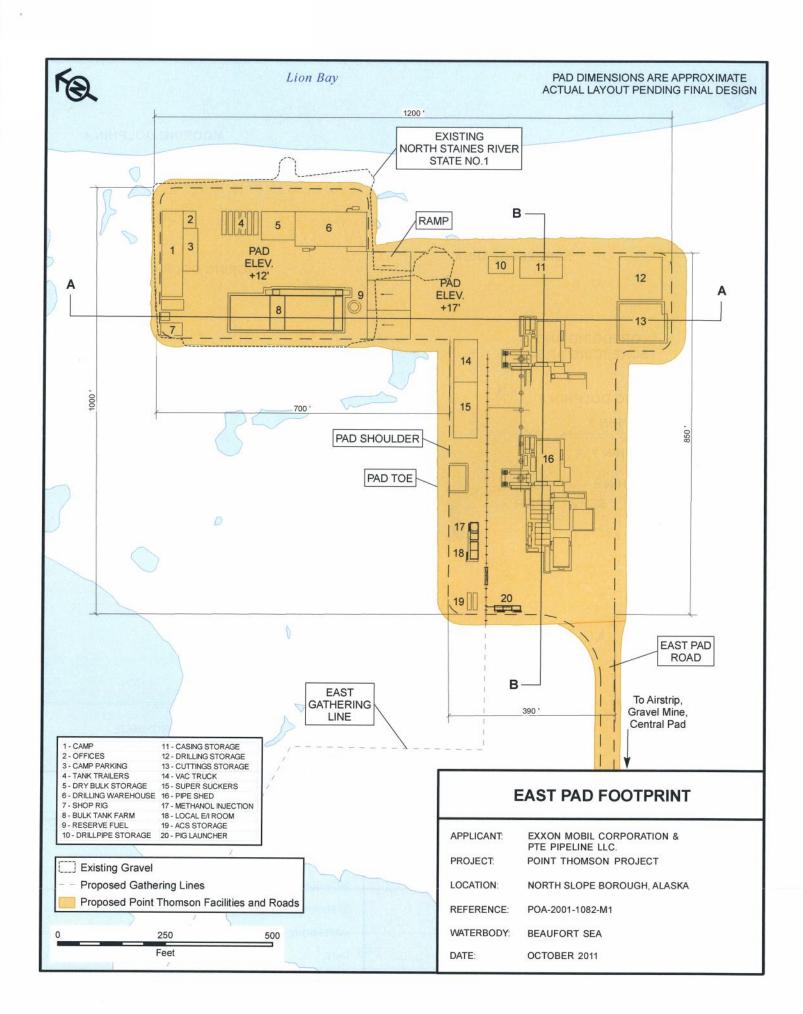


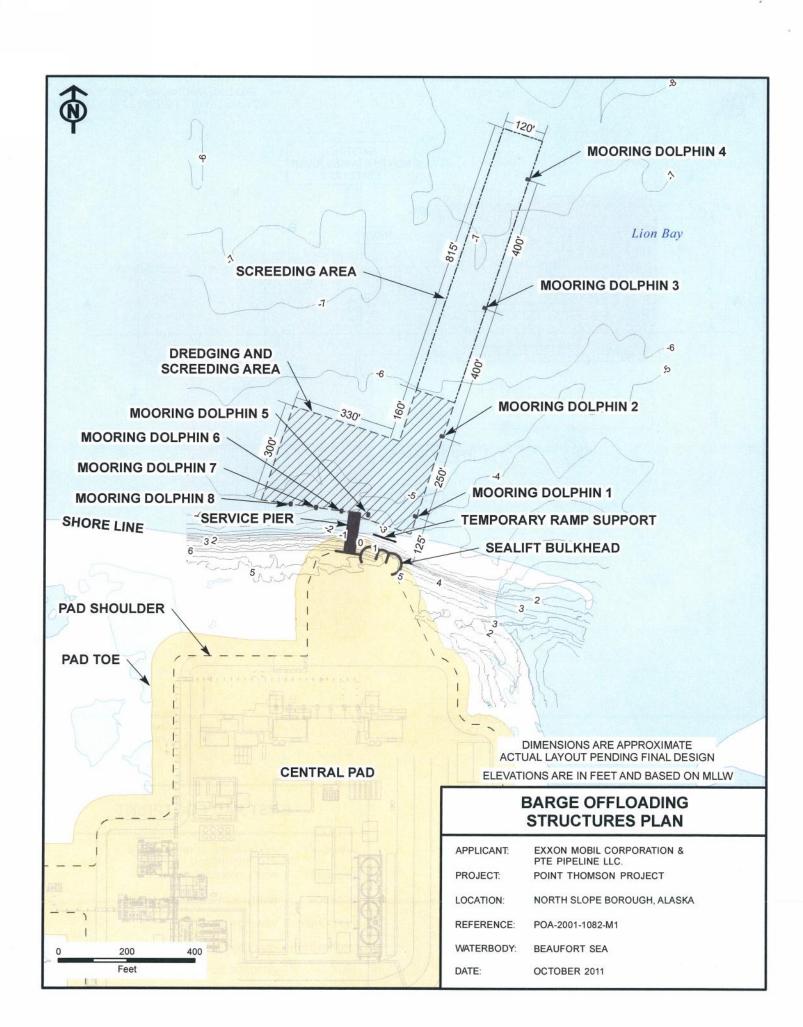


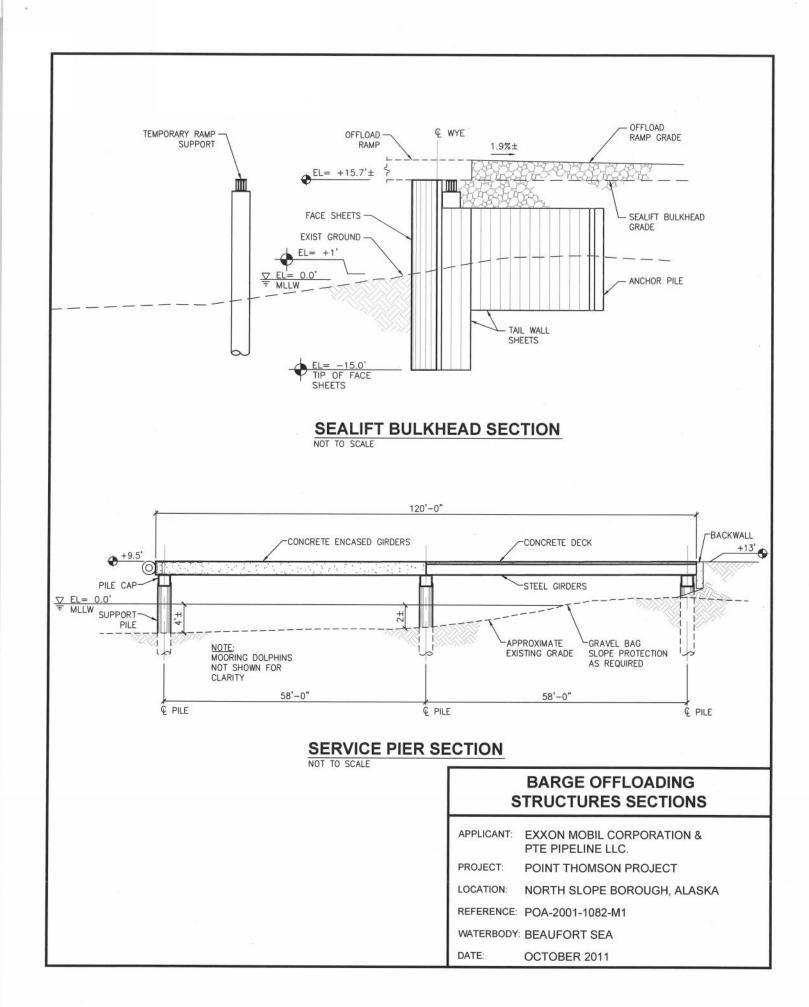


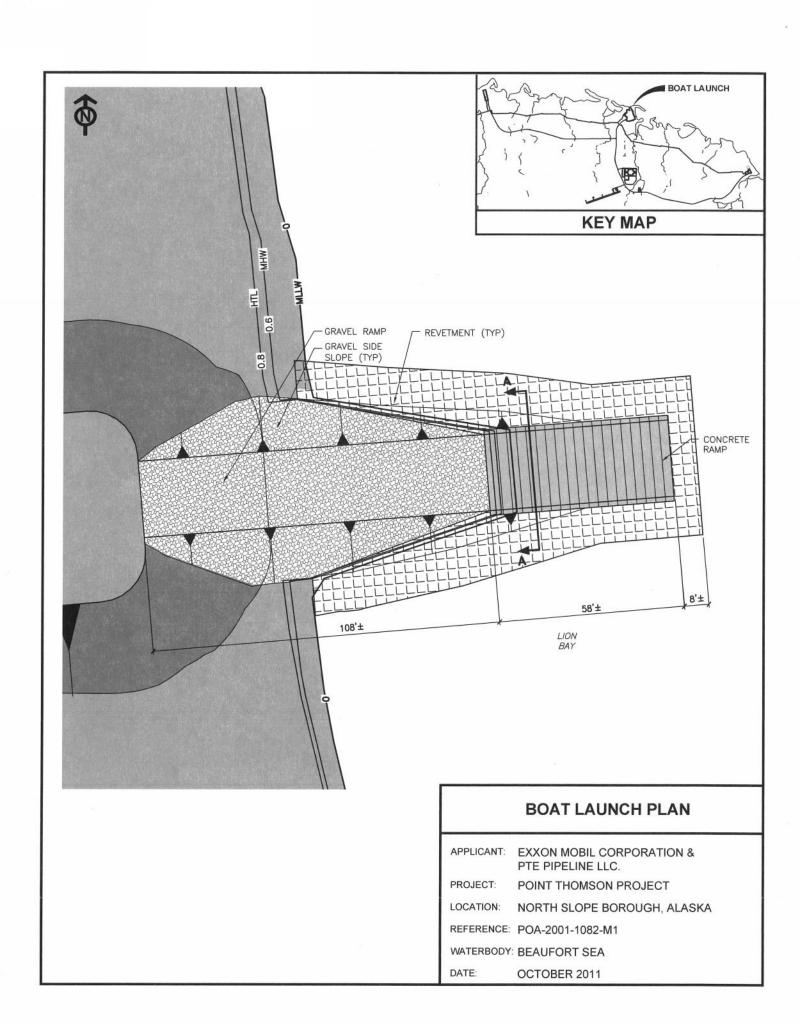
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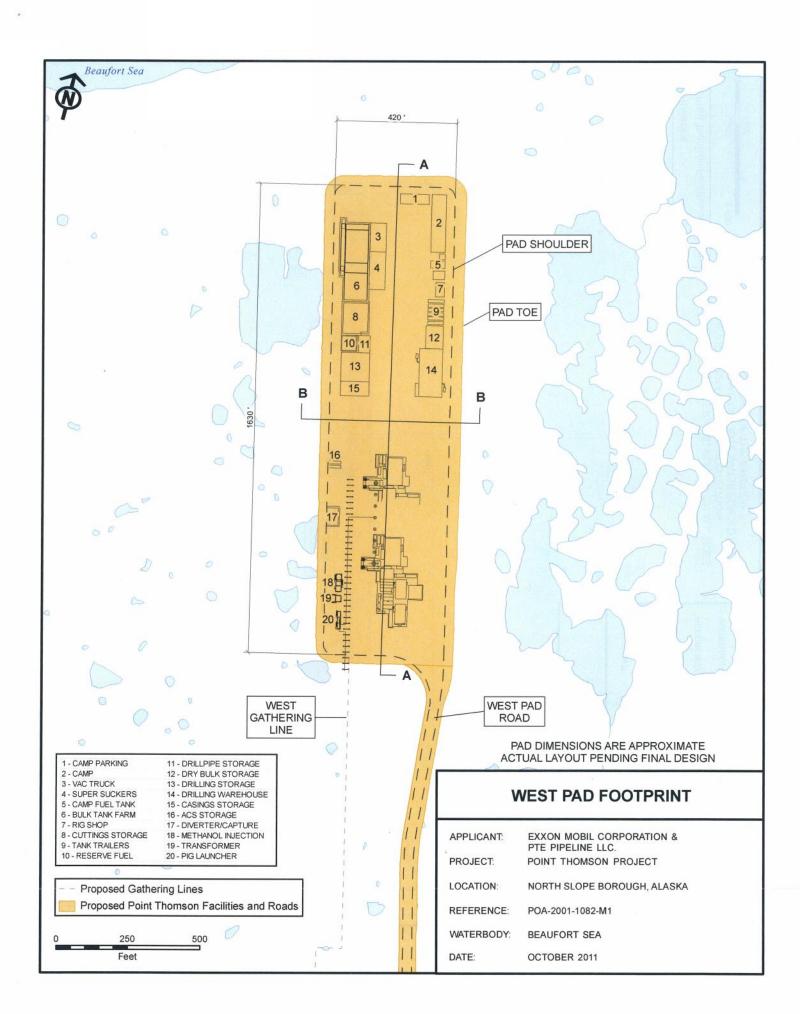
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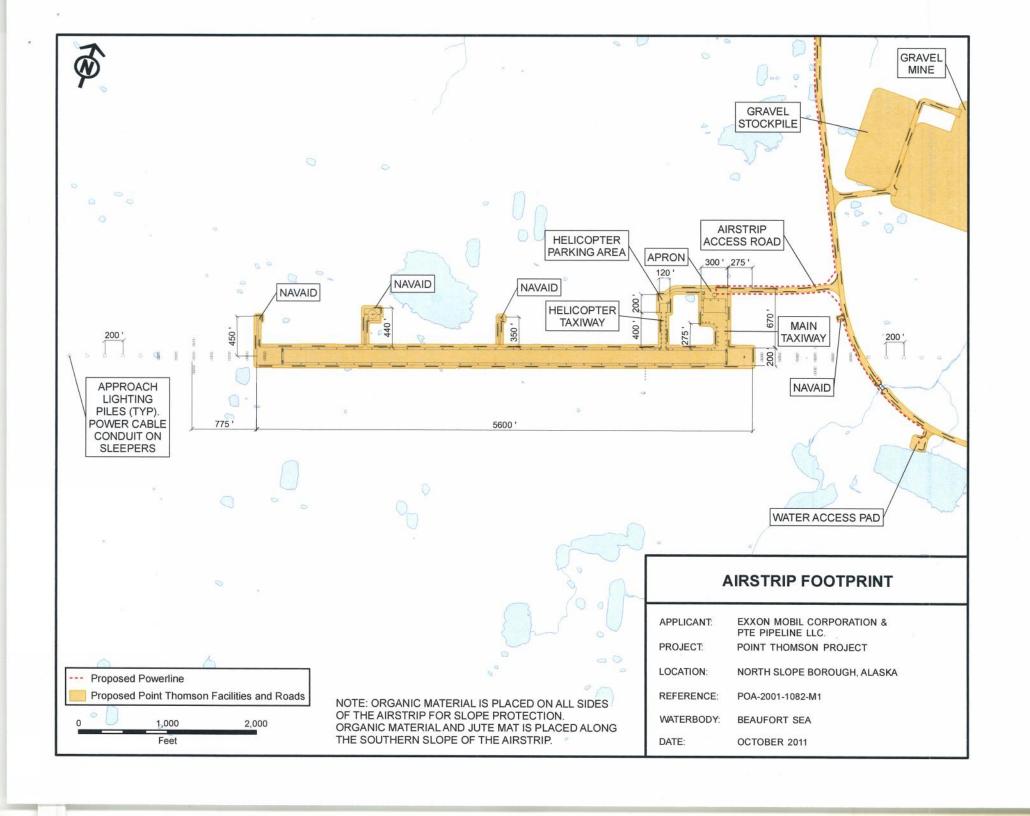


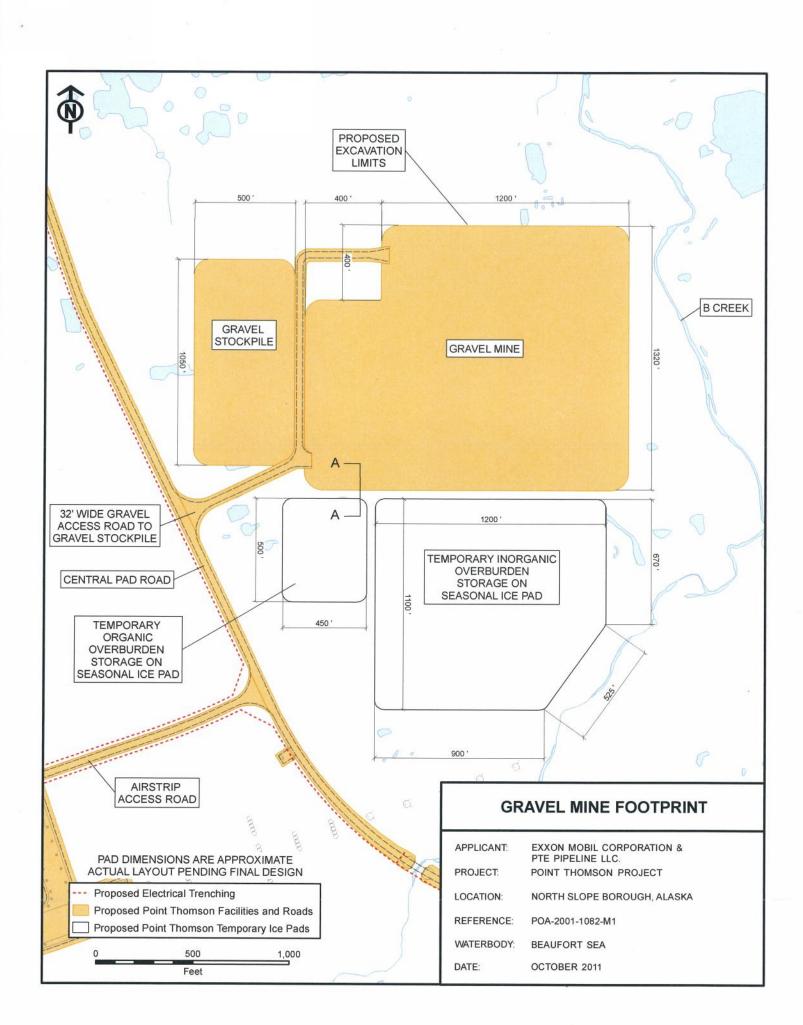












Public meetings have been scheduled for December 5–15, 2011, to seek comment on the Draft EIS. The format for these meetings will consist of an open house, followed by an opportunity for the public to provide comments. Individuals may provide oral comments, which will be recorded by a court reporter. No decisions on the project will be made at the public meeting. The open houses will allow the public to view information and the Draft EIS, and to speak with project team members in preparation for oral comments.

There will be a half-hour break after each open house (except in Kaktovik), followed by public comment. Inupiaq interpretation will be provided in Kaktovik, Nuiqsut, and Barrow. The meeting dates and locations will be as follows:

Anchorage - Monday, December 5, 2011

Z.J. Loussac Library 3600 Denali Street Open House 4-6 pm Public Comment 6:30-8 pm

Fairbanks - Wednesday, December 7, 2011

Wedgewood Resort - Taiga Center 212 Wedgewood Drive Open House 4-6 pm Public Comment 6:30-8 pm

Kaktovik - Monday, December 12, 2011

Marsh Creek Inn 901 Hula Hula Avenue Open House 6-7:30 pm Public Comment 7:30-9 pm

Nuiqsut - Tuesday, December 13, 2011

Trapper School 3310 3rd Avenue Open House 4-6 pm Public Comment 6:30-8 pm

Barrow - Thursday, December 15, 2011

Hopson Middle School 6501 Transit Street Open House 4-6 pm Public Comment 6:30-8 pm

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Attachment 4 – ExxonMobil Handout



Point Thomson Project Environmental and Logistics Comparisons of the DEIS Alternatives





Summary of PTP DEIS Alternatives

Alternative B – Applicant's Proposed Project

- Coast based Central Pad (Wells & Facilities) and East/West Well Pads
- 12 miles of infield gravel roads connecting East/West Pads and airstrip
- Infield gathering lines and 12" dia. 22-mile export pipeline to Badami
- Coastal re-supply barging and module sealift barging direct to Central Pad
- Seasonal ice roads to Endicott only needed during construction and drilling
- 5,600 foot inland airstrip and one inland gravel mine

Alternative C – Moves project components inland and eliminates barging to reduce coastal impacts

- Central Pad is split into a Well Pad for drilling at the existing Central Pad and a second Processing Pad for facilities is located 2 miles inland
- Gathering lines, infield gravel roads, and Export Pipeline are moved inland
- East and West pads moved half mile inland
- Includes an inland 44-mile gravel road from Point Thomson to Endicott
- Seasonal ice roads to Endicott only needed during construction phase
- No coastal re-supply barging; Module sealift barging to Deadhorse only
- Longer export pipeline parallels the 44-mile gravel road to Endicott
- 5,600 foot inland airstrip and multiple inland gravel mines

Alternative D – Similar to C except there is no road to Endicott

- Ground access limited to seasonal ice road during construction, drilling and operations
- No coastal re-supply barging; Module sealift barging to Deadhorse only
- The Export Pipeline is moved inland and goes to Badami rather than Endicott
- 5,600 foot inland airstrip and one inland gravel mine

Alternative E - Minimizes gravel footprint to reduce wetlands impacts

- Pads, mine and pipelines similar to Alternative B and barging is allowed
- Infield gravel roads to East/West Pads are eliminated and rely on seasonal ice road access and helicopter transport
- Reduced East/West Pad gravel area; use of multi-year ice pads during drilling
- Inland airstrip shortened to 3,700 feet to minimize gravel footprint

PROJECT PROJECT

DEIS Alternative B



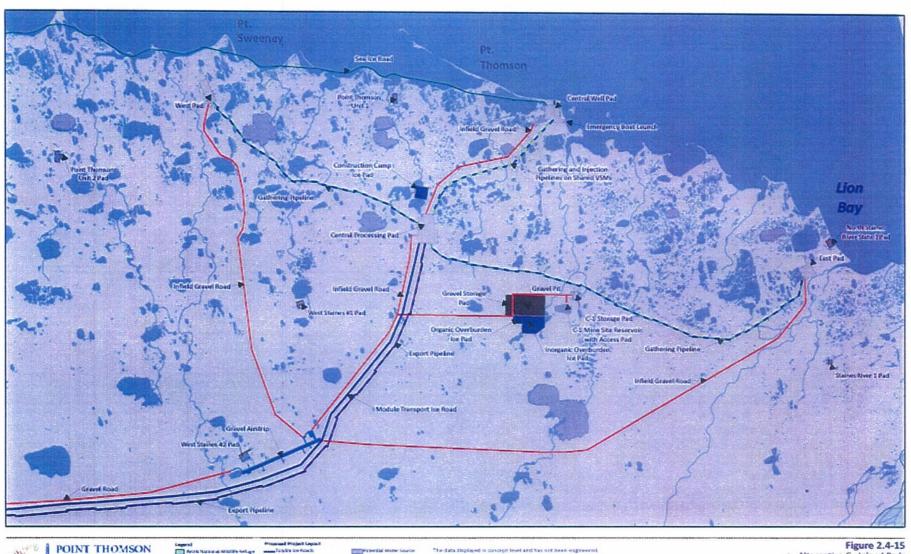
DEIS Alternative C



Alternative C - Inland Pads

with Gravel Access Road

Sheet 2 of 2



The data displayed is concept level and has not been engineered

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DEIS Alternative D





DEIS Alternative E







ExxonMobil's Environmental and Logistics Comparison of the PTP DEIS Alternatives

The bar charts in the following pages compare key environmental and logistical aspects of Action Alternatives C, D, and E versus Alternative B (ExxonMobil's Proposed Project) in the following categories:

- Environmental Wetlands Footprint
- Environmental Water Consumption
- Logistics Land Transport
- Logistics Barging
- Logistics Helicopters
- Logistics Fixed Wing

Air emissions is another key environmental aspect to compare. Fuel consumption for construction, drilling and operations activities associated with the bar chart categories directly correlates to air emissions. Qualitative differences in air emissions between the Alternatives can be compared based on the difference between bars for each category Transport.

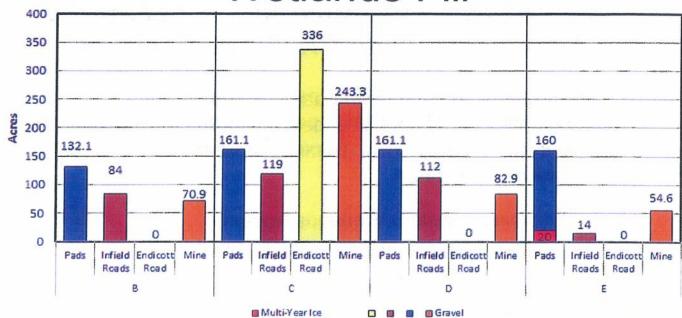
Likewise qualitative differences in noise and visual impacts can be compared based on the difference between bars for each category (especially in the helicopter and fixed with categories).

Conclusion

Of the four DEIS Action Alternatives, Alternative B (ExxonMobil's Proposed Project) has the least overall environmental impact.



Wetlands Fill



Alternative B

(Total 287 acres)

Mines

57.2-acre Mine Site, 13.7-acre Stockpile

Pads & Airstrip

1,573K CY, 132.1 Acres

Infield Roads

12 Miles, 627K CY= 84 Acres

Alternative C

(Total 859 acres)

Mines

66.8-acre Mine Site, 17.2-acre Stockpile.

Endicott Road:

5 Mine Sites= 125 Acres, 5 ea. 100K CY Stockpiles= 34.3 Acres

Pads & Airstrip

1,644 CY, 161 Acres

Infield Roads

17 Miles, 915K CY= 119 Acres

Endicott Road

2,375K CY Gravel Road= 336 Acres

Alternative D

(Total 356 acres)

Mines

65.7-acre Mine Site, 17.2-acre Stockpile

Pads & Airstrip

1,658K CY, 161 Acres

Infield Roads

16 Miles, 862K CY= 112 Acres

Ice Road

To Endicott constructed every year to every other year

Alternative E

(Total 208 + 20 acres for multi-year ice pads)

Mines

43.2-acre Mine Site, 11.4-acre Stockpile

Pads & Airstrip

1,592K CY, 140 Acres (+20 acres for multi-year ice pads)

Infield Roads

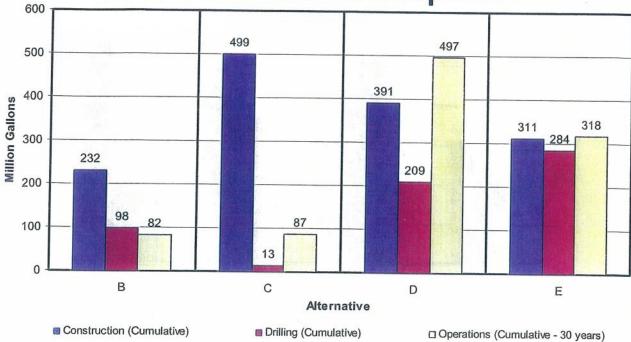
2 Miles, 108K CY= 14 Acres

Infield Ice Roads

Constructed every year



Water Consumption



Construction:

The most significant factors affecting water use in each Alternative are the differences in ice road construction and maintenance requirements. Alternatives C & D require two ice roads for each year of construction, as well as additional construction workforce. Alternative E is mostly driven by infield ice road construction and multi-year ice pad construction on the East and West Pads.

Drilling:

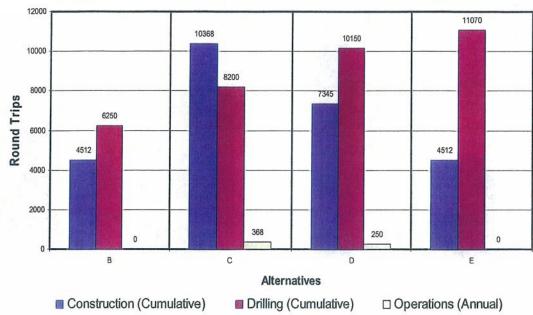
Similar to construction, drilling water consumption is primarily driven by ice road and pad differences. The secondary driver is the schedule extensions and required water to support people and equipment consumption for an extended period of time. Alternative C does not have drilling associated ice roads once the gravel road is completed; therefore, the difference is primarily the result the extended drilling schedule. Alternative D will require an ice road for each of the 2 years drilling extends beyond the Alternative B drilling schedule. Alternative E will require an ice road to Endicott for each of the two drilling seasons beyond the Alternative B drilling schedule, as well as infield ice roads for each year of schedule extension.

Operations:

Operational water consumption differences are also driven primarily by differences in ice road requirements. Alternative C does not require any ice roads due to the use of the gravel road to Endicott, but it will require additional operations staffing to manage the gravel road. Alternative D was originally assumed to require an ice road every other year to Endicott for operations resupply due to the lack of barge resupply access. If this ice road is required every year, (as assumed in the DEIS) then water consumption would double (to 636 M gallons) for the life of the Project. The significant increase in Alternative E water consumption is a result of the annual infield ice road construction.



Logistics- Land Transport



Construction:

Eliminating barging in Alternatives C and D significantly increases the frequency of trucking via ice roads to and from Point Thomson and the quantity of fuel stored at Central Pad. Each potential coastal barge load is shifted onto 10 trucks in the limited 3-month season of ice road transport. Construction of the gravel road to Endicott in Alternative C requires a larger civil scope with a corresponding increase in truck trips. Alternatives C and D would also have the need to transport 6 million gallons of diesel fuel over the ice road (600 truckloads) to support construction activities through the spring, summer and fall seasons.

In Alternatives C and D, sealift barges would have to offload facility modules of up to 1,300 tons at Prudhoe Bay where they would then be stored and preserved on gravel pads (as yet to be determined) until the winter ice road seasons. These 19 modules are too large to be transported via trucks and will transit via Self Propelled Module Transporters (SPMTs) on heavy haul ice roads. Ice road module transport results in diversions of the other truck traffic to bypass ice roads.

Drilling:

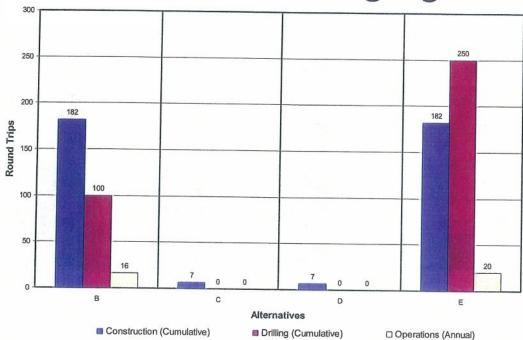
Eliminating barging in alternatives C and D directly affects the required number of truck trips via road and onward via ice roads to and from Point Thomson. This shifts the cargo back onto trucks in the limited 3-month season of ice road transport. The lack of infield gravel roads in Alternative E extends the years of drilling with multiple mobilizations of equipment and materials from a 3-year program to 5.5 years. There is also more trucking due to the shorter airstrip in Alternative E.

Operations:

Similar to construction and drilling, eliminating coastal barging during operations in Alternatives C (permanent gravel road) and D (annual ice road) shifts cargo to an increased number of trucks. Alternative B and E rely on barge and air cargo transportation and are not dependent on trucking.



Logistics-Barging



Construction:

Alternative B and E rely on coastal barging for a significant portion of cargo/equipment delivery to Central Pad (similar to the 188 barge round trips used to support the 2008-10 drilling program). Sealift barges would deliver large facility modules directly to Central Pad for Alternative B and E. The lack of barge access to Point Thomson in Alternatives C and D require 7 sealift barge trips to deliver modules to the Prudhoe Bay West Dock (60 miles West of Central Pad) for storage and later transport to Point Thomson via ice road. The lack of barge access also results in inefficient redesign and construction of smaller modules capable of moving via ice road.

Drilling:

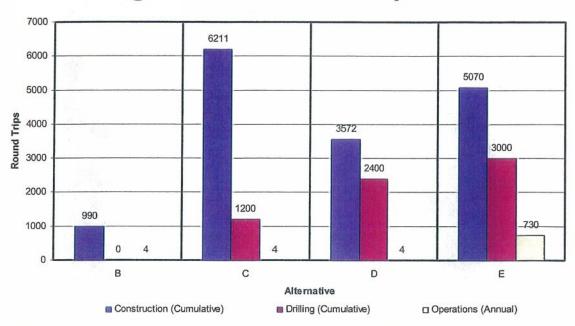
Elimination of coastal barging in Alternatives C and D shifts the transport of cargo to truck transport via ice road. The lack of infield gravel roads to the East and West Pads in Alternative E limits rig mobility and drilling activity, consequently requiring a longer drilling program with a significantly increased number of barge trips needed for the additional equipment and supplies needed to be stockpiled during the summer season in preparation for movement to the pads in winter. The shorter airstrip in Alternative E also limits air freight resupply and redirects these volumes to barge and truck transport.

Operations:

The elimination of barging in Alternatives C and D shifts the coastal barge cargoes overland via gravel or ice roads. While Alternative C can use the gravel access road during operations, Alternative D will require annual ice roads for resupply. Alternative E will require more barging in operations due to a shorter airstrip and resulting use of smaller capacity cargo aircraft.



Logistics- Helicopters



Alternative E Would Require a Helicopter Base:

A distinguishing aspect of Alternative E is that a full-time helicopter facility with base, hangers, fuel, and crews would need to be constructed at the airstrip and operated to support daily round trips to the satellite pads during 9 months of the year. During construction there would be some periods, such as when gravel is reworked at the East and West Pads, when up to 12 flights total to those pads would be needed in a single day. During drilling, all crews would need to be shuttled to the pads by helicopter until ice roads are available in winter. During operations daily helicopter flights would be required for 9 months of each year to access the East and West Pads until the infield ice roads are ready for use. Over the 30 year operational life of the project, approximately 21,900 infield helicopter flights could be required to East/West Pads.

Construction Under Alternatives C and D:

Constructing the all season gravel road in Alternative C will require extensive helicopter support for workforce rotation. The delay in completion of the permanent airstrip at Point Thomson for Alternatives C and D also increases the need for helicopter support that would have been converted to fixed wing a year earlier in Alternatives B.

Drilling Under Alternatives C and D:

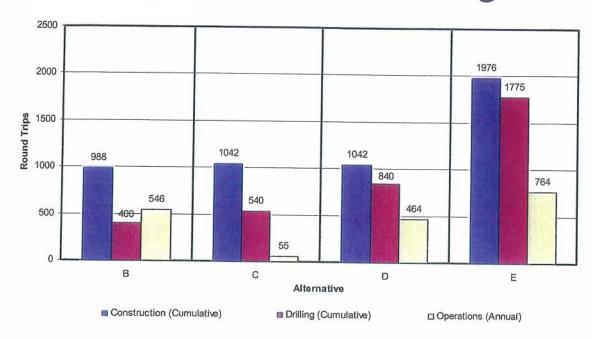
Under Alternatives C and D, the rig is mobilized prior to completion of the airstrip. Therefore, the early phase of the drilling program would require the support of helicopters in place of fixed-wing aircraft for part of the frequent shift changes of work force and crew.

Operations Under Alternatives B, C, and D:

Under Alternatives B, C, and D, operations will require minimal helicopter support.



Logistics- Fixed Wing



Drilling and Construction:

The 5,600-foot airstrip that is a component in Alternatives B, C, and D accommodates 30-passenger aircraft and regular cargo aircraft of 24,000-pounds (DC-6), as well as heavy aircraft with a 45,000-pound capacity (C130 type). The shorter 3,700-foot airstrip in Alternative E would require the use of 15 to 17 passenger aircraft for people, and it limits cargo aircraft to Twin Otters / Casa type with only a 5,000-pound capacity. This will effectively double the required air flights during construction and quadruple the number flights during drilling for Alternative E compared to Alternative B.

Operations:

The reduction in length of the airstrip to 3,700 feet in Alternative E would eliminate charter options from locations other than Deadhorse. It would also eliminate the possibility of accommodating emergency flights for response to any event that requires cargo or equipment over about 5,000 lbs. to be flown in when no ice road exists. Alternative C will require the least amount of annual aircraft support due to the availability of the permanent gravel road to Endicott.

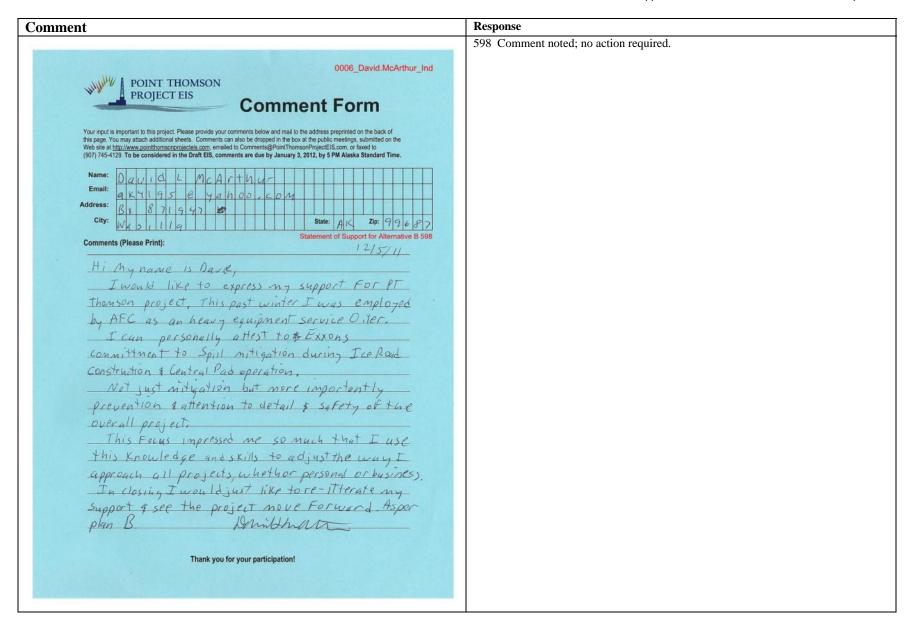
Attachment 5 - Comment Documents/Responses

Response Comment 94 Comment noted; no action required. 0001 Lorali.Simon Ind Davis, Cecile From: Alcantra, Rosetta M. Friday, December 02, 2011 2:01 PM Sent: Adair, Tina; Davis, Cecile Subject: 120212_Lorali Simon_Support Alternative B, Point Thomson DEIS From: Baij, Harry A Jr POA [mailto:Harry.A.Baij@usace.army.mil] Sent: Friday, December 02, 2011 1:52 PM To: Lorali Simon Cc: Begier, Erin; Alcantra, Rosetta M. Subject: RE: Support Alternative B, Point Thomson DEIS Hi Lorali and thank you for reviewing the Point Thomson Project Draft EIS and written comment submittal. Your comments will be given full consideration and included in the public record. The comment period will be open until Jan 3, 2012. Harry A. Baij Jr. US Army Corps of Engineers, Alaska harry.a.baij@usace.army.mil Office: 907.753.2784 Cell: 907.350.5097 www.poa.usace.army.mil/reg From: Lorali Simon [mailto:lorali.simon@gmail.com] Sent: Tuesday, November 29, 2011 9:29 AM To: Baij, Harry A Jr POA Subject: Support Alternative B, Point Thomson DEIS Mr. Baij, Statement of Support for Alternative B 94 I support Alternative B outlined in the Point Thomson Draft EIS produced by the US Army Corps of Engineers. Alternative B provides the safest, most environmentally responsible solution for developing Point Thompson, and ensures a minimal environmental footprint by incorporating a combination of summer coastal barging, winter ice roads, aviation, and in-filed roads. Through Alternative B, ExxonMobil will implement comprehensive mitigation measures to minimize impact on tundra, wildlife, aquatic resources, and subsistence activities. The Point Thomson project will provide wide-ranging benefits to Alaska in the form of new business opportunities, jobs, and revenues. Approval of the Point Thomson project, as proposed in Alternative B, is vital to the development of this world-class resource and North Slope gas commercialization. Direct benefits to the State of Alaska from Point Thomson include training and jobs for Alaskans, new revenues to the state and local governments, increased throughput for the Trans-Alaska oil pipeline, and increased business activity and revenue for the private sector. Point Thomson is a highly-technical project with high costs. Unnecessary requirements that provide very little, if any, incremental environmental benefits, should be avoided as to not compromise the economic viability of the project. The in-field roads included in Alternative B have been carefully routed to minimize the gravel footprint and for the efficient pass through of water. Moving roads inland as proposed in Alternative C and D would increase the gravel footprint and be less effective in maintaining natural drainage patterns of the project area. Alternatives C and D would move project components inland and eliminate barging, which is an

Comment	Response
established and safe means of supply for North Slope communities, including Prudhoe Bay. ExxonMobil has conducted safe barging operations in accordance with the Alaska Eskimo Whaling Commission Conflict Avoidance Agreement and in direct consultation with local whaling communities. 188 barging trips in support of Point Thomson have occurred with no impacts to marine mammals or subsistence. Alternatives C and D both result in inefficient logistical support and adds unnecessary challenges. Eliminating summer barging would result in increased costs, schedule delays, and increased tundra traffic. The 44-mile gravel road from Endicott to Point Thomson as proposed under Alternative C would create a much larger tundra footprint. Current North Slope experience at Alpine and Badami demonstrates that a gravel road is not necessary to support Point Thomson. However, not having a road connecting to Prudhoe Bay does make the combination of barging, ice roads, air access and in-field gravel roads essential. Alternative E would eliminate in-field gravel roads and shorten the airstrip. This alternative relies solely on helicopters and seasonally limited off-road vehicles for transportation to East and West pads for nine months of the year. There is no North Slope precedent for a production facility with such limitations. Moreover, inability to fly in poor weather introduces unnecessary safety risks for personnel, as well as emergency response limitations and operational inefficiencies. The longer runway in Alternative B provides better access in bad weather, reduces the number of flights by allowing larger aircraft for routine cargo shipments and allows for aircraft to transport larger equipment capabilities in the event of an emergency.	Comment letter 001 continued.
Davis, Cecile Sent: Tuesday, November 29, 2011 12:25 PM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission	96 Comment noted; no action required.
Name: Patrick S. Egger Email: Pat@JagoCM.com Contact me through email: Yes Address: 850 E. Sulatna Bay City: Wasilla State: AK Zip: 99654 Contact Phone: 907-864-0044 Add me to mailing list: Yes Comments: Point Thomson Project Comments: Statement of Support for Alternative B 96 I am very much in favor of the Point Thomson Project being permitted. Please take into consideration the importance of this project to the residents of Alaska by providing	
construction and long term jobs here in the State. The State of Alaska will also derive a positive benefit from its construction and production. My support is for alternative "B", considering it is the safest and most environmentally friendly solution for the project's development and operations. Alternative "B" is also the most cost effective and sensible manner for developing the field when considering all aspects of the project. Sincerely, Patrick S. Egger	

mment		Response
To: cc Cc: ex	ednesday, November 30, 2011 8:41 AM mments@pointthomsonprojecteis.com traski@gmail.com	97 Comment noted; no action required.
Name: Derek Miller Email: derek.miller@ala Address: PO Box 70502 City: Fairbanks State: AK Zip: 99707 Contact Phone: 907 978- Comments: I would like ExxonMobil's Point Thom ensures that the impact Alaska and the U.S. tha part of that effort. F 1) Increased revenues to	Statement of Support for Alternative B 97 to submit comments in support of Alternative B in the DEIS for son natural gas condensate development project. This alternative on the environment is minimal. It's important to the well-being of t we develop our natural resources and Pt. Thomson is an important our big reasons that these resources need to be developed responsibly: on the State of Alaska and private sector; 2) creation of jobs; 3) new and 4) increased Trans-Alaska Pipeline system (TAPS) throughput which	99 Comment noted; no action required.
To: co	ednesday, November 30, 2011 8:38 AM mments@pointthomsonprojecteis.com traski@gmail.com nline form submission	
current environmental re they must develop the be methods of development		

Comment		Response
Davis, Cecile	0005_Genevieve.Schok_Ind	100 Comment noted; no action required.
Sent: To: Cc: Subject:	Thursday, December 01, 2011 8:21 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
Address: 2350 l City: Fairbans State: AK Zip: 99709 Contact Phone: Comments: Alte	ve@flowline-alaska.com Waters Edge Lane k	
Alaska needs t	hese jobs.	



mment		Response
		101 Comment noted; no action required.
		102 Comment noted, no action required.
Davis, Cecile	0007_Alan.Coulter_Ind	
From: Sent: To: Subject:	Alan Coulter [alan_coulter@hotmail.com] Monday, December 05, 2011 1:51 AM comments@pointthomsonprojecteis.com Point Thompson Project	
1809 Quaker Vil Weybridge, Verm December 5, 201	nont, 05753	
working in Alas Arctic Wild and River three tim	ase do not disregard this comment because i am from Vermont! I have been ska every summer for the past 15 years. This work has included guiding for small guiding outfit in Fairbanks. In that time I have guided on the Canning mes and in the Arctic National Wildlife Refuge many more times.	
is not all powe effectively res And they cannot Even if there w offshore develo planet. Grubbin a short term pl generations, an	Ily aware of the concerns! A spill up there could ravage the coastline! Exxon profile except for that fact that they wield power with money. They cannot spond to an arctic spill!!! I guarantee that one will not happen!!! were not to be a spill, the impact of such development would be great. Large spill extracting oil is not in the best interest of the Arctic or of the ing for the last bit of domestic oil and impacting what is left that is wild is lan. Take the long view, which is to to preserve wilderness for future and not leave more and more messes to try to clean up, and fewer and fewer wild	
	ol or more arctic species are already in dangerous decline. Contaminated Sites and Spills 102	

mment		Response
		599 Comment noted; no action required.
Davis, Cecile	0008_Charles.Becker_Bus	
Sent: To: Cc: Subject:	Monday, December 05, 2011 12:07 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
Name: Charles Beck Email: <u>checker390</u> 0 Address: 3705 Arct City: Anchorage State: AK Zip: 99503 Contact Phone: 907 Comments: Charles	/ahoo.com /ic Blvd., #174	
Becker & Associate	es, LLC	
3705 Arctic Blvd.,		
Anchorage, Alaska	99503	
Department of the	Агту	
U.S. Army Engineer	District, Alaska	
Regulatory Divisio	on	
P.O. Box 6898		
JBER, Alaska 99506	5-0898	
	n Project Draft Environmental Impact Statement (Draft EIS) for the proposed con Mobil Corporation and PTE Pipeline LLC (Applicant).	
Dear District Engi	ineer:	
minimal environmer winter ice roads,	Statement of Support for Alternative B 599 cive B of the draft environmental impact statement because it would ensure a stal footprint by incorporating a combination of summer coastal barging, aviation, and in-field roads. These features are essential to safe and one of the project.	
measures to minimi	through Alternative B, ExxonMobil will implement comprehensive mitigation ize impact on tundra, wildlife, aquatic resources, and subsistence ionally, the coastal barge route is outside the main fall migration corridor	

Comment	Response
	Comment letter 008 continued.
Point Thomson is a highly-technical project with high costs. Unnecessary requirements that provide very little, if any, incremental environmental benefits, should be avoided as to not compromise the economic viability of the project. The in-field roads included in Alternative B have been carefully routed to minimize the gravel footprint and for the efficient pass through of water.	
The longer runway in Alternative B provides better access in bad weather, reduces the number of flights by allowing larger aircraft for routine cargo shipments and allows for aircraft to transport larger equipment capabilities in the event of an emergency.	
Moving roads inland as proposed in Alternative C and D would increase the gravel footprint and be less effective in maintaining natural drainage patterns of the project area. Moreover, the alternatives would eliminate barging, an established and safe means of supply for North Slope communities, including Prudhoe Bay. Eliminating summer barging would result in increased costs, schedule delays, and increased tundra traffic.	
ExxonMobil has conducted safe barging operations in accordance with the Alaska Eskimo Whaling Commission Conflict Avoidance Agreement and in direct consultation with local whaling communities. 188 barging trips in support of Point Thomson have occurred with no impacts to marine mammals or subsistence.	
Alternatives C and D both result in inefficient logistical support and add unnecessary challenges. The 44-mile gravel road from Endicott to Point Thomson as proposed under Alternative C would create a much larger tundra footprint. Current North Slope experience at Alpine and Badami demonstrates that a gravel road is not necessary to support Point Thomson. However, not having a road connecting to Prudhoe Bay does make the combination of barging, ice roads, air access and in-field gravel roads essential.	
Alternative E would eliminate in-field gravel roads and shorten the airstrip. This alternative relies solely on helicopters and seasonally limited off-road vehicles for transportation to East and West pads for nine months of the year. There is no North Slope precedent for a production facility with such limitations. Moreover, inability to fly in poor weather introduces unnecessary safety risks for personnel, as well as emergency response limitations and operational inefficiencies.	
Benefits to the State of Alaska from Point Thomson include training and jobs for Alaskans, new revenues to the state and local governments, increased throughput for the Trans-Alaska oil pipeline, and increased business activity and revenue for the private sector.	
Thank you for allowing me to comment.	
2	

nment			Response
Davis, Cecile		0009_Michael.Miller_Ind	104 Comment noted; no action required.
Sent: To: Cc: Subject:	Monday, December 05, 2011 9:10 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
	ler@gcinc.com /lie Circle		
	timely, cost-effective manner.		
		0010_Daniel.Anderson_Ind	106 Comment noted; no action required.
resources in a		0010_Daniel.Anderson_Ind	106 Comment noted; no action required.

nment			N.	sponse			
			10	Comment noted	; no action required.		
			100 may 20 may 2				
Davis, Cecile		0011_Jean.P	ublic_Ind				
From: Sent: To: Subject:	jean public [jeanpublic1@gmail.com] Monday, December 05, 2011 8:23 AM COMMENTS@POINTTHOMSONPROJE Fwd: public comment on federal register for business profits - always - Fwd: army	usace always votes for total desecration	of earth				
Date: Sun, Dec 4, 20 Subject: public comm profits - always - Fw To: comments@poin COMMENTS@whit humanelines@hsus.c Cc: info@peta.org. i	eanpublic 1@gmail.com> 11 at 3:58 PM nent on federal register - usace always vote d: army is one of the worst polluters in this tthompsonprojecteis.com, americanvoices; ehouse.gov, speakerboehner@mail.house.gg, info@idausa.org, info@theteapartv.org jfo@godscreaturesministrv.org, info@eart g, info@wec.greenpeace.org, info@ewtr	nation mail.house.gov, info@emagazine.con ov, SF.NANCY@mail.house.gov, niutice.org, info@defenders.org,					
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the usace is a terribly against the environm on this plan, the plan destroying prince wi jeanpublic 1@gmail. [Federal Register [Notices] [Pages 70979-709] From the Federal [FR Doc No: 2011-1] [Page 70979]] DEPARTMENT OF DEF	environmental despoiler, they always vote ent, this agency is ruled y big business and stinks to high heaven, it allows, exxon, wl liam sound 30 years ago, to go out and pol om Volume 76, Number 221 (Wednesday, g) Register Online via the Government 29632)	f big business and profiteers, they alw MONEY and GREED, we need t put i ich still havent paid the taxpayers back ute some more, excon cannot be truste November 16, 2011)] Printing Office [www.gpo.gov]	ays vote a break for				
the usace is a terribly against the environm on this plan, the plan destroying prince wijcanpublic 1@email. [Federal Register Notices Pages 70979-7091 From the Federal FR Doc No: 2011-100 Page 70979 P	environmental despoiler, they always vote ent, this agency is ruled y big business and stinks to high heaven, it allows, exxon, wl liam sound 30 years ago, to go out and pol om Volume 76, Number 221 (Wednesday, 0) Register Online via the Government 29632)	f big business and profiteers, they alw MONEY and GREED, we need t put i ich still havent paid the taxpayers back ute some more, excon cannot be truste November 16, 2011)] Printing Office [www.gpo.gov]	ays vote a break for				
the usace is a terribly against the environm on this plan. the plan destroying prince wijcanpublic1@gmail. [Federal Register [Notices] Pages 70979-709] From the Federal [FR Doc No: 2011- [[Page 70979]] DEPARTMENT OF DEI Department of the Notice of Availal Statement for the AK	environmental despoiler, they always vote ent. this agency is ruled y big business and stinks to high heaven, it allows, exxon, wl liam sound 30 years ago, to go out and pol om Volume 76, Number 221 (Wednesday, 0) Register Online via the Government 29632) ENSE Army, U.S. Army Corps of Engineer	f big business and profiteers, they alw MONEY and GREED, we need t put i ich still havent paid the taxpayers back ute some more, excon cannot be truste November 16, 2011)] Printing Office [www.gpo.gov]	ays vote a break for				
the usace is a terribly against the environm on this plan, the plan destroying prince wi jeanpublic l@gmail. [Federal Registe: [Notices] [Pages 70979-709] From the Federal [FR Doc No: 2011-10] [[Page 70979]] DEPARTMENT OF DEI Department of the Notice of Availat Statement for the AK AGENCY: Corps of	environmental despoiler, they always vote ent, this agency is ruled y big business and stinks to high heaven, it allows, exxon, wl liam sound 30 years ago, to go out and pol om Volume 76, Number 221 (Wednesday, 0) Register Online via the Government 29632) ENSE Army, U.S. Army Corps of Engineer ility of the Draft Environmental I Proposed Point Thomson Project, N	f big business and profiteers, they alw MONEY and GREED, we need t put i ich still havent paid the taxpayers back ute some more, excon cannot be truste November 16, 2011)] Printing Office [www.gpo.gov]	ays vote a break for				

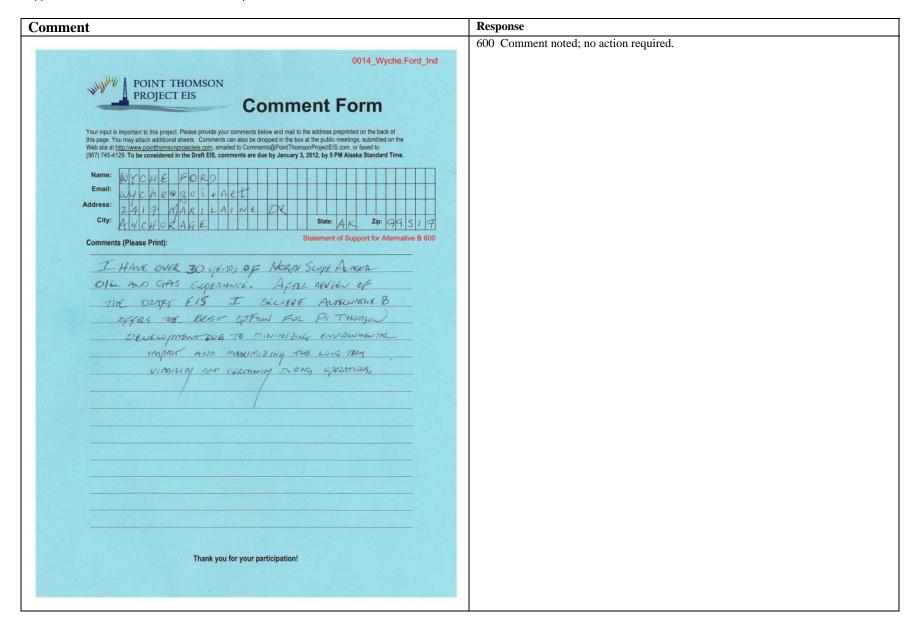
mment	Response
	Comment letter 011 continued.
ACTION: Notice of Availability.	
SUMMARY: In accordance with the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers, Alaska District, has prepared a Draft Environmental Impact Statement (EIS) on the proposed development by the Exxon Mobil Corporation and PTE Pipeline LLC (Applicant). The Draft EIS evaluates project alternatives and potential impacts to the environment which may occur from the Applicant's proposal to construct industrial infrastructure and produce liquid hydrocarbon resources near Point Thomson, Alaska. The proposed project includes the construction of structures in navigable waters of the United States (U.S.) and the discharge of dredged and/or fill materials into waters of the U.S., including wetlands. The proposed work requires authorization from the Corps of Engineers under Section 10 of the Rivers and Harbors Act (RHA) of 1899 and Section 404 of the Clean Water Act (CWA). The Draft EIS will be used to evaluate the Applicant's Department of the Army permit application and compliance with NEPA. Draft EIS Availability: Electronically available for viewing, copying, or printing at: http://www.pointthomsonprojecteis.com . A printed Executive Summary, which includes 2 Compact Discs containing the entire Draft EIS, can be obtained electronically through the project Web site address immediately above. Draft EIS Comment Period: The 45-day review and comment period begins on November 18, 2011 and ends on January 3, 2012, to: Harry A. Baij Jr., U.S. Army Corps of Engineers, Alaska District, Regulatory Division, Post Office Box 6898, JEER, AR 95056-0898. Send electronic comments, received by January 3, 2012, to: comments@pointthomsonprojecteis.com. FOR FURTHER INFORMATION CONTACT: Contact Mr. Baij by email message at harry.a.baij@usace.army.mil, by telephone at (800) 478-2712 (toil free	
within AK), (907) 753-2784 (office), or (907) 350-5097 (cell). SUPPLEMENTARY INFORMATION: The Corps of Engineers, Alaska District, has published a Public Notice of Application for Permit for the Applicant's proposal to coincide with this Notice of Availability. The Public Notice can be viewed at https://www.poa.usace.army.mil/reg . Navigate to the "Public Notice" button and file number POA-2001-1082-MI, Beaufort Sea. Comments on the Public Notice can be submitted by clicking on the Submit Comments button at the Public Notice Web page. The comment period is identical to the Draft EIS comment period. 1. Authorities: Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). 2. Background Information: The Corps of Engineers, Alaska District, received the Applicant's complete permit application on November 1, 2011. The Applicant's upropse is to produce liquid hydrocarbons and delineate and evaluate hydrocarbon resources in the Point Thomson area. Two natural gas production wells have been previously authorized, drilled, and tested at an existing gravel pad at Point Thomson, AK. Other previously authorized gravel pads and exploration wells also exist in the general area. 3. Location: Alaska's Arctic Coastal Plain, Beaufort seacoast, approximately 60 miles east Prudhoe Bay. Most of the reservoir is located under the Beaufort Sea in State of Alaska waters. The proposed facilities would be located primarily onshore, on State of Alaska lands, leased to the Applicant. Kaktovik, AK is located approximately 60 miles east. The Arctic National Wildlife Refuge is approximately 2 miles east.	
2	

Comment	Response
	Comment letter 011 continued.
4. Proposed Project: Industrial development involving gravel fill placement in tundra waters and wetlands and marine structures. 3 production and/or processing gravel pads; several miles of in-field gravel roads; similar length in-field above-ground pipelines; a marine bulkhead, service pier, and mooring dolphins; navigational dredging; and other industrial infrastructure. Processed liquid hydrocarbons would be transported through a new 22-mile long elevated pipeline to existing facilities to the west and further connections to the Trans Alaska Pipeline System. Construct temporary and permanent camps (lodging); offices, warehouses, and shops; electric power generation and distribution facilities; fuel, water, and chemical storage; a water and wastewater transportance of the second control of the secon	

Comment				Response
				Comment letter 011 continued.
05 December 2011	Anchorage, AK	Open House	4-	
6 p.m.	Loussac Library	Public Comment		
6:30-8 p.m. 07 December 2011			4-	
6 p.m.	Westmark Hotel			
6:30-8 p.m. 12 December 2011			6-	
7:30 p.m.	Marsh Creek Inn	ACTION OF THE PARTY OF THE PART		
9 p.m. 13 December 2011				
6 p.m.	Trapper School		1 108/22	
6:30-8 p.m. 15 December 2011			4-	
6 p.m.	Hobson Middle School		4-	
6:30-8 p.m.				
Baij at the contact information above full consideration to all public comm summary of the public meetings, writt will be incorporated into the Final E Dated: November 7, 2011. Harry A. Baij, Jr., Project Manager, US Army Corps of Eng [FR Doc. 2011-29632 Filed 11-15-11; 8 BILLING CODE 3720-58-P	ments received on the Draf- ten comment letters, and re EIS, as appropriate.	t EIS. A		
	4			

0012_Joe.Spink_Ind e of Alaska and to Alaskans.	109 Comment noted; no action required.
e of Alaska and to Alaskans.	
e of Alaska and to Alaskans.	
Statement of Support for Alternative B 109 ovides the safest, most nt Thomson's resources.	
by incorporating a combination of in-field roads. These features are s.	
efits to Alaska in the form of new	
lternative B, is vital to the e gas commercialization.	
on include training and jobs for ts, increased throughput for the ity and revenue for the private	
osts. Unnecessary requirements that benefits, should be avoided as to not	
	by incorporating a combination of in-field roads. These features are significant to Alaska in the form of new liternative B, is vital to the e gas commercialization. On include training and jobs for increased throughput for the lity and revenue for the private losts. Unnecessary requirements that

nment		Response
		112 Comment noted; no action required.
Davis, Cecile	0013_Kim.Skipper_Ind	
From: Sent: To: Subject:	Alcantra, Rosetta M. Sunday, December 11, 2011 12:16 PM Davis, Cecile; Adair, Tina 120511 Kim Skipper PT Comment	
Please log and updat	te mailing list. Rosetta	
Sent: Friday, Decem To: Kim Skipper Cc: Begier, Erin; Alca	. Jr POA [mailto:Harry.A.Baij@usace.army.mil] mber 09, 2011 5:51 PM cantra, Rosetta M. Thompson Project EIS	
	aks much for your comments. They will be given full consideration and administrative record. You may add to them up until Jan. 02, 2012 if you	
Harry A. Baij Jr. US Army Corps o harry.a.baij@us Office: 907.753 Cell: 907.350 www.poa.usace.a	3.2784 3.5097	
	mpson Project EIS	
Thank you for	giving me an opportunity to testify on this important project for Alaska. Statement of Support for Alternative B 112	
	on Mobil's Point Thomson natural gas condensate development project and Iternative B - coastal pads with in-field gravel roads. It is the most	
	and responsible way to proceed – the footprint is minimized. The longer provides better access especially during times of inclement weather.	
This project is Alaska.	important for Alaska ~ new business, more jobs and revenue to the State of	
	1	



ıment			Response
D!- 0!!-		0015 Annette.Stibinski Ind	113 Comment noted; no action required.
Davis, Cecile	An In Section 10 and 1 and 10		
Sent:	Tuesday, December 06, 2011 1:43 PM		
To:	comments@pointthomsonprojecteis.com		
Cc: Subject:	extraski@gmail.com Online form submission		
Subject.	Offine form submission		
Name: annette ski			
Email: <u>askibinski</u>	@carlile.biz		
Address: 3401 Per	enosa Bay		
City: Anch State: AK			
Zip: 99515			
Contact Phone:		Statement of Support for Alternative B 113	
	rt Point Thomson project and specifical	ly Alternative B. I know that Oil	
	ped responsibly and will be done so in		
least amount of i	mpact ont he environment. The time is M	OW to keep our economy flowing. It is	
crucial to our st	ate and our nation. The residual amount	of work - direct and nondirect are	
	rable, but I can guarantee it is beyond		
now and we need 1	ess dependency on foreign imports e	very step and opportunity counts.	
mank you for adv	ancing Alternative B.		
			115 Comment noted; no action required.
2010		0016 Charles.Hardman Ind	113 Comment noted, no action required.
Davis, Cecile		0010_Gridings.ridinding.ind	
Sent:	Tuesday, December 06, 2011 3:43 PM		
To:	comments@pointthomsonprojecteis.com		
Cc:	extraski@gmail.com		
Subject:	Online form submission		
Name: Charles Har			
Email: chardman@c			
Address: 341 Ocea	n Point Dr.		
City: Anchorage			
State: AK			
Zip: 99515		Statement of Support for Alternative B 115	
Contact Phone:	nt Doint Thompson, Altopastics R		
Comments: 1 Suppo	rt Point Thompson, Alternative B		
			116 Comment noted; no action required.
Davis, Cecile		0017_Christen.VanTreek-Dwiggins_Ind	110 Comment noted, no action required.
Davis, Cecile			
Sent:	Tuesday, December 06, 2011 3:12 PM		
Sent: To:	comments@pointthomsonprojecteis.com		
Sent: To: Cc:	comments@pointthomsonprojecteis.com extraski@gmail.com		
Sent: To:	comments@pointthomsonprojecteis.com		
Sent: To: Cc: Subject:	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
Sent: To: Cc: Subject: Name: Christen Va	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
Sent: To: Cc: Subject: Name: Christen Va Email: cvantreeck	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission n Treeck-Dwiggins @carlile.biz		
Sent: To: Cc: Subject: Name: Christen Va	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission n Treeck-Dwiggins @carlile.biz		
Sent: To: Cc: Subject: Name: Christen Va Email: cvantreeck Address: 1800 E 1 City: Anchorage State: AK	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission n Treeck-Dwiggins @carlile.biz		
Sent: To: Cc: Subject: Name: Christen Va Email: <u>cvantreeck</u> Address: 1800 E 1 City: Anchorage State: AK Zip: 99501	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission n Treeck-Dwiggins @carlile.biz		
Sent: To: Cc: Subject: Name: Christen Va Email: _cvantreeck Address: 1800 E 1 City: Anchorage State: AK Zip: 99501 Contact Phone:	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission n Treeck-Dwiggins @carlile.biz st Avenue		
Sent: To: Cc: Subject: Name: Christen Va Email: _cvantreeck Address: 1800 E 1 City: Anchorage State: AK Zip: 99501 Contact Phone:	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission n Treeck-Dwiggins @carlile.biz	Statement of Support for Alternative B 116	

nment			Response	
Davis, Cecile		0018_David.Truitt_Ind	117 Comment noted; no action required.	
Sent: To: Cc: Subject:	Tuesday, December 06, 2011 3:59 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: DAVID TRUITT Email: EDESMGCI.NET Address: 610 CEDAR P. City: ANCHORAGE State: AK Zip: 99515 Contact Phone: Comments: "I suppor	ARK CIR t Point Thomson, Alternative B"	Statement of Support for Alternative B 117		
		0019 Diane.Lowe Ind	118 Comment noted; no action required.	
Davis, Cecile Sent: To: Cc: Subject:	Tuesday, December 06, 2011 3:15 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: Diane Lowe Email: dlowe@carlile Contact me through ex Address: 1800 E. 1st City: Anchorage State: AK Zip: 99501 Contact Phone: 907-2 Comments: I support	mail: Yes Ave 76-7797	Statement of Support for Alternative B 118		
Davis, Cecile		0020_Donna.Riordan_Ind	120 Comment noted; no action required.	
Sent: To: Cc: Subject:	Tuesday, December 06, 2011 9:00 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
	mail: Yes ST APT 3 29-4097 st: Yes NOW ENOUGH ABOUT ALL ASPECTS OF THIS CIAL IT WILL BE. I DO NOT QUITE GRASI			

		Response
Davis, Cecile	0021_Eric.Stephenson_Ind	601 Comment noted; no action required.
Sent: Tuesday, December 06, 2011 3:10 PM To: comments@pointthomsonprojecteis.co Cc: extraski@gmail.com Subject: Online form submission	m	
Name: ERIC STEPHENSON Email: akbear1981@vahoo.com Contact me through email: Yes Address: 2231 daybreak ct City: anchorage State: AK Zip: 99501 Contact Phone: 907-750-2850 Comments: I support Point Thomson, Alternative B	Statement of Support for Alternative B 601	
Davis, Cecile	0022_Eugene.ONeal_Ind	215 Comment noted; no action required.
Sent: Tuesday, December 06, 2011 3:24 PM To: comments@pointthomsonprojecteis.co Cc: extrask@gmail.com Subject: Online form submission		
Contact me through email: Yes Address: 12110 PORTAGE ST City: ANCHORAGE State: AK Zip: 99515 Contact Phone: 907-344-9445 Add me to mailing list: Yes Comments: As a lifelong Alaskan, I am in favor of ti is time for Alaskans to take a stand for jobs for or choke hold on our state has to end. We built this stewarts of the land as well. Let's take back our future and move this project for	ur future generations. The enviromental state without their help and were good	
land and resources like those of us did back in the		
Davis, Cecile	0023_Janette.Miranda_Ind	216 Comment noted; no action required.
Davis, Cecile Sent: Tuesday, December 06, 2011 3:11 PM To: comments@pointthomsonprojecteis.co Cc: extraski@gmail.com Subject: Online form submission		216 Comment noted; no action required.

nment			Response	
Davis, Cecile		0024_Jay.Baldwin_Ind	217 Comment noted; no action required.	
Sent: To: Cc: Subject:	Tuesday, December 06, 2011 3:29 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: Jay Baldwin Email: <u>jbaldwin</u> Contact me throu Address: PO Box City: Fairbanks State: AK Zip: 99708 Contact Phone: 9 Add me to mailin Comments: I supp	carlile,biz gh email: Yes 81914 07-347-7780	Statement of Support for Alternative B 217		
Davis, Cecile		0025_Jeremy.Miller_Ind	218 Comment noted; no action required.	
Sent: To: Cc: Subject:	Tuesday, December 06, 2011 3:35 PM comments@pointthomsonprojecteis.com extraskl@gmail.com Online form submission			
Name: Jeremy Mil Email: <u>imiller@c</u> Address: 3520 Sp City: Anchorage State: AK Zip: 99516	arlile.biz	Statement of Support for Project 218		
years I feel it our natural resc environment when The North Slope ground cannot be on the roads and and windy. The wind speeds over chill. This pla come back to Anc	erson who has worked on the North Slopis very important that we move forward unces. I feel sorry for people who the they truly don't have an understanding is a barren waste land. In the summer traversed and the fact of the matter pads than trying to maneuver in the tostorms we get on the North Slope are bide mph with temperatures as low as decewas made to work and that is it. Go horage. Any one who is that concerned go spend some time up there, that would	e of Alaska for much of the past 15 with Exploration and development of ink they are trying to protect the g of what they are trying to protect. you are eaten alive by bugs, the is that the wildlife prefer to travel indra. In the winter it is cold, dark intal. I have personally experienced 10 ambient and -135 with the wind o up and spend your two weeks there and about how development will negitively		

mment		Response	
Davis, Cecile Sent: Tuesday, December 06, 201 To: comments@pointthomsonpro Cc: extrask@gmail.com Online form submission Name: Kisha Jackson Email: kjackson@carlile.biz Address: 1800 East 1st Avenue City: Anchorage State: AK Zip: 99501 Contact Phone: 907-632-2435 Comments: I support Point Thompson, Alternat	ojecteis.com	219 Comment noted; no action required.	
Davis, Cecile	0027_Lauren.Flemming_Ind	220 Comment noted; no action required.	
Sent: Tuesday, December 06, 201 To: comments@pointthomsonpre Cc: extraski@gmail.com Online form submission			
	Statement of Support for Project 220 about this project. I have family who work up in king there. I fully support the Point thompson		
Davis, Cecile	0028_Leona.Sprinkle_Ind	221 Comment noted; no action required.	
Sent: Tuesday, December 06, 201 To: comments@pointthomsonpro Cc: extraski@gmail.com Subject: Online form submission			
Name: LEONA SPRNKLE Email: LSPRINKLE@CARLILE.BIZ Address: 311 BEULAH CR #3 City: ANCHORAGE State: AK Zip: 99504 Contact Phone: Comments: I SUPPORT POINT THOMPSON, ALTERNAT	TIVE B. Statement of Support for Alternative B 221		

mment		Response	
Davis, Cecile	0029_Lisa.Marquiss_Ind	222 Comment noted; no action required.	
City: Palmer State: AK Zip: 99645 Contact Phone: ! Comments: The P- opportunities. companies and	<u>s@carlile.biz</u> orth Midtown Drive		

omment		Response
Davis, Cecile Tuesday, December 06, 2011 3:15 PM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Online form submission Name: Nicole Mikes Email: nmikes@carlile.biz Address: 8620 Turf Court City: Anchorage State: AK Zip: 99584 Contact Phone: 9073433239 Comments: I support Point Thomson, Alternative B. Please continue with all available efforts to limit environmental impact. That said this is an important project for Alaska and based on the information thus far I support it. I wish the food industry was pressured the same regulations and expectations as our developers.		223 Comment noted; no action required.
Davis, Cecile Sent: Tuesday, December 06, 2011 3: To: comments@pointthomsonproject Ce: extraski@gmail.com Subject: Online form submission Name: Paul Nave (Nave Consulting) Email: paul nave@hotmail.com Contact me through email: Yes Address: 23321 SE 158th ST. City: Issaquah State: WA Zip: 98027 Contact Phone: 2069726871 Comments: I fully recommend and support the Exception	Statement of Support for Alternative B 224	224 Comment noted; no action required.
Davis, Cecile Sent: Tuesday, December 06, 2011 2: To: comments@pointthomsonproject Cc: extraski@gmail.com Subject: Online form submission	0032_Peggy.Spittler_Ind 5 PM eis.com	225 Comment noted; no action required.
Name: peggy spittler Email: <u>part@ak.net</u> Address: 3320 admiralty bay drive City: anchorage State: AK Zip: 99515 Contact Phone: Comments: My husband and I both support that Pc hope every person in America whos longs for our dependent on foriegn energy imports would agree	country to be self-sufficient and less	

nment			Response	
Davis, Cecile		0033_Samantha.Savage_Ind	226 Comment noted; no action required.	
Sent: To: Cc: Subject:	Tuesday, December 06, 2011 3:56 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: Samantha Email: <u>ssavage@</u> Address: 2231 D City: Anchorage State: AK Zip: 99501 Contact Phone: Comments: I sup	<u>dcarlile.biz</u> Daybreak C	Statement of Support for Alternative B 226		
Davis, Cecile		0034_Tammi.Alexander_Ind	227 Comment noted; no action required.	
Sent: To: Cc: Subject:	Tuesday, December 06, 2011 4:38 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
within Alaska i families not on	<u>ler@carlile.biz</u> ugh email: Yes .inden Dr.	tionally. Alaska supports a lot of		
Davis, Cecile		0035_Clyde.Carey_ind	228 Comment noted; no action required.	
Sent: To: Cc: Subject:	Wednesday, December 07, 2011 9:48 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: Clyde Car Email: ccarev@c Contact me thro Address: 1800 E City: Anchorage State: AK Zip: 99501 Contact Phone: Comments: I sup	<u>arlile.biz</u> ugh email: Yes : 1st Ave	Statement of Support for Alternative B 228		

mment			Response
Davis, Cecile 0036_Dan.Parrish_Ind		0036_Dan.Parrish_Ind	229 Comment noted; no action required.
Sent: To: Cc: Subject:	Wednesday, December 07, 2011 7:29 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
Name: Dan Parri Email: dnpcap45 Contact me through Address: 106 Mc City: League ci State: TX Zip: 77573 Contact Phone: Comments: I sup	nergen neget	Statement of Support for Project 229	
Davis, Cecile		0037_Darald.Morgan_Ind	230 Comment noted; no action required.
Sent: To: Cc: Subject:	Wednesday, December 07, 2011 6:54 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
Address: 6976 M City: Port Orch State: WA Zip: 98367 Contact Phone: Comments: I bel Defense. We are Defense. 3.Dete	BCarlile.biz ough email: Yes nnight Dr. S.E. nard	Natural resources. 2.National s less dependence on foreign	

mment		Response	
n 6 w 50	1000 2 (1270) 107	231 Comment noted; no action required.	
Davis, Cecile	0038_Don.Taylor_Ind	•	
Sent: To:	Wednesday, December 07, 2011 7:35 AM comments@pointthomsonprojecteis.com		
Cc:	extraski@gmail.com		
Subject:	Online form submission		
Subject.	Chiline Ionn Submission		
Name: Don Taylor	v le		
Email: donte8692			
Contact me throu			
Address: 39450 2			
City: Enumclaw	AVE 32		
State: WA			
Zip: 98022	Statement of Support for Alternative B 231		
Contact Phone:	and the second s		
Comments: • The	proposed project is important to the state of Alaska and to Alaskans.		
 Of the des 	sign alternatives considered, Alternative B provides the safest, most		
	responsible solution for developing Point Thomson's resources.		
• Alternativ	ve B ensures a minimal environmental footprint by incorporating a combination		
	l barging, winter ice roads, aviation, and in-field roads. These features are		
essential to the	project's safe and efficient operations.		
Through Al	lternative B, ExxonMobil will implement comprehensive mitigation measures to		
minimize impact	on tundra, wildlife, aquatic resources, and subsistence activities.		
. EvvenMohill	l works closely with the U.S. Fish and Wildlife Service and state agencies to		
	ers and other wildlife are fully protected. Coastal barge route is outside the		
	ion corridor of bowhead whales.		
main tall migrat	ion corridor of bownead whales.		
. The Point	Thomson project will provide wide-ranging benefits to Alaska in the form of		
	nortunities, jobs, and revenues.		
new business opp	ortunities, jobs, and revenues.		
 Approval o 	of the Point Thomson project, as proposed in Alternative B, is vital to the		
development of t	this world-class resource and North Slope gas commercialization.		
Direct ben	nefits to the State of Alaska from Point Thomson include training and jobs for		
	evenues to the state and local governments, increased throughput for the		
	pipeline, and increased business activity and revenue for the private		
sector.	of the state of th		
Defeat The	to a black, and for any order that black areas the second and the		
	mson is a highly-technical project with high costs. Unnecessary requirements		
	y little, if any, incremental environmental benefits, should be avoided as to		
not compromise t	the economic viability of the project.		
. The in fin	eld roads included in Alternative B have been carefully routed to minimize the		
	and for the efficient pass through of water.		
graver rootprint	and for the efficient pass through of water.		
The longer	runway in Alternative B provides better access in bad weather, reduces the		
	s by allowing larger aircraft for routine cargo shipments and allows for		
ori ciair co tran	ishore ranger edarbinetic cabantiferes in the exeme of an emer Rench.		
	is by allowing larger aircraft for routine cargo shipments and allows for isport larger equipment capabilities in the event of an emergency.		

nment			Response
Davis, Cecile		0039_Jared.Norton_Ind	232 Comment noted; no action required.
Sent: To: Cc: Subject:	Wednesday, December 07, 2011 7:53 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
Name: Jared Nor Email: jarednor Address: 3717 n City: tacoma State: WA Zip: 98406 Contact Phone: Comments: I sup	@gmail.com	Statement of Support for Alternative B 232	
Davis, Cecile		0040_Ken_Ind	233 Comment noted; no action required.
Sent: To: Cc: Subject:	Wednesday, December 07, 2011 5:26 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
Name: ken Email: ken@baun Address: 27913 City: federal w State: WA Zip: 98003 Contact Phone: Comments: "I su	21st ave s ay	Statement of Support for Alternative B 233	
Davis, Cecile		0041_Mike.Walls_Ind	234 Comment noted; no action required.
Sent: To: Cc: Subject:	Wednesday, December 07, 2011 6:30 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
City: Buckley State: AK Zip: 98321 Contact Phone:		Statement of Support for Project 234 think of all the jobs that it	

nment		Response
		235 Comment noted; no action required.
Davis, Cecile	0042_Theo.McNama	ra_Ind
	Nednesday, December 07, 2011 12:57 AM	
	comments@pointthomsonprojecteis.com extraski@gmail.com	
	Online form submission	
Name: Theo McNamara		
Email: tmcnamara@carli		
Address: 438 East 9th City: Anchorage	AVE #216	
State: AK		
Zip: 99501	Statement of Support for Alternative B 2	35
Contact Phone: 907-301 Add me to mailing list		
	posed project is important to the economic well being of Alaskans	and
the State's continued	growth and its responsiblity to provide this country with a needed	
resource.		
	ernatives I've reviewed, I'm convinced that Alternative B provides ntally-responsible solution for developing Point Thomson's resourc	
	ombination of summer coastal barging, winter ice roads, aviation, produce much smaller environmental footprint, while ensuring a san.	
I believe, throug	h Alternative B, ExxonMobil's comprehensive mitigation measures wi	11
minimize impact on tun	dra, wildlife, aquatic resources, and subsistence activities.	
	ExxonMobil works closely with the U.S. Fish and Wildlife Service	
	re polar bears and other wildlife are fully protected and that the outside the main fall migration corridor of bowhead whales.	in.
	project will provide wide-ranging benefits to Alaska in the form ties, jobs, and revenues and provide all Americans a much more	of
secure and scaple econ	ony.	
	oint Thomson project, as proposed in Alternative B, is vital to th rld-class resource and North Slope gas commercialization.	e
Direct benefits t	o the State of Alaska from Point Thomson include training and jobs	for
Alaskans, new revenues	to the state and local governments, increased throughput for the	
	ine, and increased business activity and revenue for the private	
sector.		
	a highly-technical project with high costs. Unnecessary requiremen	
	le, if any, incremental environmental benefits, should be avoided nomic viability of the project.	as to
The longer manage	in Alternative B provides better access in bad weather, reduces t	ha a
number of flights by a	llowing larger aircraft for routine cargo shipments and allows for larger equipment capabilities in the event of an emergency. A long	
	t	

mment		Response	
Davis, Cecile	0043_Wiiliam.Ayers_Bus	236 Comment noted; no action required.	
Sent: Wednesday, December 07,	2011 5-52 AM		
To: comments@pointthomsonpi			
Cc: extraski@gmail.com			
Subject: Online form submission			
Name: William H. Ayers			
Email: BAyers@carlile.biz			
Address: 6806 Grouse Hollow			
City: Centerville			
State: MN			
Zip: 55038	Statement of Support for Project 236		
Contact Phone: 651-271-1255	at are important to the economy of Alaska and the		
	or Carlile Transportation, I have seen first hand		
	ably, the ecomony of other states. The ongoing		
Bakken development in North Dakota is very			
	are adding jobs daily in response to the needs in		
	of the resources in Alaska would have a similar		
impact on jobs in the Midwest. At a time w	then our nation is desperate for new job creation,		
it would be foolhardy to ignore the potenti	al that could be realized by developing Point		
	essential for the growth of the country. I urge		
the Corps to permit this development with a	III due speed.		
Thank you,			
,,			
William H. Ayers			
Midwest Regional Manager			
Carlile Transportation			
		227 C	
Davis, Cecile	0044_Frances.Bowman_Ind	237 Comment noted; no action required.	
Sent: Thursday, December 08, 20	111 8-22 AM		
To: comments@pointthomsonpi	rojecteis.com		
Cc: extraski@gmail.com	-1		
Subject: Online form submission			
5000 mm (1 mm)			
Name: FRANCES BOWMAN			
Name: FRANCES BOWMAN Email: FBOWMAN@CARLILE.BIZ			
Name: FRANCES BOWMAN Email: FBOWMANGCARLILE.BIZ Contact me through email: Yes			
Name: FRANCES BOWMAN Email: FBOWMANGCARLILE.BIZ Contact me through email: Yes Address: 7633 SOUTH PARK AVENUE			
Name: FRANCES BOWMAN Email: FBOWMAN@CARLILE.BIZ Contact me through email: Yes Address: 7633 SOUTH PARK AVENUE City: TACOMA			
Name: FRANCES BOWMAN Email: FBOWMANWGARLTLE.BIZ Contact me through email: Yes Address: 7633 SOUTH PARK AVENUE City: TACOMA State: WA			
Name: FRANCES BOWMAN Email: FBOWMAN@CARLILE.BIZ Contact me through email: Yes Address: 7633 SOUTH PARK AVENUE City: TACOMA			
Name: FRANCES BOWMAN Email: FBOWMANGCARLTLE.BIZ Contact me through email: Yes Address: 7633 SOUTH PARK AVENUE City: TACOMA State: WA Zip: 98408	ernative B. Statement of Support for Alternative B 237		

nment		Response	
It is definitely the	airbanksak.us ail: Yes Street 6793 t: Yes e to lend my support to Alternative B when comparing DEIS alternative B most workable solution with an extremely minimal impact. I look forward the Point Thomson Project: one of the few bright hopes for production	238 Comment noted; no action required.	
Davis, Cecile Sent:	0046_Lin.Milby_Ind Thursday, December 08, 2011 1:19 PM	239 Comment noted; no action required.	
Alaskans with needed	ail: Yes Drive		
Davis, Cecile Sent: To: Cc: Subject:	Thursday, December 08, 2011 10:37 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	240 Comment noted; no action required.	
Name: Lukas Leary Email: <u>lukasleary@car</u> Address: 1719 birch City: eagle river State: AK Zip: 99577 Contact Phone: Comments: I support P continuing success of	Statement of Support for Alternative B 240 oint Thomson, Alternative B. Natural resources are essential to the		

		Response
Davis, Cecile	0048_Shawna.Vaivai_In	241 Comment noted; no action required.
Sent: To: Cc: Subject:	Thursday, December 08, 2011 8:49 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
Name: Shawna Vaiv Email: svaivai@ca Contact me throug Address: 938 E. 1 City: Anchorage State: AK Zip: 99501 Contact Phone: 96 Comments: I supporthe Alaskans.	n <u>rlile.biz</u> h email: Yes OOth Ave.	
Davis, Cecile	0049_Stan.Halvanson_Inc	242 The record of public meeting testimony is included in this comment response section of the Final EIS.
Sent: To: Cc: Subject:	Thursday, December 08, 2011 11:40 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
Email: halvar@ala	aska.net	
Address: 1024 Kel City: Fairbanks State: AK Zip: 99701 Contact Phone: 90		
Address: 1024 Kel City: Fairbanks State: AK Zip: 99701 Contact Phone: 90	974567892 Not a Comment on EIS 242	243 Comment noted; no action required.
Address: 1024 Kel City: Fairbanks State: AK Zip: 99701 Contact Phone: 90 Comments: I wish	974567802 Not a Comment on EIS 242 to receive PDF meeting notes on the Point Thompson EIS project	243 Comment noted; no action required.
Address: 1024 Kel City: Fairbanks State: AK Zip: 99701 Contact Phone: 90 Comments: I wish Davis, Cecile Sent: To: Cc: Subject: Name: Cindy Halle Email: cindy.hall Contact me throug Address: PO Box 8 City: Wasilla State: AK Zip: 99687-0505 Contact Phone: Comments: My husb so of course we so	Priday, December 09, 2011 8:34 AM comments@gointhomsonprojecteis.com extraski@gmail.com Online form submission Imm Lum@gmail.com the Monta Comment on EIS 242 Not a Comment on EIS 242 O050_Cindy.Hallum_In Online form submission	d ·
Address: 1024 Kel City: Fairbanks State: AK Zip: 99701 Contact Phone: 90 Comments: I wish Davis, Cecile Sent: To: Cc: Subject: Name: Cindy Hallu Email: cindy.hall Contact me throug Address: PO Box 8 City: Wasilla State: AK Zip: 99687-0505 Contact Phone: Comments: My husb so of course we so B provides the sa B provides the sa B provides the sa	Pr4567882 To receive PDF meeting notes on the Point Thompson EIS 242 To receive PDF meeting notes on the Point Thompson EIS project O050_Cindy.Hallum_in Friday, December 09, 2011 8:34 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission Imm Lum@gmail.com the email: Yes 378505 Statement of Support for Alternative B 243 pand and I strongly support Point Thomson, Alternative B. We are Alaskans, support opening Point Thomson. It is about time. And we believe Alternative	d ·

nment		Response	
Davis, Cecile	0051_Gary.Swoffer_Ind	244 Comment noted; no action required.	
Sent: Friday, December 09, 2011 To: comments@pointthomsonpr Cc: extraski@gmail.com Subject: Online form submission			
Name: Gary Swoffer Email: gswoffer@denali-industrial.com Contact me through email: Yes Address: PO Box 60129 City: Fairbanks State: AK Zip: 99706 Contact Phone: Add me to mailing list: Yes Comments: This project is very important to gas. Exxon will to it environmentally right	Statement of Support for Project 244 Alaska and us in the interior. We need jobs and . Do not hold this project up.		
Thank You			
Davis, Cecile	0052_Kevin.Sibley_Ind	245 Comment noted; no action required.	
Sent: Friday, December 09, 2011 To: comments@pointthomsonpr Cc: extraski@gmail.com Subject: Online form submission			
Name: Kevin Sibley Email: ksiblev@carlile.biz Contact me through email: Yes Address: 2301 Taylor Way So City: Tacoma State: WA Zip: 98421 Contact Phone: 206-730-1391 Comments: "I support Point Thomson, Alternar growth.	Statement of Support for Alternative B 245 tive B" It is VITAL for local and Federal job		
Davis, Cecile	0053_Ryan.Williams_Ind	246 Comment noted; no action required.	
Sent: Friday, December 09, 2011 To: comments@pointthomsonpr Cc: extraski@gmail.com Subject: Online form submission	7:41 AM ojecteis.com		
Name: Ryan Williams Email: rwilliams@carlile.biz Address: 2301 Taylor Way City: Tacoma State: WA Zip: 98421			

mment		Response	
Davis, Cecile Sent: Saturday, December 10, 2011 3:32 PM To: comments@pointhomsonprojecteis.com Cc: extrask@gmail.com Online form submission Name: Jim Plaquet Email: jandiplaquet@gci.net Address: 1444 2nd Avenue City: Fairbanks State: AK Zip: 99781 Contact Phone: 987 456-4423 Comments: Alternative B is the most environmentally saithomson development	0054_Jim.Plaquet_Ind statement of Support for Alternative B 247 Fe way to proceed with the Point	247 Comment noted; no action required.	
Davis, Cecile Sent: Wednesday, December 14, 2011 4:37 PM To: comments@pointhomsonprojecteis.com cc: extraski@gmail.com Subject: Online form submission	0055_Rada.Khadjinova_Ind	248 Comment noted; no action required.	
Name: Rada Khadjinova Email: rada@pacriminstitute.com Contact me through email: Yes Address: PO Box 201444 City: Anchorage State: AK Zip: 99520 Contact Phone: 907-727-3828 Comments: I would like to express my support for the A particularly impressed with the process for alternative subsequent environmental review of each practicable all represents an optimal choice and good balance between and minimizing impact on surrounding environment. Ala depends on responsible development of new hydrocarbon environmental permitting, I have developed more trust project scrutiny and environmental assessment the agen- process.	e consideration, selection, and ternative. I believe Alternative B the need to develop Alaska's resources ska's economic sustainability primarily resources. After taking UAA classes in in the process and appreciation for		
Davis, Cecile	0056_Adriany.Vargas_Ind	249 Comment noted; no action required.	
Sent: Friday, December 16, 2011 4:11 PM To: comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission Name: Adriany Vargas Email: avargas@carlile.biz Address: 701 s klevin sp 102 City: anchorage State: AK Zip: 99508 Contact Phone: 907-343-3206 Comments: I support Point Thomson, Alternative B	Statement of Support for Alternative B 249		

nment		Response
Davis, Cecile Sent:	0057_Amy_In Friday, December 16, 2011 2:21 PM comments@pointthomsonprojecteis.com	250 Comment noted; no action required.
Cc: Subject:	extraski@gmail.com Online form submission	
Name: Amy Email: ahartv@carl Address: 2301 Tayl City: tacoma State: WA Zip: 98421 Contact Phone:		
	rt Point Thomson, Alternative B Statement of Support for Alternative B 250	
Davis, Cecile	0058 Bobbie In	251 Comment noted; no action required.
Sent: To: Cc: Subject: Name: bobbiet@char Email: bobbiedale.	.t@gmail.com	
Address: PO box 64 City: Guntersville State: AL Zip: 35976 Contact Phone: 256 Comments: Is anybo	10 Control of Control	
Davis, Cecile	0059-Bobby.Fontenot_Inc	252 Comment noted; no action required.
Sent: To: Cc: Subject:	Friday, December 16, 2011 2:21 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
Name: Bobby Fonter Email: <u>fontenot</u> bo	pbby@yahoo.com	
Address: PO Box 16 City: Palmer State: AK Zip: 99645 Contact Phone:		

nment		Response	
Davis, Cecile	0060_Brent.Petersen_Ind	253 Comment noted; no action required.	
Sent: Friday, December 16, 2011 2:35 PM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission			
Name: Brent D Petersen Email: bpetersen45@xmail.com Contact me through email: Yes Address: 17344 Meadow Creek Dr City: Eagle River State: AK Zip: 99577 Contact Phone: 987-694-7498 Add me to mailing list: Yes Comments: I support Point Thompson, alternative B	Statement of Support for Alternative B 253		
Davis, Cecile	0061_Carl.Trexler_Ind	254 Comment noted; no action required.	
Sent: Friday, December 16, 2011 2:22 PM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission			
Name: carl trexler Email: ctrexler@carlile.biz Address: 1800 East 1st ave City: anchorage State: AK Zip: 99501 Contact Phone: Add me to mailing list: Yes Comments: I fully suport the development of this project our interests.	Statement of Support for Alternative B 254 and belive the B option to be in akk		
Davis, Cecile	0062_Cheryl.Burns_Ind	597 Comment noted; no action required.	
Sent: Friday, December 16, 2011 2:57 PM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission			
Name: Cheryl Burns Email: cburns@alaskalife.net Address: 7307 Bailey Rd City: Anchorage State: AK Zip: 99502 Contact Phone:			

nment			Response
Davis, Cecile		0063_Christine_Ind	255 Comment noted; no action required.
Sent: To: Cc: Subject:	Friday, December 16, 2011 3:16 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
Address: 2324 F City: FAIRBANKS State: AK Zip: 99701 Contact Phone:	ick@carlile.biz RICKERT	Statement of Support for Project 255	
Davis, Cecile		0064_Connie.Morelos_Ind	256 Comment noted; no action required.
Sent: To: Cc: Subject:	Friday, December 16, 2011 3:15 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
Name: CONNIE Email: MORELOS Address: 35116 City: AUBURN State: WA Zip: 98001 Contact Phone: Comments: I sup		Statement of Support for Alternative B 256	
Davis, Cecile		0065_David.Johnston_Ind	257 Comment noted; no action required.
Sent: To: Cc: Subject:	Friday, December 16, 2011 5:23 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
disturbances in emission footpr good, developme	9709@vahoo.com Overhill Drive s	e used to help reduce our carbon oil.As long as the science is	

mment			Response	
Davis, Cecile		0066_Desiree.Doster_Ind	258 Comment noted; no action required.	
Sent: To: Cc: Subject:	Friday, December 16, 2011 2:19 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: Desiree Do Email: ddoster@c Address: 1040 A: City: Fairbanks State: AK Zip: 99709 Contact Phone: Comments: I supp	<u>carlile.biz</u> spen Street	Statement of Support for Alternative B 258		
Davis, Cecile		0067_Erica.Matich_Ind	259 Comment noted; no action required.	
Sent: To: Cc: Subject:	Friday, December 16, 2011 3:00 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: Erica Mati Email: emaich@c Contact me throu Address: 229 Ora City: Anchorage State: AK Zip: 99504 Contact Phone: S Comments: I supp	<u>carlile.biz</u> Ugh email: Yes ange Leaf Cir	Statement of Support for Alternative B 259		
Davis, Cecile		0068_Gary.McConnell_Ind	260 Comment noted; no action required.	
Sent: To: Cc: Subject:	Friday, December 16, 2011 2:23 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: Gary Mccor Email: gmcconnel Address: 1040 As City: Fairbanks State: AK Zip: 99709	<u>ll@carlile.biz</u> spen Street			
Contact Phone:		Statement in Support for Alternative B 260		

			Response
Davis, Cecile	534 David A 2014 A 40 DV	0069_Harry.McDonald_Ind	261 Comment noted; no action required.
Sent: To: Cc: Subject:	Friday, December 16, 2011 2:13 PM comments@pointhomsonprojecteis.com extraski@gmail.com Online form submission		
is integral to Alternative B	Id ugh email: Yes lollipan Court 997-632-2440 ing list: Yes the CEO of a locally owned trucking company wi making the future for my own family and the fa jobs and reduced enviromental impact. I have	milies of my employees positive. ield roads will provide the best attended a number of Exxon's	
the project wil	ings attended by most potential contractors for il be executed in the most safe and professiona o move forward will benefit all Alaskans and th		
the project wil	ll be executed in the most safe and professiona	l manner possible. Allowing	262 Comment noted; no action required.
the project wil this project to	ll be executed in the most safe and professiona	l manner possible. Allowing me Country. Thanks	262 Comment noted; no action required.
Davis, Cecile Sent: To: Cc: Subject: Name: Jerid Lar Email: 1lane@cc. Address: 1040 A City: Fairbank State: AK Zip: 99709 Contact Phone:	Il be executed in the most safe and professiona on move forward will benefit all Alaskans and the move forward will benefit all Alaskans and the professional content of the comments (a) of the comments (b) of the comment of the com	l manner possible. Allowing me Country. Thanks	262 Comment noted; no action required.

nment			Response	
Davis, Cecile		0071_Judy.Chadwick_Ind	263 Comment noted; no action required.	
	Participated and the second control of the control of the second c	our i_oudy.ondomok_ind		
Sent:	Friday, December 16, 2011 3:23 PM comments@pointthomsonprojecteis.com			
To: Cc:	extraski@gmail.com			
Subject:	Online form submission			
development pro infrastructure infrastructure Drilling will ho Alaska needs the bring. I feel	9@vahoo.com ugh email: Yes Tulin Park Loop	sponsible, and provide the best Alternative B provides the y and emergency access. Directional t, while maximizing the output. enues that this development will		
is vital to our	economic nearth.			
Davis, Cecile		0072_Kathleen.Graham_IND.PFD	264 Comment noted; no action required.	
	Friday December 16, 2011 3:15 PM	0072_Kathleen.Graham_IND.PFD	264 Comment noted; no action required.	
Sent: To:	Friday, December 16, 2011 3:15 PM comments@pointthomsonprojecteis.com	0072_Kathleen.Graham_IND.PFD	264 Comment noted; no action required.	
Sent: To: Cc:	comments@pointthomsonprojecteis.com extraski@gmail.com	0072_Kathleen.Graham_IND.PFD	264 Comment noted; no action required.	
Sent: To: Cc:	comments@pointthomsonprojecteis.com	0072_Kathleen.Graham_IND.PFD	264 Comment noted; no action required.	
Sent: To: Cc: Subject: Name: KATHLEEN Email: GRAHAM Address: 16944 I City: EAGLE RIVI State: AK Zip: 99577 Contact Phone: 9	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission RIDDELL ST ER	0072_Kathleen.Graham_IND.PFD Statement in Support for Project 264	264 Comment noted; no action required.	
Sent: To: Cc: Subject: Name: KATHLEEN Email: GRAHAM Address: 16944 I City: EAGLE RIVI State: AK Zip: 99577 Contact Phone: Add me to maili Comments: I SUPI	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission RIDDELL ST ER 907-632-2432 ng list: Yes		264 Comment noted; no action required. 265 Comment noted; no action required.	
Sent: To: Cc: Subject: Name: KATHLEEN Email: GRAHAM Address: 16944 City: EAGLE RIVI State: AK Zip: 99577 Contact Phone: 5 Add me to mailin Comments: I SUPI Davis, Cecile	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission RIDDELL ST ER 997-632-2432 ng list: Yes PORT POINT THOMSON PROJECT	Statement in Support for Project 264		
Sent: To: Cc: Subject: Name: KATHLEEN Email: GRAHAM Address: 16944 City: EAGLE RIVI State: AK Zip: 99577 Contact Phone: ! Add me to maili Comments: I SUPI Davis, Cecile Sent:	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission RIDDELL ST ER 907-632-2432 ng list: Yes PORT POINT THOMSON PROJECT Friday, December 16, 2011 2:33 PM comments@pointthomsonprojecteis.com	Statement in Support for Project 264		
Sent: To: Cc: Subject: Name: KATHLEEN Email: GRAHAM Address: 16944 # City: EAGLE RIVI State: AK Zip: 99577 Contact Phone: 9 Add me to maili Comments: I SUPI Davis, Cecile Sent: To: Cc:	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission RIDDELL ST ER 997-632-2432 ng list: Yes PORT POINT THOMSON PROJECT Friday, December 16, 2011 2:33 PM comments@pointthomsonprojecteis.com extraski@gmail.com	Statement in Support for Project 264		
Sent: To: Cc: Subject: Name: KATHLEEN Email: GRAHAM Address: 16944 I City: EAGLE RIVI State: AK Zip: 99577 Contact Phone: Add me to maili Comments: I SUPI	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission RIDDELL ST ER 907-632-2432 ng list: Yes PORT POINT THOMSON PROJECT Friday, December 16, 2011 2:33 PM comments@pointthomsonprojecteis.com	Statement in Support for Project 264		
Sent: To: Cc: Subject: Name: KATHLEEN Email: GRAHAM Address: 16944 City: EAGLE RIVI State: AK Zip: 99577 Contact Phone: 9 Add me to maili Comments: I SUPI Davis, Cecile Sent: To: Cc: Subject: Name: Lane Keate Email: <u>lkeator@</u> Address: 959 we: City: fairbanks State: AK Zip: 99709	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission RIDDELL ST ER 907-632-2432 ng list: Yes PORT POINT THOMSON PROJECT Friday, December 16, 2011 2:33 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission Or carlile.biz st chena hills drive	Statement in Support for Project 264		
Sent: To: Cc: Subject: Name: KATHLEEN Email: GRAHAM Address: 16944 #6 City: EAGLE RIVI State: AK Zip: 99577 Contact Phone: 9 Add me to mailin Comments: I SUPI Davis, Cecile Sent: To: Cc: Subject: Name: Lane Keat Email: lkeator@ Address: 959 wa Address: 959 wa City: fairbanks State: AK Zip: 99709 Contact Phone:	comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission RIDDELL ST ER 907-632-2432 ng list: Yes PORT POINT THOMSON PROJECT Friday, December 16, 2011 2:33 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission Or carlile.biz st chena hills drive	Statement in Support for Project 264		

		Response
	007	266 Comment noted; no action required.
Davis, Cecile From: Sent: To:	Mary Boston [mboston@carlile.biz] Friday, December 16, 2011 4:04 PM comments@pointhomsonprojecteis.com	267 Comment noted; no action required.
I support Point Thon		t for Alternative B 266 tives Comparison 267
	sistant phone 907-451-7155 fax 907-374-6831	
Davis, Cecile	0075_M	268 Comment noted; no action required.
Sent: To: Cc: Subject:	Friday, December 16, 2011 2:48 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
and my income wa is still support	statement in Support Statement in Support For Pt. Thomson, Alternative B. I lived and worked in Alask. Is derived from the oil and gas industry. I now work in Tacoused by the oil and gas industry in Alaska. We need oil develutiance on foreign oil. Please continue to support the develutiance on foreign oil.	a for 20 years ma and my living opment in America
Regards,		
Matthew Sievert		
Davis, Cecile	0076	
Sent: To: Cc: Subject:	Friday, December 16, 2011 2:23 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
Name: Megan Wrig	tht mail.com re Rd. #2	

nment			Response	
Davis, Cecile Sent: To: Cc: Subject:	Friday, December 16, 2011 3:51 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	0077_Rose.Odess_Ind	270 Comment noted; no action required.	
Name: Rose Odess Email: rodess@car Address: 2731 W 7: City: Anchorage State: AK Zip: 99502 Contact Phone:	iile.biz 2nd gly support this project. I believe th:	Statement in Support of Project 270 is project will benefit all Alaskans.		
Davis, Cecile		0078_Sherri_Ind	271 Comment noted; no action required.	
Sent: To: Cc: Subject:	Friday, December 16, 2011 4:07 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: sherri Email: kellerpps@ Address: 2376 nugi City: fairbanks State: AK Zip: 99709 Contact Phone: Comments: I suppor		Statement in Support of Alternative B 271		
Davis, Cecile		0079_Tammy.Roeder_Ind	272 Comment noted; no action required.	
Sent: To: Cc: Subject:	Friday, December 16, 2011 2:23 PM comments@pointthomsonprojecteis.com extraskl@gmail.com Online form submission			
Name: Tammy Roedel Email: tlrinak@ho: Contact me througl Address: 2643 Love City: Anchorage State: AK Zip: 99508	mail.com n email: Yes e Joy Drive			
Contact Phone: (98		Statement in Support of Alternative B 272		

nment	Response
Davis, Cecile Sent: Friday, December 16, 2011 2:29 PM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission Name: Teresa Baty Email: tbaty@carlile.biz Address: 1701 Thuja Avenue City: Anchorage State: AK Zip: 99507 Contact Phone: 907-258-2624 Comments: I support Point Thomson, Alternative B.	273 Comment noted; no action required. 274 Comment in Support of Alternative B 273
Davis, Cecile	274 Comment noted; no action required.
Sent: Friday, December 16, 2011 3:20 PM To: comments@pointhomsonprojecteis.com Cc: extrask@gmail.com Subject: Online form submission Name: Terry Smith Email: tsmith@carlile.biz Contact me through email: Yes Address: 12800 Cumberland Circle City: Anchorage State: AK Zip: 99516 Contact Phone: 9076326253 Add me to mailing list: Yes Comments: • Alternative B is my preferred option. This critical prosolution provides the safest, most environmentally-responsible soluti Thomson's resources. It provides the smallest footprint and combines winter ice roads, aviation, and in-field roads. Our company contract projects and our record speaks for itself. We are risk averse and pu measures to minimize impact on tundra, wildlife, aquatic resources, a activities. This project will provide jobs and an economic bridge th shipped via TAPS continue their decline until another solution is bro decline in the near future.	stion for developing Point less summer coastal barging, lets on many North Slope put in place every and subsistence the State needs as liquids brought in to offset the 275 Comment noted: no action required.
Davis, Cecile Sent: Friday, December 16, 2011 2:28 PM To: comments@pointhomsonprojecteis.com Cc: extraski@gmail.com Online form submission Name: tony vitoff Email: vitofft@hotmail.com Address: 3707 n 21st st City: Tacoma State: WA Zip: 98406 Contact Phone: 253-670-6106 Comments: I fully support the Pt Thomson Proj	2/3 Comment noted; no action required. Statement in Support of Project 275

omment		Response
To: comments@ Cc: extraski@gr	0083_Veronica-Bylenber 16, 2011 2:25 PM pointthomsonprojecteis.com nail.com	276 Comment noted; no action required.
Subject: Online form Name: VERONICA BYKONEN Email: VBYKONENBYAHOO.COM Address: 28025 150TH PL SE City: KENT State: NA Zip: 98421 Contact Phone: Comments: I SUPPORT POINT THOMS		native B 276
Davis, Cecile	0084_Vickie.Wi	277 Comment noted; no action required.
Name: Vickie Wingate Email: <u>vkitchen@carlile.biz</u> Address: 434 N. Bragaw #3 City: Anchorage State: AK Zip: 99508 Contact Phone: 907-929-7569 Comments: I support Point Thoms	on Aleternative B Statement in Support of Altern	native B 277
Davis, Cecile	0085_William.La	278 Comment noted; no action required.
Sent: Friday, Dect To: comments@ Cc: extraski@gr Subject: Online form		
States needs this project for t	Statement in Support of Alternative tive B and get this project moving. Alaska and the Ur he energy and also energy security. Pay attention to the players feet to the fire and they will do a very	nited the

		Response
Davis, Cecile	0086_Curt.Goodwin_Ind	279 Comment noted; no action required.
Sent: To: Cc: Subject:	Sunday, December 18, 2011 11:22 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
times and have that area is kep	carlile.biz igh email: Yes With Ave E Statement of Support for Project 279	
Davis, Cecile	0087_Linda.Leary_Bus	280 Comment noted; no action required.
Sent: To: Cc: Subject:	Sunday, December 18, 2011 12:31 PM comments@pointthomsonprojectels.com extraski@gmail.com Online form submission	
Subject.	Offiline form submission	
Name: Linda Lear Email: <u>llearwace</u> Contact me throu Address: 11719 b City: eagle rive State: AK Zip: 99577 Contact Phone: 9 Add me to mailin Comments: I am wenvironmentally- cost-effective m support of Alask every precaution important to the	ry rrille.biz gh email: Yes irch hills drive rr	
Name: Linda Lear Email: <u>llearwace</u> Contact me throu Address: 11719 b City: eagle rive State: AK Zip: 99577 Contact Phone: 9 Add me to mailin Comments: I am wenvironmentally- cost-effective m support of Alask every precaution important to the	ry rille.biz gigh email: Yes sirch hills drive re re re re re re re re responsible solution for developing Point Thomson's resources in a timely, sanner. Exxon has shown a committement to Alaska through their enthusiastic an hire and use of Alaska contractors on their work on Pt Thompson. They take to protect employees and contractors and the environment. This project is to future of Alaska and the US. Lets get to work and build a bright future for	
Name: Linda Lear Email: <u>lleary@cc</u> Contact me throu Address: 11719 b City: eagle rive State: AK Zip: 99577 Contact Phone: 9 Add me to mailin Comments: I am wenyironmentally- cost-effective m support of Alask every precaution important to the our children and	ry rille.biz gigh email: Yes sirch hills drive re re re re re re re re responsible solution for developing Point Thomson's resources in a timely, sanner. Exxon has shown a committement to Alaska through their enthusiastic an hire and use of Alaska contractors on their work on Pt Thompson. They take to protect employees and contractors and the environment. This project is to future of Alaska and the US. Lets get to work and build a bright future for	

nment	Response
Davis, Cecile 0088_Ryan.Groth_Ind	281 Comment noted; no action required.
Sent: Sunday, December 18, 2011 7:16 PM To: comments@pointthomsonprojecteis.com Cc: extraskl@gmail.com Subject: Online form submission	
Name: Ryan Groth Email: aksledhead@gmail.com Address: 3165 Moominvalley City: Fairbanks State: AK Zip: 99709 Contact Phone: Comments: We support Point Thompson, Alternative B. Statement in Support of Alternative B 281	
Davis, Cecile 0089 Cassie.Sheehan_Ind	282 Comment noted; no action required.
Sent: Monday, December 19, 2011 7:00 AM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission	
Name: cassie sheehan Email: csheehan@carlile.biz Address: 2301 taylor way City: tacoma State: WA Zip: 98359 Contact Phone: Comments: I support Point Thomson, Alternative B. I work for Carlile Transportation Systems and although I live in Washington State, the development of Point Thomson's resources affects the employees throughout the corporation. Please consider this when making your decisions.	
Davis, Cecile 0090_Jimmy.Goranson_Ind	283 Comment noted; no action required.
Sent: Monday, December 19, 2011 12:17 PM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission	
Name: Jimmy Goranson Email: Jgoranson@carlile.biz Address: 2429 Forgetmenot lane apt#2 City: Anchorage State: AK Zip: 99508 Contact Phone: Comments: I fully support Point Thompson, (alernative B) Statement in Support of Alternative B 283	

nment		Response
Davis, Cecile	0091_Mike.Desmond_Ind	284 Comment noted; no action required.
Sent:	Monday, December 19, 2011 2:17 PM	
To:	comments@pointthomsonprojecteis.com	
Cc:	extraski@gmail.com	
Subject:	Online form submission	
Name: Mike Desmond		
Email: mike@westmech Address: 2225 Van Ho	1. COM	
City: Fairbanks	I'M Road	
State: AK		
Zip: 99701		
Contact Phone:	Statement in Support of Alternative B 284	
Comments: I have rev B.	viewed the executive summary for the draft EIS. I do support Alternative	
4900		285 Comment noted; no action required.
Davis, Cecile	0092_Rhonda.Mellinger_Ind	283 Comment noted, no action required.
Sent:	Monday, December 19, 2011 6:39 AM	
To:	comments@pointthomsonprojecteis.com	
Cc: Subject:	extraski@gmail.com Online form submission	
000,000	anne min addiname!	
Name: Rhonda	30. A 30.	
Email: rmellinger@ca	arlile.biz	
Address: 2301 Taylor City: Tacoma	way	
State: WA		
Zip: 98421		
Contact Phone:		
Comments: I support	Point Thomson, Alternative B Statement in Support of Alternative B 285	
		286 Comment noted; no action required.
Davis, Cecile	0093_Steve_Duwa_Ind	200 Comment noted, no action required.
Sent:	Monday, December 19, 2011 9:31 AM comments@pointthomsonprojecteis.com	
To: Ce:	comments@pointthomsonprojectels.com extraski@gmail.com	
Subject:	Online form submission	
Name: Steve Duwa		
Email: slduwa@acsala	ska.net	
Address: 3320 E. 42r	nd Ave	
City: Anchorage		
State: AK		
Zip: 99508 Contact Phone:	Statement in Support of Alternative B 286	
	the development of Point Thompson using the Alternate B plan	
	and the state of t	

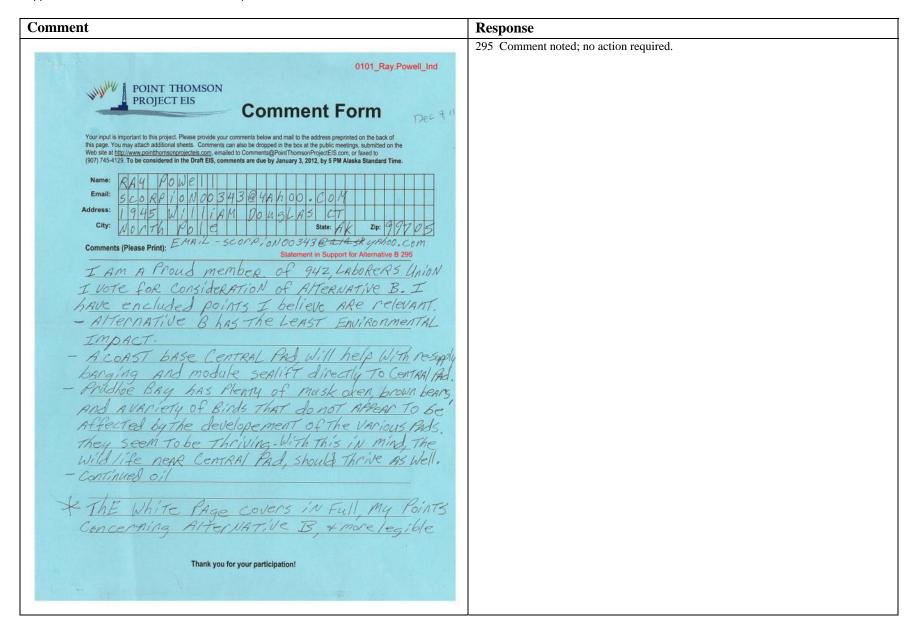
nment		Response
		287 Comment noted; no action required.
Davis, Cecile	0094_Jon.Cook_Bus	
Sent: Thursday, December 22, 2011	8:47 AM	
To: comments@pointthomsonproj Cc: extraski@gmail.com	acteis.com	
Subject: extraski@gmail.com Online form submission		
Name: Jon Cook		
Email: joncook@aer-inc.net		
Contact me through email: Yes		
Address: P.O Box 72578		
City: Fairbanks State: AK		
Zip: 99707		
Contact Phone:	Statement in Support of Alternative B 287	
Comments: Airport Equipment Rentals, Inc. ful	lly supports Alternative B with regard to the	
Pt. Thomson EIS. Our reasons for suppoting t	his alternative include:	
V-94-200 J1 VI - 90 1900 1200 VI	197 NAV 197 197 197 197 197 197 197 197 197 197	
 Of the design alternatives considered, environmentally-responsible solution for deve 	Alternative B provides the safest, most	
environmentally-responsible solution for deve	Toping Point Thomson's resources.	
Alternative B ensures a minimal environ	nmental footprint by incorporating a combination	
	aviation, and in-field roads. These features are	
essential to the project's safe and efficient	operations.	
Through Alternative B. ExxonMobil will	implement comprehensive mitigation measures to	
minimize impact on tundra, wildlife, aquatic		
minimize impact on condra, wildlife, aquacte	resources, and subsistence accivities.	
 ExxonMobil works closely with the U.S. 	Fish and Wildlife Service and state agencies to	
	ly protected. Coastal barge route is outside the	
main fall migration corridor of bowhead whale	5.	
. The in-field roads included in Alternat	tive B have been carefully routed to minimize the	
gravel footprint and for the efficient pass t		
	- 1999/1995 - 1999-1999 1999 1999 1999 1999 199	
	vides better access in bad weather, reduces the	
number of flights by allowing larger aircraft aircraft to transport larger equipment capabi		
aircraft to transport larger equipment capabi	ittles in the event of an emergency.	
We have worked on nearly every North Slone de	evelopment project for the last twenty years and	
Exxon has raised the bar with regard to going		
standards. Finally, while it likely not rele		
also gone above and beyond in terms of hiring	Alaskan workers and contractors.	
2.11		
Regards,		
	1	

nment		Response
		288 Comment noted; no action required.
21.2 20.22		
Davis, Cecile	0095_Derrell.Koont	z_Ind
Sent:	Thursday, December 22, 2011 6:10 AM	
To:	comments@pointthomsonprojecteis.com extraski@gmail.com	
Cc: Subject:	Online form submission	
Name: Darrell Koont	7	
Email: dkoontz@aksh		
Contact me through		
Address: 12260 Audu	bon Drive	
City: Anchorage		
State: AK Zip: 99516		
Contact Phone: 907-	229-5553	
Add me to mailing 1		
Comments:		
****	Statement in Support for Alternative B	288
	alternatives considered, Alternative B provides the safest, most ponsible solution for developing Point Thomson's resources.	
environmentally-res	polistote solucion for developing rothe monison's resources.	
Alternative B	ensures a minimal environmental footprint by incorporating a combinat	ion
	arging, winter ice roads, aviation, and in-field roads. These features	are
essential to the pro	oject's safe and efficient operations.	
	native B, ExxonMobil will implement comprehensive mitigation measures tundra, wildlife, aquatic resources, and subsistence activities.	to
ensure polar bears	rks closely with the U.S. Fish and Wildlife Service and state agencies and other wildlife are fully protected. Coastal barge route is outside corridor of bowhead whales.	
	roads included in Alternative B have been carefully routed to minimize d for the efficient pass through of water.	the
number of flights by	nway in Alternative B provides better access in bad weather, reduces t y allowing larger aircraft for routine cargo shipments and allows for rt larger equipment capabilities.	he
Please contact me i	f you have any question	
	1	

Thursday, December 22, 2011 5:07 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission e Holmes holmes@gci.net me through email: Yes 1231 Redwood Ct chorage K 88 88 88 Statement in Support of Alternative B 289	289 Comment noted; no action required. 290 Comment noted; no action required.
Thursday, December 22, 2011 5:07 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission e Holmes holmes@gci.net me through email: Yes 1231 Redwood Ct chorage K K 88	290 Comment noted; no action required.
Thursday, December 22, 2011 5:07 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission e Holmes holmes@gci.net me through email: Yes 1231 Redwood Ct chorage K K 88	
Thursday, December 22, 2011 5:07 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission e Holmes holmes@gci.net me through email: Yes 1231 Redwood Ct chorage K K 88	
comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission e Holmes holmes@ci.net me through email: Yes 1231 Redwood Ct chorage K K 88	
Online form submission e Holmes holmes@gci.net me through email: Yes 1231 Redwood Ct chorage K 88	
holmes@gci.net me through email: Yes 1231 Redwood Ct chorage K K K	
holmes@gci.net me through email: Yes 1231 Redwood Ct chorage K K K	
me through email: Yes 1231 Redwood Ct chorage K 08	
chorage K 08	
K 08	
08	
Phone: 907-278-8211 Statement in Support of Alternative B 289 : I've looked at the various options and believe I would support option B. I've spent	
able time throughout the north slope while working on projects for NSB and I believe	
he barge system is better overall for the slope than building another gravel road. ave less impact on our environment than a fleet of semi's continuously rolling over a	
oad. The impact of excavating and moving the gravel along with the long term	
nce of the road would create decades of unnecessary fuel usage, dust in the air, etc.	
delivery system would have a lot less impact, carbon footprint, etc. than a fleet of rucks.	
300399499	
milar reason I like option B for the longer runway. when you need to bring something	
remote locations in Alaska, a Herc is going to save you time, money, and carbon t again over a fleet of smaller planes having to make multiple trips.	
Alternatives Comparison 290	
ed in Alaska for almost 30 years now and feel that the oil and gas industry is doing	
they can and that this is a reasonable approach for the Pt. Thompson Field.	
u,	
u,	
es	
í	

nment		Response
	0007 Kids bedress Ind	291 Comment noted; no action required.
Davis, Cecile	0097_Kirk.Jackson_Ind	
Sent:	Wednesday, December 21, 2011 8:53 AM	
To: Cc:	comments@pointthomsonprojecteis.com extraski@gmail.com	
Subject:	Online form submission	
Name: Kirk Jack		
	kson@ualocal375.org	
Contact me thro Address: 3980 B		
City: Fairbanks		
State: AK		
Zip: 99709 Contact Phone:	007 470 6221	
Add me to maili		
Comments: I str	ongly support Alternative B for the Point Thompson Project. I support	
	or several reasons. 1) The proposed project is important to the State of	
	laskans. 2) Alternative B ensures a minimal environmental footprint. The in- luded in alternative B have been carefully routed to minimize the gravel	
footprint and f	or the efficient pass through of water. 3) It also provides for a longer	
runway allowing	large aircraft for cargo shipments and larger equipment capabilities in the	
event of an eme option.	rgency. These are some of the reasons I feel alternative B is the best	
option.		
	All parties and the second	292 Comment noted; no action required.
Davis, Cecile	0098_Onika.Brown_Ind	•
Sent:	Wednesday, December 21, 2011 8:36 AM	
To:	comments@pointthomsonprojecteis.com	
Cc:	extraski@gmail.com Online form submission	
Subject:	Online form submission	
Name: Onika Bro		
Email: obrown@c	arlile.biz	
Address: 2301 T City: Tacoma	ayıor way	
State: WA		
Zip: 98421		
Contact Phone:	port Point Thomson, Alternative B Statement in support for Alternative B 292	
comments: 1 sup	port Point Thomson, Alternative B Statement in support for Alternative B 292	
		293 Comment noted; no action required.
Davis, Cecile	0099_Lance.Roberts_Ind	
Davis, Cecile Sent:	Tuesday, December 20, 2011 12:45 PM	
Sent: To:	Tuesday, December 20, 2011 12:45 PM comments@pointthomsonprojecteis.com	
Sent: To: Cc:	Tuesday, December 20, 2011 12:45 PM comments@pointthomsonprojecteis.com extraski@gmail.com	
Sent: To:	Tuesday, December 20, 2011 12:45 PM comments@pointthomsonprojecteis.com	
Sent: To: Cc: Subject:	Tuesday, December 20, 2011 12:45 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
Sent: To: Cc: Subject: Name: Lance Rob Email: Roberts.	Tuesday, December 20, 2011 12:45 PM comments@pointhomsonprojecteis.com extraski@gmail.com Online form submission erts Lance@gmail.com	
Sent: To: Cc: Subject: Name: Lance Rob Email: Roberts. Contact me thro	Tuesday, December 20, 2011 12:45 PM comments@pointhomsonprojecteis.com extraski@gmail.com Online form submission erts Lance@gmail.com ugh email: Yes	
Sent: To: Cc: Subject: Name: Lance Rob Email: Roberts.	Tuesday, December 20, 2011 12:45 PM comments@pointhomsonprojecteis.com extraski@gmail.com Online form submission erts Lance@gmail.com ugh email: Yes 83449	
Sent: To: Cc: Subject: Name: Lance Rob Email: Roberts. Contact me thro Address: PO Box City: Fairbanks State: AK	Tuesday, December 20, 2011 12:45 PM comments@pointhomsonprojecteis.com extraski@gmail.com Online form submission erts Lance@gmail.com ugh email: Yes 83449	
Sent: To: Cc: Subject: Name: Lance Rob Email: Roberts. Contact me thro- Address: PO Box City: Fairbanks State: AK Zip: 99708	Tuesday, December 20, 2011 12:45 PM comments@pointhomsonprojecteis.com extraski@gmail.com Online form submission erts Lance@gmail.com ugh email: Yes 83449	
Sent: To: Cc: Subject: Name: Lance Rob Email: Roberts. Contact me thro Address: PO Box City: Fairbanks State: AK Zip: 99708 Contact Phone:	Tuesday, December 20, 2011 12:45 PM comments@pointhomsonprojecteis.com extraski@gmail.com Online form submission erts Lance@gmail.com ugh email: Yes 83449 (907)456-5140 Statement in Support for Alternative B 293	
Sent: To: Cc: Subject: Name: Lance Rob Email: Roberts. Contact me thro Address: PO Box City: Fairbanks State: AK Zip: 99708 Contact Phone:	Tuesday, December 20, 2011 12:45 PM comments@pointhomsonprojecteis.com extraski@gmail.com Online form submission erts Lance@gmail.com ugh email: Yes 83449	

mment		Response
		294 Comment noted; no action required.
Davis, Cecile	0100_Bill.Cessnun_Ind	
Sent: Thursday, December : To: comments@pointthon Cc: extraski@gmail.com Subject: Online form submission	sonprojecteis.com	
Name: bill cessnun Email: cessnun.bill@nrim.com Contact me through email: Yes Address: 9850 Prospect Drive City: Anchorage State: AK Zip: 99507 Contact Phone: 3017163 Comments: I prefer Alternative B.		
Of the design alternatives consi- environmentally-responsible solution for	Statement in support for Alternative B 294 dered, Alternative B provides the safest, most or developing Point Thomson's resources.	
	environmental footprint by incorporating a combination oads, aviation, and in-field roads. These features are icient operations.	
	will implement comprehensive mitigation measures to uatic resources, and subsistence activities.	
	e U.S. Fish and Wildlife Service and state agencies to re fully protected. Coastal barge route is outside the whales.	
 The in-field roads included in A gravel footprint and for the efficient 	ternative B have been carefully routed to minimize the pass through of water.	
number of flights by allowing larger as	B provides better access in bad weather, reduces the rcraft for routine cargo shipments and allows for capabilities in the event of an emergency.	
	1	



Comment	Response
	Comment letter 0101 continued.
in Her	
Ray Powell Been States	
1945 William Douglas CT	
North Pole, Alaska 99705	
scorpion00343@yahoo.com	
Cell: 907-378-1029	
I am Ray Powell, and a proud member of 942, Laborers Union I vote for Consideration of Alternative B, I	
have encluded points I believe are relevant	
Alternative B has the least Environmental Impact	
A coast based Central Pad, will help with re-supply barging and module sealift directly to Central pad	
Prudhoe Bay has plenty of musk oxen, caribou, some brown bears and a variety of birds that do not appear to	
be affected by the developement of the various pads. They seem to be thrivingwith this in mind, the wild	
life near Central Pad, should thrive as well	
Continued oil exploration helps our local businesses, and population, as well as our economy	
Oil is used in many products we use all the time. Heating fuel, fuel for our vehicles, and equipment	
Exploring and Developing our natural resources decreases our need for foreign oil	
If we do not manage our natural resources. or replenish them, unemployment will rise	
I thank you for considering these points	
#	

nment		Response
Davis, Cecile	0102_Vera.Williams_Ind	296 During the 404(b)(1) Guidelines analysis, the Corps will consider mitigation options along with impacts to the environment identified during the NEPA process before making its final permit decision.
From:	Alcantra, Rosetta M.	
Sent: To: Subject:	Wednesday, December 28, 2011 11:02 AM Davis, Cecile FW: Point Thomson Project, DEIS and Public Notice comment period extended to January 18, 2012	
Cecile, Just wanted to make	e sure you had this email. Thanks, Rosetta	
Sent: Tuesday, Deo To: Begier, Erin Cc: Baij, Hank; Galla Subject: Re: Point	s [mailto:realty@inupiatgov.com] ember 27, 2011 9:04 AM agher, Tim; Alcantra, Rosetta M.; Allwright, Michael C.; Price Leavitt Thomson Project, DEIS and Public Notice comment period extended to January 18, 2012 Mitigation 296 the record via email as a concern Tribal Member and Citizen of the North Slope -Region:	
Please consider the going to be adequa and I've seen the mounds more and some are ice cellar So as a concern I whumane thing to do we eat as subsisten	e "Caribou Crossings", I don't want to think that 7' to 8' height on the proposed pipeline is tate my reasoning is that "Global Warming" is taking place and the permafrost is melting ground go lower even by my own house where the ground has gone down and you'll see more as our summers are getting hotter and hotter some of those mounds are graves and is of individual familiesand some are lakes that have turned into mounds, also would plea for "Caribou Crossings" to be constructed I would think that would be the most to think ahead and to eliminate possible stress that could be brought out to the very animals necessary with the total could be survive on as Inupiat people.	
Sincerely, Vera W	illiams.	
On Fri, Dec 23, 20	11 at 11:36 AM, Begier, Erin < Erin.Begier@hdrinc.com > wrote:	
All,		
	Engineers has extended the Point Thomson, Draft Environmental Impact I Public Notice comment period by 15 calendar days to 18 January 2012.	
Thank you,		
	1	

Comment	Response
POINT THOMSON PROJECT EIS Comment Form You'r incul is important to this project. Please provide your comments below and mail to the address preprinted on the back of this page. You may attach additional sheets. Comments can also be dropped in the box at the public meetings, submitted on the Web site at http://www.pointhomsorprojeciels.com, enabled to Comments gift-point ThomsorProjectEis.com, or Stavat to (907) 644-7227. To be considered in the Draft Elis, comments are due by January 3, 2012, by 5 PM Alaska Standard Time. Name: PA	Response 297 Comment noted; no action required.
Thank you for your participation!	

mment		Response
Davis, Cecile	0104_Thane.Fisher_Ind	298 Comment noted; no action required.
To: cc Cc: ex Subject: O Name: Thane Fisher Email: kah-63@hotmail.c Address: P.O. Box 2076 City: Kenai State: AK Zip: 99611 Contact Phone: 252-9265 Comments: I support Poi become a bad thing? In rest of our state! It c		

Comment Response 0105_Sean.Parnell_SGOV STATE CAPITOL 350 West 7th Avenue #1700 Anchorage, Alaska 99501 907-269-7450 PO Box 110001 Juneau, Alaska 99811-0001 907-465-3500 En 907-269-7463 fac: 907-465-3532 www.Gov.Alaska.Gov Governor@Alaska.Gov Governor Sean Parnell STATE OF ALASKA December 29, 2011 Mr. Harry A. Baij Department of the Army United States Army Corps of Engineers, Alaska District Regulatory Division P.O. Box 6898 Joint Base Elmendorf-Richardson, AK 99506-0898 Re: Point Thomson Draft Environmental Impact Statement (DEIS) Dear Mr. Baij, The State of Alaska will continue promoting American energy independence, energy security, and economic growth by commenting on the Draft Environmental Impact Statement (DEIS) for the Point Thomson project, which was released by the Army Corps of Engineers (Corps) for public comment along with a Public Notice of Application for Permit on November 18, 2011. The State continues to fully support production at Point Thomson, which would help offset current declines in North Slope production and maintain efficiency of the Trans Alaska Pipeline System (TAPS). Over the past 20 years, Alaska North Slope production has steadily declined to its current level of about 640,000 barrels per day. Faced with steadily declining Alaska oil production, a faltering national economy, and energy instability due to our country's reliance on foreign oil, I put forth an ambitious goal for Alaska to increase TAPS throughput to one million barrels of oil production per day within a decade. Bringing Point Thomson development online will certainly move us to increased production, grow economic opportunity, and lessen dependency on foreign sources of energy. Additionally, the field's development is also a likely necessary prerequisite for a natural gas pipeline from the North Slope. For these reasons, the State is keenly interested in ensuring that the Point Thomson leaseholders can move forward to develop this field in a diligent and timely manner. The comments provided on the DEIS are intended to help the Army Corps of Engineers, as the lead federal agency for the DEIS, comply with the National Environmental Policy Act (NEPA) and implementing regulations in 40 CFR Part 1500. The State of Alaska remains a strong proponent of timely decision making and the collaborative working relationship among cooperating agencies for the remainder of the EIS process, as well as the subsequent permitting of the proposed project.

Comment	Response
Mr. Harry A. Baij December 29, 2011 Page 2	
General and page specific comments intended to strengthen the DEIS are enclosed, as well as a letter addressed to Secretary Salazar on the DEIS. Thank you for your consideration of these comments. I look forward to our continued efforts together in providing energy to the nation.	
Sincerely, Han tonell Governor	
Enclosures	
cc: The Honorable Daniel Sullivan, Commissioner, Alaska Department of Natural Resources Randy Ruaro, Deputy Chief of Staff, Office of the Governor Kip Knudson, Director of State and Federal Relations, Office of the Governor Jeff Jones, Special Assistant, Office of the Governor Joseph Balash, Deputy Commissioner, Alaska Department of Natural Resources Ed Fogels, Deputy Commissioner, Alaska Department of Natural Resources William Barron, Director, Division of Oil and Gas, Alaska Department of Natural Resources Thomas Crafford, Director, Office of Project Management and Permitting, Alaska Department of Natural Resources Sara Longan, Large Project Manager, Office of Project Management and Permitting, Alaska Department of Natural Resources	

Comment Response 299 Most gravel mining would occur during the winter period when fugitive dust is less likely due to the frozen condition of soils. The sentence in Section 5.4.4.1, Construction Emissions: "Additionally, small electric power generators, heaters, and other fuel-burning equipment as well as fugitive dust sources would contribute Enclosure: State of Alaska Comments on the Point Thomson Draft Environmental Impact to emissions during construction" has been changed to "Additionally, small electric power generators, heaters, and other fuel-burning equipment as well as fugitive Page 2-27, Section 2.4.2.4 Common: Other Infrastructure: Fugitive dust from gravel mining and dust sources such as gravel excavation, storage, and placement would contribute to gravel storage is not addressed in the DEIS air quality sections. It is not clear to what extent fugitive emissions during construction." Section 5.2.7, Mitigative Measures describes the dust will be generated during mining or generated from gravel storage piles. What, if any, mitigations measures are being considered in the project design to address these problems? Applicant's Design Measures for dust control during mining activities as follows: "Applying dust control measures to roads, pads, and summer mining activities to Page 3-32, Section 3.4.3, Air Quality Standards, Table 3.4-1: Footnote g needs to be updated. The Alaska Ambient Air Quality standards now have a 1 hour SO₂ standards in place. protect insulating vegetation, and minimizing dust settlement on vegetation or snow which could increase thermal conductivity and promote earlier spring thaw Page 3-33, Section 3.4.5, Ambient Air Quality: The data for Badami is over ten years old. Please describe briefly the value this data adds to the analysis. in affected areas." The following text was added to the first paragraph of Section Section 3.6, Figure 3.6-1, Surface Water Hydrology. The Liberty Mine Site next to the Duck 5.4.4.1: "The Applicant would apply dust suppression measures to fugitive dust Island Mine Site is not depicted on the figure. The pipeline bridge is downstream of the vehicle sources." bridge over the West Channel Sagavanirktok River. 300 Footnote 'g' in Table 3.4-1 has been revised to reflect that the AAAOS now have a Section 3.6 Hydrology and Section 3.6.4.7 Lakes. In the first paragraph it says "Prospective users must apply for water use permit with the Alaska Department of Natural resources (ADNR), who 1 hour SO2 standard. sets permit limits for each source but no amount of water or proportion of water is guaranteed to a 405 Badami is the location nearest Point Thomson for which monitoring data are permitted user." This statement should be clarified. First, all water withdrawal, impoundment, or diversion must be permitted by ADNR. ADNR does set the quantities allowed for use based on available. The air quality monitoring data for Badami are not intended to represent hydrology, recharge, fish presence, etc. It should be clarified that an applicant can apply for either a current conditions in the project area, but the data help provide a more complete water right or a temporary water use authorization. A water right gives the holder the right to the water as specified on the permit or certificate of appropriation. This amount of water is only picture of current and recent conditions. The text in Section 3.4.5, Ambient Air allocated to the holder of the water right and is not available for other users. A temporary water use Quality has been modified to include a sentence at the end of the third bullet, authorization has no rights and may be allocated to other users. stating: "While the Badami data are over 10 years old, these data augment the air Page 3-67, Section 3.7.3.2, Water Discharges: The top paragraph in this section reads "The quality description for the study area." discharge of treated domestic wastemater to surface water requires a discharge permit from ADEC. The type of permit needed depends on whether the discharge occurs in fresh (AKG-57-0000) or marine (AKG-57-1000) waters." This 301 Figure 3.6-1 has been revised to show the Liberty Mine Site and the correct sentence is overly general. We would suggest the following: "The type of domestic wastewater location of the existing pipeline downstream of the vehicle bridge over the West discharge permit needed depends on a variety of factors, including, but not limited to: discharge volume, chemistry, and location; receiving water characteristics, including quality and quantity; Channel Sagavanirktok River. whether the discharge is to fresh or marine waters, etc. Accordingly, the applicable domestic wastewater APDES discharge permits for the Point Thomson project are AKG-57-0000 and AKG-302 Changes have been made to this existing text in Section 3.6.4.7, Lakes: "Prospective users must apply for a water use permit with the ADNR. The ADNR Page 3-171, Section 3.12, last paragraph. Most freshwater species such as Arctic grayling or round sets permit limits for each source but no amount of water or proportion of water is whitefish do not migrate to low salinity estuarine or nearshore waters in summer. These species may guaranteed to a permitted user." The new text states: "All water withdrawal, occasionally be found in these waters during summer. impoundment, or diversion must be permitted by the ADNR. The ADNR sets Page 3-181, Section 3.12, first paragraph. The statement that a gravel mine site (Sag Site C) contains 88 times more water than overwintering areas in the Sagavanirktok River (Hemming 1988) quantities allowed for use based on such factors as hydrology, recharge, and fish refers to that portion of the West Channel Sagavanirktok River at or immediately downstream of the presence. A prospective water user can apply for either a water right or a Sagavanirktok River Bridge. Additional overwintering area exists in the Sagavanirktok River, temporary water use authorization. A water right gives the holder the right to the particularly in the East Channel Sagavanirktok River. water as specified on the permit or certificate of appropriation. This amount of water is only allocated to the holder of the water right and is not available for other users. A temporary water use authorization has no rights and may be allocated to other users." 303 The Corps has changed the text in Section 3.7.3.2, Water Discharges, as suggested in the comment.

Comment	Response
	304 Text regarding freshwater species use of estuarine and nearshore waters was clarified in the referenced paragraph and elsewhere in Section 3.12 of the Final EIS to state that some freshwater species use these habitats for migration during early summer when peak discharges from freshwater systems lower the salinity of nearshore habitats.
	305 The text in the referenced paragraph was revised as suggested in the Final EIS.

Comment Response 306 Text regarding freshwater species use of estuarine and nearshore waters was clarified in the referenced paragraph and elsewhere in Section 3.12 of the Final EIS to state that some freshwater species use these habitats for migration during early summer when peak discharges from freshwater systems lower the salinity of nearshore habitats. Page 3-182, Section 3.12, seventh paragraph. Same comment as page 3-171. 307 The text in this section and Figure 3.12-3 were revised to include overwintering areas of broad whitefish in the East Channel Sagavanirktok River. Morris (2000) is Section 3.12, Figure 3.12-3. Additional overwintering habitat occurs in the East Channel Sagavanirktok River. See Morris (2000). Morris, W.A. 2000. Seasonal movements of broad whitefish cited and added to the references chapter. (Coregonus nasus) in the freshwater systems of the Prudhoe Bay Oil Field. M.S. Thesis. University 308 If passersby are welcomed onto the site (within the ambient air boundary), it is of Alaska, Fairbanks. 71 pp. presumed they are being allowed to "trespass" at their own risk. Visitors often take Page 5-43, Section 5.4.4.4, Air Quality Impacts Figure 5.4: Air permits require a demonstration that air quality standards can be met at the ambient air boundary, often a fence line. The contour tours of industrial plants across the nation, and simply giving them access for a plots showing pollutant concentrations indicate that the CFP Ambient Air Boundary, which appears brief site visit does not impact appropriate placement of the dispersion modeling to include the entire pad. Discussions with the proponent have indicated that passers by sometimes stop at the existing facilities and the facility will continue to welcome passersby, particularly if they ambient air boundary. Likewise, when regulatory agency staff make a site visit as are in need to assistance. Does the modeling boundary include areas where passersby may have part of their normal oversight function, their access to areas within the ambient air access? boundary does not affect the appropriate placement of that boundary. Both Page 5-53, Section 5.4.7, Alternative E: Coastal Pads with Seasonal Ice Access Road: visitors and regulators are assumed to accept the risk of being within the ambient Alternatives D and E both include a five year drilling plan, yet the drilling impacts of Alternative E "would be of greater duration than Alternatives B.C. and D due to the five year drilling program. air boundary when they are allowed on site. The National Ambient Air Quality Please explain the difference. Standards (NAAQS) are conservative. Consequently, the potential for any adverse Page 5-55, Section 5.4.9.2, Cumulative Impacts: This section discusses cumulative impacts from air quality impacts on visitors is negligible given the stringency of the other potential projects. The scenario presented assumes that the Point Thomson project would precede Shell's exploration drilling in the Beaufort Sea OCS and that ADEC air permitting would NAAQS. The ambient air boundary does encompasses areas where visitors may not allow deterioration of ambient air quality. The scenario does not appear to examine the potential briefly be allowed to have access, but any impacts in such areas are not required to for Shell's exploration drilling preceding the Point Thomson development or the potential for Shell's be analyzed for modeled demonstrations of compliance with NAAQS. exploration drilling being contemporaneous with the construction and development of the Point Thomson project. Those could be important scenarios to consider when addressing cumulative 309 The first sentence of Section 5.4.7, Alternative E: Coastal Pads with Seasonal Ice Access Road: "The construction, drilling, and operations emissions and impacts for Page 5-86, Section 5.6, Ice Infrastructure. As Alternative C, as well as Alternative D, proposes to Alternative E would be similar to those described in Alternative B (see Table 5.4 use seasonal ice roads to transport modules rather than barging, significantly greater impact will occur from these ice roads to streams in the area, particularly the Sagavanirktok River. The heavy 2), although drilling impacts would be of greater duration than Alternatives B, C, modules proposed for this project will likely require grounded ice to cross streams. As the and D due to the 5-year drilling program" is corrected to state: "The construction, Sagavanirktok River can have flow late into the winter, grounding the ice may not be possible without substantial impacts to fish, fish habitat, and ice road operations. This section, as well as drilling, and operations emissions and impacts for Alternative E would be similar others in this document, should assess these impacts. Additional storage pads for modules near West to those described in Alternative B (see Table 5.42), although drilling impacts Dock as well as the potential impacts of getting the modules from West Dock to the Endicott Road should also be examined. would be spread out longer due to the 5-year drilling program." The first sentence of Section 5.4.5, Alternative C: Inland Pads with Gravel Access Road: "The Page 5-86, Section 5.6, Pipelines. This section should include a discussion of the potential impacts of pipeline crossings to fish and fish habitat as the export pipeline in this alternative ties in construction, drilling, and operations emissions and impacts for Alternative C with the Endicott Pipeline west of the East Channel Sagavanirktok River rather than at Badami. The would be similar to those described in Alternative B (see Table 5.42), although pipeline crossing of the East Channel of the Sagavanirktok River may be problematic as flow may be present in winter when pipeline installation is likely to occur. The discussion should include the drilling impacts would be of greater duration due to the 4-year drilling program" is effects of both elevated and buried pipeline installation as well as water management and maintenance of fish habitat upstream and downstream of the crossing location. clarified to state, "The construction, drilling, and operations emissions and impacts for Alternative C would be similar to those described in Alternative B (see Table 5.4 2), although drilling emissions would be longer in duration and greater in volume due to the 4-year drilling program and the greater length of the wells."

Comment	Response
	310 A change in the order of implementing other potential projects in the Point Thomson area would not change the conclusions of the alternatives analysis. The facilities would be far enough apart that, because of dispersion, measurable cumulative effects would be unlikely. Further, regardless of the order, the second facility would need to include the first in its air quality modeling and cumulative impact assessment. The Corps believes discussion in the EIS is general enough to account for this scenario without making changes to the original text.
	311 The following language has been added to sections 2.4.4.3 Alternative C: Access and Transportation and 2.4.5.3 Alternative D: Access and Transportation to clarify that ice roads would be grounded: "Ice roads would be located such that they could be grounded at stream crossings. For larger streams, such as channels of the Sagavanirktok River, ice road locations would be limited to areas where the streams are shallow and braided." Sections 2.4.4.4 Alternative C: Other Infrastructure and 2.4.5.4 Alternative D: Other Infrastructure of the EIS have the following language: "Module staging pad: Alternative C [D] would require many modules of up to 1,300 tons to complete the CPF. These modules, and any permanent fuel storage tanks, would be sealifted to Prudhoe Bay during the summer open water season but would have to be stored at Deadhorse until the ice road to Point Thomson was installed. The staging area would need to include generators and heaters to prevent the internal instrumentation in the modules from freezing while the modules are staged. Deadhorse does not currently have the storage capacity for that volume of large modules, and a pad would need to be constructed prior to module deliver. The number of modules and subsequent size of the storage pad would be determined during detailed engineering." At this time, engineering of the modules that would be used for Alternative C or D have not been designed. Therefore, the space needed for storage and any potential infrastructure improvements in the Deadhorse area due to the size of the modules is not known. The assumption has been made that through design of the modules infrastructure improvements would be kept to a minimum. During the 404(b)(1) Guidelines analysis, the Corps will consider practicability (which includes cost and logistics), along with the project purpose, public interest determination, and mitigation options when making its final decision.
	312 The Corps conducted a review of impacts associated with alternative components and determined that a pipeline extending all the way to Endicott Spur would have higher environmental impacts than a pipeline connecting at Badami and, thus, would not be a likely component of the final project, if the project is permitted. For that reason, this suggested analysis was not conducted.

ent	Response
Page 5-87, Section 5.6, Table 5.6-8, Alternative C- Impact Evaluation for Hydrologic Regime. This table states gravel pads would have a major impact on drainage patterns whereas the gravel access road and infield gravel roads would have noderate impacts to drainage patterns. It would appear that gravel roads would have a far greater impact to drainage patterns than would gravel pads. This assessment should be charified Page 5-93, Section 5.6, Ice Infrastructure. See Alternative C page 5-86 comments. Page 5-110, Section 5.7.2, Permits: The second paragraph in this section has a sentence that reads "Permits AKG-57-000 and AKG-57-1000 are issued by the ADEC and over waterwater discharges during construction and operations to the tundra and marine waters." This sentence lacks specificity, because these two general permits do not cover all wastewater discharges during construction and operations. This sentence is also somewhat misleading in that the water quality standards, on which the ADES permits are based, specifically protect uses for marine and fresh water (which tundra falls under). ADEC suggests the following instead: "General Permits AKG-57-0000 and AKG-57-1000 are issued by the ADEC and cover domestic wastewater discharges during construction and operations to surface fresh waters (including tundra) and marine waters."	geographic extent of the impacts are "extensive" as compared to the "local" extent of impacts from the gravel pads. 314 See response to Comment 312. 315 The text in Section 5.7.2, Permits, has been modified as suggested by ADEC. 316 The impact evaluation defined an impact based on the percentage of a type of wetland/vegetation type, which sometimes did not correspond with the greatest overall amount of wetlands fill or impact. The Key Findings has been revised in the Final EIS to clarify this. 317 The sentences discussing Dolly Varden spawning in Stream 24 were removed
Page 5-125, Section 5.8, Key Findings. Alternative B is listed as having moderate impacts to vegetation and wetlands whereas Alternative D is listed with minor impacts. However, Tables 5.8-3 (ALT B) and 5.8-9 (ALT D) indicate gravel roads and pads in Alternative D impact more wetlands than do the roads and pads in Alternative B. This apparent discrepancy should be examined and rectified if necessary.	from the referenced paragraph in the Final EIS. 318 The referenced paragraph was revised in the Final EIS to clarify that corrugated multiplate culverts would be used for fish bearing streams. 319 The analysis of gravel mine sites for the gravel access road under Alternative C
	did not assume that channels would be constructed to connect floodplain gravel mine sites to stream channels. The sentence discussing fish movements was revised in the Final EIS to clarify that arctic grayling migrate through drainages
pipe unless hydraulic and fish passage analyses indicated a structural steel line pipe could meet the fish passage criteria for the design type and size of fish.	while Dolly Varden migrate through nearshore habitats.
Page 5-370, Section 5.12, sixth paragraph. Fish could move in or out of flooded mine sites if the sites were connected with an adequate channel to fish-bearing waters. They would not be restricted to spring flooding events in this case. Only if the site were isolated from a stream by a sufficient distance would colonization and movements be intermittent.	320 Text in Section 5.12.4.1, Alternative C: Construction, of the Final EIS was revise to state that documented overwintering areas in the East Channel Sagavanirktok River may be within impact areas for pile driving during bridge construction.
Arctic grayling do not typically migrate to estuarine and nearshore waters in spring for feeding and rearing.	321 The Corps conducted a review of impacts associated with alternative composand determined that a pipeline extending all the way to Endicott Spur would higher environmental impacts than a pipeline connecting at Badami, and, the would not be a likely component of the final project, if the project is permitt that reason, this suggested analysis was not conducted.
Page 5-371, Section 5.12, Pile Driving/Blasting. Under this alternative (C), bridges would be required over the Sagavanirktok River. As a result, pile driving would be required in reaches of the river where known fish overwintering occurs. In addition, the export pipeline would cross this river and would require pile driving for a pipeline bridge to span the river if an elevated crossing was the chosen design.	
Page 5-371, Section 5.12, Pipeline/VSM Crossings. If the export pipeline were to be buried in wide braided floodplains (e.g., East Channel Sagavanirktok River) under this alternative, additional impacts such as changes in water quality, maintenance of surface and subsurface flow to downstream fish overwintering areas, disturbance, changes to available habitat and other effects need to be evaluated.	Fish 321

ent	Response
	322 The referenced paragraph was revised in the Final EIS to state that pile driving for road bridges may be located within the impact area for overwintering fish.
Page 5-371, Section 5.12, first paragraph. Fish overwintering areas do occur in the Sagavanirktok River in the area of road crossing discussed in Alternative C. Thus, impacts from pile driving may occur to fish. Page 5-371, Section 5.12, third paragraph. This section should discuss the impacts of installing a buried pipeline crossing across the Sagavanirktok River and other major crossings, as this will likely be the mode selected for crossing these rivers because of distance and ice concerns. This discussion should include maintenance of flow, if present, across the pipeline centerline, disturbance to overwintering fish, sedimentation and turbidity impacts, as well as impacts to channel morphology and stream hydrology.	323 The Corps conducted a review of impacts associated with alternative components and determined that a pipeline extending all the way to Endicott Spur would have higher environmental impacts than a pipeline connecting at Badami, and, thus, would not be a likely component of the final project, if the project is permitted. For that reason, this suggested analysis was not conducted. 324 Placement of the power line varies based on the alternative. Chapter 2 of the Draft EIS (page 2-64) states for Alternative C, "Airstrip and water source power would be distributed from cables buried within the infield gravel road to the airstrip and water source." The text on page 5.77 in Section 5.6. Hydrology, recording to
Page 5-372, Section 5.12, first paragraph. This section states powerlines to the airstrip and mine site would be buried in the roadbed. Elsewhere, the text indicates these lines will be buried 15 ft from edge of the road (see page 5-77).	water source." The text on page 5-77, in Section 5.6, Hydrology, regarding a trenched power line is under the analysis for Alternative B. 325 The Draft EIS text in Section 5.24.1, Hazardous Material and Waste Management,
Page 5-635, Section 5.24.1, Hazardous Material and Waste Management: This section discusses the Oil Discharge and Prevention Contingency Plan (ODPCP) and notes that a new ODPCP would be required for the project. It should be clarified in the document that updates to the existing October 2008 ODPCP will require a plan amendment under 18 AAC 75.415. It should also be noted that the October 2008 plan was specifically for drilling operations and the full project will require a spill response plan to include all categories of activities at the facility under 18 AAC 75.430 – 440.	regarding the ODPCP has been modified as follows: "The Applicant prepared a ODPCP prior to drilling the current wells at the PTU-3 pad that covered only drilling activities. This October 2008 plan was approved by the ADEC in Marc 2009 and is provided in Appendix U. It also provides relevant information for t current assessment of the risk of produced fluid spills for the proposed project. Because this existing ODPCP only addresses drilling operations, a plan
Page 5-635, Section 5.24.1 Hazardous Material and Waste Management: Paragraph one of this section discusses the Waste Management Plan which addresses storage, transportation, and disposal of wastes during construction, drilling, and operations. It should be clarified in the document whether this plan also addresses wastes generated during a spill or release incident or if a separate waste management plan will need to be developed as a result of a spill or release incident. It should also be clarified if there are any differences in wastes generated from spills or discharges upstream of the central pad or from downstream of the central pad.	
Page 5-635, Section 5.24.1 Hazardous Material and Waste Management: Paragraph three of this section notes that wastes would be handled in accordance with the North Slope industry standard, Alaska Waste Disposal and Reuse Guide, also known that the "Red Book". This reference should be included in the references section in Chapter 9. It would also be worthwhile to provide or summarize the applicable statutory and regulatory authorities covered in the Red Book.	contain spill prevention measures such as fluid storage and transfer guidelines, secondary containment requirements, and cleanup procedures if a spill were to
Page 5-637, Section 5.24.2.1, Size Classification: This section describes the size categories for oil and hazardous materials spills and cires to a reference (BLM 2004). Chapter 9 provides references called out as BLM 2004a and BLM2004b. It should be clarified which reference document is being cited.	occur" has been changed to: "This plan would contain spill prevention measures such as fluid storage and transfer guidelines, secondary containment requirements, and cleanup procedures (including management of associated wastes) if a spill
Page 5-640, Section 5.24.2.3, Phases of Oil Field Development: This section discusses the factors that may delay spill cleanup. Bullet two identifies one factor as "Time intensive search identified by the Supervisory Control and Data Acquisition (SCADA) system as the likely source." It is not clear what this sentence is describing.	Types of Materials Spilled: "Spills upstream (in a processing context) of the Central Pad Facility could include natural gas condensate, oil, saltwater, and drilling mud, whereas downstream of the facility, spills from the export pipeline could include petural gas liquids and oil."
Page 5-651, Section 5.24.7.2, Pipeline Leak Detection: The text in the third paragraph of this section indicates that computer-based gain/loss volume trending would be used to identify low rate Sites and Spi 330	

Comment	Response
	the majority of routine waste streams generated by oil and gas exploration and production operations in Alaska. The guide contains disposal/reuses tables for various waste streams and products. These tables are based on regulations and policy guidelines of the EPA, ADEC, and AOGCC."
	328 The citation in the text has been updated to indicate reference to BLM 2004a.
	329 Bullet two under Operation in Section 5.24.2.3, Phases of Oil Field Development, has been changed to "Locating the leak may require significant time searching the area identified by the Supervisory Control and Data Acquisition (SCADA) system as the likely source."
	330 The Corps has replaced the following text in Section 5.24.7.2, Pipeline Leak Detection, "The Applicant would also incorporate computer-based accumulated gain/loss volume trending to assist in identifying low rate or seepage releases below the 1.5- to 2-percent-by-volume detection threshold bounded by flow measurement equipment." The new text states, "The Applicant would install two independent leak detection systems. The primary system would detect a leak as small as 1 percent of the daily flow rate, as required by 18 ACC 75.055(a)(3). This system would use meters on the inlet and outlet of the export pipeline, with a state-of-the-art computational system that would perform real-time monitoring for pipeline leaks and be continually updated via the SCADA system. A proprietary leak detection system using different technology would provide another level of protection."

Comment

or seepage releases below the 1.5 to 2 percent-by-volume detection threshold bounded by flow measurement equipment. It is not clear if the pipeline leak detection system will have continuous capability to detect a daily discharge equal to not more than one percent of daily throughput as required by 18 AAC 75.055(a)(3). This should be clarified.

Page 5-651, Section 5.24.7.2, Pipeline Leak Detection: The second bullet in this section indicates that the applicant will use measures such as aerial and ground patrols whenever practical to provide direct observation and identification of leak locations. It is not clear if in addition to measures to provide direct observation of leak location, if weekly aerial surveillance of the pipeline will occur, unless precluded by safety or weather conditions. This should be clarified to ensure that the activities will be consistent with 18 AAC 75.055(a)(3).

Page 5-653, Section 5.24.8, Spill Scenarios: The first paragraph in this section describes a 2,000 gallon spill as a "small spill" despite the fact that this conflicts with the size classification for spills provided in Section 5.24.2.1. This section categorizes small spills as ranging from 10 to 99.9 gallons and large spills from 1,000 to 100,000 gallons. This spill characterization should be clarified to match the classifications used elsewhere in the document.

Arctic National Wildlife Refuge

We appreciate Secretary Salazar's acknowledgement in his December 9, 2011 letter to Governor Sean Parnell (attached) that Title X of the Alaska National Interest Lands Conservation Act (ANILCA) "does not designate the coastal plain of the Arctic National Wildlife Refuge as a wilderness study area." The letter also states related errors have been corrected; however, the DEIS still contains inaccurate or misleading statements about Congressional direction for the Arctic Refuge 1002 area, and as such, continues to place an inappropriate and excessive emphasis on the proposed project's impacts to refuge wilderness-related values. It appears the source for much of the inaccurate information comes from the draft revised Arctic National Wildlife Refuge Comprehensive Conservation Plan (CCP) and DEIS. Since the draft Arctic Refuge CCP/DEIS is a nonbinding draft document, which contains no preferred alternative, is based on incorrect legal premises, and is not a final agency action, it is inappropriate to rely on it, either directly or indirectly, as source material for the Point Thomson DEIS. The DEIS should instead refer to current management guidance contained in the final 1988 Arctic Refuge CCP.

In addition, the DEIS places considerable emphasis on the Arctic Refuge's national symbolic value and the public discourse regarding management direction of the 1002 area. We question the overall relevance of these issues to the DEIS and the related discussions, which are subjective, one-sided, and default in favor of wilderness protection. This bias results in an analysis that fails to consider the inappropriateness of emphasizing wilderness protection in the 1002 area, given the proximity to federal OCS development and adjacent State oil and gas lease lands.

Statements that are based on a misinterpretation of ANILCA or that are inherently subjective inappropriately skew and over-inflate the refuge values that are the basis for the DEIS' impact analysis. We therefore question the basis for most of the analyses that relate to the Arctic Refuge and request the Corps not only correct the inaccurate and inflammatory information, as noted below and in the page-specific comments that follow, but also revise the corresponding impact analyses and potential mitigation accordingly.

Response

Sites and Spills

Sites and Spills

Arctic Refuge

- 331 The following sentence has been added prior to the last sentence in Section 5.24.7.2, Pipeline Leak Detection, "Visual inspections of the export and infield pipelines would be conducted weekly during operations via aerial surveillance, unless precluded by safety or weather conditions."
- 332 The following sentence in Section 5.24.8, Spill Scenarios: "For example, a small spill of 2,000 gallons into an interconnected tundra wetland system in late spring where thousands of migrating waterfowl are getting ready to nest could cause substantial impacts, whereas a very large spill of 210,000 gallons onto a frozen, snow-covered dry tundra in winter..." has been changed to: "For example, a spill of 2,000 gallons into an interconnected tundra wetland system in late spring where thousands of migrating waterfowl are getting ready to nest could cause substantial impacts, whereas a spill of 210,000 gallons onto frozen, snow-covered dry tundra in winter..."
- 333 Errors regarding 'wilderness study area.' In preliminary drafts, the Draft EIS stated that the 1002 Area was designated by ANILCA as a wilderness study area. As indicated in Secretary Salazar's letter, the Department of Interior has indicated that is not the case. Not all instances of such language were corrected for the DEIS (most notably in Appendix N) but have been corrected for the Final EIS. See also responses to comment 336 regarding use of the word "wilderness." **Inappropriate and excessive emphasis.** As indicated in Secretary Salazar's letter, the 1002 Area does possess wilderness qualities, and disclosure of impacts is the aim of an EIS. Therefore, disclosure of impacts to the refuge (including its wilderness qualities) is appropriate. See also response to Comment 125. **Sources of Refuge information.** Information for the EIS did not come from the draft revised CCP; information came from the existing 1988 plan and Refuge staff. See also Comments 335 and 345 regarding citations that have been added. National/symbolic values. The EIS explains the national values of the 1002 Area, both for oil and gas development and for protection of the wild/natural landscape, and describes the Refuge's current management of both the designated unit of the National Wilderness Preservation System and nondesignated lands. Wilderness values, including the Refuge's symbolic value, are relevant because they are the background that explains why development of Point Thomson, within sight of the refuge but on adjoining nonrefuge land, creates an impact. See also response to Comment 356.

Comment Response 334 The last bullet on page 3-208 (Section 3.14.3) was in error and has been removed. See also response to Comment 333. 335 The Draft EIS reflects how the USFWS actually manages the Arctic Refuge today. Information regarding applicability of the original Range purposes came from Arctic Refuge ANILCA Section 1002 Refuge staff. This has been clarified and two staff citations added. The following In Section 1002 of the Alaska National Interest Lands Conservation Act (ANILCA), Congress quote from the 1987 Legislative EIS "The entire 1002 area meets these criteria" provided separate direction for the 1002 area of the Arctic Refuge, which did not include studying (criteria of the Wilderness Act) has been paraphrased and added to the text in the the area for its wilderness qualities or interim preservation of wilderness qualities (i.e. page 3-208) as indicated throughout the DEIS. Section 1002(h) of ANILCA called for a report to Congress that third paragraph of 3.13.5.3 and a citation added. That paragraph now reads: "A described the natural resources (including the mineral resources) of the 1002 area, evaluated the 1987 Secretary of the Interior EIS and report to Congress acknowledged that the potential impacts of development in the coastal plain, and made recommendations regarding further exploration and development in the coastal plain. This report was completed and submitted to entire 1002 Area met the criteria of The Wilderness Act, which would qualify it for Congress in 1987, which included the Secretary of Interior's recommendation that the 1002 area be designation as part of the National Wilderness Preservation System, but made available for oil and gas leasing. Furthermore, the 1002 area was not included in the ANILCA Section 1317 wilderness review conducted in conjunction with the 1988 Arctic Refuge recommended authorization of full oil and gas leasing of the 1002 Area because of Comprehensive Conservation Plan (CCP), nor was it part of the wilderness study required in the importance of the oil and gas resource to the nation (Clough et al., 1987). ANILCA Section 1001 and further addressed in Section 1004, which excluded conservation system units designated by ANILCA. Although opening the 1002 Area to oil and gas development has been proposed multiple times in both houses of Congress, the issue of development versus Arctic Refuge Original Range Purposes preservation has been highly charged among the public, and a final decision that The DEIS also inappropriately emphasizes the original Range purposes as established by PLO 2214. would either open the area to oil and gas drilling or include it in the National Contrary to information cited in the DEIS (page 3-205, 4th paragraph), the 1988 CCP states that ANILCA "redesignated" the original 8.9 million-acre....Range as the Arctic National Wildlife Refuge" and Wilderness Preservation System has not been made." "...declared the purposes for which the Arctic Refuge was established and shall be managed include." to conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to, the Porcupine caribon herd (including the participation in coordinated ecological studies and management of this herd and the Western Arctic caribou herd), polar bears, grizzly bears, muskox, Dall sheep, wolves, wolverines, snow geese, peregrine falcons and other migratory birds and Arctic char and grayling; to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats: to provide, in a manner consistent with purposes set forth in subparagraph (i) and (ii), the opportunity for continued subsistence uses by local residents; and to ensure, to the maximum extent practicable and in a manner consistent with the proposes set forth in subparagraph (i), water quality and necessary water quantity within the refuge. (1988 CCP, Summary Page xi) Nowhere in the 1988 CCP does it state that the original Range purposes of "...preserving unique wildlife, wilderness, and recreational values" continue to apply to the redesignated Refuge (page 3-205), which includes the 1002 area. ANILCA Section 305 recognizes that prior authorities, such as PLO 2214, remain "in force and effect except to the extent that they are inconsistent with this Act or the Alaska Native Claims Settlement Act and, in any such case, the provisions of such Acts shall prevail." However, ANILCA Section 303(2), which established the Refuge and redesignated the Range as part of the Refuge, does not include "[preservation of] unique ... wilderness... values" (PLO 2214) in the list of purposes for which the Refuge was established and is to be managed. Instead, wilderness areas within wildlife refuges are specifically identified in Section 702 of ANILCA, and Section 702(3) specifically designated a portion of the original Range. The wilderness preservation management directive in PLO 2214 therefore applied only to the

Response Comment 336 Wilderness definition. To help minimize confusion, the Final EIS has been revised to use "National Wilderness Preservation System" or "Mollie Beattie Wilderness" consistently when referring to formally designated unit of the National Wilderness Preservation System. Where wilderness, as defined in the dictionary, is the subject of discussion, the text has been revised to indicate "wilderness original Range, and has been superseded by the formal wilderness designation of the original Range in ANILCA section 702(3), which does not include the 1002 area. As such, not only has the qualities" or to specify "nondesignated wilderness." (See also Comment 359.) wilderness directive in PLO 2214 been superseded by the formal wilderness designation in ANILCA section 702(3), but it cannot be read into the management intent for the rest of the Refuge, which is References to wilderness study area status were in error and have been removed. set forth in ANILCA Section 303(2). In fact, wilderness preservation is pointedly absent from the Visual sensitivity rating in Appendix N. The H-M-L ratings are appropriate, and list of purposes for which the Refuge was established and should not in any way be used as the basis for analyzing project impacts to the Refuge. reference to the 'wilderness study area' has been removed. The focus is on relative public interest in these areas (highest public interest and sensitivity for refuge land, Appendix N, Visual Resource Assessment which is a conservation system unit managed in part for its wilderness qualities The Visual Resource Assessment is a prime example of how this misinformation is being and natural scenic values; moderate for state land along the coastal corridor and inappropriately applied in the DEIS. As stated above, the 1002 area was not included in the refuge boundary; and low for state lands farther inland). That refuge lands and ANILCA Section 1001 wilderness study, or the 1988 Section 1317 Arctic Refuge wilderness review, therefore, statements included in the Appendix, such as "ANILCA indicated that, until Congress views by refuge users would be rated as more sensitive than views from state lands determined otherwise, the 1002 Area was to be administered to maintain presently existing wilderness character and is consistent with the common perception in the area and with sentiment expressed potential for inclusion in the National Wilderness Preservation System" (page 3 and 23) and "The 1002 Area of the Arctic Refuge is a "minimal management" wilderness study area" (page 25) are inaccurate, as is applying in this comment (336) about distinctions between the two areas. the term "de facto wilderness" to Refuge non-designated wilderness. Only Congress can designate **Project not located on refuge lands.** The intent is to determine the visual impacts Wilderness and "de facto" wilderness violates that authority. Using BLM manual guidance to designate the 1002 Area as a "Special Area" on that basis for the purposes of this analysis is also of the proposed project on viewers as seen from sensitive viewpoints, some of inappropriate. As such, the very basis for the "high" sensitivity rating applied to the 1002 area is which are within the Refuge. **Mitigation.** Mitigation examples listed at the end of Appendix N are examples, as The Appendix also includes ample discussion of the scenic values that are located within the Refuge stated in the text, not proposed mitigation or requirements. Proposed mitigation is for which the Refuge is managed; however, the purpose of the analysis is to determine the visual impacts of the proposed project, which is located off refuge lands. The scenic values of the refuge provided in the body of the EIS. would not be impacted by the proposed project, which is located outside the refuge boundary; therefore, it is unreasonable to expect mitigation for facilities that are merely being viewed by 337 The Executive Summary has been revised for the Final EIS to indicate that neither visitors within the Refuge. Given the proposed project is located outside the refuge boundary, opening the 1002 Area to oil and gas exploration and development nor adjacent to lands that have similar potential for oil and gas development, and ample refuge lands (approximately 19 million acres) remain available without the potential for such visual impacts, the permanently closing it by formal designation as part of the National Wilderness proposed mitigation on page 97, which requires "creating greater distance between corridors or view points and Preservation System is considered a reasonably foreseeable future action. industrial facilities..." is unreasonable and must be eliminated from consideration. ANILCA established clear boundaries for conservation system units (CSU) and did not include "buffers" for further protection. Treating surrounding lands as a "buffer" for this CSU is inappropriate, especially considering the management intent for the surrounding lands has been apparent since statehood. We suggest the Refuge instead advise interested visitors that development occurring outside the refuge boundary may be visible during certain conditions and to plan their visit accordingly. The State of Alaska should not be expected to manage its oil and gas lease lands as though they were Page-Specific Comments: Arctic National Wildlife Refuge Page ES-5, Proximity to Arctic Refuge. The Executive Summary states that opening the 1002 Area to oil and gas development is not considered reasonably foreseeable at this time and is not an issue that will be addressed in this DEIS. However, in many places of this DEIS contrary statements are made. Page specific examples follow. In addition, a wilderness designation in the 1002 area

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would be equally unlikely, as it would also require congressional action. We request the final EIS reflect there is an equal probability associated with both actions. Page ES-56, Visual Aesthetics. When discussing visual aesthetics in the area, projects on federal OCS lands, also within close proximity to the Arctic Refuge, need to be disclosed in the DEIS and considered in the visual impacts analysis. Additionally, this section should also note that the project would take place on State land, managed for oil and gas exploration and development, and that the project area is located outside of the Refuge boundary. Page ES-57, Noise. This section needs to acknowledge that ANILCA allows for airplane, snowmachine and motorboat use in the Arctic Refuge so that any perceived nuisances from aircraft would be put into perspective. Page ES-76/77, Table ES-2, Comparison of Impacts. The Visual Aesthetics portion states that the project would contrast strongly with the surrounding viewshed. However, oil and gas exploration has and will continue to be authorized by the State in this area, and this project is proposed on State land designated and managed for oil and gas exploration and development. Additionally, the federal government has recently authorized oil and gas activities on federal OCS lands less than 15 miles away from the Refuge. Thus, it is inappropriate to imply that this project may be the only one of its kind in the area. Page 3-197, 3.13.1 Key Information About Land Ownership, Land Use, and Land Management. The contention that examination of broader land ownership and management in the vicinity of the project is warranted because the landscape is principally flat and treeless is unfounded. The project would occur on State land, designated and managed for oil and gas exploration and development. We request more adequate justification as to why the study area includes lands not included in the applicant's proposal.	338 OCS development is discussed in the EIS under cumulative impacts as a reasonably foreseeable future action and briefly discussed in the Draft EIS Executive Summary under Key Impacts/Issues. The Executive Summary discussion of visual aesthetics focuses primarily on the coastal corridor, which includes state lands and waters closest to the project. Management for oil and gas development does not preclude the potential for visual impacts that are appropriately analyzed in an EIS. See also responses to Comments 340 and 342. 339 This section of the Executive Summary is a summary of the main findings of the noise impact analysis, which does not discuss ANILCA or permitted uses. Section 3.18.3, Recreation in the Study Area, discusses the permitted activities in the study area and in the Arctic Refuge, including airplane, snowmachine, and boat use. 340 As discussed in the main text of the EIS, if the Point Thomson Project is built, it would be the first effectively permanent oil and gas production facility in the eastern ACP landscape. Any future nearby projects would have incremental, additive impacts but would not create as much visual contrast once the first industrial project is in place and part of the visual environment. Other oil and gas activities are discussed under cumulative impacts. See also responses to Comment 338 and 342. 341 The "flat and treeless" reference is indication that the project may be seen and

Comment	Response	
	344 The sentence referring to Section 1001 has been removed.	
and management of this berd and the Western Arctic caribou berd), polar bears, grizzly bears, muskess, Dall theep, wolver, molecules, snow goese, perserine falcous and other migratory birds and Arctic shar and graphing: (ii) to infill the international treaty obligations of the United States with respect to fish and wildlife and their babitats; (iii) to provide, in a meanner consistent with purposes set forth in subparagraph (i) and (ii), the apparamity for continued inhistience uses by local residents; and (iv) to ensure, to the maximum extent practicable and in a manner consistent with the purposes set forth in subparagraph (i), water quality and necessary mater quantity within the referge, (ANILCA § 303(2)(B))	345 Most of the fourth paragraph of Section 3.13.5.3 has been reworded, and a refuge staff citation has been added. The text now reads: "Under the existing plan, most of the refuge, including those lands nearest to the proposed project site, is managed for its wildlife resources and wilderness values under the CCP management category 'Minimal Management' (Seim 2010; Reed 2010; USFWS 1988). The Mollie Beattie Wilderness is managed under the CCP management category 'Wilderness Management' and, as a Congressionally designated unit of the National Wilderness Preservation System, is subject also to the Wilderness Act ar ANILCA. Until Congress acts to determine a definitive management direction for those portions of the refuge that are closest to the proposed Point Thomson Projec (the western edge of the 1002 Area), 'Minimal Management' applies. The CCP defines Minimal Management as follows:" See also the response under Comment 335 regarding original purposes of the range/refuge. 346 In response to this comment, the full quotation has been included in the Final EIS followed by the following text: "According to the USFWS as a cooperating agenc for this EIS, currently, the portion of the refuge nearest to the project site is not managed to provide for prescribed burns, oil and gas studies, or structures associated with guiding or fisheries development; however, in accordance with existing law and policy, these activities remain available as management tools. Regarding management studies and survey/inventory programs, a wildlife researc camp is established most summers on the Canning River delta."	plan, most of s managed ement 88). The egory of the eness Act and lirection for
Page 3-205, 3.13.5.3 U.S. Government – Arctic Refuge, second paragraph, third sentence. The study required by ANILCA Section 1001 did not include any lands within the Arctic National Wildlife Refuge. The Secretary shall initiate and carry out a study of all Federal lands (other than submerged lands on the Onter Continental Shelf) in Alaska meth of 68 degrees meth latitude and east of the swstern boundary of the National Petroleum Reserve – Alaska, other than lands included in the National Petroleum Reserve – Alaska and in conservation system units established by this Act. (ANILCA 1001(a) [Emphasis added] Therefore, we request this sentence be removed from the EIS as it is not relevant. Page 3-205, 3.13.5.3 U.S. Government – Arctic Refuge, fourth paragraph. The 1988 CCP does not discuss the original Range purposes as indicated in the second sentence. As discussed above, we also question the statement "the rigge is managed largely for its wildlife resources and wilderness ralaes both inside and onticle of the designated wilderness area." There is no direction in ANILCA to manage non-designated wilderness to preserve "wilderness values," nor is wilderness an express purpose of the Arctic Refuge. We request this sentence be removed. Page 3-205-3-206, 3.13.5.3 U.S. Government – Arctic Refuge, quotation. To provide a broader perspective on what activities are allowed in minimal management, we request the full description for minimal management from page 184 of the current 1988 Arctic Refuge CCP be included in the final EIS. Management under this category is directed at maintaining the existing conditions of areas that bave high fits and wildlife values or other resource values. Minimal management areas are satisfied for subcriment allowed by Congress. Opportunities for public use and access would be available for subsistence purposes and for traditional activities took as hunting, fishing and trapping, Traditional management acated by Congress. Opportunities for public use and access would be available for subsi		The CCP or

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focus its efforts primarily on management studies and survey/inventory programs to increase the refuge's resource data base, and examine refuge management techniques. Page 3-207, 3.14.2 Review and Adequacy of Information Sources for the Arctic Refuge. It appears that some of the information for the DEIS comes from the Draft Revised Arctic Refuge CCP, either directly or indirectly from conversations with Refuge staff. It is inappropriate to utilize information from this source material as it is still in draft, and as such, is not valid management guidance for the Refuge. As clearly stated on page 1-1 of the draft CCP: When the Revised Plan is finalized, it will replace the current management direction as described in the [1988] Arctic National Wildlife Refuge Final Comprehensive Conternation Plan Environmental Impact Statement Wilderness Revised Wild River Plan and associated record of decision (draft Arctic CCP, page 1-1) [Emphasis added.] Moreover, the draft Revised CCP did not identify a preferred alternative and is based on inaccurate legal premises. Use of the draft Revised CCP as the basis for analysis in this DEIS indicates an	Response 347 The existing 1988 CCP and discussion with refuge staff were the key sources of information for how the refuge is managed. The revised CCP/EIS draft was not referenced and was not used as the basis for analysis in the Draft EIS. 348 Text has been deleted. 349 The last bullet was in error and has been removed. 350 This comment has been addressed primarily by cross reference back to the Land Management section. The beginning of the second full paragraph in Section 3.14.3 now reads: "The Land Management section (3.13.5.3) addresses refuge purposes. Refuge management is directed by a CCP (USFWS 1988), also addressed in 3.13.5.3." 351 The sentence regarding "preserving" has been deleted from this paragraph. Text has been rewritten in select other instances. "Protection" has been changed to "conservation."
Page 3-208, 3.14.3, Arctic Refuge Purposes and Management, fourth bullet. When Congress established the Arctic Refuge it did not designate the 1002 area as a wilderness study area or require interim management to preserve wilderness character for possible future designation by Congress.	Arctic Refuge 348 Arctic Refuge 349
Page 3-208, 3.14.3, Arctic Refuge Purposes and Management, second paragraph. The Arctic Range purposes, not the Arctic Refuge purposes, were spelled out in PLO 2214. In addition, consistent with the general comment above (and the 1988 CCP), the original Range purposes were superseded by the ANILCA purposes specified in Section 303(2)(B), which do not include a wilderness purpose. The Refuge's designated wilderness is managed to protect wilderness characteristics, consistent with the Wilderness Act, as amended by ANILCA. We request this section be corrected and offer the following edits for your consideration. Arctic Refuge purposes were spelled out in a public land order that established the original "wildlife range" in 4960 and in ANILCA in 1980. The USFWS manages the Arctic Refuge for a variety of purpose, including to conserve fith and wildlife populations and babitate in their natural diversity, hiffill international treaty obligations to maintaining opportunities for subsistence apportunities, and ensure water quality from meeting treaty obligations to maintaining opportunities for subsistence to preserving wildlife and indereses rathers. Additionally, the Wilderness Act as modified by ANILCA provided direction for the Refuge's designated wilderness. Refuge management is directed by a Comprehensive Conservation Plan (CCP; USFWS 1988).	Arctic Refuge 350
Page 3-208, 3.14.3 Arctic Refuge Purposes and Management, last paragraph, last sentence. ANILCA and the Wilderness Act did not establish a strict "protective" management regime. Section 303(2)(B)(i) of ANILCA states one purpose of the Arctic Refuge is "to conserve fish and wildlife populations and habitats," and Section 2(a) of the Wilderness Act states that "protection" is the	Arctic Refuge 351

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direct result of "preservation of [] wilderness character." Furthermore, protection implies Refuge these resources are not to be utilized, which is contrary to Congressional intent. We therefore request the final EIS refer to the Service's responsibilities as conserving fish and wildlife resources instead of protecting resources, consistent with refuge purposes. We recommend a word search to identify other areas in the DEIS where the language is similar. Page 3-211, 3.14.3.1 Fish and Wildlife, second paragraph. The State of Alaska is responsible for the sustainability of all fish and wildlife within its borders – regardless of land ownership or designation – and has the authority, jurisdiction, and responsibility to manage, control, and regulate fish and wildlife populations, including for subsistence purposes, unless specifically prerempted by federal law. The USFWS also has trust responsibilities for fish and wildlife on Refuge lands. Therefore we request the following rewrite, The USFWS, while baring purisdiction were wildlife within the Antie Belogs, has an interest in the wilfare of species that un the Artic Refuge lands, including those species that more arras its borders and patentially back and forth between federal and state-owned lands (USFWS 2008d) Page 3-211, 3.14.3.1 Fish and Wildlife, second paragraph. Referring to minimal management as the "status quo" is confusing. A variety of management actions are available under minimal management. For example, Prescribed burning and minure habitat improvements outle be permitted in minimal management areas where compatible with brings purposes. Fishery development facilities may be built in these areas if they are compatible with brings purposes. Fishery development facilities may be built in these areas if they are compatible with be proposes of the original Kange to the resource relates in minimal management areas where compatible with be proposes of the original Range of not a trans that bare kept high and wildlife solutes to allow or allow removes	352 The second half of the paragraph has been rewritten to read as follows: "The USFWS shares responsibility for wildlife management within the Arctic Refuge with ADF&G, and has an interest in the welfare of species that move across its borders and potentially back and forth between federal and state-owned lands (USFWS 2008d). ADF&G manages wildlife populations within Alaska, regardle of land ownership." 353 This sentence has been revised as suggested: "the focus of USFWS wildlife management in Minimal Management areas, including the portion of the refuge nearest to the project site, is 'maintaining existing conditions of areas that have high fish and wildlife values or other resource values." (See also the response to Comment 346.) 354 The use of the term "added" is from USFWS. No change made. 355 The word "dichotomy" has been removed in both instances but the intended meaning has not been altered. The first paragraph under 3.14.4 now reads: "Congress made the 1002 Area a study area for potential future oil and gas development and reserved decisions about long-term management of the area to itself. Congress has repeatedly considered opening the 1002 Area to oil and gas development, and has seen at least one bill proposing to designate the area as pa of the National Wilderness Preservation System. Congress has not made a final decision, and the result has been the prominence of the Arctic Refuge in an ongoing national debate." The bottom of the sixth paragraph of Section 3.18.3 of the Final EIS now reads: "Because the Arctic Refuge has these wild qualities an because there has been an ongoing tension in the public between the national interest in tapping large oil and gas reserves in the refuge and the national interes in designation of the refuge's ACP as part of the National Wilderness Preservations."

Comment Response 356 Intangible values can be measured in surveys, can be mitigated for, and are legitimate impact topics regardless of the management of adjacent state land. Further reading on the intangible values of wilderness nationally and in Alaska is in multiple publications, including in the book Wilderness and the American Mind (Nash 2001) and in government policy, both cited in this subsection of the Draft This comment also applies to page 3-245 where the language is similar; however, we also recommend conducting a word search to identify and change other sections where similar EIS. The citation of USFWS wilderness policy is appropriate because the policy statements are repeated. addresses what are considered wilderness values and is relevant to what those Page 3-212, 3.14.4 The Arctic Refuge's National Values, third paragraph. The third paragraph seeking a "wilderness experience" might be seeking, whether or not such an states: "For wilderness proponents, the Arctic Refuge is symbolic of the concept of wilderness in the U.S. value system. It is important not just to those who visit it (addressed in Section 3.18, Recreation) but also symbolically to those who experience is within a unit of the National Wilderness Preservation System. may not visit, similar to the Little Bigborn Battlefield or Statue of Liberty National Monuments might be to 357 Here, "wilderness" is used as defined in the dictionary. See response to Comment Americans who never visit Montana or New York." Such subjective, idealistic statements about the intangible values of the Refuge cannot be measured or mitigated for and are outside the scope of 336. The sentence has been revised to read: "Recreation in the study area is this EIS, given the project is occurring on State oil and gas lease lands, outside the refuge boundary. principally a backcountry recreation experience, and activities include river We also note the source for many of these types of statements are not cited. recreation, hunting, fishing, and hiking in an area with high wilderness qualities." In addition, the source for the last sentence in this paragraph is the USFWS Wilderness Stewardship 358 In Section 3.18.1, the sentence has been rewritten as follows: "The study area is Policy. It is inappropriate to refer to this policy when discussing the 1002 area, because it was not part of the Section 1001 wilderness study, the 1988 Section 1317 Arctic Refuge wilderness study or generally undeveloped and, in the secondary study area, includes a portion of designated as wilderness by ANILCA. federally designated Mollie Beattie Wilderness of the Arctic Refuge. That portion Page 3-243, 3.18 Recreation, fourth sentence. Consistent with the general comment above and of Arctic Refuge within the primary study area is managed in part for its the 1988 Arctic Refuge CCP, wilderness recreation is limited to designated wilderness in the wilderness qualities and for recreation suited to such an area." secondary study area. We therefore disagree with the statement, "Recreation in the study area is principally a backcountry, wilderness recreation experience." [Emphasis added] and request the following rewrite: In Section 3.18.3, the middle of the fifth paragraph in the Final EIS has been Recreation in the study area is principally a backcountry, wilderness recreation experience; and activities include river recreation, luenting, fishing, and liking, rewritten as follows: "Whether on state or federal land, the recreation environment is similarly undeveloped and wild without communities or permanent habitations Page 3-243, 3.18.1 Key Information About Recreation, first paragraph. Consistent with the general comment above and the 1988 Arctic Refuge CCP, the 1002 area was not part of the Section along the coast from Bullen Point to Kaktovik, a stretch of nearly 80 miles, and for 1001 wilderness study, the Section 1317 Arctic Refuge wilderness review, nor was it designated as much greater distances inland. There is no unit of the National Wilderness wilderness by ANILCA. It is also not being managed in the interim under the minimal management category for potential designation as wilderness. Therefore, we request the following rewrite, Preservation System in the primary study area. The closest corner of the Mollie Beattie Wilderness of the Arctic Refuge is 30 miles from the coast, measured from That portion of Arctic Refuge within the primary study area, known as the 1002 Area, is managed in part to preserve its wilderness qualities under the minimal management category until such time that Congress either acts to open the area to oil and gas development or officially designate it as wilderness. Point Thomson. The Arctic Refuge manages its land in the primary study area under its minimal management category in part for its wilderness values and for This comment also applies to page 3-245 where the language is similar. We further request a word recreation in such an environment, although the area is not designated wilderness." search to identify and change other portions of the plan with similar language. 359 This text has been revised as follows: "The state land of the project site and the Page 3-243, 3.18.1 Key Information About Recreation, second paragraph. Since designated adjacent Arctic Refuge provide vast areas of principally undeveloped land where wilderness does not exist on State lands and the entire Arctic Refuge is not designated wilderness, we request the following revision: visitors can encounter wildlife and natural scenery with a high degree of isolation (and associated challenges and risks). Although these areas are not designated as The Arctic Refuge and adjacent state land provide vast areas of undeveloped land and wilderness where visitors can encounter scenery and wildlife with a high degree of isolation (with its associated challenges and part of the National Wilderness Preservation System as defined in federal law (16 USC 23) or part of a 'wilderness park,' as defined in state law (AS 41.21.990), the qualities of the recreation resource are currently the same 'wilderness qualities' found in designated areas. "See also the response to Comment 336.

Comment Response 360 The text in question was added to the EIS in response to comments on the Preliminary Draft EIS to help clarify that there is a different management intent between state and federal land. The text has been revised as follows: "Despite management of state land specifically for oil and gas development, and despite Page 3-244, 3.18.3 Recreation in the Study Area, first paragraph. Recreation in designated widely-spaced oil and gas exploration activities in the past, most of the time both wilderness accounts for only a small portion of the secondary study area and wilderness recreation is federal and state lands in the area appear quiet, remote, and wild. Regardless of the not the principle experience across the whole study area. We request the following modification to Point Thomson Project, further oil and gas activities could occur in the future and alter the recreation experience, especially on state lands." (See also the response to Recreation in the study area is principally a backcountry and wilderness recreation experience. Comment 336.) In addition, the following sentence is illogical, and is not based on any objective or factual 361 The visual baseline is explained in Section 5.19, Visual Aesthetics, and the Visual foundation: "Recreationists in general likely are aware that the state land is managed differently and that oil and gas exploration activities have occurred or could occur even as most assume that they will not observe such activities." It Assessment technical report is based on 2009 conditions without the lights and recreationists are aware the land is managed for oil and gas exploration, it is not logical for them to industrial activity proposed under the Applicant's 2010 permit application. See also assume they would not observe any such activities. the response to Comment 393. Page 3-244, 3.18.3 Recreation in the Study Area, third paragraph. In the last sentence of the third paragraph it is mentioned that Kaktovik residents reported at the time of project scoping 362 The text has been changed to "without communities or permanent habitations." meetings that they can see nighttime glow in the sky above the current project activities. The 363 Starting with the 4th sentence of this paragraph, the text has been modified for baseline studies of the project viewshed should, but fail to, consider these actual conditions. clarity: "Although the Arctic Refuge and State of Alaska allow some uses of Page 3-244, 3.18.3 Recreation in the Study Area, fourth paragraph, third sentence. We snowmobiles, motorboats, and airplanes on their lands, the recreational attraction question the statement that the coast is "aithout communities or buildings" when summer subsistence camps and cabins are scattered along the coast from Flaxman Island to Kaktovik. is that the area is undeveloped, quiet, and wild. ANILCA provides for motorized uses for traditional activities and for travel to and from villages and homesites on Page 3-245, 3.18.3 Recreation in the Study Area, first full paragraph. The statement that the "Arctic Refuge and State of Alaska allow some uses of snowmobiles, motorboats and airplanes..." is incomplete. Refuge lands. The State of Alaska restricts motorized overland travel except for The discussion needs to instead clarify that Section 1110(a) of ANILCA provides for the use of subsistence. Observation of aircraft, boats on the ocean, and snowmobiles occurs at snowmachines, motorboats, airplanes and non-motorized surface transportation for traditional activities and for travel to and from villages and homesites on Refuge lands. In addition, the final low levels." EIS must recognize that while the use of these federally protected transportation methods may 364 The specific landscape is important to these types of recreational experiences. This affect recreationalists' experiences; a certain level of mechanized or motorized use should be expected in the study area. section is a subsection of Recreation by Nonresidents of the Area and is Page 3-250, 3.18.5.1 Recreation on the Arctic Refuge. Recreational opportunities in the Arctic appropriately in its own subsection in order to discern differences between Refuge are not unique, since similar experiences can be achieved in most every conservation system recreation on the different types of managed lands within the project area. unit in Alaska. We also question the need for this section as this information is encapsulated more Establishing the existing conditions and uses are important for the impacts analysis precisely in the previous section, Recreation by Nonresidents of the Area. Furthermore, the language in the first half of this section is highly infused with subjective statements that apply to the Refuge as discussed in Chapter 5. a whole instead of the specific study area. We question the appropriateness of including this type of information in what is supposed to be an objective analysis of the proposed project. 365 The approach to evaluation of impacts for any given project is unique for each project. The effects of OCS activity would be 12-15 miles offshore from the refuge Additionally, we question whether this type of analysis was used to consider perceived impacts to Refuge visitors during the review of OCS oil and gas activities on federal land north of the Refuge. coast and different than onshore activity 2-8 miles away from the refuge border. Page 3-255, 3.19 Visual Aesthetics. This section, and other related sections within this DEIS, fail 366 See responses to Comments 338, 340, and 342. to consider potential future oil and gas activities on federal land north of the Refuge, as well as other oil and gas activities on State land near the Refuge. With all of the oil and gas leases in the area it appears reasonable to assume that oil and gas activities, and related structures and noises, should be expected in this area.

Comment Response 367 The first sentence of Section 3.19.1 has been revised to read: "The project is located on state land, managed for oil and gas development, and is in a minimally developed and uninhabited area." Regarding previous and future activities, see also responses to Comments 338 and 340. Page 3-255, 3.19.1 Key Information About Visual Aesthetic Resources, first paragraph. We 368 Regarding previous and future activities, see responses to Comments 338, 340, and request that the first sentence be revised to acknowledge that the project is located on State land 342. Gravel pads that still exist from prior exploration are visually of low contrast managed for oil and gas exploration and development. We question the use of the baseline conditions which erroneously assumes that other oil and gas activities have not, or will not continue and are considered in the No Action Alternative. Visually, from the key observation points, it is the long-term and permanent structures and associated Page 3-255, 3.19.1 Key Information About Visual Aesthetic Resources, second paragraph. lights, plumes, etc. that are a visual issue. The no action alternative should not assume an untouched condition because exploratory drilling has already occurred, and will continue to occur on this State owned and managed land, as well as on 366 369 The cited paragraph is a summary of the rest of the visual section, which in turn is federally owned and managed land in the area. a summary of the visual technical report (Appendix N). The visual analysis Page 3-255, 3.19.1 Key Information About Visual Aesthetic Resources, third paragraph. It is acknowledges the presence of industrial workers in Section 3.19.3.3 of the EIS, erroneous to assume that most users of the area are thought to be fairly sensitive to visual changes. and the sentence has been further clarified to read: "Sensitivity is based on...types The project is proposed on State land managed for oil and gas exploration and development. Those who visit the area for oil and gas-related purposes should be considered in this analysis and probably of users (primary users are local residents and visiting recreationists, who are have a different sensitivity level. thought to be fairly sensitive viewers, and industrial workers who are likely to be Page 3-260, 3.19.3.3 Sensitivity Level Analysis, second paragraph. Consistent with the general less sensitive)." The technical report in Appendix N more fully describes comment above, Congress did not mandate the 1002 area "he managed for their potential future inclusion in differences in sensitivity levels among user types, including industrial workers, in the National Wilderness Preservation System." On the contrary, the 1002(h) report recommended the 1002 area be opened to oil and gas development. Therefore, the very basis for rating the primary Section 3.3.1.3. study area as having a "high" sensitivity is flawed. See additional comments below regarding Appendix N. 370 The first sentence of the second paragraph has been rewritten as follows: "Arctic Refuge lands in the primary study area are rated 'high' sensitivity because the Page 3-263, 3.19.3.5 Visual Resource Classes and Objectives. All of the data considered in this Aesthetics refuge manages the land, in part, to maintain its existing natural visual assessment relates to management of the Arctic Refuge. Again, the proposed project would occur outside of the Refuge, on State land managed for oil and gas exploration and development; environment and because refuge lands are more sensitive among the public than therefore, assessing only Refuge-oriented values is inappropriate. nearby state lands." The sensitivity rating is retained. See also the discussion under Page 3-267, 3.20.2 Review and Adequacy of Information Sources for Noise. The proposed responses to Comments 396 and 336. It is not the entirety of the primary study area project is consistent with the use of the area as the project would occur on State land managed for oil and gas exploration and development. In addition, there are other oil and gas projects recently that has a "high" sensitivity rating; it is the refuge portion. uthorized in the area, including on federal lands. As such, the analysis should take into 371 The cited section addresses both Refuge lands and state lands explicitly. The onsideration that related noises should be expected in the project area. project would be visible from refuge lands; therefore the Refuge is addressed. Page 3-317, 3.22.3 Subsistence Definition and Relevant Legislation. The justification in this Refuge visual values are given space in the text and State visual values are not, section that the proposed project could affect subsistence resources located on refuge lands does not make the federal subsistence program relevant to this EIS and we request it be removed. In addition, Land Use because the refuge has some visual management guidelines and the State does not. we request the following edits to reflect state management of subsistence harvest within the project 373 The visual values associated with a principally undeveloped visual landscape occur also on state lands, regardless of management. Subsistence hunting and fishing in the project area is are regulated under a dual management system by the State of Alaska and the federal government. Federal subsistence law regulates federal subsistence uses; state 372 The consistency of the project with land use and management is discussed in law regulates state subsistence uses. The federal government recognizes subsistence priorities for rural resident Section 3.13, Land Ownership, Land Use, and Land Management, where it is on federal public lands or in certain maters with a federal reserved water right. The State of Alaska considers noted that the project would be located on land that is managed by the State of all Alaskan residents to have an equal right to participate in subsistence hunting and fishing activities when resource abundance and harvestable surpluses are sufficient to meet the demand for all subsistence and other Alaska for oil and gas development. The noise impact analysis uses the existing noise levels measured at six different sites in the study area to determine a baseline condition. The existing condition does not include other potential uses in the area. However, the potential effects to noise from reasonably foreseeable future actions, including future oil and gas exploration in the study area, are discussed in the cumulative impacts analysis for noise, Section 5.20.10.2. 373 The purpose of the discussion of federal subsistence regulations in Section 3.22.3, Subsistence Definition and Relevant Legislation is to describe the baseline

Comment	Response
	conditions for subsistence in the study area communities, not to suggest that federal regulations apply to the project area. The discussion is intended to provide an understanding of subsistence on the North Slope.

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	374 See responses to Comments 338 and 340. Reasonably Forseeable Future Actions are addressed in relation to visual resources in the cumulative impacts analysis, Section 5.19.7.2 of the Draft EIS.
Federal inhibitione-law is based on Title VIII of the 1980-ANILCA and regulations found in 36 CFR 242.1 and 50 CFR 100.1. Federal regulations recognic substitute activities hand on a person's evidence in Abasha, shifted are citiber ment or mannral. Only individuals also permanently would entitle designated mannral activates are considered from the manneau of applications. Nammal residents may have the following on before individuals and particles and game as most federal hand (unless the lands are closed to non-federally qualified inhibitions neeply houses) there have the hands are closed to non-federally qualified inhibitions neeply houses there have to account under state regulations. Under federal law, "inhibitions are means the extinonary and rendiminal neet by great Alaska residents of mid-researchie resources for direct personal or family consumptions as food, shelice, field which in the federal inhibitions are family consumptions; and for extromary trade" (AVIII.C. 1 Title V III Section 801). Because the project area is an state lands, the federal inhibitions program does not apply to harves a which the project area houses of project articles and for actionary trade" (AVIII.C. 1 Title V III Section 801). Because the project area is an state lands, the federal inhibitions program does not apply to harves a which the project area houses of project articles and in federal inhibitions program does not apply to harves a which the project area houses of project articles and for actionary trade "(AVIII.C.) Title V III Section 801). Because the project area on marry federal lands (e.g., the Artic National W Vidilife Refuge). In addition, resources a currently plan (e.g., the Artic National W Vidilife Refuge). In addition, resources a currently plan (e.g., the Artic Industry and migratory fith such as artic cisco, may be harrested elecubers on state, federal, or private lands. Substitute and a first state is that there are also hydrocarbon resources currently planned for exploration and development with the plan	a reasonably foreseeable future action based simply on the definition of reasonably foreseeable future actions in Section 4.2 of the Draft EIS "RFFAs are those that ar likely or reasonably certain to occur." See also the response to Comment 378. 376 The cited section is specifically meant to address land use. The immediately preceding section addresses land management. The cited section already states the land use on state land could change to oil and gas development, "which is consistent with the state's certification order and the intent of the oil and gas and gas-only lease program." Further clarification has been added in the first two paragraphs to indicate industrial uses are "consistent with the state's management intent." 377 See the response to Comment 356.

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Page 5-398, 5.14.1 Methodology, sixth bullet. This bullet states that the methodology for the analysis includes potential impacts, including Congressional designation of the 1002 area for oil and gas leasing however, the Executive Summary states that is beyond the scope of this EIS. Page 5-402, 5.14.3.1 Construction, Drilling, and Operation. The "Congressional Designation of the 1002 Area" section discusses how this project may influence the 1002 area debate in Congress; however the Executive Summary states that this is outside of the scope of this EIS. Page 5-404, 5.14.5.2 Cumulative Impacts, second paragraph. Why does the no action alternative fail to mention the reasonably foresceable future actions mentioned in this section? Page 5-404, 5.14.5.2 Cumulative Impacts, third paragraph. The last bulleted sentence mentions how this project will affect the debate to open the 1002 area to oil and gas development, yet according to the Executive Summary of this DEIS this is outside of the scope of this EIS. Page 5-404, 5.14.6 Alternatives Comparison and Consequences. The last sentence on this page again references how this project may affect the debate to open the 1002 area to oil and gas development, yet according to the Executive Summary of this DEIS this is outside of the scope of this EIS. Page 5-404, 5.14.6 Alternatives Comparison and Consequences. The last sentence on this page again references how this project may affect the debate to open the 1002 area to oil and gas development, yet according to the Executive Summary of this DEIS this is outside of the scope of this EIS. Page 5-404, 5.18 Recreation. Consistent with the general comment above, it is inappropriate to equate "backcountry" with "wilderness" when the recreational experience is occurring outside designated wilderness. It is also inappropriate to consider the "peruphion of last of apportunity for arillerness revealion experience" by those who do not even plan to visit the Refuge. As such, we disagree with the overall findings in this section t	378 The sixth bullet is part of a list of "types of impacts" that "could include" impacts such as changes to designation of the 1002 Area. However, such impacts were found not reasonably foreseeable. Page ES-5 in the Executive Summary of the Draft EIS indicates that impacts of opening the 1002 Area to oil and gas development are not addressed in this EIS because opening the 1002 Area is not a reasonably foreseeable future action; however, that does not preclude mention of the potential for the heightening of debate. See also responses to Comments 375, 379, and 380. 379 The text was clarified as follows: "The Corps acknowledges that approval of any of the development alternatives could become another point of discussion in the debate concerning opening the 1002 Area to oil and gas leasing versus formal designation of the area as part of the National Wilderness Preservation System. Although the outcome of any such debate is unknown, the Corps acknowledges the potential that approval of any of the action alternatives could result in heightened debate in Congress that could spur a decision. Because there is no way to know whether Congress would change the 1002 Area status—and if changed, whether it would lean toward preservation of wilderness qualities or toward development of hydrocarbons—impacts of this decision cannot be evaluated in this EIS." 380 Direct and indirect (or secondary) impacts of the No Action Alternative are addressed in Section 5.14.2. Under NEPA, reasonably foreseeable future actions are addressed as part of cumulative impacts assessment but not assessment of direct or indirect impacts, based on the definition of cumulative impacts. As defined in Chapter 4, cumulative impacts are those that combine impacts of the proposed action with other past, present, and reasonably foreseeable future actions. Cumulative impact assessment generally focuses on action alternatives, not on the No Action Alternative 381 See responses to Comments 342 and 375. The last portion of the bulleted sentence-" wh
	there may be other major developments in the future. See also the response to

Comment	Response
	Comment 340.
	386 The cumulative impacts section of the EIS discusses reasonably foreseeable future actions and is the section that discusses other developments that may occur and that may create impacts of their own. Note that Appendix N addresses only direct impacts of this project and does not address cumulative impacts. The baseline condition is the point of comparison based on the conditions around the time that the Applicant submitted their DOA permit application. See also responses to Comments 338, 340, and 342.
	387 The second paragraph on ANILCA has been removed as not applicable to the Point Thomson Project, and the first paragraph has been rewritten as follows: "ANILCA (PL 96-487) created or expanded more than 100 million acres of national parks, wildlife refuges, monuments, conservation areas, recreation areas, forests, and wild and scenic rivers on federal lands in the State of Alaska for the preservation of 'nationally significant natural, scenic, historic, archeological, geological, scientific, wilderness, cultural, recreational, and wildlife values.' Among these is the Arctic National Wildlife Refuge. ANILCA includes a number of provisions intended to allow for infrastructure and economic growth in general, travel and access in conservation system units, and pursuit of a subsistence lifestyle, while protecting resource values. ANILCA helps provide context for evaluation of potential effects to the Arctic Refuge, but ANILCA provisions do not apply beyond the refuge boundary and do not apply to the State of Alaska lands on which the Point Thomson Project is proposed."

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matural resources. However, ANILCA bas a number of mique rules and provisions intended to allow for infrastructure and commitie growth, access for subsistence and and for people to move around Alaska, parametraditional activities and iffestyles, and maintain their beridge while protecting Alaska's natural resources. Additionally, ANILCA Section 101(d) could be quoted: This Act pravides inflicient protection for the national interest in the scenic, natural, cultural and environmental values on the public lands in Alaska, and at the same time provides adequate opportunity for satisfaction of the economic and social meets of the State of Alaska and its people Page 10, Appendix F, 1.3.2 Arctic Refuge Comprehensive Conservation Plan. This section incorrectly states that the Point Thomson Project is located within the Draft Revised Arctic Refuge CCP planning area. As previously noted the proposed project is located outside the refuge boundary on State oil and gas lease lands. Page 1, Appendix N, Summary, second paragraph. It seems inappropriate to use a pre-2009 scenario as a baseline condition, as this suggests that a pre-2009 scenario is one of unaltered land. In actuality much of the land in the area has been designated for oil and gas exploration and development for some time, as evidenced by such things as the federal government's authorization of oil and gas exploration and development on the OCS just a few miles from this project, as well as recent State oil and gas lease sales, which are located even closer to the Refuge than this project, as well as recent State oil and gas lease sales, which are located even closer to the Refuge than this project, as well as recent State oil and gas lease sales, which are located even closer to the Refuge than this project, as well as recent State oil and gas lease sales, which are located even closer to the Refuge than this project in this area. As such, we believe that it is inappropriate to use sentences such as "The sensitivity of viewers mostly is high," as this	388 The sentence has been removed and the paragraph rewritten. It now reads: "The Arctic Refuge CCP was developed in 1988 as directed under ANILCA 304(g) to provide a broad management framework for visitor use, development, and resour management. Direction in a CCP is based on 'the purposes of the refuge, its significant values, the activities occurring (on the refuge at the time of publication), and the resolution of any major issues surrounding possible land use conflicts within and adjacent to the refuge.' The USFWS has been revising the CCP and a Draft CCP was released for public comment in August 2011. A Recor of Decision is expected by the end of 2012. The CCP helps provide context for evaluation of potential effects to the Arctic Refuge, but its provisions do not apply beyond the refuge boundary and do not apply to the State of Alaska lands on which the Point Thomson Project is proposed." 389 See responses to Comments 340 and 385. The baseline being referenced is not for land management but for the visual resource. As seen from key observation point the existing condition is gravel pads with minimal equipment as presented in the baseline discussed in Section 2.3 of Appendix N. 390 "Oil and gas exploration activities" was added to the list of activities that occur. Also, the "sensitivity" sentence was clarified as follows: "The sensitivity of most viewers, with the exception of industrial workers, is high." These are introductory and summary paragraphs; details are further explained in Section 3.3.1. 391 The third paragraph regarding wilderness has been rewritten to clarify where formal designation as part of the National Wilderness Preservation System applie and where it does not, and to include state lands: "Discussion of de facto and wilderness as defined in a dictionary and discussion of the National Wilderness Preservation System (federally designated wilderness) recurs in this document because state lands where the project is proposed and adjacent federal lands are
area, it is important to also state that the proposed project would be located on State land designated A	principally undeveloped and wild, and because the Mollie Beattie Wilderness, designated by Congress in the Alaska National Interest Lands Conservation Act (ANILCA), occurs within the boundaries of the Arctic Refuge and visual impact
baseline condition assumes that no exploratory drilling and associated activities have taken place in	there have been a subject of interest for the land manager. The nearest corner of Mollie Beattie Wilderness lies about 30 miles from the arctic coast and proposed project site. However, wilderness qualities, including natural scenery, are an important part of the refuge and its management even outside the designated
regards to how caribou move near pipelines, we suggest that this be balanced with scientific articles	wilderness area." 392 The first paragraph has been revised for clarification as follows: "The proposed Point Thomson Project is located on state lands in a flat landscape that offers views to distant horizons. Also, the project is located in a principally undevelope environment adjacent to Arctic Refuge lands valued for wilderness qualities. The same qualities exist on state land, although the state's management is focused on oil and gas development. Because the presence of human development in a backcountry or nondesignated wilderness environment may be a determinant of a visual impact (see Section 2.3), and because the area's uninterrupted views may allow visibility of the project from inside the refuge and its designated Mollie

Comment	Response
	Beattie Wilderness, the project area for visual assessment purposes is defined based on the concept of "visibility," as further described below."
	393 Three sentences of clarification have been added at the end of the Base Conditions paragraph: "The baseline condition in the general area is not static, however, as intermittent industrial activity has occurred occasionally over several decades. At these times, activities have temporarily introduced visually contrasting structures, camps, lights, and motion, and such intermittent activity would likely occur in the future even without the project. While these temporary activities are acknowledged, the focus of this visual assessment is on larger, very long-term, year-round visual changes from the proposed project that would be essentially permanent."
	394 On page 8 of Appendix N, the intent is to say there was a public concern and the visual assessment will include motion and reflection, which is otherwise not directly addressed in BLM methods. Section 4.10.2 of Appendix N presents discussion of impacts to caribou movement. This visual report briefly addresses the motion and reflection aspects of the project, but leaves it to the wildlife section of the EIS to address biological impacts regarding pipelines

Response Comment 395 The EIS discusses the Shell Oil offshore exploration proposal and other reasonably foreseeable future actions in the cumulative impacts analysis in chapter 4. Reference to other potential oil and gas projects in Appendix N would not change the visual contrast of this project when compared with the baseline, which is the Page 13, Appendix N, 3.2 Scenic Quality Observation. We request an additional section in this purpose the visual assessment contained in Appendix N. See also responses to portion of Appendix N that notes other potential changes to the landscape - such as recently Comments 340, 342, and 399. authorized oil and gas activities on federal and State land. 396 The process defined a study area, which included both the state lands of the Page 25, Appendix N, 3.3.5/3.3.6 Special Areas/Delineation of Sensitivity Level Rating Units. It is inappropriate to categorize the 1002 area as a "special area," which only serves to give proposed project site and federal lands at the edge of the Arctic Refuge. As Refuge values more weight than the State's land values. Since this project would occur on State land indicated at the opening line of 3.3 in the Appendix N, "sensitivity levels are a more emphasis should be given to the State's land designations, and not those of an adjacent land measure of public concern for scenic quality. Public lands are assigned high, medium, or low sensitivity levels by analyzing the various indicators of public Page 31, Appendix N, 3.5.3 Arctic Refuge Visual Management, last paragraph. Consistent with the general comment above, the scenic values apply to refuge lands, whereas the proposed concern." The BLM visual inventory method indicates that lands like the refuge project is on State land. As such, it seems inappropriate to use the scenic values criteria as part of the have greater indication of public concern than state lands, even though visually risual resource assessment. they are the same at the boundary. Because the land originally was understood to Page 39, Appendix N, 4.2 West End Mary Sachs Island. It seems inappropriate to use a baseline Aesthetics be a formal wilderness study area, the "special area" designation seemed to apply condition of no structures or development, when structures and development exist and will continue to exist in the area. unquestionably. The text has been modified to indicate it is not a wilderness study Page 96, Appendix N, 4.11 Visual Contrast and Impact Conclusions. The analysis in this area. However, the sensitivity rating is based on several factors, and the "measure section does not take into consideration other oil and gas activities in the area, such as the recently of public concern for scenic quality" still appears high. See also response to authorized Shell exploration in the OCS and recent successful State oil and gas lease sales Comment 370. (preliminary lease sale results and maps may be viewed at http://dog.dnr.alaska.gov/). We request he final analysis recognize that these additional activities will also be occurring in the area. The "Special Areas" paragraph (3.3.5) in Appendix N has been revised as follows: Additional Page-Specific Comments "BLM Manual 8410 describes 'special areas' in part by example, including Page 7, Appendix F, 1.1.18 Coastal Zone Management Act of 1972, second paragraph, We 'Natural Areas, Wilderness or Wilderness Study Areas, Wild and Scenic Rivers,' suggest the following rewrite: and several others. Manual 8410 also emphasizes management objectives, stating Per Alaskan Statutes 44.66.020 and 44.66.030, the Alaska Coastal Management Program (ACMP) that designation as one of the example types 'does not necessarily mean that these expired on July 1, 2011 and was withdrawn from the CZMA, leaving no active CZMA program in areas are scenic, but rather that one of the management objectives may be to Alacka preserve the natural landscape setting.' The '1002 Area' of the Arctic Refuge is a Additional Comments on Appendices 'minimal management' area that has a high profile among the public nationally, Requests for Information (RFI) among the land managers, and among elected officials. It is managed in part to RFI #63, Pad Locations and Drilling Departures: Formal (documented) comment and input by maintain the existing natural landscape setting and visual values, which include the State of Alaska, Resource Evaluation Section of the Division of Oil and Gas (DOG) on the seeing little or no human development. The 1002 Area is not one of the named Point Thomson project plan for the EIS process was made in response to a RFI (Request For Information) from the EIS contractor (HDR). The request (RFI #63) and DOG's response are examples of 'special areas' in the BLM manual, which is focused on BLM included in Appendix D (RFI Index) of the DEIS document. categories, but its 'minimal management' status under the USFWS and its high RFI #63 requested comment on the location of the proposed pad locations for the Point Thomson profile make it similar to a 'special area' as defined and, in any case, more sensitive project and their relationship to the aerial extent of the Point Thomson reservoir. In addition, DOG than the adjacent state land on which the project is proposed. The state land is not was asked to comment on the likely maximum achievable drilling departures (reach) for accessing the reservoir considering existing drilling technology, geology, and reservoir characteristics specific included in any special area of this kind. Rather, the proposed project site is managed as an oil and gas lease sale area by the Alaska Division of Oil and Gas." 397 Scenic values apply to the view from refuge lands as well as the view from state lands, whether or not the view is of like lands or lands managed differently. 398 This comment is specific to the Mary Sachs Island key observation point and the view of the project site from that KOP. The visual simulations were prepared before exploratory drilling was finished, and at that time, the visual assessment team did not have information about well covers. The EIS text updates the Appendix N information with reference to the well covers, including a photograph

Comment	Response
	of the well covers, so that decision makers and the public can see them. The well covers do not substantially influence the analysis, because they have much less mass and height than proposed facilities. There are no existing structures in this view except the well pad and well covers. See also the response to Comment 393.
	399 Other oil and gas activities are addressed under cumulative impacts in the EIS. The direct impacts of the Point Thomson Project alone are the subject of Appendix N. See also the response to Comment 395.
	400 The correction was made.
	401 Comment is continued as Comment 402. See response to Comment 402.

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The Division of Oil and Gas confirmed that the aerial distribution of the reservoir depicted by the applicant (ExsonMobil) was consistent with other interpretations of the available geologic data and indicate that the main portion of the Point Thomson reservoir is located 1-3 miles (5,000 to 16,000) feet) north of the Beaufort Sea coastine, DOG also stressed that the number and bottom-hole locations of wells drilled to fully develop the resource are not fixed as of yet and will depend on both the distribution and quality of the reservoir encountered by subsequent wells, and the recover method ultimately employed to fully develop and produce the hydrocarbon resource. The location and number of wells will likely differ between a full scale gas-eycling development and a gas blow-down development. Given these uncertainties, it is reasonable to assume development wells may need to be drilled with horizontal departures of 10,000 to over 15,000 feet from the proposed coastal location of the drill pads to adequately access the hydrocarbon resources within the Point Thomson reservoir. A literature search showed that the maximum borizontal departure for wells recently drilled in othe similar high pressure / high temperature reservoirs (primarily in the North Sea) ranged from approximately 11,000 to 13,000 feet from the sea floor. This is mainly due to increased friction as result of needing heavier weight drilling fluids (15-18 lbs/gal) to deal with the reservoir pressure an longer wellbores required for the greater horizontal departure. DOG's conclusion was that any alternative plan requiring the proposed drill pads to be located further south from the coastline could likely impact the ability to adequately access and develop the Point Thomson reservoir. ExxonMobil also provided a Technical Brief concerning the location of the drill pads (TB#1, Appendix D) which reached conclusions similar to the State's. Exxon noted in addition though, the from a reservoir development perspective, the optimal sites for the well surfa	for additional pads closer to the reservoir (i.e., along the coast) in order to reach bottomhole targets, given the present 13,000-foot limit of extended-reach drilling.

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RFI #65, Compressor Types: There was also some discussion between the contractor (HDR) and the Division of Oil and Gas concerning evaluation of the type of compression (reciprocal) proposed by the applicant for the project. Based upon these initial discussions, HDR investigated and compared the characteristics of reciprocal and centrifugal compressor for use in this project. This was carried out within RFI #65 – Compressor Comparison, #65 – Augmented Compressor Comparison, and #65b – Compressor Comparison (Appendix D, RFI Index). The conclusions drawn from this evaluation were that within the scope of the proposed project (reinjecting approximately 200 MMscf of gas per day at a discharge pressure of 10,000 psi with a projected start-up date of 2014), reciprocal compressors were capable of handling the moderate volumes required, provided advantages in operating flexibility, were readily available and resulted in no significant environmental disadvantages. There are potential advantages in using centrifugal compressors in development scenarios requiring increased injection volumes, such as with a full field gas cycling expansion. This is due to the increased efficiency of centrifugal compressors to handle large volumes of gas and the smaller footprint compared to that required for reciprocal compressors to handle large volume of gas. The use of reciprocal injectors in the first phase however, does not preclude later installation of centrifugal compressors if deemed necessary. Health Impact Assessment, Executive Summary, Page ES-3, paragraph four: This paragraph discusses the potential for emissions of hazardous materials from incinerator facilities due to incomplete combustion and notes that this impact can be mitigated through stack emission monitoring is not required at present. Incinerator monitoring will be required through the permitting process, under the authority of 18 AAC 50. This discussion on incinerator emission monitoring and hazardous materials appears repeatedly within the Health impact Assessme	403 The Draft EIS stated that the use of reciprocal compressors did not preclude the use of centrifugal compressors in the future. Section 2.3.1.5, Component: Centrifugal Compression, cites RFI 65b in stating, while centrifugal compression was dismissed from consideration for the current project's gas cycling function, selection of reciprocal compression for condensate production does not preclude the future use of a centrifugal compressor in the event that Point Thomson is developed for natural gas production. 404 The Health Impact Assessment was prepared by the Alaska Department of Health and Social Services and was included in the EIS as supplemental information. Section 5.23, Human Health, of the EIS contains findings of this HIA. The issue regarding stack emissions was clarified in Sections 5.23.3.1 (Alternative B: Construction and Drilling) and 5.23 by stating the following: "While emissions would be regulated through the air permitting process and emissions would likely be rapidly diffused over a wide area,"

Comment			Response
			Attachment to Comment 0105_Sean.Parnell_SGOV
STATE CAPITOL PO 8xx 1 10001 Juneau, Abaka 99811-0001 907-465-3500 fax: 907-465-3532	Governor Sean Parnell STATE OF ALASKA	350 West 7th Avenue #1700 Anthorage, Altoka 99301 907-269-7450 fan 907-269-7463 wmm.Gov.Alanka.Gov Governoviji/Alanka.Gov	Attachment not coded
October 31, 2011			
between the federal government relationship. We appreciate these In the spirit of open communica my significant concern over the ExxonMobil's Point Thomson diriculated to the State and other. First some background. The Poin National Wildlife Refuge (ANW) North America. This area is estin condensates and over eight trillio will provide enormous benefits to revenue, and enhanced energy se Thomson will extend the life of it is also a necessary prerequisite to have taken a personal interest in production in a manner that advit Unfortunately, the Point Thomson has come to my attention that the its proximity to the project" and impact ANWR's "wilderness value DEIS spends considerable effort.	taken positive steps on several fronts to increase and the State of Alaska, which has improved our efforts. tion between State and federal government, I ampreliminary Draft Environmental Impact Stateme evelopment project, which the Corps of Engineer Cooperating Agencies for comment. In Thomson field is on State land near the 1002 A R). This field is one of the largest undeveloped of mated to have well over 400 million barrels of oil on cubic feet of natural gas. Point Thomson's time of the State and country and will lead to more jobs curity. Furthermore, increased domestic productible Trans Alaska Pipeline System (TAPS). The fie or a natural gas pipeline from the North Slope. Fo ensuring that EsxxonMobil diligently moves forws.	writing to convey ent (DEIS) for es recently Area of the Arctic il and gas fields in and gas ely development s, significant ion from Point eld's development or these reasons, I ard with on State lands. It rahuation "due to boundaries could rerior's input, the omson project on	

Comment	Response
	Attachment to Comment 0105_Sean.Parnell_SGOV
The Honorable Ken Salazar October 31, 2011 Page 2	Attachment not coded

Comment	Response
	Attachment to Comment 0105_Sean.Parnell_SGOV
The Honorable Ken Salazar October 31, 2011 Page 3	Attachment not coded
ANILCA Section 1002(c) and (h) directs the Secretary to publish the results of the study, which concluded the Secretary should recommend that Congress authorize oil and gas development in the coastal plain. In short, the State has already submitted detailed comments to the Corps regarding the apparent attempt to bootstrap a wide range of ANWR issues into the Point Thomson DEIS. It is unclear how the Corps of Engineers will respond to the State's concerns. My hope is that the Corps removes all of the objectionable language from the DEIS identified in the State's comments, and we can remove this contentious issue early in the process. Finally, because timely development at Point Thomson is critical to State and country, I would also like to request that ExxonMobal's Point Thomson project be included in Deputy Secretary Hayes' Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska. Sincerely, Sean Parnell Governor c: David Hayes, Deputy Secretary, United States Department of the Interior Kim Elton, Director, Office of Alaska Affairs, United States Department of the Interior	

Comment Response Attachment to Comment 0105_Sean.Parnell_SGOV Attachment not coded THE SECRETARY OF THE INTERIOR WASHINGTON DEC - 9 2011 The Honorable Sean Parnell Governor of Alaska Juneau, Alaska 99811 Dear Governor Parnell: Thank you for your letter of October 31, 2011, commenting on the U.S. Army Corps of Engineers (Corps) agency-review Draft Environmental Impact Statement (DEIS) for ExxonMobil's Point Thomson development project. As you noted, the U.S. Fish and Wildlife Service (Service) is a cooperating agency. The Corps is the lead agency and has final discretion for the content of the As is required by the National Environmental Policy Act (NEPA) and its implementing rule in 40 CFR Part 1500, the DEIS discloses potential effects to the adjacent Arctic National Wildlife Refuge. We defer to the Corps on the amount of emphasis placed on any subject in the DEIS. It is incumbent on Federal agencies to analyze and disclose all effects likely to occur as a result of a proposed action and the alternatives considered. To do less would not meet the requirements of the regulations and could subject the Corps to NEPA-related litigation. As you point out in your letter, staff of the National Wildlife Refuge System have land management responsibilities that stop at the boundary of the refuge. Also, as you point out in your letter, the agency-review DEIS did state that the Alaska National Interest Lands Conservation Act (ANILCA) called on the Service to manage the coastal plain as wilderness. The Service provided comments to the Corps that requested the errors be corrected. The Corps has acknowledged that these changes have been made in the public-review DEIS. By copy of this letter to the Corps, I am reiterating our position that Title X of ANILCA does not designate the coastal plain of the Arctic National Wildlife Refuge as a wilderness study area. That said, the coastal plain does currently contain wilderness characteristics and it is appropriate that the DEIS disclose effects, if any, on those values. Disclosure of effects does not equal an extension of authority. In many instances, development activities occur immediately adjacent to undeveloped areas including designated wilderness areas. I appreciate you contacting me and hope we can continue to work together to promote responsible energy development on state and federal lands and protect special areas such as the Arctic National Wildlife Refuge.

Response Comment 406 Comment noted; no action required. 0106_Charlie.Huggins_SGOV ALASKA STATE LEGISLATURE Senate District H Juneau AK 99801-1182 907-465-3878 600 E. Railroad Avenue Wasilla AK 99654 907-376-4866 Fax: 907-465-3265 800-862-3878 907-373-4724 :Fax **Charlie Huggins** Senator December 19, 2011 Harry Baij, Jr Department of the Army U.S. Army Engineer District, Alaska Regulatory Division P.O. Box 6898 JBER, Alaska 99506-0898 Dear Mr. Baij, Statement of Support for Alternative B 406 I am writing this letter in regards to the recently released draft Environmental Impact Statement (DEIS) for Exxon Mobil's Point Thomson natural gas condensate project. Alaska is the storehouse for oil and gas that are so vital to our nation's economy and security. Point Thomson is essential to Alaska natural gas commercialization, as its fields contain approximately 25 percent of the North Slopes' known natural gas resources. The DEIS presents five alternatives; of those, I support Alternative B, which I understand will ensure safe and efficient operations and a minimal environmental footprint by incorporating a combination of summer barging, winter ice roads, aviation, and in-field roads. Through Alternative B, Exxon will implement comprehensive mitigation measures to minimize impacts on tundra, wildlife, aquatic resources, and subsistence activities. I believe Alaska and America need the resources and jobs that the Point Thomson project can provide. Of the design alternatives contained within the DEIS, Alternative B provides the safest, most environmentally responsible solution for developing those resources and I encourage your favorable consideration of this matter. Thank you for considering my views. Sincerely, Charlie Huggins Senator www.aksenate.org/huggins/ Senator_Charlie_Huggins@legis.state.ak.us

Comment Response 407 Comment noted; no action required. 0107_Charisse.Millet.SGOV Alaska Legislature **Representative Charisse Millett** Session: Interim: State Capitol Building, Room 13 Anchorage LIO Juneau, AK 99801 716 W 4th Ave., Room 390 Anchorage, AK 99501 Phone (907) 465-3879 Fax (907) 465-2069 Phone (907) 269-0222 Toll free (888) 269-3879 Fax (907) 269-0223 District 30 January 2, 2012 Mr. Harry Baij Jr. Department of the Army Engineer District, Alaska Regulatory Division P.O. Box 6898 JBER, Alaska 99508-0898 [RE: Alternative B, DEIS Point Thomson] Dear Mr. Baij, Statement of Support for Alternative B 407 The Point Thomson Project is one of the most important new petroleum fields in Alaska because it holds about 25 percent of the known natural gas reserves on the North Slope. It is unlikely any natural gas pipeline could ever be built without development at Point ExxonMobil has submitted a development plan and your agency released a draft environmental impact statement with five alternatives. I urge your agency to adopt alternative B because it is the most environmentally sound plan that still allows the resources to be monetized in a cost effective manner. Point Thomson is a challenging project and will be very expensive to develop so it is important to avoid making costly requirements that create little if any environmental protection. ExxonMobil and its partners are taking extensive measures to protect the land, air, sea and wildlife. Subsistence activities will also be protected and respected under Alternative B. The economic benefits to the residents of Alaska are tremendous. New jobs, economic development and state revenue will all be created once the field is in operation.

Comment	Response
Thank you far taking the time to read our comments on this year important issue and	
Thank you for taking the time to read my comments on this very important issue and feel free to contact my office if you need any additional information.	
Sincerely,	
Church Willet	
O'U'''	
Rep. Charisse Millett	

nment		Response
		408 Comment noted; no action required.
	0408	8 Karl.Gohike Ind
Davis, Cecile From: Sent:	Alcantra, Rosetta M.	Kan.Gonike_ind
To: Subject:	Tuesday, January 03, 2012 11:03 AM Davis, Cecile 121911 Karl Gohlke Comment PTDEIS	
From: Baij, Harry A Jr Sent: Saturday, Decem	POA [mailto:Harry.A.Baij@usace.army.mil] nber 31, 2011 9:24 AM	
To: Karl Gohlke Cc: Begier, Erin; Alcant Subject: RE: Point The	tra, Rosetta M. omson Project EIS Public Comment	
Hi Karl,		
	ents. They will be given full consideration and included in the administrative rend-of-day Jan. 18, 2012.	record. You may
Harry A. Baij Jr. US Army Corps of harry.a.baij@usac Office: 907.753.2 Cell: 907.350.5 www.poa.usace.arm	784 097	
Sent: Monday, Decemb To: Baij, Harry A Jr PO Cc: Billy@FrontierSupp		
Dear Mr. Harry Baij, I support the Point Thor	mson Project Alternative B for the following reasons: Statement of Support for	or Alternative B 408
winter ice roads operations.	sures a minimal environmental footprint by incorporating a combination of sum s, aviation, and in-field roads. These features are essential to the project's safe	e and efficient
 resources in a t Through Altern resources, and 	rovides the safest, most environmentally responsible solution for developing Po timely, cost-effective manner, attive B, ExxonMObil will implement comprehensive mitigation measures to tun subsistence activities.	ndra, wildlife, aquatic
jobs, and reven Direct benefits the state and lo Approval of the	mson project will provide wide-ranging benefits to Alaska in the form of new bunues. to the State of Alaska from Point Thomson include training and jobs for Alaska ocal governments, increased business activity and revenue for the private sect I Point Thomson Project, as proposed by Alternative B, is critical to developing ecuring Alaska's energy future.	ans, new revenues to or.
I look forward to seeing natural gas commercial	construction movement by the end of 2012 or the beginning of 2013. This is e lization, extending the life of the Trans Alaska Pipeline and the future wellbeing	ussential to Alaska g of Alaska
Sincerely, Karl		
	1	

Response Comment 409 A Programmatic Agreement is continuing to be developed with the intent that it will be finalized prior to the issuance of the Record of Decision (ROD) for the EIS. 0109 Judith Bittner SGOV 410 Cultural resource investigations will continue, with additional identification efforts SEAN PARNELL, GOVERNOR outlined in a Programmatic Agreement, being developed with the SHPO and 550 WEST 7TH AVENUE, SUITE 1310 consulting parties. ANCHORAGE, ALASKA 99501-3565 (907) 269-8721 (907) 269-8908 DEPARTMENT OF NATURAL RESOURCES **DIVISION OF PARKS & OUTDOOR RECREATION** RECEIVED OFFICE OF HISTORY AND ARCHAEOLOGY DEC 27 2011 December 22, 2011 File No.: 3130-1R COE Point Thomson Project Harry A. Baij, Jr. Project Manager U.S. Army Corps of Engineers Alaska, Regulatory Division P.O. Box 6898 JBER, AK99506-0898 Subject: Point Thomson Project Draft Environmental Impact Statement Dear Mr. Baij, Jr.: The Alaska State Historic Preservation Office (AK SHPO) has reviewed the subject Draft Environmental Impact Statement (EIS). Based on our review of the EIS and accompanying documentation, we offer the following comments: Overall our office believes that the discussion of Cultural Resources in Chapter 3 (Affected Environment) Cultural and Chapter 5 (Environmental Consequences) is well written, organized, and comprehensive. The Corps has adequately and appropriately addressed the relationship between the National Environmental Policy Act and Section 106 of the National Historic Preservation Act. The draft EIS notes that the Corps is presently consulting with our office and other consulting parties pursuant to Section 106 and that it plans to enter into a Programmatic Agreement (PA) (36 CFR 800.14[b]) in order resolve any adverse effects to historic properties resulting from the undertaking. We reviewed and commented on the Corps' proposed area of potential effects (APE) for the Point Thomson project in August 2011 and look forward to continued consultation on the development of an agreement document, which should be finalized prior to the issuance of the record of decision (ROD) for the subject EIS. As noted at 36 CFR 800.8(a)(3), "Agency officials should ensure that preparation of an EIS and record of decision (ROD) includes appropriate scoping, identification of historic properties, assessment of effects upon them, and consultation leading to resolution of any adverse effects." We offer the following minor comments on the draft EIS: General comment: The documentation suggests that cultural resource investigations, including but not limited to, archival research, pedestrian inventory, interviews with local residents and Tribes, etc. is essentially complete for the Point Thomson APE. Is this accurate or does the Corps believe that additional identification efforts will occur? Printed on Recycled Paper

Comment	Response
	411 The text has been revised in this section to refer to the correct table.
	412 The phrasing has been changed to: "with the general, but not absolute, provision that they are over 50 years old"
3.2.1.1, page 2-293, first reference to Table 3.21-1: The text that first references Table 3.21-1 suggests that it provides a list of past archaeological surveys in the project area, but it does not. Suggest either removing the reference or providing a separate table that lists past studies. 3.2.1.2, page 2-294, 1" full paragraph, soon sentence states, " with the general, but not absolute, provision that they are over 50 years old." 3.2.1.3, page 3-296, 3" full paragraph, last sentence, "For a cultural resource to be eligible for the NRHF, it must meet one or more of the National Register criteria and possess integrity of" (suggest adding bolded language). 3.2.1.1, page 3297, first full-sentence, "Despite the absence of earlier documented cultures in the area, the potential does exist for future discoveries of prehistoric remains of much greater antiquity", (suggest adding bolded language) 5.2.1.1, first bullet, "The determination of whether the proposed action would adversely affect cultural resources is based on whether the action would alter, directly or indirectly, any of the characteristics that make the property eligible for the National Register, in a manner that would diminish the property's integrity, (suggest using bolded language or something similar that is more consistent with the definition of an adverse effect in the regulations at 36 CER, 800.5[al] [1]). 5.2.1.1, third paragraph, end of the first sentence is missing a close parenthesis. Table 5.2.1.1, upon intial review of this table, it is not clear what "Additional Indirect" means exactly. However, it is explained in the text below the table. Suggest moving the text up or the table down below that explanatory text. Also, the table should note that these are the "known" or "reported" cultural resources. We commend the Corpse 'efforts in adequately addressing cultural resources in this darft document and look forward to comment. Please contact Shina david language and the proposal contact shina david language and the proposal	 413 The suggested text has been added. 414 The suggested text has been added. 415 The suggested text has been added. 416 The text has been corrected in the Final EIS. 417 The table has been moved below the text; all tables in this section have been updated to include the title "Documented Cultural Resources Potentially Affected," to clarify that these sites are identified, documented cultural resources in the project area.

Response Comment 0110_Richard.Glenn_ACOR Anchorage Office • 3900 C Street, Suite 801 • Anchorage, Alaska 99503-5963 • 907,339,6000 • FAX 907,339,6028 • 1,800,770,2772 January 3, 2012 Hank Baij, Project Manager U.S. Army Corps of Engineers AK District, Regulatory Division P.O. Box 6898 JBER, Alaska 99506-0898 Phone: (907) 753-2784 Re: Point Thomson Project Draft Environmental Impact Statement (DEIS) Dear Mr. Baij: This letter provides Arctic Slope Regional Corporation's ("ASRC") comments in response to the U.S. Army Corps of Engineers ("Corps") request for public comment regarding Point Thomson Project Draft Environmental Impact Statement ("DEIS"). ASRC appreciates the Corp's efforts with respect to ensuring that oil and gas exploration and development in the Arctic, proceeds in a safe and thoughtful manner. ASRC has been involved in reviewing plans and submitting comments with respect to Arctic oil and gas development efforts on the North Slope, and we continue to believe that development of Alaska's petroleum resources can proceed safely and in a manner that protects the Arctic environment as well as the subsistence resource needs and culture of Alaska Natives. Introduction ASRC is an Alaska Native regional corporation created by Congress under the terms of the Alaska Native Claims Settlement Act of 1971 ("ANCSA"). See 43 U.S.C. § 1606. This landmark legislation extinguished Alaskan aboriginal land rights and authorized and directed Alaska Natives to adopt a western corporate model to manage lands, funds and natural resources. At ASRC, we have been able to successfully manage our assets consistent with our Iñupiat values. Under ANCSA, Iñupiat Eskimos living on the North Slope in 1971 were enrolled as shareholders in ASRC. ASRC has since issued additional shares to their descendants giving ASRC a shareholder base of approximately 11,000 lñupiat Eskimos, most that reside on Alaska's North Slope. Through ANCSA, Congress created ASRC and directed that we use the North Slope's natural resources to benefit the Iñupiat people financially and culturally. Congress authorized ASRC "to provide benefits to its shareholders who are Natives or descendants of Natives or to its shareholders' immediate family members who are Natives or descendants of Natives to promote the health, education or welfare of such shareholders or family members." 43 U.S.C. § Carporate Headquarters • PO Box 129 • Barrow, Alaska 99723-0129 • 907.852.8533 or 907.852.8633 • FAX 907.852.5733

Comment Response 418 Comment noted; no action required. 419 During the Scoping period the residents of Kaktovik expressed concern about the ASRC Comments barge bridge impeding the movements of fish in east/west directions along the Pt. Thompson DEIS coast. The Draft EIS evaluated the potential impacts of the barge bridge on fish, Page 2 determining that the gaps between the barges would allow fish to pass through and 1606(r) (emphasis added). Consistent with this unique legislation, ASRC is a for-profit business that the short-term duration of barge placement would further minimize impacts to that is committed both to providing sound returns to our shareholders and to preserving our fish movement. The sealift bulkhead would be constructed at the water's edge and Iñupiat way of life, culture and traditions. Operating in one of the least hospitable natural climates in the world, we have built businesses would not impede fish movements. The coastal barge dock would be constructed to provide jobs for our people, tax revenues for our Villages and our Borough, and cash by using pilings that would not impede fish movements. dividends for our shareholders. At the same time, we have integrated maintenance and protection of the Iñupiat cultural and traditional practices into the ASRC business. 420 Comment noted; no action required. In carrying out our congressionally-mandated mission, ASRC and its subsidiary companies are active participants in North Slope oil exploration, development and production. The oil and gas industry is the source of many jobs for ASRC's Inupiat shareholders and of many contracting opportunities for the ASRC family of companies. This includes work our subsidiaries perform as contractors in oil field developments, engineering, pipeline maintenance, and property leasing for exploration and development. Comments to the DEIS The proposed Point Thomson Project is important to our region of the State and more specifically to the North Slope Borough. We recognize the need to allow for responsible development of the Arctic to ensure a continuous tax base to the Borough for continued improvements to our communities. ASRC supports Alternative B after consultation with leaders in the community of Kaktovik. Alternative B ensures a minimal environmental footprint by incorporating a combination of winter ice roads with summer barging activities and infield gravel roads. Winter seasonal access provides a critical 'safe haven' for our shareholders and other community members that travel from Kaktovik to Deadhorse each winter. Specifically allowing local access to the ice roads for winter travel is critical to ASRC. We are pleased that ExxonMobil worked closely with the U.S. Fish and Wildlife Service to minimize impacts of barge routes so that traffic is outside the fall migration corridor of bowhead whales. However, we have heard there are concerns from Kaktovik about the location and design of the dock at Point Thomson; we would request that the dock be designed so as to not impede or deflect fish migration along the shoreline from west to east. As already stated, ASRC feels that Alternative B allows for the smallest footprint for development other alternatives in the DEIS would require more gravel and have a much more significant impact on the local environment. We are, however, familiar with the development of the Alpine Oilfield and its satellites and understand the constrictions a 'roadless' development may have. We feel that ExxonMobil has been realistic in the early identification of infield roads for development of the Point Thomson Field.

Comment	Response
	421 Comment noted; no action required.
ASRC Comments Pt. Thompson DEIS Page 3 1/3/2012	
Conclusion	
Given the proximity of our shareholders to the planned development activities set forth in	talement of upport for Internative B 21
Sincerely, ARCTIC SLOPE REGIONAL CORPORATION Richard Glenn	
Executive Vice President Lands and Natural Resources	

nment		Response	
		422 Comment noted; no action required.	
Davis, Cecile	0111_Bill.Vivlamore_Bus		
From: Sent: To: Subject:	Alcantra, Rosetta M. Tuesday, January 03, 2012 11:01 AM Davis, Cecile 122011 Bill Vivlamore Comment PTDEIS		
Sent: Saturday, Dec To: BillV@FrontierSu Cc: Begier, Erin; Alca	Jr POA [mailto:Harry.A.Baij@usace.army.mil] tember 31, 2011 9:37 AM upply.com antra, Rosetta M. Thomson Project EIS Public Comment ~ comments received		
Hi Bill,			
	comments. They will be given full consideration and included in the administrative record. You may till end-of-day Jan. 18, 2012.		
Harry A. Baij Jr. US Army Corps of harry.a.baij@us. Office: 907.753 Cell: 907.350 www.poa.usace.a	f Engineers, Alanka ace.army.mil .2784 .5097		
Sent: Tuesday, Dece To: Baij, Harry A Jr F	≥ [mailto:BillV@FrontierSupply.com] ember 20, 2011 3:16 PM POO A POO A POO A POO A POO A POO A POO B B B B B B B B B B B B B B B B B B		
Dear Mr. Harry Baij,			
I support the Point T	Thomson Project Alternative B for the following reasons: Statement of Support for Alternative B 422		
barging, wint efficient ope	ensures a minimal environmental footprint by incorporating a combination of summer coastal ter ice roads, aviation, and in-field roads. These features are essential to the project's safe and erations. B provides the safest, most environmentally responsible solution for developing Point Thomson's		
resources in - Through Alte	a timely, cost-effective manner. ernative B, ExxonMobil will implement comprehensive mitigation measures to tundra, wildlife,		
 The point The opportunitie Direct benefit to the state and Approval of the state and approval of	surces, and subsistence activities. some project will provide wide-ranging benefits to Alaska in the form of new business ses, jobs, and revenues. fits to the State of Alaska from Point Thomson include training and jobs for Alaskans, new revenues and local governments, increased business activity and revenue for the private sector. the Point Thomson Project, as proposed by Alternative B, is critical to developing this world-class d securing Alaska's energy future.		
	eing construction movement by the end of 2012 or the beginning of 2013. This is essential to Alaska cialization, extending the life of the Trans Alaska Pipeline and the future wellbeing of Alaska.		
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mment			Response
			423 Comment noted; no action required.
		2442 147 11 11 11 11	
Davis, Cecile	Alexander Personal M	0112_Mike,Huston_Ind	
From: Sent: To: Subject:	Alcantra, Rosetta M. Tuesday, January 03, 2012 11:01 AM Davis, Cecile 122211 Mike Huston Comment PTDEIS		
Sent: Saturday, Decer To: Mike	POA [mailto:Harry.A.Baij@usace.army.mil] nber 31, 2011 9:39 AM		
Cc: Begier, Erin; Alcan Subject: RE: Point Th	tra, Rosetta M. ompson ~ comments received		
Hi Mike,			
	ents. They will be given full consideration and included in end-of-day Jan. 18, 2012.	the administrative record. You may	
Harry A. Baij Jr. US Army Corps of harry.a.bail@usacoffice: 907.753.2 Cell: 907.350.3 www.pos.usace.arm	7784		
From: Mike [mailto:m Sent: Thursday, Dece To: Baij, Harry A Jr PO Subject: Point Thomp	mber 22, 2011 8:50 AM A		
needs to be well regul	an I am very aware of the potential for accidents and or m ated and I believe it is. Having said that the Point Thompso as quickly as possible. Having looked I think alternatives B	n project is long overdue. Please	
Thanks Mike Huston			
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mment		Response
		424 Comment noted; no action required.
Davis, Cecile	0113_Kent.Petterson_Bus	
From: Sent: To: Subject:	Alcantra, Rosetta M. Tuesday, January 03, 2012 11:00 AM Davis, Cecile 122211 Kent Patterson Comment PTDEIS	
Sent: Saturday, Dec To: Kent D. Patterso Cc: Begier, Erin; Alca		
Hi Kent,		
	your comments. They will be given full consideration and included in the administrative record. You er until end-of-day Jan. 18, 2012.	
Harry A. Baij Jr. US Army Corps of harry.a.baij@us. Office: 907.753 Cell: 907.350 www.pos.usace.ar	f Engineers, Alaska ace.army.mil .2784 .5097	
Subject: Folia Thor	Statement of Support for Alternative B 424	
without saying that to our future. Please businesses and our c	nt and an Alaskan business man I am concerned about the future of the Alaska economy. It goes Alaska's economy is reliant on our natural resource development and Point Thomson is a major key consider the application for Option B as this and the development will help ensure the future of our children's future.	
Why Pt Thomson Deve	elopment is important	
The Point Thom Approval of the Slope gas comm Direct benefits governments, it Point Thomson	project is important to the state of Alaska and to Alaskans. sson project will provide wide-ranging benefits to Alaska in the form of new business opportunities, jobs, and revenues. Point Thomson project, as proposed in Alternative B, is vital to the development of this world-class resource and North mercialization. to the State of Alaska from Point Thomson include training and jobs for Alaskans, new revenues to the state and local increased throughput for the Trans-Alaska oil pipeline, and increased business activity and revenue for the private sector. It is a highly-technical project with high costs. Unnecessary requirements that provide very little, if any, incremental benefits, should be avoided as to not compromise the economic viability of the project.	
Why Alternative B?		
Of the design a Thomson's reso	alternatives considered, Alternative B provides the safest, most environmentally-responsible solution for developing Point ources.	

Response Comment 425 The Corps will consider multiple factors, such as impacts to the environment identified during the NEPA process, the project purpose, practicability (as part of the 404[b][1] Guidelines analysis), public interest determination, and mitigation · Alternative B ensures a minimal environmental footprint by incorporating a combination of summer coastal barging, winter ice roads, aviation, and in-field roads. These features are essential to the project's safe and efficient operations. options, when making its final permit decision. Through Alternative B, ExxonMobil will implement comprehensive mitigation measures to minimize impact on tundra, wildlife, aquatic resources, and subsistence activities. ExxonMobil works closely with the U.S. Fish and Wildlife Service and state agencies to ensure polar bears and other wildlife are fully protected. Coastal barge route is outside the main fall migration corridor of bowhead whales. . The in-field roads included in Alternative B have been carefully routed to minimize the gravel footprint and for the efficient pass through of water. . The longer runway in Alternative B provides better access in bad weather, reduces the number of flights by allowing larger aircraft for routine cargo shipments and allows for aircraft to transport larger equipment capabilities in the event of an emergency. Why not Alternative C , D or E? Alternatives Comparison 425 . Moving roads inland as proposed in Alternative C and D would increase the gravel footprint and be less effective in maintaining natural drainage patterns of the project area. · Alternatives C and D would move project components inland and eliminate barging, which is an established and safe means of supply for North Slope communities, including Prudhoe Bay. ExxonMobil has conducted safe barging operations in accordance with the Alaska Eskimo Whaling Commission Conflict Avoidance Agreement and in direct consultation with local whaling communities. 188 barging trips in support of Point Thomson have occurred with no impacts to marine mammals or subsistence. Alternatives C and D both result in inefficient logistical support and adds unnecessary challenges. Eliminating summer barging would result in increased costs, schedule delays, and increased tundra traffic. . The 44-mile gravel road from Endicott to Point Thomson as proposed under Alternative C would create a much larger tundra footprint. Current North Slope experience at Alpine and Badami demonstrates that a gravel road is not necessary to support Point Thomson. However, not having a road connecting to Prudhoe Bay does make the combination of barging, ice roads, air access and in-field gravel Alternative E would eliminate in-field gravel roads and shorten the airstrip. This alternative relies solely on helicopters and seasonally limited off-road vehicles for transportation to East and West pads for nine months of the year. There is no North Slope precedent for a production facility with such limitations. Moreover, inability to fly in poor weather introduces unnecessary safety risks for personnel, as well as emergency response limitations and operational inefficiencies. The longer runway in Alternative 8 provides better access in bad weather, reduces the number of flights by allowing larger aircraft for routine cargo shipments and allows for aircraft to transport larger equipment capabilities in the event of an emergency. Thank you for your time and your consideration to this critical project. Kent Patterson President Patterson Insurance Brokers Inc. PO Box 242225 400 W Tudor kpatterson@pibinsure.com www.pibinsure.com Confidentiality Notice: this e-mail message, including any attachments, is for the sole use of the intended recipient (s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original

mment		Response
		426 Comment noted; no action required.
Davis, Cecile	0114_Steve.Hickman_Ind	
From: Sent: To: Subject:	Alcantra, Rosetta M. Tuesday, January 03, 2012 11:00 AM Davis, Cecile 122211 Steve Hickman Comment PTDEIS	
Sent: Saturday, Dece To: Hickman, Steve Cc: Begier, Erin; Alca	Or POA [mailto:Harry.A.Baii@usace.army.mil] ember 31, 2011 9:47 AM entra, Rosetta M. emson ~ comments received	
Hi Steve,		
	or comments and information regarding dust control. The comments will be given full consideration idministrative record. You may comment further until end-of-day Jan. 18, 2012.	
harry.a.baij@usa Office: 907.753. Cell: 907.350. www.poa.usace.ar From: Hickman, Stev	.2784 .5097 .mmy.mil/reg we [mailto:shickman@polarsupply.com] .ember 22, 2011 11:39 AM .OA	
Hi Harry,	Statement of Support for Alternative B 426	
the process of permit that without hesitation environmental impact The time is now to around the world. Na business of rebuilding	blic Comments meeting at the Loussac Library the other day. As a long time Alaskan I have watched ting this project as a concerned citizen and now a materials supplier for our local industries. I can say n I have always been for developing this project. It appears to me that option B will have the least t of the choices. move forward with this project. Alaska's oil and gas industry is one of the cleanest groups of this type tural gas is one of the cleanest sources of energy. Our country needs projects like this to begin the g our economy. Consumerism alone will not do it. Please permit this project sooner rather than later, presumptuous maybe I can help you with your decision. I took this picture while I was at the	
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Comment Response Soils and Permafrost Gravel fill: Alternative C wo more area than Alternative additional gravel mines. Alt 20% less gravel infrastructu alternatives. Fugitive dust and gravel fro onto the surrounding tundi and permafrost. Such impa extensive under Alternative Little change would occur i or compaction of soil as th ice pad or ice road construc pads proposed for Alternat compaction of the underlyi of vegetation regeneration

Comment Response 427 The use of chemical dust palliatives will be considered as a possible mitigation measure to address fugitive dust. Mitigation 427 It appears that one of the biggest causes for concern is the environment impact of fugitive dust from the road and pads. The good news is that this problem has already been addressed and evaluated by the Army Corps of Engineers. Polar Supply Company sells a product call EK-35. Please check the 2004 study, "Comprehensive Field Studies to Address Performance of Chemical Dust Palliatives" and the 2006 study, Evaluation of Chemical Dust Palliatives for Helipads", both by John Rushing with the U.S. Army Engineer Research and Development Center in Vicksburg. These studies show the effectiveness of palliatives in general. Additionally the EPA has certified in their Environmental Technology Verification (ETV) Report that EK-35 is environmentally safe and effective for controlling dust. EK-35 and it's companion product Envirokleen are the only products with this verification. Locally EK-35 has been used in Alaska for over 10 years. Reductions in fugitive dust have been dramatic. Our Alaska DOT uses some every year as part of it's maintenance schedule at local airports and roads. We have some interesting third party information proving how effective it is and how much more effective it is verses it's competitors. I would appreciate the opportunity to discuss this further. Please call me at your earliest convenience. Thanks, Steve POLAR SUPPLY COMPANY Steve Hickman Polar Supply Company 300 E. 54th Ave. Anchorage, AK 99518 Phone: 907-244-1959 Fax: 907-561-1850 Email address: shickman@polarsupply.com Visit our website at www.polarsupply.com CONFIDENTIALITY NOTICE: This email may contain confidential and privileged material for the sole use of the intended recipient(s). Any review or use by others is strictly prohibited. Any distribution or disclosure by or others is strictly prohibited. If you have received this communication in error, please notify the sender immediately by e-mail and delete the message and any file attachments from your

Comment		Response
		756 Comment noted; the comment period was extended.
Northun Alala Environmenti Conservation's Northern Voice	0115_Pamela.Miller_NGO	
	December 22, 2011	
Mr. Harry Baij Jr Department of the Army, U.S. Army Engineer District P.O. Box 6898 JBER, AK 99506-0898 E-mail: harry.a.baij@usace.army.mil Re: Public Comments on Point Thomson Project Draft EIS, and Permit Application POA-2001-1082-MI Dear Mr. Baij Jr., We wish to request a 15-day extension of the public comment period on Exxore Project Draft Environmental Impact Statement ("DEIS") and U.S. Army Corp referenced above ("Permit"). The Northern Alaska Environmental Center ("No regional non-profit conservation organization. This year we celebrated our 40 the environment of Arctic and Interior Alaska through education and advocacy We request a comment period extension for the following reasons. First, the e period overlaps with three significant federal holidays (Thanksgiving, Christmare some of the busiest travel times of the year for Alaskan residents, including Slope. The effectively shortened review period presents a burden for intereste Second, a comment period extension is necessary and appropriate due to the side DEIS and Permit as well as the magnitude of proposed impacts to the natural after the project of the period of the proposed impacts to the natural after the period extension of permaent roads, pipelines, and drill sites in the easter vicinity contains significant wetlands and fish and wildlife resources including whales and threatened species including polar bear's critical habitats, subsister Interest and the project of the Arctic National Wildlife Refuge with facilities planned only aborder, and noise and other impacts that extend into the refuge. Third, the Point Thomson DEIS is a huge, complex document. It has 5,757 pages; Appendices - 4,253 pages). However, neither the project Summary nor out to the Northern Center, nor apparently any other interested public who had comments, unless requested. Unless one obtained a copy of the 46 page / 21 DVD at the public meeting/hearings, it was necessary to download 36 different waw pointhlomsondeis.com. 15 for the main DEIS (with the vital Environmen	so of Engineers permit orthern Center") is a b 'year of working to protect xisting public review as, and New Year's), which g those living on the North d parties. ze and complexity of the und human environment North Slope. The project endangered bowhead toer resources vital to mson Project has close miles away from its ges (main DEIS - 1,504 DEIS documents were sent provided scoping 4B Executive Summary or t files from tal Consequences Chapter portant Appendix K's ne to download even at ermit Application	
A 501 (c)(3) NOT-FOR-PROFIT ORGANIZATION 830 COLLEGE ROAD, FARBLANKS, ALASKA 99701 PHONE: (907) 452-5021 • FAX: (907) 452-3100 • WEB: http://www.	v.northern.org	

Comment	Response
Fourth, the project and analyses are complex and involve a number of issues. Issues covered in the documents include wetlands, noise and other modeling, scientific information requiring expert review, and scores of complex Appendices that provide necessary reference materials for the alternatives and environmental impact analysis and Permit review. In particular, the Appendices are an interlocking part of the DEIS as they comprise essential references not otherwise available in published scientific or technical literature and with analysis particular to this project analysis. This DEIS also involves a complex analysis of mitigation measures for project impacts to wetlands functions and values and navigable waters of the United States. Because the project alternatives are presented as a "menu" approach to various ways to reduce impacts and the public was requested to evaluate which components from various alternatives much best avoid or reduce impacts, it is necessary to carefully examine the analyses for four different action alternatives as well as the supporting Appendices. This is the crux of the NEPA analysis and the Corps' decision, and the current short comment period burdens full public participation. Fifth, the Point Thomson review involves cumulative impacts analysis involving controversial projects including the nearby Sivality drilling proposed by Shell Oil Inc., new planned Beaufort Sea federal OCS leasing, and others. The DEIS explains that the Point Thomson Project infrastructure is related to OCS leases. See, e.g. DEIS at 4-10. Public comment review periods for these offshore oil and gas projects overlapped with the Point Thompson project comment period, putting an additional burden on communities and organizations seeking to enagge in the administrative process. In particular, the Bureau of Ocean Energy Management's OCS Oil and Gias Leasing Program: 2012-2017 Draft Programmatic EIS ("PDEIS" ("FI R 70 155) eyeleaed November 10, 2011 with comments due January 9. The BOEIS ("PDEIS" ("FI R 70 155)	Response
Pamela A. Miller Arctic Program Director	

Comment Response 428 Comment noted; no action required. 0116_Carl.Portman_NGO RESOURCE DEVELOPMENT COUNCIL Growing Alaska Through Responsible Resource Development December 21, 2011 Mr. Harry Baij Department of the Army U.S. Army Engineer District, Alaska Regulatory Division P.O. Box 6898 JBER, Alaska 99506-0898 Re: Point Thomson Project EIS Dear Mr. Baij: The Resource Development Council (RDC) is writing in support of Alternative B of the Point Thomson Draft Environmental Impact Statement (DEIS). RDC is a statewide organization made up of all resource sectors, business associations, labor unions, Native corporations, tourism providers, local governments and individuals. RDC's purpose is to encourage a strong, diversified private sector in Alaska and expand the state's economic base through the responsible development of our natural resources. RDC strongly supports the advancement of the Point Thomson project, which is essential to the success of the Alaska gas pipeline project - a major cleanenergy priority of the Obama administration. Point Thomson contains an important component of gas volume to be moved by an Alaska gas pipeline and accounts for approximately 25 percent of known North Slope gas reserves. Development of Point Thomson resources will help meet domestic energy needs, reduce dependence on foreign sources, and increase throughput in TAPS, which is currently operating at one-third capacity. In addition, this multi-billion dollar project will provide hundreds of new jobs, additional tax revenues to local, state and federal governments, and help boost the private sector economy in Alaska and the Lower 48. In fact, Point Thomson development and subsequent production will serve as a lasting economic stimulus with virtually no cost to the federal government. RDC urges the Corps to adopt Alternative B as the preferred alternative. Alternative B provides the safest, most environmentally-responsible option for Point Thomson's development. It minimizes the environmental footprint by 121 West Fireweed Lane, Suite 250, Anchorage, Alaska 99503-2035
Phone: 907-276-0700 Fax: 907-276-3887 Email: resources@akrdc.org Website: akrdc.org

Comment

Page 2/RDC Comments on Point Thomson DEIS

incorporating a combination of summer coastal barging, winter ice roads, aviation, and in-field gravel roads. These features are essential to the project's safe and efficient operations.

Alternatives C, D, and E in our view will pose a larger environmental impact, compromise safety, and will make it more difficult to respond to an emergency. For example, alternatives C and D prohibit barging, which will result in increase truck traffic. Alternative C will leave a larger tundra footprint from a 44-mile road to the Prudhoe Bay road system, which will require hundreds of additional acres of gravel and five mines. The current North Slope experience at Alpine and Badami demonstrates that a gravel road is not necessary to support Point Thomson.

In contrast, barging has long been established as a safe and efficient mode of transportation for goods, supplies, and equipment throughout the remote Arctic. Over 185 barge trips have occurred to Point Thomson without adverse impacts to the environment, marine mammals, or subsistence. Since 2008, ExxonMobil has conducted safe barging operations in accordance with the Alaska Eskimo Whaling Commission Conflict Avoidance Agreement and in direct consultation with local whaling communities. Moreover, barge routing occurs outside of the main fall migration corridor for bowhead whales. Access to Point Thomson by the existing modes of transportation – barging, ice roads, in-field roads and aviation – are sufficient, provided they are available.

In addition, Alternative C would move the export pipeline inland and double its length from 22 to 44 miles.

RDC also has major concerns with Alternative E, which proposes to eliminate infield gravel roads and shorten a vital airstrip, which would serve a critical role in response to emergencies. There is no North Slope precedent for a production facility with no infield roads and no fixed-wing access to remote satellite pads. The Alternative E scenario relies solely on helicopters and seasonally-limited off-road vehicles for transportation to East and West pads for most of the year. Moreover, inability to fly in poor weather – up to 10 days at a time – poses unacceptable safety risks, as well as emergency response limitations. Additional helicopter transports would result in long-term noise, which could impact subsistence activities and wildlife. Meanwhile, the infield roads included in Alternative B have been carefully designed and routed to minimize the gravel footprint and to efficiently pass drainage.

Alternative E shortens the airstrip from 5,600 feet to 3,700 feet to minimize the tundra footprint. However, a longer runway provides improved and safer access in bad weather and allows for aircraft with larger cargo capacity. In the event of an emergency, a longer runway would allow for a quicker response in that more equipment could be flown into the area in a shorter period of time.

Compared to Alternative B, a shorter airstrip would triple air traffic during construction and increase annual air flights by 40 percent during operations. Location of the longer runway was carefully designed to minimize impacts to natural runoff during spring breakup and have minimal impact to hydrology.

In our view, a combination of summer coastal barging, winter ice roads, aviation, and infield roads are essential to safe and efficient operations at Point Thomson. ExxonMobil is prepared to implement comprehensive mitigation measures to minimize impact on the tundra, wildlife, aquatic resources, and subsistence activities.

Response

of Support

- 429 Comment noted; no action required.
- 430 The Corps will consider multiple factors, such as impacts to the environment identified during the NEPA process, the project purpose, practicability (as part of the 404[b][1] Guidelines analysis), public interest determination, and mitigation options, when making its final permit decision.

nment	Response
with regard to the nearby Arctic National Wildlife Refuge (ANWR), it is disconcerting that the DEIS places so much emphasis on the proposed project's proximity to the refuge and implies that the state land beneath Point Thomson should be managed as if they were part of the refuge. RDC joins the State of Alaska in expressing serious concern with the appropriateness of the DEIS assessing such impacts when the project is located on state lands designated for oil and gas development, well outside refuge boundaries. Moreover, a large portion of ANWR already includes over eight million acres designated as Wilderness and ANWR also encompasses vast ecosystems that are specifically designed to protect fish, wildlife, and wilderness values. Therefore, RDC is opposed to extending ANWR's reach beyond it boundaries. With regard to polar bears, the Point Thomson project will not pose a threat to the survival of the species. Polar bear denning habitat is plentiful, widely distributed and undisturbed on the Beaufort Sea coastal plain. It is highly unlikely that denning habitat will become a limiting factor for polar bears, even when all foreseeable development activity is taken into account. We certainly do not see any significant impact from Point Thomson on critical habitat for polar bears. Moreover, ExxonMobil works closely with the U.S. Fish and Wildlife Service and state agencies to ensure polar bears and other wildlife are protected. There are extensive measures in place to minimize incidental encounters and protect bears and personnel, as well as surveys and Forward Looking Infrared Radar to identify and avoid dens. There are also project design and operational features to protect bears and humans. In conclusion, approval of the Point Thomson project as proposed by Alternative B is critical to the development of this world-class resource. The project will provide direct benefits to the State of Alaska and much-needed revenues to local, state and federal governments, as well as boost the private sector economy in Alas	 Response 431 Section 3.13, Land Use, Land Ownership, and Land Management, explicitly st that the Point Thomson project area is located on land owned and managed by State of Alaska. NEPA requires analysis of impacts regardless of land ownersh The EIS includes a separate section on the Arctic Refuge due to its proximity to the project and the Thomson Sand Reservoir. 432 The Corps agrees that the proposed project would not pose a threat to the survi of polar bears as a species. However, project activities may affect individual pobears, primarily through disturbance. The EIS evaluates these potential impacts addition, because polar bears are protected under the Endangered Species Act a Marine Mammal Protection Act, the Corps is consulting with the U.S. Fish and Wildlife Service to evaluate the potential for polar bear "take" under these feder regulations.
Sincerely, Carl Portman Deputy Director	
Deputy Director	

Comment Response 433 Comment noted; no action required. 0117 Anna.Fairclough SGOV Alaska State Legislature Representative Anna Fairclough - House District 17 December 28, 2011 Mr. Hank Baij Project Manager U.S. Army Corps of Engineers Alaska District, Regulatory Division P.O. Box 6898 JBER, Alaska 99506-0898 Dear Mr. Baij, Statement of Support for Alternative B 433 Please accept this letter as comment for the draft Environmental Impact Statement for the Point Thomson Project on the North Slope of Alaska. I am supportive of the Alternative B proposal. This proposal is the safest, most environmentally friendly-responsible solution for developing the resources at Point Thomson. Alternative B would incorporate a combination of summer coastal barges, winter ice roads, aviation, and infield roads, minimizing the environmental footprint. The barge route proposed under Alternative B is outside the main fall migration corridor of the bowhead whales. The in-field roads have been carefully routed to minimize the gravel footprint and all for efficient pass through of water. The longer runway will provide better access in bad weather, reduce the number of flights into the area by allowing larger aircraft to haul large cargo shipments and larger equipment in the event of an emergency. All of this combined are essential to the safe and efficient operation of the project. This project is very important to the state of Alaska, our people, and the United States of America. This project will provide our state and nation with a wide range of benefits, from new business opportunities, to iobs and increased tax revenues. Development of Point Thomson will bring this world-class resource to market and provide security and stability for our state and country. The development and approval of the Point Thomson- Alternative B project will help secure our energy future and provide opportunity for Thank you for your consideration of my comments. I will continue to monitor the progress and success of this project. I look forward to a favorable outcome that will benefit the state of Alaska, the United States of American, and our citizens. Representative Anna Fairclough Alaska State Legislature House of Representatives Session: Alaska State Capitol • Juneau, AK 99801 • 907-465-3777 • Fax 907-465-2819 Interim: 10928 Eagle River Road, Suite 238 . Eagle River, AK 99577 . 907-694-8944 Fax 907-694-8945 Representative_Anna_Fairclough@legis.state.ak.us

ment		Response
	Page 1 of 2	434 The name has been corrected in the Final EIS.
	0118_Deborah.Cranswick_FGOV	
From:	Alcantra, Rosetta M.	
Sent:	Tuesday, January 03, 2012 10:55 AM	
To:	Davis, Cecile	
Subject:	FW: informal note - information for Point Thomson EIS ~ message received	
	Jr POA [mailto:Harry,A.Bail@usace.army.mil] cember 31, 2011 10:30 AM	
To: Cranswick, Debo		
Cc: Begier, Erin; Alc	antra, Rosetta M.; Gallagher, Tim; Allwright, Michael C.	
Subject: RE: inform	nal note - information for Point Thomson EIS ~ message received	
Hi Deborah,		
Thank you very muc	h for your note and references to supplement the DEIS. If these scientific papers were not	
used, I will ask they	be reviewed. Your message, with no formal comment, will be included in the administrative ovide comments until end-of-day Jan. 18, 2012.	
	peaking to you or staff regarding the possible cumulative impacts of off-shore Federal leases in area. Please contact me when you get a chance.	
Erin, please send M	s. Cranswick one more set of the NEPA document CDs and 2 computer simulation CDs.	
Harry A. Baij Jr.		
	f Engineers, Alaska	
harry a baij@us	ace.army.mil	
Office: 907.753 Cell: 907.350		
www.poa.usace.a		
	eborah [mailto:Deborah.Cranswick@boem.gov]	
	nber 30, 2011 9:59 AM	
To: Baij, Harry A Jr	POA ote - informaion for Point Thomson EIS	
Subject mornari	occ mornal roll from Els	
Hi.		
Lam the Chief of the	Environmental Analysis Section I, Alaska Region, Bureau of Ocean Energy Management	
	MS, then BOEMRE). My section was asked to review the EIS. Staff commented that the EIS	
	complete. The BOEM Alaska Region has no formal or official comment. This note is not a	
comment on the DE	IS, although it is appropriate to include in the record.	
I offer the following	information on our agency name change and recent studies FYI.	
We had another nar	me change October 1, 2011. BOEMRE was divided into 2 agencies: the Bureau of Ocean	
	t (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE). The correct	
	he Bowhead Whale Aerial Survey Program (BWASP) surveys and studies (cited in Section	
3.11.2) is now BOEN	Λ.	
BOEM (and its prede	ecessors) funded the following studies that you might consider to supplement the studies	
file://C+\Doouse.au	ts and Settings/cedavis/Desktop/Point Thomson/Draft EIS Comments/FW 1/4/2012	
me.//C. Document	is and settings regavis Desktop Fourt Thomson Draft E15 Comments F.w., 1/4/2012	

Comment Response 435 The Corps reviewed each of the studies listed in this comment. Thorsteinson et al. Page 2 of 2 1991 provides study area-specific information that has been incorporated into the Final EIS (see Section 3.12.3 and Figure 3.12-1). Gradinger and Bluhm 2005 provides information on the importance of sea ice to algae and invertebrates in the cited in Section 3.12.2. shallow waters of the Beaufort Sea and the affect of sedimentation on productivity. 1. Thorsteinson, L.K., L.E. Jarvela, and D.A. Hale. 1991. Final Report, Arctic Fish Habitat Use Investigations Reference to this study has been added to the discussion of invertebrates and other Nearshore Studies In The Alaskan Beaufort Sea, Summer 1990 (MMS 92-011) available at: http://alaska.boemre.gov/reports/1990rpts/92 0011/92 0011 1.pdf trophic levels in Section 3.12.7, Invertebrates and Other Lower Trophic Levels, of the Final EIS. Murphy et al. 2007 provides a synthesis of existing publications and 2. Gradinger, R.R. and B.A. Bluhm. 2005. Final Report, Susceptibility of sea ice biota to disturbances in the shallow Beaufort Sea: Phase 1: Biological coupling of sea ice with the pelagic and benthic realm. (MMS 2005reports on arctic cisco and includes the perspective of local knowledge for the 062) available at: http://alaska.boemre.gov/reports/2005rpts/2005 062.pdf Colville River and importance of the species for subsistence harvest. Because the 3. Murphy, S.M., F.J. Mueter, and S.R. Braund. 2007. Variation In The Abundance Of Arctic Cisco In The Colville Draft EIS discusses and references studies synthesized in Murphy et al. 2007, the River: Analysis Of Existing Data And Local Knowledge. (MMS 2007-042) available at: 2007 report was not incorporated into the Final EIS. The potential impacts to http://alaska.boemre.gov/reports/2007rpts/2007 042/2007 042.pdf subsistence harvest of arctic cisco from the Point Thomson Project is discussed in 4. Logerwell, E., K. Rand, S. Parker-Stetter, J. Horne, T. Weingartner and B. Bluhm. 2010. Final Report, Beaufort Section 5.22. Logerwell et al. 2008 is an important current study of offshore Sea Marine Fish Monitoring 2008: Pilot Survey and Test of Hypotheses (BOEMRE 2010-048) available at: http://alaska.boemre.gov/reports/2010rpts/2010_048.pdf marine fish; however, it was not incorporated into the Final EIS because its focus is offshore, while the potential impacts to marine fish from the Point Thomson Deborah Cranswick Chief, Environmental Analysis Section I Project would mostly be in nearshore areas and because the study area for the Alaska Region report was far west of the Point Thomson Project study area (Cape Simpson to Bureau of Ocean Energy Management Cape Halkett). file://C:\Documents and Settings\cedavis\Desktop\Point Thomson\Draft EIS Comments\FW... 1/4/2012

omment		Response
Davis, Cecile	0119_Michelle.Holland_Ind	436 Comment noted; no action required.
Address: 8716 E City: Anchorage State: AK Zip: 99507 Contact Phone: Comments: After considered, Altr	#hollandroofingco.com	

omment		Response	
Davis, Cecile	0120_Mark.Symonds_Ind	437 Comment noted; no action required.	
Sent: To: Cc: Subject:	Thursday, December 29, 2011 7:40 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
	@sencoak.com ugh email: Yes dowling rd 1-907-561-2175		
Davis, Cecile	0121_Christina.Hollibone_Ind	438 The Corps will consider multiple factors, such as impacts to the environment identified during the NEPA process, the project purpose, practicability (as pa	
Sent: To: Cc: Subject:	Saturday, December 24, 2011 1:40 PM comments@pointhomsonprojecteis.com extraski@gmail.com Online form submission	of the 404[b][1] Guidelines analysis), public interest determination, and mitigation options, when making its final permit decision.	
supplies from Pr available in thi winter this is r	ec@gmail.com ugh email: Yes 84261		
Davis, Cecile	0122_Judy.McClean_Ind	439 Comment noted; no action required.	
Sent: To: Cc: Subject:	Friday, December 23, 2011 10:08 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
B. This project	<u>rmail.com</u> Igh email: Yes Kenzie Drive		

nment			Response
Davis, Cecile		0123_Jodi.Dingle_Ind	440 Comment noted; no action required.
Sent: To: Cc: Subject:	Wednesday, January 04, 2012 9:14 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
	<u>gle@ch2m.com</u> 241863	statement of Support for Alternative B 440 December in Anchorage at Loussac	

nment		Response	
		441 Comment noted; no action required.	
		442 Comment noted; no action required.	
Davis, Cecile	0124_Elke.Joos_Ind	•	
Sent: To: Cc: Subject:	Wednesday, January 04, 2012 9:00 AM comments@pointthomsonprojecteis.com extraskl@gmail.com Online form submission		
Name: Elke Joos Email: ejoos@cona Contact me throug Address: 2327 E 8 City: Anchorage State: AK Zip: 99507 Contact Phone: 96	th email: Yes 6th Court 7-830-0823 Statement of Support for Alternative B 441		
Comments: I am a I support of plan	39 year resident of Alaska, born in Palmer Alaska, and		
significantly boo improve the econo the Lower 48, red	Statement of Support for Project 442 levelopment of potentially immense oil and gas deposits in the Arctic would st Alaska's economy, extend the life of the trans-Alaska oil pipeline, mic viability of the proposed natural gas pipeline from the North Slope to luce America's reliance on foreign energy, create tens of thousands of new hundreds of billions of dollars in federal, state, and local government		
average of 54,700 Alaska OCS, with billion in new pa	we study by Northern Economics and the University of Alaska, an annual new jobs would be created and sustained through the year 2057 from the 68,600 during production and 91,500 at peak employment. A total of \$145 yroll would be paid to employees through the year 2057, including \$63 eees in Alaska and \$82 billion to employees in the rest of the U.S.		
averages \$65 a ba of Alaska, \$4 bil	sillion in government revenue would be generated through the year 2057 if oil arrel, with \$167 billion to the Federal government, \$15 billion to the State lion to local Alaska governments, and \$6.5 billion to other state arranged the state arranged to the state are state ar		
plans in the ever	ndustry has invested significant resources to develop comprehensive response it of an oil spill. In Alaska, Shell currently maintains a highly specialized ized containment equipment, as well as a large workforce of highly trained		
conditions in the Alaska. Even so,	re far more technically complex than the shallow-water, low-pressure Beaufort and Chukchi Seas. This provides a greater margin of safety in robust well control and oil spill prevention systems have been enhanced with we Deepwater Horizon tragedy.		
	1		

mment	Response
There has never been a blowout in the Alaska OCS or the Canadian Arctic. Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology. The North Slope and the offshore are now perhaps the most studied energy basins in America. The federal government has spent more than \$300 million on studies in Alaska and in the past decade the agency has funded over 250 studies here, with the majority of those focused on the Beaufort and Chukchi Seas. Access to Alaska's OCS resources may be a key element in the economic feasibility of the proposed natural gas pipeline from the North Slope to the Lower 48, one of President Obama's top energy priorities. Additional gas reserves beyond those already discovered are needed to make the project economic.	
Davis, Cecile Sent: Wednesday, January 04, 2012 8:47 AM To: comments@pointhOmsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission Name: Scott A. Marler Email: scott.marler@evergreenak.com Contact me through email: Yes Address: 1936 Merrill Field Drive City: Anchorage State: AK Zip: 99501 Contact Phone: 907-257-1525 Add me to mailing list: Yes Comments:	443 Comment noted; no action required.

mment		Response	
Davis, Cecile	0126_Shell.Schwenn_Ind	444 Comment noted; no action required.	
Sent: Tuesday, January 03, 2012 3: To: comments@pointthomsonproi Cc: extraski@gmail.com Subject: Online form submission	11 PM cteis.com		
Name: Shell Schwenn Email: cosmonulln@pmail.com Address: 8244 Seacliff City: Anchorage State: AK Zip: 99502 Contact Phone: Comments: Please chose Alternative B as it a for development of Pt Thomson.	Statement of Support for Alternative B 444 opears the most environmentally sensitive option		
Davis, Cecile	0127_John.Ellsworth_Ind	445 Comment noted; no action required.	
Sent: Tuesday, January 03, 2012 2: To: comments@pointthomsonproi Cc: extraski@gmail.com Subject: Online form submission			
Name: John Ellsworth Email: john.ellsworth@alaska.com Address: PO Box 224889 City: Anchorage State: AK Zip: 99522 Contact Phone: Comments: • Alternative B ensures a minimal combination of summer coastal barging, winter features are essential to the project's safe	ice roads, aviation, and in-field roads. These		
minimize impact on tundra, wildlife, aquaticExxonMobil works closely with the U.S.	Fish and Wildlife Service and state agencies to ly protected. Coastal barge route is outside the		
The in-field roads included in Alternat gravel footprint and for the efficient pass to	ive B have been carefully routed to minimize the hrough of water.		
 The longer runway in Alternative B pro number of flights by allowing larger aircraft aircraft to transport larger equipment capabi 			

nment		Response	
Davis, Cecile Sent: Tuesday, January 03, 2012 2:28 Pl To: comments@pointhomsonprojectei Cc: extraski@gmail.com Online form submission Name: Mike Murphy Email: mike@eaglesafety.net Contact me through email: Yes Address: 5849 0ld Seward Hwy. City: Anchorage State: AK Zip: 99518 Contact Phone: 907-677-6513 Add me to mailing list: Yes Comments: After close review of all of the proposa sebeing in support of EIS Draft Alternative B. definitely the best choice.	Statement of Support for Alternative B 446 sed alternatives I would like to go on record	446 Comment noted; no action required.	
Davis, Cecile Sent: Tuesday, January 03, 2012 1:05 Pl To: comments@pointthomsonprojectei Cc: extraski@gmail.com Subject: Online form submission	0129_Lucas,Olive_Ind M s.com	447 Comment noted; no action required.	
Name: Lucas Olive Email: <u>lucaso@nanuq-afc.com</u> Address: P.O.Box 224889 City: Anchorage State: AK Zip: 99522 Contact Phone: Comments: I support alternative B to help continu	Statement of Support for Alternative B 447 set to develop our States natural resources.		
Davis, Cecile Sent: Tuesday, January 03, 2012 12:05 f To: comments@pointthomsonprojectei Cc: extraskl@gmail.com Online form submission	0130_David.Chaput_Ind PM s.com	448 Comment noted; no action required.	
Name: David Chaput Email: dave.chaput@alaska.com Address: 6250 S. Airpark Place City: Anchorage State: AK Zip: 99502 Contact Phone: 907-562-5303 Add me to mailing list: Yes Comments: I am in support of the Point Thomson De alternative because it provides the safest and me developing these reserves.			

Comment

Davis, Cecile

0131 Linda, Brown Ind

Sent: Monday, January 02, 2012 11:05 AM
To: comments@pointthomsonprojecteis.com

Cc: extraski@gmail.com
Subject: Online form submission

Name: Lou (Linda) S. Brown Email: jonmiller@acsalaska.net Contact me through email: Yes Address: 2630 Home Run City: Fairbanks State: AK

State: AK Zip: 99709

Contact Phone: 907 479-5629

Comments: Hank Baij, Project Manager

U.S. Army Corps of Engineers

AK District, Regulatory Division

P.O. Box 6898

JBER, Alaska 99506-0898

January 3, 2012

Thank you for the opportunity to comment on the Point Thomson Project EIS. I also appreciate the extension of the comment period.

I attended one of the public meetings on the Draft EIS on December 7 in Fairbanks and had the opportunity to become somewhat familiar with the scope of the project. Based on that meeting, I would like to make the following comments:

• In my view, the east pad of the project will be located too close to the Staines River thannel of the Canning River. The Staines is only about two miles from the Canning which, as you know, is the western boundary of the Arctic National Wildlife Refuge. Images contained on the website show caribou in quite high concentrations on the Canning Delta and I believe development so close to the river will disturb their migrations and, therefore, have a negative impact on the purposes for which the Refuge was created. Given the directional drilling capabilities the proposed project will have, I believe that this easternmost pad could be and should be eliminated. Pursuing this option would reduce impacts on wildlife while still meeting the project's purpose and need.

• Secondly, I think that the pads as currently described, are too close to the shore and I am concerned that activity so close to the water will disturb both birds and mammals. Moreover, it seems likely that encounters between people and animals such as polar bears could end in poor outcomes for one or both. Indeed, Appendix M of the EIS shows that at least eight confirmed bear dens are found in the Point Thomson area and that a significant amount of bear denning habitat also surrounds and penetrates the proposed development site. To some extent, encounters with bears and other negative impacts on birds and animals could be reduced by moving the pads back from the shore.

Response

- 449 Through the NEPA process, the public interest review, and the 404(b)(1) Guidelines analysis, the Corps will take many factors into consideration, including minimizing impacts, before making a final decision. The Corps is not looking at an alternative that eliminates the East Pad. This alternative (Concept 6) was eliminated from detailed consideration for not meeting the purpose and need of the project. The language in Section 2.2.4.2 has been supplemented to make this decision clearer. Without the ability to drill wells from the vicinity of the proposed East Pad, the Applicant would not be able to access eastern resources that have already been identified in approximately one-third of the Thomson Sand Reservoir. A well from the Central Pad would have to reach more than 30,000 feet, which is technologically infeasible. The State of Alaska independently verified that a 13,000-foot horizontal distance is the present limit of extended-reach drilling. Reduced access to the eastern portion of the reservoir would limit the Applicant's ability to continue evaluation and delineation activities, including fully delineating the eastern edge of the reservoir, testing connectivity with the central portion of the reservoir, and fully evaluating the Thomson Sand oil rim and Brookian Group sandstones hydrocarbons.
- 450 Inland and coastal pad locations each have trade-offs and environmental impacts. The Corps will consider multiple factors, such as impacts to the environment (e.g., to birds and mammals) identified during the NEPA process, the project purpose, practicability (as part of the 404[b][1] Guidelines analysis), public interest determination, and mitigation options, when making its final permit decision.

mment	Response
	451 North Slope operating procedures set the minimum thicknesses for gravel pads, the Corps does not have jurisdiction over that aspect of the project.
Alternatives Development	
• Melting permafrost due to global climate change could increase erosion which, in turn could have significant deleterious impacts on the pad foundations. Shifting of the pads could result in spillage of oil or other chemicals and fluids used in the exploration and development of the fields. I urge the Army Corps to require additional protections in the form of, for example, thicker foundation pads and containment structures to guard against such eventualities. As the Corps is no doubt aware, the question is not if a spill will occur, but when. It is within the Corps power to ensure such accidents are minimized in both number and scale.	
Thank you for considering my thoughts on this matter.	
Sincerely,	
Lou (Linda) S. Brown	
2630 Home Run	
Fairbanks, AK 99709	
Davis, Cecile 0132 Brett.Ard_Ind	452 Comment noted; no action required.
Sent: Friday, December 30, 2011 7:50 AM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission	
Name: Brett Ard Email: pennywise 65@hotmail.com Contact me through email: Yes Address: 16510 Centerfield Drive #D7 City: Eagle River State: AK Zip: 99577 Contact Phone: Statement of Support for Alternative B 452	
Comments: After reviewing the provided information, I feel that "Alternative B" is the most efficient course of action to progress the development of resources on the North Slope of Alaska. By developing Pt Thomson, we can ensure that more jobs are created for Alaskans and our state economy gets a much needed boost.	

453 Comment noted; no action required.

Comment	Response
	92 Comment noted; no action required.
0134_Aves.Thompson_APM_Bus	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS COMMENTS 2.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Good evening. My name is Aves Thompson. 1 I'm the Executive Director of the Alaska Trucking 2A Association. The Alaska Trucking Association is a 23 52-year-old Alaska trade association, comprised of 24 nearly 200 member companies, representing diverse 25 trucking operations in Alaska. In 2010, trucking in Alaska employed over 14,500 persons and paid annual 2 wages of more than \$720,000. 3 I'm here today to talk about the Point 4 Thomson Project and the Draft EIS. Of the several 5 design alternatives for Point Thomson, for the Point 6 Thomson project, Alternative B provides the best 7 approach to developing Point Thomson. 8 Alternative B provides for summer coastal 9 barging, winter ice roads, landing strips and 10 in-field roads, all of which are environmentally 11 sound methods of transportation. 12 Approval of the Point Thomson Project, as 13 proposed in Alternative B, is vital to provide direct 14 benefits to the state of Alaska in the form of jobs 15 for Alaskans, throughput for the Trans Alaska oil 16 pipeline, new revenues for the state and local 17 governments, and increased business activity and 18 revenue for the private sector. 19 On behalf of the of Alaska Trucking 20 Association's nearly 200 members, I urge you to move 21 forward with Alternative B.	

Comment	Response
	95 Comment noted; no action required.
0136_Brad.Osborne_APM_Bus	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska BRAD OSBORNE: Thank you. Statement of Support for Alternative B 95 20 My name is Brad Osborne; I'm the President 21 of NANA Oilfield Services Company, or NOSI, and an 22 Inupiaq Eskimo. NOSI is a subsidiary of NANA 23 Development Corporation, which was formed following 24 the Alaska Native Claims Settlement Act four decades 25 ago. NANA is owned by 12,700 Inupiaq shareholders, whose roots are in Northwest Alaska. I take pride in 2 being a NANA shareholder and having the opportunity 3 to work for my Alaska Native corporation. 4 I'm here, on behalf of NOSI, to support 5 Alternative B of the Corps' Draft Environmental 6 Impact Statement. This option provides the smallest 7 project footprint and greatest environmental 8 protection. The combination of barging, ice roads 9 and aviation will allow safe, flexible operations on 10 a year-round basis. 11 Barging is part of life in the 90 percent 12 of Alaska that is off the road system. It is 13 normally the safest, most reliable, most 14 cost-effective way to deliver goods. Barge traffic 15 in Alternative B is outside the main travel path of 16 the bowhead whales. 17 NOSI has worked with ExxonMobil and the 18 other producers for years. We appreciate the efforts 19 they take to ensure polar bears, whales and other 20 wildlife are protected. We've been particularly 21 interested in the polar bear program at Point 22 Thomson, which includes wellsite bear monitors, 23 building exit bear cages and implementing the Polar 24 Bear and Wildlife Interaction Plan. It has been very 25 effective, and we know the company will continue that	

Comment	Response
vigilance when production begins. 2	Response

Comment	Response
	98 Comment noted; no action required.
0137_Bryan.Clemenz_APM_Ind	
POINT THOMSON PROJECT EIS COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska BRYAN CLEMENZ: Thank you. Statement of Support for Alternative 8 98 3 Hello, my name is Bryan Clemenz. I also 4 work at CH2M HILL. I spent a little time with some 5 folks, in one of our conference rooms earlier today, taking a look at all of the facts that are out there 2 and some of the information that's already been 3 presented. I think it's been a remarkable effort by 4 all parties supporting the EIS development: HDR, the 5 leading agency, Army Corps, and ExxonMobil, as well 6 as others, were conscientious, deliberate, thoughtful 7 and thorough in the development of the alternatives 8 being presented. 9 Phenomenal simulations, by the way. I 10 think that was great. 11 HANK BAIJ: Thank you. 12 BRYAN CLEMENZ: I'd like to be more 13 specific with my comments and say that after careful 14 review and consideration of all the alternatives, I 15 believe that Alternative B would provide the most 16 balanced approach to the development of the project. 17 I believe that that maximizes the full potential of 18 the project for all Alaskans and Americans, I think 19 it establishes safe and reliable operations, while 20 minimizing risks that could otherwise result in an 21 event impacting persons, environment or both, due 22 fact. And logistics are pretty significant with a 23 project like this, and some of those alternatives, 16 17 you kind of look a little bit deeper and underneath 25 the surface, you'll find that that may impose some additional risks. And I believe that also it 2 minimizes the impact to the environment, gravel	

Comment	Response
3 field, wetlands, given all the alternatives that are 4 out there. 5 I encourage that everybody here, whether 6 you're giving verbal testimony or written testimony, 7 to take a closer look at the facts, and as I said 8 earlier, try to get those facts in there. I think 9 there's a lot of information out there, so I 10 encourage everybody to do so. 11 Thank you.	Response

Comment	Response
	103 Comment noted; no action required.
0138_Carl.Portman_APM_NGO	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library — Wilda Marston Theatre Anchorage, Alaska CARL PORTMAN: Good evening. My name is 22 Carl Portman. I'm Department Director of the 23 Resource Development Council. 24 RDC is a statewide organization made up of 25 all resource sectors, including business associations, labor unions, Native corporations, 2 tourism providers, local government and individuals. 3 RDC's purpose is to encourage a strong diversified 4 sector in Alaska and extend the state's economic base 5 through the responsible development of our natural 6 resources. 7 RDC strongly supports the advancement of 8 the Point Thomson Project, which is essential to the 9 throughput of the Alaska gas pipeline project, a 10 major clean-energy priority through the Obama 11 Administration. 12 Point Thomson contains an important 13 component of gas volume to be moved by an Alaska gas 14 pipeline and accounts for approximately 25 percent of 15 the North Slope gas reserves. Development of Point 16 Thomson resources will help meet domestic energy 17 needs, reduce dependence on foreign sources and 18 increase throughput in TAPS, which is currently 19 operating at one-third capacity. 20 In addition, this multi-billion-dollar 21 project will help provide hundreds of new jobs, 22 additional tax revenues for local, state and federal 23 governments, and help boost the private-sector 24 economy in Alaska and in the Lower 48. 25 In fact, Point Thomson development and subsequent production will serve as a lasting	

Comment	Response
2 economic stimulus at virtually no cost to the federal 3 government. 4 RDC urges the Corps to adopt Alternative B 5 as the preferred alternative. Alternative B provides 6 the safest, most environmentally responsible option 7 for Point Thomson development. As we have heard this 8 evening, Alternative B clearly minimizes the impacts 9 and environmental footprint by utilizing coastal 10 barging, winter ice roads, aviation and in-field 11 gravel roads. 12 With regard to polar bears, this project 13 will not pose a threat to the survival of the 14 species. Polar bear denning habitat is plentiful, 15 widely distributed and undisturbed on the Beaufort 16 Sea Coastal Plain. It is highly unlikely that 17 denning habitat will become a limiting factor for 18 polar bears even when all foreseeable development 19 activity is taken into account. We certainly do not 20 see any significant impact from Point Thomson on 21 critical habitat for polar. 22 RDC appreciates the opportunity to express 23 its support for the Point Thomson Project and urges 24 the Corps to move forward with Alternative B. RDC 25 will submit more detailed comments on the various alternatives before next month's deadline. 2 Thank you.	Acceptable 1

Comment	Response
	105 Comment noted; no action required.
0139_Charisse.Millett_APM_IND	
POBLIT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Statement of Support for Alternative B 105 CHARISSE MILLETT: Is it better if I come 3 down? 4 Thank you for the opportunity to testify. 5 My name is Charisse Millett, for the 6 record, and I am an Alaska legislator; I represent 7 House District 30. I'm here representing myself. 8 I'm a lifelong Alaska, an Alaska Native. I 9 have three children and one grandchild. I'm 10 testifying tonight to ensure a bright, vibrant future 11 for them. Resource development in Alaska is what 12 will provide that. 13 A strong economy in Alaska is vital to 14 their future. Throughput is declining at a rate that 15 is depleting energy supplies to Alaskans and to the 16 U.S. Alaska's development of oil and gas could be 17 and will be a part of a secure energy supply for the 18 U.S. and for Alaska for years to come. That is why 1 19 support Point Thomson development and the prospects 20 of future production. 21 like the EIS to approve. Alternative B ensures 23 minimal environmental footprint by incorporating a 24 combination of summer coastal barging, winter ice 25 roads, aviation and in-field roads. These features are essential to the project's safe and efficient 20 operations. 3 Point Thomson Project will provide 4 wide-ranging benefits to Alaska in the form of new 5 businesses, opportunities, jobs and revenues. 6 Approval of the Point Thomson Project, as proposed in 7 Alternative B, is vital to the development of this 8 world-class resource in the North Slope and gas 20 commercialization.	

Comment Res	ponse
Tomment Direct benefits to the State of Alaska from Point Thomson include training for jobs for Alaskans, Reseased throughput for the Trans Alaska oil pipeline and increased business activity for the revenue of the private sector. If revenue of the private sector. Record of Decision. Thank you.	ponse

Comment	Response
	108 Comment noted; no action required.
0140_Dave.Cruz_APM_Bus	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska BAVE CRUZ: My name is Dave Cruz. I'm CEO 12 of Cruz Companies in Alaska. We are in resource 13 development in Alaska and the Lower 48. 14 I'm here in support of Alternative B: 15 Alaska needs this project, America needs this 16 project; B is for me. 17 Thank you.	

omment noted; no action required.

Comment	Response
	111 Comment noted; no action required.
0142_Eric.Dompeling_APM_Bus	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Submement of Support for Alternative B 111 ERIC DOMPELING: I think I'll just do it from here, if you don't mind. HANK BAJJ: Sure. THE WITNESS: Good evening. My name is Fric Dompeling. I am a manager for Solsten XP and represent that company here this evening. I'm also past president of the Alaska Support Industry Alliance. I'm here to support Alternative B proposal a sput forth by the ExxonMobil organization as the safest and most environmental-responsibility solution for developing Point Thomson's resources. This project, to take into consideration, minimizes the environmental footprint and also minimizes the impact on the tundra, the wildlife, the aquatic resources, as well as minimizes the impact subsistence activities. But just as importantly, by incorporating summer coastal barging and the use of winter ice roads, aviation, where necessary for safety reasons, and most efficient use of in-field roads, all these things contribute to safe and officient operations, which, at the end of the day, should be the point of environmental impact reviews. During the 40-plus years I've lived and worked in Alaska, I have witnessed a significant worked in Alaska, I have witnessed a significant the improvement in the ability of Alaskans to provide for their families. Since the discovery of Prudhoe Bay, in 1968, to the construction of the Trans Alaska Pipeline the projects like the Point Thomson development, many more Alaskans have been able to	

19 find good paying, year-round jobs. 20 Ladies and gentlemen, this project is 21 important to the State of Alaska and to Alaskans, 22 because the Point Thomson Project will provide new 23 business opportunities and jobs and revenue. 24 Approval of the Point Thomson Project, as proposed in 25 Alternative B, is vital to the development of this world-class resource and North Slope gas 2 commercialization.	Comment	Response
Ladies and gentlemen, this project is important to the State of Alaska and to Alaskans, because the Point Thomson Project will provide new business opportunities and jobs and revenue. Approval of the Point Thomson Project, as proposed in Alternative B, is vital to the development of this world-class resource and North Slope gas commercialization.		
Ladies and gentlemen, this project is important to the State of Alaska and to Alaskans, because the Point Thomson Project will provide new business opportunities and jobs and revenue. Approval of the Point Thomson Project, as proposed in Alternative B, is vital to the development of this world-class resource and North Slope gas commercialization.		
from A Point Thomson include training and jobs for Alaskans 5 att means increased throughput, for the Trans Alaska 7 Pipeline, and increased business activity and revenue 8 for the private sector. 9 And one more thing: Point Thomson is a 10 highly technical project, even by global standards, 11 and will associate a high cost to extract the 12 resource. Any unnecessary requirement, that provides 13 no incremental benefits but simply adds cost, should 14 be avoided in order to maintain a viable project. 15 The Point Thomson Project, 30 years in the 16 making, likely will provide jobs for Alaskans for the 17 next 30 years. 18 Balash's comments. I wish I had the ability to 20 reread what he said, because it certainly is 21 significant to the State of Alaska that we maintain 22 and we develop these lands. Thank you.	important to the State of Alaska and to Alaskans, because the Point Thomson Project will provide new business opportunities and jobs and revenue. Approval of the Point Thomson Project, as proposed in 25 Alternative B, is vital to the development of this world-class resource and North Slope gas 2 commercialization. Direct benefits to the State of Alaska from 4 Point Thomson include training and jobs for Alaskans 5 and new revenues for the state and to the boroughs. 6 It means increased throughput, for the Trans Alaska 7 Pipeline, and increased business activity and revenue 8 for the private sector. 9 And one more thing: Point Thomson is a 10 highly technical project, even by global standards, 11 and will associate a high cost to extract the 12 resource. Any unnecessary requirement, that provides 13 no incremental benefits but simply adds cost, should 14 be avoided in order to maintain a viable project. 15 The Point Thomson Project, 30 years in the 16 making, likely will provide jobs for Alaskans for the 17 next 30 years. 18 I'd also like to state I support Joe 19 Balash's comments. I wish I had the ability to 20 reread what he said, because it certainly is 21 significant to the State of Alaska that we maintain 22 and we develop these lands.	

Comment	Response
	114 Comment noted; no action required.
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Statement of Support for Alternative B 114 FLOYD DAMRON: Good evening, and thank you 6 for having me here. 7 I'd like to state my name for the record. 8 It's Floyd Damron. I've lived in Alaska for the past 9 46 years, and I know exactly what it's like to live 10 here prior to having our resource development on the 11 North Slope, and it's much better for me, my family 12 and all of us when the situation is resource 13 development on the Slope. 14 I would like to say I support Alternative	Response 114 Comment noted; no action required.
for the Point Thomson Project as the most environmentally responsible way to develop that resource. I'm an East High graduate, University of Alaska Fairbanks graduate; I did quite a bit of research, in the Prudhoe Bay and Deadhorse area, on water resources and water supply. I had the privilege recently of being the manager and leading a project to develop a temporary water supply for the Point Thomson Project, and I can tell you that every step of the way Exxon had an environmental component and was very concerned about each and every issue in the project so that the water resource would be developed most responsibly. I'm an engineer with CH2M HILL, but I'm speaking on behalf of myself tonight, and I believe that development of Alternative B will result in very good jobs for those of us in Alaska; for ourselves, ultimately for family members, our kids and others. Thank you very much for letting us have	

Comment	Response
	119 Comment noted; no action required.
0144_Gawain.Brumfield_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Statement of Support for Alternative B 119 GAWAIN BRUMFIELD: My name is Gawain 5 Brumfield. I arrived here in Alaska a week ago 6 this a year ago this week. After a year in 7 Alaska, I'd say this is my favorite place I've ever 8 lived. I spent the last 12 years living all over the 9 world, and I'd like to speak to that a little bit. 10 Can you hear me okay? 11 Being in the oil and gas industry, I mostly 12 lived in areas where oil and gas are under production 13 and development, and I can say there's no safer, more 14 environmentally friendly place in the world to 15 develop natural resources in 21st Century America. 16 For example, I have lived in places there 17 were refineries. Anything out of the bottom half of 18 the vacuum tower was considered economically 19 undesirable. It was used as unfiltered fuel oils or 20 mix in the roads, or simply dumped. And as long as 21 the United States is getting about 60 percent of 22 their oil from overseas and 20, 15 to 20 percent of 23 their natural gas, we're contributing to that 24 problem. That's why I very strongly support Option 8 for this project. And I agree with one of the gentleman who 2 spoke earlier. The other options just simply don't 3 make any sense: A much larger environmental 4 footprint; as well increased drilling distance 5 just adds unnecessary risk, as well. So I support Option B. 7 Thank you.	

Comment	Response
	121 Comment noted; no action required.
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska IVALU ERIC FOX: Thank you. Statement of Support for Alternative B 121 22 Good evening. Thank you for the chance to 23 present my views and the views of NANA Management 24 Services, or NMS, on the U.S. Army Corps of Engineers 25 Draft Environmental Impact Statement for ExxonMobil's Point Thomson natural gas condensate development 2 project. 3 I'm Ivalu Eric Fox, Vice President of 4 Operations for Camp Services at NMS, a NANA 5 Development Corporation subsidiary. NANA Development 6 Corporation, owned by 12,700 Inupiaq people who 8 originated in Northwest Alaska. I am proud to call 9 myself one of them. 10 I started working for NANA as a security 11 officer almost 20 years ago on the North Slope. My 12 entire professional career has been with NANA, and 1 13 take great pride in being an owner, a shareholder, 16 off my employer. 15 Production at Point Thomson will help my 16 company and Alaska. Approval of the Point Thomson 17 Project, as proposed by Alternative B, is critical to 18 developing this valuable resource and helping to 19 secure Alaska's energy future. 20 Of the design alternatives considered, 21 Alternative B provides the safest and best way 22 forward. The in-field roads included in	
Production at Point Thomson will help my company and Alaska. Approval of the Point Thomson Project, as proposed by Alternative B, is critical to developing this valuable resource and helping to secure Alaska's energy future. Of the design alternatives considered, Alternative B provides the safest and best way forward. The in-field roads included in	

Comment	Response
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Alternative C and D would increase the	
2 footprint and increase the difficulty in maintaining	
3 natural drainage patterns of the project	
area. They 4 would move project components inland and eliminate	
5 barging, which is an established and safe means of	
6 supply for North Slope communities, including	
Prudhoe 7 Bay. ExxonMobil has conducted safe barging	
8 operations in accordance with the Alaska Eskimo	
9 Whaling Commission Conflict Avoidance Agreement and 10 in direct consultation with local whaling	
11 communities.	
12 I have a personal and professional stake in	
13 this decision and in seeing Point Thomson	
developed.	
14 In simple terms, when there's oil and gas 15 development, several of NANA's companies can	
compete	
16 for this work. When that happens, NANA can help the	
17 Alaska economy grow with private sector jobs and	
move	
18 forward in our mission to provide opportunities and 19 employment to our shareholders, the majority of	
whom	
20 live in Northwest Alaska. 21 NMS sees the direct impact from the	
growth,	
22 or lack of growth, of the oil and gas industry in 23 Alaska. With about 2,400 employees, NMS is among	
the	
24 ten largest employers in the state of Alaska. 25 Between a third and a half of our revenues come	
from	
providing services to the oil and gas industry.	
A major part of our mission is to provide mployment and career advancement for NANA	
4 shareholders. I am an example of NMS's commitment	
in 5 this area. Camp Services, my division, is more	
than	
6 20 percent NANA shareholders and 90 percent Alaska 7 hire. Approving Alternative B will move production	
, nite. approving attendence b will move production	

Comment	Response
n at Daint Mhanna is a star allow to sundusting	
8 at Point Thomson in a step closer to production that 9 is good for Alaska, NANA and NMS. Thank	
9 is good for Alaska, NANA and NMS. Thank 10 you for this opportunity.	

Comment	Response
company has become in focusing on the environment and 2 focusing on protection of the environment. I think 3 there's no better company to do this project than 4 ExxonMobil. 5 In addition, I think it's imperative to 6 note that the amount of information that we know 7 about polar bears today is in large part thanks to 8 the oil industry. Were it not for the oil industry, 9 we wouldn't know and have the funding to do much of 10 the research that's been done on polar bears and 11 other mammals up on the North Slope. 12 Indeed, we've seen the polar bear 13 population triple since the sixties. I sure hope 14 that there will not be any restrictions put on this 15 project because of the polar bear population which 6 are thriving both in size and in number and in 17 distribution. 18 I hope that and I think one of the 19 positive impacts of this project, hopefully will 20 it will ultimately be to ANWR being opened. This is 21 also imperative to the one-million-barrel goal. And finally, I want to applaud the Obama 24 and finally coming to resolution, building a 25 bridge in NPR-A shouldn't have stopped the project for two years. I sure hope the Corps keeps that in 2 mind when they approve Alternative B in an 2 expeditious manner.	

Comment	Response
	123 Comment noted; no action required.
0147_Jim.Gilbert_APM_Bus	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska	
Anchorage, Alaska Statement of Support for Alternative B 123 It to testify on behalf of the Point Thomson Draft Environmental Impact Statement. My name is Jim Gilbert, and I'm President and testifying on behalf of my company, Udelhoven Colifield Systems Services. Our 800-plus employees provide technical expertise to the oil and gas industry in Alaska, the Sulf of Mexico, Tbilisi, Georgia, and Arakini, Turkey. First and foremost, we want a Point Thomson Froject; sooner, rather than later, and with the greatest long-term benefits for the State of Alaska, Alaskan workers, Alaskan businesses and all Alaskans. North Slope gas commercialization holds one of the keys to Alaska's future. Alternative B provides the safest, most environmentally responsible solution for developing Point Thomson's resources. Alternative B ensures a minimum a environmental footprint by incorporating a combination of summer coastal barging, winter ice roads, aviation, and in-field roads. These features are essential to the projects safe and efficient operations. The Point Thomson Project will provide wide-ranging benefits to Alaska in the form of new business opportunities, jobs and revenues.	

Comment	Response
	124 Comment noted; no action required.
0148_Joe.Balash_APM_SGOV	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska	
13 Balash, Deputy Commissioner of the Department of	Statement of Busport for Project 22

Comment		Response
19 oil and gas fields in North America. This area is 20 estimated to have well over 400 million barrels of 21 oil and gas condensates and over eight trillion cubic 22 feet of natural gas. Point Thomson's timely 23 development will provide enormous benefits to the 24 state and country and will lead to more jobs, Unfortunately, the Point Thomson DEIS is 2 another example of federal overreach on state lands. 3 The Draft Environmental Impact Statement includes 4 ANWR in its evaluation "due to its proximity to the 5 project" and assumes that activities occurring 6 outside Refuge boundaries could impact ANWR's 7 "wilderness values." Indeed, based on the Department 8 of Interior's input, the Draft EIS spends 9 considerable effort evaluating the potential impacts 10 of the Point Thomson Project on Refuge "value," 11 including wilderness, aesthetic, and national values, 12 which are subjective and difficult to quantify. 13 It is disconcerting that the Draft EIS 14 places so much emphasis on the proposed projects 15 proximity to ANWR and implies that the state should 16 manage its adjacent lands as if they were part of the 17 Refuge. We have serious issues with the 18 appropriateness of the Draft EIS assessing such 19 impacts when the project is located on state lands 20 designated for oil and gas development, and well 21 outside Refuge boundaries. Moreover, a huge portion 20 of ANWR already includes over eight million acres 23 that are designated as "wilderness," and ANWR also 24 encompasses vast ecosystems that are specifically 25 designed to protect fish, wildlife, and wilderness 25 significant revenue, and enhanced energy security. values. Therefore, there's no reason to extend 2 ANWR's reach beyond its boundaries. 6 Each 20 Faft EIS, 4 is a backdoor way to allow the Fish and Wildlife 5 Service to regulate oil and gas activities on state 6 lands. Thus, the state has requested that the	Arctic Refuge 125	impacts of an undertaking, whether those impacts occur on federal land or on land owned by others. The EIS makes clear that refuge management authority does not extend beyond refuge boundaries. However, impacts in several categories extend across the boundaries and into the Refuge, including noise and visual impacts. The lead federal agency is obligated to disclose the impacts.

Comment	Response
	126 Comment noted; no action required.
	127 Comment noted.
7 Draft EIS clarify that the Fish and Wildlife 8 Service's authority to manage the Refuge stops at the 9 ANWR boundary. 10 It should also be noted, that exploration 11 in the Thomson Sand Reservoir is not a new concept. 12 The first well was drilled in the Point Thomson area 13 in 1969. To date, 21 wells have been drilled on and 14 offshore in the general Point Thomson area, and 15 several gravel structures from these early 16 exploration activities remain. While the North 18 slope 17 has historically produced a substantial share of 18 hydrocarbons to the state's and nation's energy 19 production, the currently proposed production at 20 Point Thomson is greatly needed. The significant 21 portion of the Thomson Sand Reservoir is offshore, 22 but the majority of the project, project facilities, 23 would be on land. 24 In closing, we want to recognize the hard 25 work that has gone that has been accomplished during this EIS process. We commend the 2 Army Corps of Engineers and other participating 3 agencies for the successful issuance of the 4 Draft EIS. The Point Thomson EIS process for the 5 currently proposed project began in late 2009. The 6 estimated date for issuing the Record of Decision has 7 slipped, by one year, from the original schedule. 8 Because construction on the North Slope is typically 9 limited to the winter season, this schedule slip has 10 unfortunately resulted in a two-year delay in project 11 start-up and production date. As a cooperating 12 agency on the EIS, the State of Alaska has 13 highlighted the importance of establishing and 14 maintaining a reasonable and firm time frame for 15 completion. Given these delays, the state remains	127 Comment noted.

Comment	Response
17 collaborative working relationship among	
18 agencies throughout the remainder of the process as 19 well as throughout the potential permitting of this 20 project. We look forward to continue working 21 together with these federal agencies to see continued 22 success in completing the EIS phase for the Point 23 Thomson Project. 24 Thank you.	
Li Lium you.	

Response
128 Comment noted; no action required.

Comment	Response
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22 from Endicott to Point Thomson. A road will only 23 grow costs, take more time and significantly increase 24 impact to the tundra. However, not having a road	
25 makes the combination of barging, ice roads and air access and in-field gravel roads essential. 2	
6 significant barriers to emergency response and adds 7 to operational inefficiencies. There is no North 8 Slope precedence for a production facility with such 9 dangerous limitations.	
I am proud of the work we do at NANA. I We have a good record of providing employment and opportunities for Alaskans. We see Point Thomson as 13 a way to continue that.	
NANA has a long history of serving the oil 15 patch in Alaska. We started working on the North 16 Slope not long after the passage of the Alaska Native	
17 Claims Settlement Act. NANA Oilfield Services has 18 been in business providing services to the oil 19 industry for about four decades, and NANA Management 20 Services, or NMS, has been serving the industry for	
21 over 30 years. And more recently, companies like 22 NANA WorleyParsons have designed and engineered new 23 North Slope facilities, and NANA Construction is 24 building modules for use in Alaska's oil fields. 25 We have recently purchased the Gulf Coast-based Grand Isle Shipyard, or GIS. This is a 2 significant, strategic investment for NANA that	
3 highlights our belief in the future of the petroleum 4 industry in Alaska. 5 NANA wants to help Alaska, particularly 6 rural Alaska, see, safe, the benefits, efficient 7 development and production in the oil patch. We	
see 8 developing Point Thomson as a part of our future and	

Comment]	Response
9 a way to help create more 10 for our shareholders and 11 Northwest Alaska. 12 Please approve 13 Corps of Engineers' Draft 14 Statement on ExxonMobil's 15 condensate development pr 16 Thank you for y 17 listening.	employment opportunities Alaskans living in the	Response

Comment	Response
	129 Comment noted; no action required.
0150_John.Shively_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, AlaskaStatement of Support for Alternative 8 129 JOHN SHIVELY: Thank you very much. For 7 the record, my name is John Shively. I'm here to 8 support Alternative B of the Draft EIS. I'm a former 9 commissioner in the Department of Natural Resources. 10 I served in the late '90s. 11 I certainly would like to associate myself 12 with the comments of Joe Balash. Back in the '90s, 13 we were anxious to see if Point Thomson if Point 14 Thomson could get going. We had a number of 15 discussions with Exxon, so we're pleased to see the 16 progress that has been made, even if the Draft EIS 17 process has slowed that down some. It's certainly a 18 project that is good for Alaska. It's on state 19 lands. 20 And there are a couple things that Joe said 21 that really struck home with me. One was the delay 22 in the process. We seem, in this country, to be able 23 to delay almost any project, I think, in the process, 24 and that's maybe one of the reasons why our national 25 economy is in such bad shape. Also, it concerns me that people could sit 2 and interpret something that's in the EIS, and that 3 the Fish and Wildliffe Service plan to expand its 4 authority beyond the boundaries congress set for it. 5 And lastly I just would like to remind 6 people that the high energy prices, that are driven 7 by the fact that we don't develop our own resources, 8 have an impact on the very poorest Americans, 9 including Alaskans, and in the case of Alaskans, it's	

Comment		Response
10 11 12 13 14 15	primarily people in rural Alaska who are paying the very highest energy prices in the country. Although this project may not resolve all those problems, getting this project developed and having the potential to get gas off the North Slope for use in our state would be a positive step forward. Thank you very much.	Response
17	Thank you very much.	

Comment	Response
	130 Comment noted; no action required.
0151_John.Sturgeon_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska JOHN STURGEON: Thank you. Satement of Support for Alternative B 130 21 My name is John Sturgeon. Good evening. 22 I'm a 41-year resident of Alaska. I have worked in 23 the Alaska forest products industry during that 24 entire time. I have two grown children and three 25 grandchildren that live in Alaska. I want a future for Alaska that will have an economy that will 2 provide the same great opportunities I had during 3 those same 42 years. 4 Alaska and America need the resources that 5 Point Thomson field contains. I support Alternative 6 B, because it is the safest, most environmentally 7 responsible solution for developing the Point Thomson 8 area. 9 Thank you for the opportunity to speak 10 tonight.	

Comment	Response
	133 Comment noted; no action required.
0152_Kate.Williams_APM_NGO	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, AlaskaStatement of Support for Alternative 8 133 KATE WILLIAMS: My name is Kate Williams, 14 and I'm the Regulatory Affairs Representative for the 15 Alaska Oil and Gas Association. We appreciate the 16 opportunity to provide testimony tonight on the 17 Draft EIS for the Point Thomson Project. 18 ACGA strongly supports Alternative B, the 19 proposed project. The proposed project is the 20 safest, most environmentally sound and economic 21 option of the action alternatives and should be 22 selected as the preferred alternative in the Final 23 EIS. 24 Alternatives C, D and E all prohibit or 25 require project components which are more harmful to the environment than the proposed project. For 2 example, Alternative C and D prohibit barging, which 3 would necessitate a substantial increase in truck 4 traffic. Instead of barging, Alternative C proposes 5 a 44-mile gravel road from Point Thomson to the 6 Prudhoe Bay road system. This would require an 7 additional 336 acres of gravel and five mines, and 8 create a much large tundra footprint. On the 9 contrary, barging has long been established as a safe 10 means of delivering supplies to coastal communities 11 throughout the state. To date, approximately 188 12 barge trips have taken place in support of the Point 13 Thomson Project with no adverse impacts to marine 14 mammals or subsistence use. Should the project move 15 forward, barging operation would continue to be 16 conducted in accordance with the Alaska Eskimo 17 Whaling Comminssion Conflict Avoidance Agreement and 18 in direct consultation with local whaling 19 communities. 20 Alternative E would eliminate in-field 21 gravel roads and shorten the project's proposed	

Comment	Response
22 airstrip by almost 2,000 feet, instead relying solely 23 on helicopters and seasonally-limited off-road 24 vehicles for transportation. This would create 25 unnecessary safety risks as well as emergency response limitations and operational inefficiencies. 2 Compared to Alternative B, the shorter airstrip would 3 triple fixed-wing air traffic during construction and 4 increase air traffic by 40 percent during operations. 5 The in-field roads associated with the proposed 6 project have been routed to minimize the gravel 7 footprint and maintain natural drainage patterns; no 8 new streams would be created, nor would existing 9 streams be eliminated, and bridges would be 10 constructed to ensure anadromous fish passage. In 11 comparison, moving roads inland, as proposed in 12 Alternatives C and D, would increase the project's 13 gravel footprint by 30 percent and have greater 14 impacts on drainage patterns and fish passage. 15 Point Thomson represents approximately 25 16 percent of known North Slope gas resources, holding 17 an estimated eight trillion cubic feet of gas and 200 18 million barrels of gas condensate. Since 2008 alone, 19 ExxonMobil has contracted with 170 Alaska-based 20 firms, investing almost \$700 million in Alaska 21 businesses and employment opportunities. Should the	
22 proposed project move forward, revenues will flow - 23 revenues will flow throughout the state. The Point 24 Thomson resources are also a vital component of any 25 effort to commercialize Alaska's gas. Given the proposed project's minimal impacts to the tundra, 2 wildlife, aquatic resources, and subsistence 3 activities, and the benefits the project would 4 provide the State and Alaskans, AOGA urges the Corps 5 to select Alternative B in the Final EIS. 6 Thank you.	

Comment Response 134 Comment noted; no action required. 135 Roads oriented parallel to the flow of water would not need to "pass the water" 0153 Kenton.Braun APM Ind as they would not restrict the flow of water. Portions of the infield gravel roads for Alternatives C and D would be oriented largely perpendicular to flow and POINT THOMSON PROJECT EIS some portions would be oriented largely parallel to flow. Where the roads are PUBLIC MEETING COMMENTS not parallel to flow, culverts would be used to allow the water to pass through. December 5, 2011 The number and placement of the culverts would be optimized to prevent or Z.J. Loussac Public Library - Wilda Marston Theatre minimize ponding, similar to Alternative B. Anchorage, Alaska KENTON BRAUN: Thanks. For the record, I'm Kenton Braun, Vice 14 President of PND Engineers. I'm here representing myself tonight. I'm an engineer, licensed engineer, with 16 18 17 years of experience working on the North Slope of 18 Alaska, so I'm very familiar with the design and 19 inputs that go into these type of facilities. 20 I'd first acknowledge ExxonMobil has been 21 great partner, in working with the State of Alaska and all the engineers in Alaska, to make sure that they have a responsible development out there. 24 They've gone to great measures to incorporate the 25 lessons learned from previous projects and moving forward with a responsible, safe and environmentally conscious proposal. I strongly support Alternative B, and I wish to discuss the civil engineering aspects, primarily. The hydrology aspects of Alternative B have been very thought out through the analysis and the proposal that ExxonMobil has come up with. ExxonMobil has proposed wider bridges, than have 10 normally been proposed on previous projects on the 11 Slope, that will pass water much more efficiently, 12 and, as well -- and, also, allow more fish passage, 13 greater fish passage. Other options in the EIS, like C and D, 15 also underestimate the effects of the hydrology on those alternatives. For instance, the alignment of 17 the roads parallel with the primary drainage, which 18 is to the north, will not effectively pass the water. 19 There will be water flowing along the road instead of through the culverts. When you orient it

Comment	Response
	136 Comment noted; no action required.
24 Alternative B, represents the minimal footprint,	

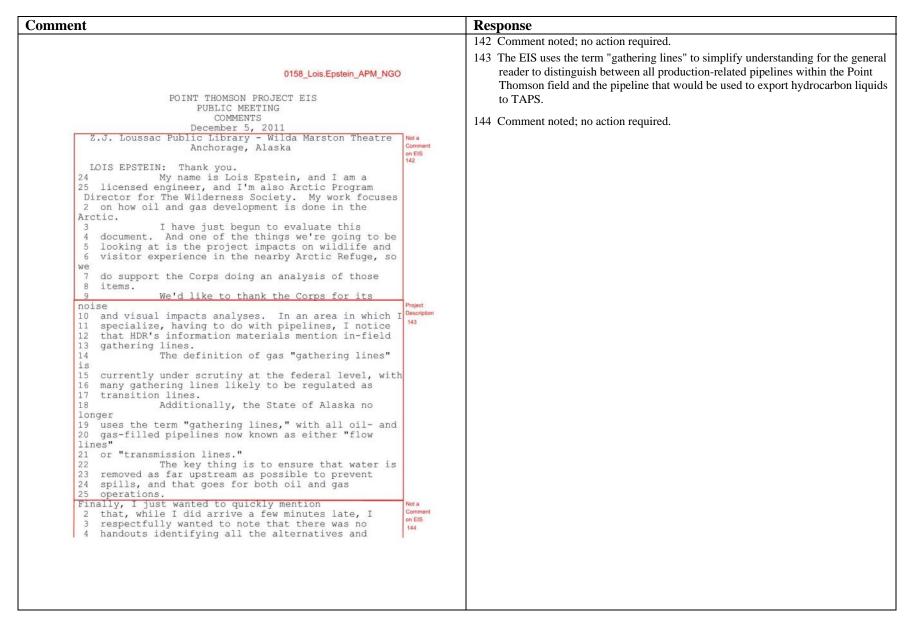
Comment	Response
	138 Comment noted; no action required.
0154_Keith.Silver_APM_Bus	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska	
KEITH SILVER: Good evening. Statement of Support for Alternative B 138 My name is Keith Silver. I'm a sole for proprietor, owner of the Silver Agency and Allstate Agency, and I have no direct ties to ExxonMobil or any of the other contractors. However, I am in favor of Alternative B and the comments made by Deputy Commissioner Balash. In a deference to the people following me, I'm going to give up the mic. HANK BAIJ: Thank you, Keith.	

Comment	Response
	139 Comment noted; no action required.
0155_Larry.Houle_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Statement of Support for Alternative B 139 LARRY HOULE: That's how it's pronounced,	
15 too. Thank you. 16 I thank HDR and the Corps for this 17 opportunity to comment. 18 My name is Larry Houle, and I am employed 19 by RIM Architects. We are a 25-year-old Alaskan 20 company with offices in Guam, Hawaii and California.	
21 We have about 90 employees. I would point out that 22 we don't have any clients in the oil industry, at 23 this time, but we do believe in projects like this, 24 and we think that the oil industry in Alaska 25 represents the best practices in responsible development. 2 A long-time Alaskan, I worked on the Alaska	
3 Pipeline; helped put me through college, and I 4 believe projects like Point Thomson will help future 5 generations through college, as well, and enhance 6 their skill sets. 7 I'd like to voice support for Alternative 8 B. We think it's the safest and most	
9 environmentally responsible access to Point Thomson. 10 The in-field road plan clearly minimizes the tundra 11 footprint. The longer runway provides the safest -	
12 a safer and more practical access for larger routine 13 cargo transportation. 14 I think, on a personal note, my sons and I, 15 over these last couple decades, have spent	
literally 16 weeks in the Brooks Range and on the Arctic Slope, so 17 we have an understanding and appreciation of the 18 delicate environment up there. We also think the	

Comment	Response
19 TAPS and Alaska North Slope development represents 20 probably the best practices in the world for 21 responsible development and environmental protection. 22 Therefore, we support Alternative B.	
0156_Leslie.Simmons_APM_Ind	140 Comment noted; no action required.
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska LESLIE SIMMONS: Yes, that's me. Statement of Support for Project 140 10 I'm Leslie F. Simmons. I'm currently a 11 University of Alaska Ph.D. student, and in the past, 12 I worked with the Point Thomson Project as both a 13 regulator and the regulated. 14 The Point Thomson Project does well, with 15 environmental safety and health projects and 16 compliance, and I support the Point Thomson Project 17 for development and moving forward. 18 Thank you.	

Comment	Response
	141 Comment noted; no action required.
0157_Lindsay.Williams_APM_SGOV	
PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska LINDSAY WILLIAMS: Good evening.Sustement of Support for Alternative B 141 11	

Comment	Response
coated pipeline surface allows it to bend with the environment. Most importantly, Alaskans will have opportunity for jobs and training. To date the project has accrued more than 3.5 million hours without a Lost Time Incident. This, along with accommodations for wildlife and land issues, represents a culture of safety for the environment and people. I support Option B for the Point Thomson development, as outlined in the Project Draft Environmental Impact Statement. Thank you.	



Comment	Response
5 describing those alternatives and that the contractor	
6 ran out of copies of Executive Summary, and that was	
7 a little unfortunate for those of us who are just 8 trying to get up to speed on this issue. 9 Thank you.	
9 Thank you.	

Comment	Response
	606 Comment noted; no action required.
0159_Lorali.Simon_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Statement of Support for Alternative B 606 THE WITNESS: Good evening. I'm Lorali 6 Simon, and I live in Palmer, Alaska. 7 I support Alternative B outlined in the 8 Point Thomson BIS. Alternative B provides the 9 safest, most environmentally responsible solution for 10 developing Point Thomson and ensures a minimal 11 environmental footprint by incorporating a 12 combination of summer coastal barging, winter ice 13 roads, aviation and in-field roads. 14 Through Alternative B, ExxonMobil will 15 implement comprehensive mitigation measures to 16 minimize impacts on tundra, wildlife, aquatic 17 resources and subsistence activities. Approval of 18 the Point Thomson Project, as proposed in Alternative 19 B, is vital to the development of this world-class 20 resource and North Slope natural gas 21 commercialization. 22 Direct benefits to the state of Alaska from 23 Point Thomson include training and jobs for Alaskans, 24 new revenues to the state and local governments, 25 increased throughput for the Trans Alaska oil pippeline and increased business activity and revenue 2 for the private sector. 3 Point Thomson is a highly technical project 4 with high costs. Unnecessary requirements that 5 provide very little, if any, incremental 6 environmental benefit should be avoided, so as not to 7 compromise the economic viability of this project. 8 Thank you.	

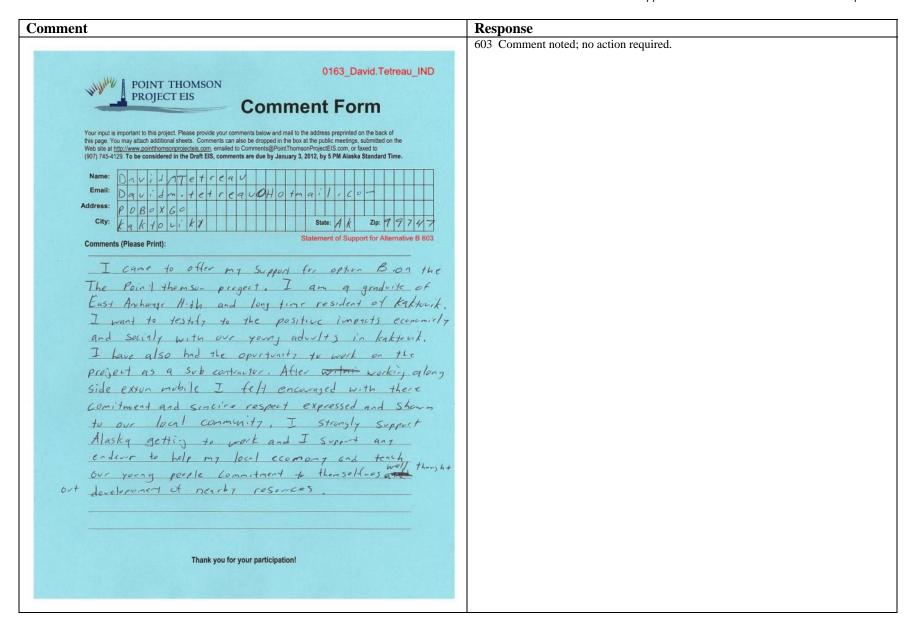
DOINT THOMSON PROJECT EIS PUBLIC MENTIN December 5, 2011 E.J. Loussac Public Library - Wilds Marston Theatre Anchorage, Alaska MAYNARD TUPP: Is it all right if I stay 4 seated? I'm with the governmental office of the 8 (Indiscentible), which is 9 (Reporter requested clarification.) TUPP, I's INTINESS: Wy name is Maynard Tupp. 11 the founding member of Hawk Consultants, LLC, which 12 was started in 1985. We're a small business that 13 provides human resources to the oil and gas industry, 15 Many of our people are classified as recycles or 16 retreads, having worked for the industry for years 18 companies. 19 I strongly support the development of Point Companies. 20 Alternative B. 21 Alternative B. 22 Alternative B. 23 in the world's and the United States' best interest 25 for the U.S. to have a stong sconcey, independent countries as opposed to in in located in 2 countries that may that agree with our agree 3 with our policies and positions of the world. It 4 in the State of Alask's best interest to have a 5 strong, trusted contributor, like ExxonMobil, Teeling 18 revenues, and adding needed oil to the Trans Alaska 8 Pipeline. Oil is the oil is the state's 1 ifeblood 9 and beefits everyone in the state, either directly 10 of indirectly.	Comment	Response
POINT THOMSON PROJECT EIS PUBLIC MERTIN COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilds Marston Theatre Anchorage, Alaska MAYNARD TUPP: Is it all right if I say a seated? MAYNARD TUPP: Is it all right if I say a seated? MAYNARD TUPP: My name is Maynard Tupp. I'm with the governmental office of the (Indiacental requested clarification.) THE WITNESS: My name is Maynard Tupp. I'm Tupp. I'm The provides human resources to the oil and gas industry, here in the state of Alaska, and throughout the U.S. U.S. Many of our people are classified as recycles or retreads, having worked for the industry for years The retreads, having worked for the industry for years The and sometimes for major oil and gas producing Scompanies. Thomson by ExxonMobil Corporation using their EIS Alternative B. Alternative B. Labsolutely believe the following: It's To rhe U.S. to have a strong economy, independent Countries as opposed to in in located in countries as opposed to the trenst to have a strong, trusted contributor, like ExxonMobil, tueling the state's economy in the form of jobs, tax revenues, and adding needed oil to the Trans Alaska Helplione and benefits everyone in the state's and benefits everyone in the state's		145 Comment noted; no action required.
15 Many of our people are classified as recycles or 16 retreads, having worked for the industry for years 17 and sometimes for major oil and gas producing 18 companies. 19 I strongly support the development of Point 20 Thomson by ExxonMobil Corporation using their EIS 21 Alternative B. 22 I absolutely believe the following: It's 23 in the world's and the United States' best interest 24 for the U.S. to have a strong economy, independent 25 from foreign oil and gas supplies within - in 2 countries as opposed to in in located in 2 countries that may that agree with our agree 3 with our policies and positions of the world. It is 4 in the State of Alaska's best interest to have a 5 strong, trusted contributor, like ExxonMobil, fueling 6 the state's economy in the form of jobs, tax 7 revenues, and adding needed oil to the Trans Alaska 8 Pipeline. Oil is the oil is the state's lifeblood 9 and benefits everyone in the state, either directly	POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Statement of Support for Alternative B 145 MAYNARD TUPP: Is it all right if I stay 4 seated? 6 MAYNARD TUPP: My name is Maynard Tupp. 7 I'm with the governmental office of the 8 (Indiscernible), which is 9 (Reporter requested clarification.) 10 THE WITNESS: My name is Maynard Tupp. I'm 11 the founding member of Hawk Consultants, LLC, which 12 was started in 1985. We're a small business that 13 provides human resources to the oil and gas industry, 14 here in the state of Alaska, and throughout the	*
	14 here in the state of Alaska, and throughout the U.S. 15 Many of our people are classified as recycles or retreads, having worked for the industry for years and sometimes for major oil and gas producing companies. 19 I strongly support the development of Point 20 Thomson by ExxonMobil Corporation using their EIS 21 Alternative B. 22 I absolutely believe the following: It's 23 in the world's and the United States' best interest 24 for the U.S. to have a strong economy, independent 25 from foreign oil and gas supplies within - in countries as opposed to in in located in 2 countries that may that agree with our agree 3 with our policies and positions of the world. It is 4 in the State of Alaska's best interest to have a 5 strong, trusted contributor, like ExxonMobil, fueling 6 the state's economy in the form of jobs, tax 7 revenues, and adding needed oil to the Trans Alaska 8 Pipeline. Oil is the oil is the state's lifeblood 9 and benefits everyone in the state, either directly	

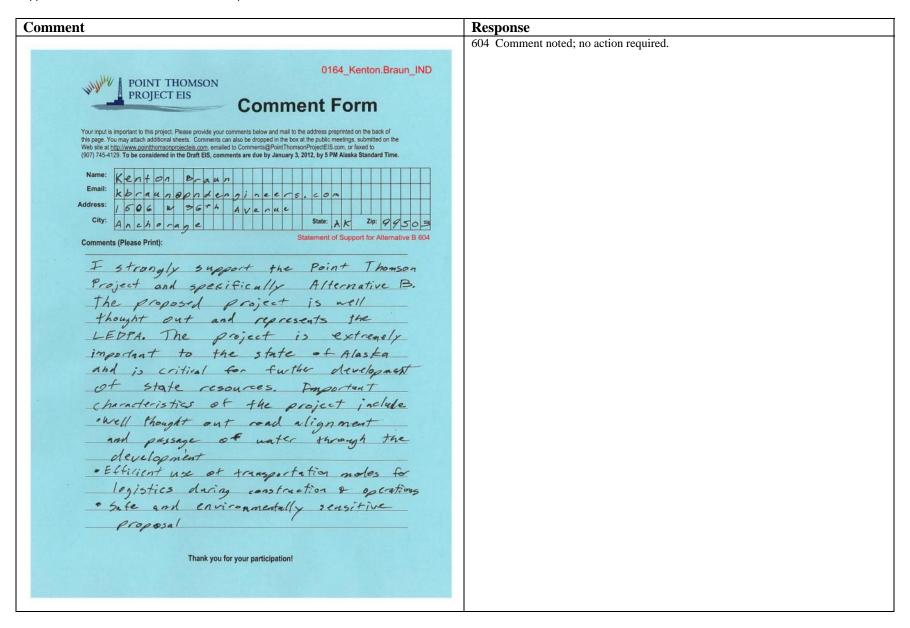
Comment	Response
11 It is time for the United States, Alaska	
12 and its citizens to make our country fuel energy	
13 independent, so that we must never need to deploy our	
14 most valuable human resources in protection of our	
15 economy and our way of life. 16 ExxonMobil has a long-standing	
17 philanthropic participation in Alaska, in a wide	
18 variety of community programs. One in particular is	
19 the ANSEP program at UAA. That's the Alaska Native	
20 Science and Engineering Program. This program has	
21 received special funding from ExxonMobil, supporting	
22 the education and development of Alaska Natives in	
23 the studies of engineering and science. Because of 24 ExxonMobil's leadership, other companies, like	
Hawk,	
25 similarly support this and other programs. We need to recognize that, over the past 50	
2 years, activity on the North Slope, Alaska,	
3 there's been minimal environmental damage relating to	
4 the oil and gas production. There's nothing in the	
5 oil on the North Slope of Alaska that will have 6 any long-term affect on the environment other than	
7 the increased animal populations, as exhibited with	
8 the increase in caribou population at Prudhoe Bay. 9 At most, we are borrowing time on the	
9 At most, we are borrowing time on the North	
10 Slope, and in this case, Point Thomson. We leave,	
11 after a few years, and it will be difficult or 12 impossible to even know we were there, except for	
13 maybe a few roads that the tourists and the	
14 scientists use for their purposes. 15 This could be a great legacy for future	
16 generations to use for study and enjoyment. For	
the 17 minimal time we borrow this location, we will help	
18 America and Western Civilization stop reasons for	
the	
19 war and benefit the economy and participants in 20 untold ways, positively affecting the citizens of	
21 Alaska and the United States.	
I strongly support EIS Alternative B. Thank you.	
904 Tableson # 1 art	

Comment	Response
	Attachment to Comment 0160_Maynard.Tupp_AMP_SGOV
My name is Maynard Tapp and I am the founding member of Hawk Consultants, LLC, which started in 1985. We are a small business that provides human resources to the oil and gas industry here in the state of Alaska and throughout the US. Many of our people can be classified as "recycled or retreads" having worked in the industry for years and some times for the major oil and gas producing companies.	Attachment not coded
I strongly support the development of Point Thompson by ExxonMobil corporation using their EIS Alternative B.	
I absolutely believe the following:-	
 It is in the world's and United States' best interest for the US to have a strong economy, independent of foreign oil and gas supplies located in countries that may not have interests that align with ours. 	
2. Is it in the State of Alaska's best interest to have a strong trusted contributor like ExxonMobil fueling the state's economy in the form of jobs, tax revenues, and adding needed oil to the Trans Alaska Pipeline System (TAPS). The oil is the states lifeblood that benefits everyone in the state, either directly or indirectly.	
3. It is time for the United States, Alaska, and all its citizens to make our country fuel energy independent, so that we must never need to deploy our most valuable "human resources" in protection of our economy and way of life.	
4. ExxonMobil has a long standing philanthropic participation in Alaska in a wide variety of community programs, one in particular, the ANSEP program at UAA. (Alaska Native Science and Engineering Program) This program receives special funding from ExxonMobil supporting the educational development of Alaska Natives in the studies of Engineering and Science. Because of ExxonMobil's leadership, other companies like Hawk similarly support this and other programs.	
5. We need to recognize that in the past 50 years of activity on the North Slope of Alaska, there has been minimal environmental damage relating to the oil and gas production.	
6. There is nothing on the North Slope of Alaska that will have any long-term effect on the environment other than an increase in the animal populations as exhibited by the increase in the Caribou population in the Prudhoe Bay area.	
 Ultimately, this project and projects like this on the North Slope will have minimal to no impact on 99% of the north slope. 	
8. At most we are borrowing time on the North Slope and in this case Point Thompson. When we leave, after a few years, it will be difficult if not impossible to even know we were there maybe a few roads that tourists and scientists may use for their purposes. This could be a great legacy for future generations to use for study and enjoyment.	
For the minimal time we loan/lease this location, we will help protect America and western civilization, stop reasons for war, and benefit the economy and its participants in untold ways, positively effecting the citizens of Alaska and the United States.	
In summary I strongly support the development of Point Thompson by ExxonMobil corporation using their EIS Alternative B.	
Thank-you for the opportunity to testify.	
Maynard Tapp 200 W 34 th Ave, #809 Anchorage, AK - 99503	

Comment	Response
	146 Comment noted; no action required.
0161_Mila.Umanskaya_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Statement of Support for Alternative 8146 My name is Mila Umanskaya, and I'm a 7 structural engineer for CH2M HILL, and I'm for 8 Alternative B. 9 And if we want to remain, our young 10 professionals, in the state, we really need to 11 develop our natural resources. 12 Thank you.	

Comment	Response
	147 Comment noted; no action required.
0162_Moriah.Miles_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Subtement of Support for Alternative B 147 Hello, my name is Moriah Miles, and I am 4 working on my master's over here at UAA. I was born 5 and raised in Alaska and have grown up in the life of 6 oil, gas and mining. It is my understanding that 7 currently production and 8 (Reporter requested clarification.) 9 THE WITNESS: Hi, my name is Moriah Miles, 10 and I'm working on my master's degree here at UAA. I 11 currently work for CH2M HILL in the recruiting 12 department, so I'm definitely trying to go out there 13 and hire a bunch of those Alaskans. Projects like 14 this could help. 15 I grew up born and raised in Hatcher 16 Pass, Alaska, grew up in a lifestyle of oil, gas and 17 mining. My peers have enjoyed that lifestyle with 18 me, as well, throughout the years. 19 It's my understanding that production is at 20 a decline on the Slope and that projects like this 21 could help. And it's also my understanding that to 22 keep that going we need to expedite these types of 23 processes, and as such, I support Alternative B. 24 Thank you very much for your time. I hope 25 I've added relevancy as being a voice for my peer	





Comment Response 605 Comment noted; no action required. 0165_Jeanine.St.John_BUS **LYNDEN** December 5, 2011 6400 South Arrigate Place, Suite #1 Anchorago, AK 90502 (907) 245-1544 Department of the Army U.S. Army Engineer District, Alaska Regulatory Division P.O. Box 6898 JBER, Alaska 99506-0898 Via email to harry.a.baij@usace.army.mil, Statement of Support for Alternative B 605 Comments on Point Thomson Project Draft Environmental Impact Statement (Draft EIS) Lynden is a multi-modal transportation and logistics company, with over 700 Alaska employees, a history of scheduled service to Alaska starting in 1954, and extensive activity throughout the state of Alaska, including support for all segments of the economy. Lynden has provided support services for the oil industry including significant logistics support for virtually every oil and gas project in Alaska. In addition to providing transportation and logistics services, one of our companies provides training to industry and government responders at our facility in Fairbanks. Our assessment is that Alternative B (coastal pads with in-field gravel roads) is the appropriate option for the Point Thomson Project. This project is important to the State of Alaska, and as a major transportation and logistics company operating in the State, we have been carefully reviewing the plans from a safety, environmental, and economic standpoint where logistics is an extremely critical component. We believe that the work done to date on the comprehensive logistics needs, including summer coastal barging, ice roads, aviation and in-field gravel roads is not only cost effective, but also essential to establishing the minimum environmental footprint, while ensuring the ability to develop this field. The strict requirements that will be placed on the subcontractors, such as ourselves, indicates the utmost concern for the environment and minimizes the impact on tundra and wildlife, including marine species. We have been working with Exxon and their other contractors, and believe that Alternative B is truly the most effective and appropriate option for this project. Other Key points for consideration and support of Alternative B: · Direct benefits to the State of Alaska from Point Thomson include training and jobs for Alaskans, new revenues to the state and local governments, increased throughput for the Trans-Alaska oil pipeline, and increased business activity and revenue for the private sector.

Point Tromson is a highly-dechnical groted with high costs. Unnecessary requisitements that growless very little, if any, incremental environmental benefits, should be avoided as to not compromise the economic vasility of the project. Noving roads inland as proposed in Alternative C and D sould increase the gravel foliportin and be less effective in markinary instruction of the project for the efficient part instruction of the project for the project instruction of the project for the efficient part instruction of the project for the efficient part in the project instruction of the project for the efficient part in the project for the efficient part in the efficient part

Comment	Response
	148 Comment noted; no action required.
0166_Peter.Maxie_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska PETER MAXIE: My name is Peter Maxie, I am 4 an employee of a 50-man fabrication shop in 5 Anchorage. Mostly, I want to continue working for a 6 living, so I'm in support of Exxon's continued 7 efforts on the Slope. 8 The company I work for doesn't work solely 9 for the oil company; they work for everyone, so that 10 we can stay in business. Any customer is an exciting 11 event for us, and so we're looking forward to them 12 working here. 13 I'm in favor of Alternative B. I don't 14 know if it's necessarily the most economic 15 alternative, but that doesn't seem to count in a lot 16 of these projects. I think the biggest thing is I'm 17 an Alaskan resident, and I'd like to see a little bit 18 more exploitation of our own resources. I believe 19 the first wells were drilled when I was still a 20 teenager, and I just turned 60, and I'd like to work 21 a little more here. 22 And I wanted to last long enough so that 23 this lady did the little peace sign. 24 Thanks for your time.	

Comment	Response
The project area, which is on state land as federal wilderess area, which is on state land as federal commitment made at statehood. The project As project area, which is on state land exceptable. Such treatent of the project of actual access and/or development. The project area, is completely a unacceptable of the project of actual access and/or development. Treatment of the project area, which is on state land as federal wilderness area, is completely a unacceptable. Such treatment of state land be expeditiously as possible, given the already delayed of project and to issue an FEIS with Alternative B as 8 the preferred proposal and get this project going. Thank you.	Kesponse

Comment	Response
	150 Comment noted; no action required.
0168_Reed. Christensen_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska REED CHRISTENSEN: Thank you. Statement of Support for Alternative B 150 24 My name is Reed Christensen and I'm here to severing; four of the Point Thomson Project. I have many reasons why I'm here before you this 2 evening; four of them are my very own children. I'm 3 concerned about their future in this state. 4 Oil production as well as throughput in the 5 Trans Alaska Pipeline are down. The pipeline is 6 two-thirds empty and getting worse. If we do not do 7 something now, the number of youth in the next 8 generation that will be able to stay in Alaska will 9 be done, as well. 10 I work for a manufacturing company here in 1 Anchorage. I would rather export value-added 2 products instead of exporting our youth. In order to do that, we need a vibrant and growing economy, not a shrinking economy bogged down by never-ending 1 litigation. 6 Alaska, as well as the nation, needs jobs 17 and energy. The development of Point Thomson can 8 successfully contribute to both. The Trans Alaska 19 Pipeline is facing significant technical challenges 20 due to the decline in throughput, combined with the 11 lower temperatures of the oil going through the 21 pipeline. Money from oil funds over 90 percent of 23 the State's entire budget. If the pipeline is shut 24 down, we will all be in serious trouble. That is why 25 Mark Hamilton makes the statement that if you live in Alaska then you are in the oil business. There are 2 not enough people or businesses in this state to be	
24 down, we will all be in serious trouble. That is why 25 Mark Hamilton makes the statement that if you live in Alaska then you are in the oil business. There are 2 not enough people or businesses in this state to be	

Comment	Response
continued from previous page	
a taxed to even come close to covering this gap. 4 Whether people like it or not, oil is the lifeblood of our state. 6 In addition to my support of the Point 7 Thomson Project as a whole, I would also like to 8 express my support of Alternative B within this 9 project. We need to keep this project moving forward 10 for the benefit of all Alaskans, as well as for the 11 benefit of the country, as we work to keep our state 12 a great place to live and our country less dependent 13 on oil coming from Third World countries, with little 14 to no regard for the environment. It is in best 15 interest of the environment to develop projects like 16 Point Thomson right in our own backyard where we can 17 see exactly what is going on and where we are putting 18 the investment back into our own economy. 19 Thank you.	

Comment	Response
	151 Comment noted; no action required.
0169_Sami.Glascott_APM_NGO	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska THE WITNESS: My name is Sami Glascott. 13 I'm with the Anchorage Chamber of Commerce. 14 Today, businessweek.com announced that it 15 ranked Anchorage tenth, as the best city in America; 16 tenth. Based on 16 criteria, we ranked tenth on the 17 number of restaurants, bars and museums per capita, 18 the number of colleges, libraries and professional 19 sports teams imagine that the income, powerty, 20 unemployment, crime and foreclosure rates, percent of 21 population with bachelor's degrees, public school 22 performance, park acres per 1,000 residents and air 23 quality. 24 Comparatively, we enjoy a very healthy, 25 high-quality way of life, but we must understand that 2 securing a pipeline of successful resource 3 development projects. 4 1,100 businesses that represent over 60,000 of 6 Anchorage's employees. We are the largest business 7 organization in the state and have been here since 8 1915. 9 Supporting continued development is 10 imperative to our economy and sustaining the quality 11 of life in Anchorage and Alaska. 12 We support Alternative B as the safest, 13 most environmentally responsible solution for 14 developing the Point Thomson resources in a timely, 15 cost-effective manner. 16 Thank you.	

Comment	Response
	152 Comment noted; no action required.
0170_Steve.Connelly_APM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Summent of Support for Alternative B 152 THE WITNESS: My name is Steve Connelly. 11 I've lived and worked in Alaska, wherever I could, to 2 support my family, for the past 30 years. 13 I agree with all the previous speakers who 14 spoke of the great economic potential for the Point 15 Thomson Project. But, unfortunately, I don't think 16 that carries any weight with the governmental process 17 that we go through here. Safety and the environment 18 should carry weight, and my brief remarks will be 19 regarding that. 20 I believe Alternative B provides the 21 safest, most environmentally responsible solution for 22 developing Point Thomson's resources. It provides 23 for summer coastal barging, winter ice roads, 24 adequate aviation facilities and in-field roads. 25 These features are essential to the project's safe and efficient operations. 2 Point Thomson is a technical project with 3 high costs. Unnecessary requirements that provide 4 very little, if any, incremental environmental 5 benefits should be avoided so as not to compromise 6 the economic viability of the project. 7 Thank you.	

Comment	Response
	153 Comment noted; no action required.
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska TOM HENDRIX: Thank you. Statement of Support for Alternative B 153 15 Good evening; for the record, my name is 16 Tom Hendrix. I'm the Vice President of Strategic 17 Business Development for Carlile Transportation 18 Systems, and I'm the current president of the Alaska 19 Support Industry Alliance. 20 I'm here tonight to encourage you to 21 approve Alternative B for the Draft EIS for the Point 22 Thomson Project. It is clear, from an objective 23 comparison of proposed alternatives, that Alternative 24 B provides the safest, most environmentally 25 responsible solution for development of this critical resource. 2 From acres of gravel used, to the number	
resource.	

Comment	Response
Continued from previous page	
21 Please approve the Draft EIS Alternative	
B: 22 It clearly it is clearly a win-win situation;	
with 23 stringent mitigation measures in place for polar	
24 bears and other marine mammals, with a keen focus	
25 protecting subsistence alternatives in the area, as well as increasing jobs and revenue for Alaskans in	
2 and the State of Alaska, this is clearly the best 3 path in moving forward.	
4 Thank you for your time.	

Comment	Response
	154 Comment noted; no action required.
0172_Tom.Maloney_APM_Bus	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 5, 2011 Z.J. Loussac Public Library - Wilda Marston Theatre Anchorage, Alaska Statement of Support for Alternative B 154 TOM MALONEY: Good evening. Can you hear 8 me okay? 9 Okay. Good acoustics. 10 My name is Tom Maloney. I'm a long-term 11 resident of Anchorage and Alaska Area Manager for 12 CH2M HILL. CH2M HILL is employee-owned and one of 13 the top private employers in the state of Alaska with 14 over 2,500 current employees. We serve customers in 15 the oil and gas, federal, state and local governments 16 and various other industries. Work scopes for oil 17 and gas customers include engineering and consulting, 18 construction, operations and maintenance and drilling 19 support services. 20 In our company's opinion, Alternative B 18 21 the best solution for Point Thomson. We are 22 confident this plan fully incorporates best practices 23 and lessons learned from well over 40 years of North 24 Slope Alaska Arctic experience. ExxonMobil has been 25 active participants on several multi-billion dollar projects on the North Slope. Many of these mega 2 projects were with other Point Thomson owners. These 3 projects include all of the huge gas handling 4 facilities at Prudhoe Bay, the largest oil field in 5 North American history. ExxonMobil has solicited 6 input from numerous contractors and resource owners 7 on drilling, facilities, pipeline, environmental, 8 stakeholder engagement and other project considerations. Several hundred million dollars of	

Comment	Response
	155 Comment noted; no action required.
0173_Zeb.Woodman_FPM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska ZEB WOODMAN: Hi, my name is Zeb Woodman. 12 I'm a lifelong resident of Fairbanks, Alaska. I'm a 13 17-year member of Local 942 here in Fairbanks. And 14 today I'm speaking in support of Alternative B. 15 This field, we all know, contains large 16 amounts of natural gas and oil, and approximately 25 17 percent of the North Slope's known natural gas. If 18 we develop it, we could we could possibly get that 19 natural gas into an in-state gas line. That would 20 create jobs that we desperately need, as well as the 21 in-state gas. 22 Alternative B provides the safest, 23 environmentally responsible solution for developing 24 Point Thomson's resources. It incorporates all the 25 different ways that we do construction on the North Slope. I've worked up there quite a bit. The 2 footprint that is needed nowadays has been 3 drastically reduced through the years. Long, 4 directional drills have not only become possible but 5 now are the norm. 6 Winter ice roads, a small airport, and 7 in-field roads, I don't think this is too much 8 footprint to ask for. And it would be these would 9 be essential to safe operations of the developing 10 field. 11 At this point, the approval of Point 12 Thomson project Alternative B is vital to the 13 development of our world-class resources and natural 14 gas on the North Slope. There would be direct 15 benefits to the state, including throughput jobs, 16 obviously money, and hopefully a local, in-state 17 gasline.	

Comment	Response
Comment Comment	Response

Comment		Response
	continued from the previous page	
19		
20 21	project forward and get this oil going and get it into the pipeline. And it will be great for	
22	project. So it is important that we push this project forward and get this oil going and get it into the pipeline. And it will be great for Fairbanks and the State of Alaska. Thank you.	
23	mank you.	

Comment	Response
	157 Comment noted; no action required.
0175_Tom.Bundtzen_FPM_Bus	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska TOM BUNDTZEN: Well, I'll make it short. I 2 heard an earlier presentation I'm with the Chamber 23 of Commerce, Natural Resource Committee, and I'm Tom 24 Bundtzen. I run a small geological firm, Pacific Rim 25 Geological Consulting here in Fairbanks. I've been in Alaska since 1959. I was just 2 a kid when I came up here, and I watched I watched 3 statehood come in as a little kid. And then I watched some uncertain times in the '60s. And then 5 we got lucky and found all that oil on the North 6 Slope. And believe me, without that discovery and 7 development, we would all be poor because it has done 8 so much to the citizens of Alaska. 9 It's really not what I do as a living. I'm 10 a metals geologist. But I have to reference the oil 11 companies that develop the North Slope for the wealth 12 that we all benefit from, including our schools and 13 our and our communities and everything. It's so 14 important to us. 15 I support Alternative B. I think 16 ExxonMobil has done an outstanding job of taking a 17 close look at all of the alternatives. And I think 18 they've come up with the alternative that has the 19 least environmental impact on this area. A small 20 airstrip, not so much gravel being used we asked 1 that question earlier today a minimal amount of 22 water. They took a hard look at how to how to 23 develop this resource. 24 I'm looking forward to the development of 25 those gas liquids, in the near term because it's going to do so much good to the Trans Alaska continued on next page	

Comment	Response
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continued from previous page	
2 Pipeline. It's going to it's going to be a good	
3 additive to the pipeline. It's going to reduce 4 corrosion. It's going to it's going to help	
with	
5 the paraffin buildups that we're starting to see, and	
6 it's kind of a concern now for the operation of the	
7 TAPS pipeline.	
8 And certainly, in the near term, that's a 9 good thing. You almost feel like, it's like an	
10 additive you put in an older car or something, just	
11 to make that make that pipeline work a little	
12 better. It's not so much it's 10,000 barrels were 13 made initially, but it will add up to 50 or 60,000.	
14 But that will do a lot of good, as well as	
generating 15 increased revenues.	
16 And hopefully, development of Point	
Thomson 17 will lead the way a bit, a few more years down the	
18 road, toward the development of a large a large	
19 gasline and another and another new part of our	
20 economy. 21 It and a reference was made earlier	
22 about it's being proximal to the Alaska the	
23 National Wildlife Refuge. Well, I I I 24 acknowledge that, it's it's it's a great	
25 Refuge. We should all honor it. But it is next to	
the 1002 lands which are set aside by the United 2 States Congress to take a look at for potential	
3 future development, and the same kind of	
development.	
4 So I don't really think this is an incompatible 5 thing.	
I think the way Exxon has approached this	
7 is so so I just have to congratulate them for 8 minimal impacts. I believe decades from now, when	
9 the oil and gas are finally exhausted in that area,	
10 which they will be some day, that area will become	
<pre>11 back to a primitive and wilderness character. And 12 that's really what we all want to see in the long</pre>	
13 term.	
14 So it's going to be good for Alaska on the	
15 short term, and good for Alaska on the long term.	
16 And I think I'll leave it at that. Thank you.	

Comment		Response
		158 Comment noted; no action required.
0176_Tim.Sharp_FPM_NGC		
POINT THOMSON PROJECT EIS		
PUBLIC MEETING COMMENTS		
December 7, 2011		
Wedgewood Resort - Taiga Center Fairbanks, Alaska		
0.000 to 1000	Statement	
TIM SHARP: My name's Tim Sharp.	of Support for Alternative B	
21 I'm the business manager of Laborer's	158	
Local 22 942, about 1,500 Alaskan workers in northern,		
central		
23 and southeastern Alaska. I also represent the Alaska		
24 District Counsel of Laborers, about 5,000 statewide 25 members. Here to speak in strong support of		
2 Alternative B and applaud Exxon to date on their		
3 Alaska hire record. It's been stellar so far, and		
4 want to put everybody at ease that so far they've		
5 done a very good job. 6 I'm in favor of Alternative B mainly		
7 because it has the necessary environmental safequards		
8 that will ensure, in my mind, responsible		
9 development. And right now for us, both in Fairbanks		
10 and I think, too, to a certain extent, the United		
11 States, it's about work, jobs, and cheaper energy. 12 Further selfish agenda is, we want wages		
13 and benefits to stay in Alaska, spend four or five		
14 times, help the businesses develop, pay mortgages, 15 build the state, keep our kids here, create and		
16 foster the apprenticeship programs that we've created		
17 to put Alaskans to work.		
18 That being said and I want to make sure		
19 that I am on record on this if we don't have 20 Alaska hire from our end, we don't care if and I		
21 say Alaska hire, that means workers and that means		
22 Alaska contractors, who sometimes have been more 23 Alaska contractors have been more overlooked than		
Continued on next page		
	l.	

ment	Response
continued from previous page 24 Alaska workers sometimes. We don't care if it stays 25 in the ground for another hundred years. I just want to make sure that people understand that. It's 2 about it's about responsible development, 3 environmentally sensitive development, and it's about 4 putting Alaskans to work. 5 We have had ASC and Nanook up there, I'd 6 say you out of our halls in particular, you're 7 looking at a 99.9 percent Alaska hire record, almost 8 a spotless record. I would thank Tom Erwin with the 9 State of Alaska formerly with the State of Alaska, 10 who helped facilitate that. 11 And in terms of the oil spills, we've 12 trained thousands of workers, thousands of workers 13 through our hall that are ready, willing and able 14 should the unlikely event ever take place on the 15 North Slope there. 16 Though we don't speak for the caribou 17 and I don't think many people here do I can say 18 that it's been my observation that it will take a 19 physical barrier to keep the caribou out of these 20 drill sites. There will be velvet hanging from their 21 horns, they'll be very you can tell that they're 2 very happy to have a little bit of shade, something 23 to rub up against, and a place to shield their young. 24 I think it's a questionable argument about 25 the caribou sometimes. But I'm very sensitive to the long-term environmental standards and needs. And we 2 support those, to the extent that they they don't 3 kill our state. 4 So thank you very much and I appreciate the 5 opportunity to speak. And I guess the library must 6 have been busy. Next time I'll be able to find this 7 place.	159 The use of the Point Thomson Project study area by caribou and the potential impacts of the project on caribou (including caribou use of gravel pads and other infrastructure) are discussed in Chapters 3 and 5 of the EIS.

Comment Response 160 Comment noted; no action required. 161 The EIS acknowledges that the project is on state lands that are managed for oil 0177 Shawn.Lowry FPM Ind and gas development activities, and does not make reference to a buffer in the text of the analysis. NEPA requires the federal agency to examine potential POINT THOMSON PROJECT EIS impacts to resources affected by a proposed action. Analysis of impacts to the PUBLIC MEETING COMMENTS Arctic Refuge are included in the EIS due to its proximity to the proposed December 7, 2011 project. Wedgewood Resort - Taiga Center Fairbanks, Alaska SHAWN LOWRY: My name is Shawn Lowry. I'm 4 a business agent with the Operating Engineers. for Project I'm as close to being a lifelong Alaska resident as you can be without actually being born 6 in 7 the state. The pipeline brought my parents up here 8 when I was just a tiny kid, so I've been here my 9 entire life. The oil industry has provided for my 10 family and I hope it continues to provide for my 11 extended family that continues on. I want to applaud Exxon for your -- your 12 13 manhour safety presented for the work that you've done to this point. Without lost time incident, that's tremendous speaking, and I applaud you for 16 that. As well as your use of Alaskan contractors 17 Alaskans on your project. I've known, out of our 18 hall, hundreds of people have gone to work for you the last few years, as you were doing your 19 exploration drilling out there. I also want to applaud you on a very well 21 thought out and well-presented impact statement for the environment today. What you showed today is - shows that you're thinking within the bounds that 25 you've been constrained in, and I personally applaud that and think this -- it's very well. First off, I want to say, this isn't in the Refuge 3 Refuge, so let's leave the Refuge out of the conversation. If you continue to expand the buffer 5 zone, then where does the Refuge end? It won't. So 6 it's not in the Refuge; leave it out of the equation. We're talking about lands that have been 8 set aside, state lands, to be developed. There's

Comment	Response
	162 Comment noted; no action required.
Control	
9 plenty of regulation out there to take on safety and 10 to keep the environment well thought of and well 11 protected. People are building pipelines throughout 12 the world and we don't do it any safer than we do in 13 Alaska. 14 Responsible resource development can be 15 done right here. It's been proven. And I think that 16 it's time for us to open up the floodgates and get 17 some more production going on in the state, not only 18 for Exxon, but out into the NPR and in the offshore. 19 We have a resource here that needs to be developed. 20 We're only handicapping ourselves by not developing our own resources. 21 If you're going to break an omeletteif you're going to break an omeletteif you're going to make an omelette, you've got to break 24 some eggs. I've heard that my entire life, my 25 grandparents say it. If you're going to build a road, you have to put dirt on the ground. 2 Whether you believe in the big bang theory 3 or believe the earth was created by a higher power, dirt's here. It rolls over. Naturally reoccurring geological cycles, we've had ice ages millions of years ago, we'll have ice ages millions of years in 7 the future. Okay? Let's not take that argument a 8 little bit too far. 9 Doing nothing is not an option. Energy 10 issues are the biggest giant we face today. Our 11 natural resources are one answer to that solution. 12 Until we can come up with something that's a viable 13 alternative, we are a petroleum consuming, fossil 14 fuel energy world. 15 There isn't a person out here, that I	
know 16 of, that can actually survive 100 percent without 17 some sort of fossil fuel. I haven't seen it. I've 18 heard the argument. I personally have not seen it.	
19 If it's out there, prove me wrong. I'm open to	

Comment	Response
20 discussion. 21 And the projected throughput that you have 22 mentioned today is promising. For a cold shutdown 23 that we had last January with the line break at Pump	Response
24 Station 1, it almost crippled this entire state. I 25 mean, we're an oil state, whether we like it or not. We are an oil state. The projected throughput from 2 this project, in its beginning phases, should be 3 enough for us to get onboard and get this thing 4 going. 5 I believe that this opportunity to well, 6 this are this Option B provides the best are the best	
6 this this Option B provides the best the best 7 option that we have right now for this project. It 8 gives you all three of your transportation needs; 9 you have your airstrip that's needed, you have road 10 access during the winter, and you have the barges. 11 All three of those things are essential for a project 12 like this. I feel that this that's the best way 13 to go. 14 Need provides the revenue, not only to	
the 15 state, but it provides income to employees; not only 16 income just for the building phase, but in the 17 project those are jobs that Alaskans can have. 18 And if you look in the long term and 19 there's some things that we've, you know, brought 20 workers up from other states we can be training 21 people now for those jobs if we know they're coming.	
22 We can put Alaskans to work for decades. Okay? 23 Careers, grandchildren's careers, it can all be done 24 if we open up and start developing our own resources. 25 I honestly believe that B has the minimal impact on the environment and I'm fully in support of 2 this project and what it represents to Alaska, what 3 it represents to Alaskans, what it represents to me 4 and to my future family. Not only is it jobs now, 5 but it's jobs for the future. This project is key	

Comment	Response
6 for us to be able to develop future resource 7 development in this state. I'm all for that. 8 I thank you for the time to speak today and 9 I encourage you to hasten your approval of this 10 project.	Response

Comment	Response
	163 Comment noted; no action required.
0178_Scott.Eickholt_FPM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska Statement of Support for Alternative B 163 SCOTT EICKHOLT: My name is Scott Eickholt. 19 I'm an Alaskan resident. I'm a proud Laborer's 942 20 union member. 21 I work in an industry that serves the 22 construction and maintenance of the petroleum 23 industry, as well as the environmental aspect of the 24 industry; specifically training in spill response, 25 hazardous material handling and cleanup, and other various duties associated with the related hazards. 2 I'm speaking to support Alternative B of 3 the DEIS. This alternative will allow for the most 4 responsible development of the Point Thomson area. 5 Alternative B ensures a minimal footprint by 6 incorporating a number of different access options. 7 While access is essential to the project's safety, 8 efficiency and production, the environmental impact to tundra, wildlife and subsistence activity is 10 minimized under this alternative. 11 Point Thomson will provide great benefits 12 to Alaska and Alaskan residents by way of new 13 business opportunities, jobs, revenue, and most 14 important, an opportunity to create a stable supply 15 of energy. With a healthy source of natural gas, the 16 realized. This could spark economic development on 18 an unprecedented scale. 19 With throughput in our TAPS decreasing at 2 a significant rate, it's essential to the condition 15 of the infrastructure to increase throughput as soon 25 possible. It is the responsibility of our 24 infrastructure in our state, as well as the revenues	

Comment	Response
25 that support almost every aspect of how Alaskans live their day-to-day lives. 2 Thanks for the opportunity to testify.	
Thanks for the opportunity to testify.	

Comment	Response
	164 Comment noted; no action required.
0179_Roger.Burggraf_FPM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska ROGER BURGGRAF: I'm Roger Burggraf. 6 Reside at 830 Sheep Creek Road; Fairbanks, Alaska 7 I've been a resident of Alaska for about 60 years 8 now. 9 My career has I've been in banking, I 10 helped work on the Trans Alaska Pipeline and I've 11 been involved in mining for many years now. My 12 degree in college was resource development, wildlife 13 management. And I came to this country because I 14 felt I loved it and I felt it had a great deal of 15 opportunity for a person that wants to go out and 16 make a life for himself. 17 I have reviewed all five alternatives 18 proposed for consideration in the EIS. This is one 19 of the best EIS proposals I've had a chance to 20 review, and I've looked at a lot of them. 21 I support the Alternative B. I feel that 22 it is is the best one. It's primarily set up for 23 coastal pads with in-field gravel roads, docking 24 facilities, and I feel that this alternative would 25 the least environmentally damaging. I feel the pads that are proposed have been 2 researched and they offer the best opportunity for 3 drilling into the reserves. I am not in favor of 4 moving, you know, the East Pad. 5 Trans Alaska Pipeline operating, and it's not a real 7 large field but it's an important one for getting new 8 oil into the pipeline. It would provide jobs for 9 over 600 people during the construction period, and I 10 was told probably about 50 permanent jobs, once it 11 gets started.	

Comment	Response
Comment 12	Response

Comment	Response
	165 Comment noted; no action required.
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska PAUL METZ: My name is Paul Metz. I reside 6 at 3510 Rosie Creek Road; Fairbanks, Alaska. I've 7 been a resident of Alaska since 1968. And I started 8 my career here by supporting activities on the	
North 9 Slope and including the Kaktovik area, for the 10 United States Air Force. 11 I'm a geological engineer by profession. I 12 teach at the University of Alaska Fairbanks, and I'm 13 also chair of the Association of Environmental & 14 Engineering Geologists for the Alaska section. I'm 15 speaking here on behalf of myself, rather than the 16 University or the AEG. 17 I would just like to to ratify the 18 comments that the executive director of the Fairbanks 19 Chamber provided you with previously. I'm also the 20 chair of the resources committee for the Greater 21 Fairbanks Chamber of Commerce. Just a few additions 22 to Lisa's comments. 23 When we look at the cumulative	
consumption 24 of materials, land and water, in support of this 25 economic development and this is a significant resource, eight trillion cubic feet of natural gas 2 and 200 million barrels of condensate is not a 3 trivial resource. The the eight TC of the gas 4 would be equivalent to about a hundred years of 5 Alaskan consumption at at current rates, 6 consumption for the entire state. 7 The the condensate would have a very 8 positive impact on the the throughput through the 9 Trans Alaska Pipeline by by not only adding	

Comment	Response
	166 The Corps agrees that less time in the air equates to less chance of aviation-
	related incidents and recovery expeditions.
10 volume, but by reducing the amount of paraffin 11 buildup in the pipeline, which is a major issue, in	
12 addition to the low flow. 13 But as I said earlier, the Alternative B Alternative B	
14 would actually utilize less gravel, less water, comparison would	
15 provide a safer environment for operations. The 16 barging alternative reduces the amount of transport 17 that would have to take place by fixed-wing and	
18 helicopters.	
19 As I said at the beginning, I started my 20 career here in Alaska for the United States Air 21 Force. I've been on literally hundreds of search	
and 22 rescue operations around the state. And	
23 unfortunately, I was the subject of several of those	
24 operations myself when the fixed-wing or the 25 helicopters that I went in failed at various	
various times. 2 And certainly it's the last thing we want	
3 to do, is increase the risk that we're putting people	
4 to by selecting alternatives that maximize fixed-	
5 or helicopter use on the North Slope, especially 6 during the winter months.	
7 Thank you.	

Comment	Response
0181_Pam.Miller_FPM_NGO POINT THOMSON PROJECT EIS	
PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska	
PAM MILLER: Will this work? 15 Hello, I'm Pam Miller. Thank you for this 16 opportunity to comment. I'm here today representing 17 Northern Alaska Environmental Center. We're a 18 regional, grassroots conservation group who 19 celebrated our 40th year this year. 20 We appreciate commenting on this proposed 21 Point Thomson gas condensate development on 22 State of Alaska lands. And it includes a drill site 23 two miles away from the Arctic National Wildlife 24 Refuge. For that reason we really appreciate that 25 the Corps of Engineers has recognized a unique 25 characteristic of this project, which is its 2 proximity to the Arctic National Wildlife Refuge. 3 I do also recognize that this is 4 State of Alaska lands, that this is lands that are 5 slated and zoned, in effect, for oil and gas 6 development. So we're taking that as a given. 7 What I'm here to comment on today is 8 aspects of how can environmental impacts from this 9 project be reduced and measures that could minimize 10 project impacts to the wetlands, to the coastal zone 11 and to the nearby national wildlife refuge. 12 To put it in context, we know that 50 years 13 ago, President Eisenhower's interior secretary, at 14 the same time that the Arctic Refuge was designated 15 opened, the lands that are now Point Thomson and 16 Prudhoe Bay and the prize of Prudhoe Bay was given to 17 the state. There was a balance in land use. The	

Comment	Response
18 Arctic Refuge over here, the oil and gas development 19 over here. So that line that's the boundary of the	
20 Arctic Refuge is a very important line. 21 We recognize that this reservoir, at least	
22 according to the EIS, is outside the Arctic Refuge. 23 We're not talking about activities in the Refuge. So	
24 we're acknowledging that, I want to make it clear, 25 that the nature of our comments on this project,	
because the Refuge is so close to the proposed 2 project, we are looking at some ways that you can	
3 minimize impacts. 4 One other thing I wanted to mention, in 5 terms of the context of the project, is that we do	
6 know that there's currently still a pending court 7 dispute between the State of Alaska and Exxon 8 regarding the validity of these leases, and that is	
<pre>9 fundamental factor of this project. So maybe 10 there is a settlement brewing. That's the rumor, but</pre>	
11 it is not yet a done deal. 12 Also, this is not the huge national gas 13 development project. This is a very first	
step. So 14 we're not here to talk about the development of 15 natural gas as a, you know that depends on the	
16 pipeline down south from Prudhoe Bay. 17 And I also will note that the amount of 18 hydrocarbons that are proposed to be produced from	
19 this project are not acknowledged. So to see what's	
20 the benefit to State of Alaska and to consumers 21 ultimately from this project, we need more of that 22 information.	
23 So to get at the nuts and bolts of my 24 recommendations, we thank the Corps of Engineers for	
25 commissioning the noise and visual resources studies	
that have assessed the potential impacts to the 2 Refuge. This was important research and it did	

Comment Response 209 The Corps is not looking at an alternative that eliminates or moves the East Pad to the west. This alternative (Concept 6) was eliminated from detailed consideration for not meeting the purpose and need of the project. The language in Section 2.2.4.2 has been supplemented to make this decision clearer. Without the ability to drill wells from the vicinity of the proposed East Pad, the Applicant 3 document negative impacts from all the alternatives to the Refuge. would not be able to access eastern resources that have already been identified in We think that there should be a new approximately one-third of the Thomson Sand Reservoir. A well from the Descriptions alternative, that eliminates or pushes to the west Central Pad would have to reach more than 30,000 feet, which is technologically the East Pad, because it is so close to the Refuge. That initial step of determining whether or not it infeasible. Reduced access to the eastern portion of the reservoir would limit the is Applicant's ability to continue evaluation and delineation activities, including feasible to produce the reservoir without that East 1.0 Pad, based on the information in the EIS, we think fully delineating the eastern edge of the reservoir, testing connectivity with the the Corps should go back and take a harder look at central portion of the reservoir, and fully evaluating the Thomson Sand oil rim how could this be done with the project being further and Brookian Group sandstones hydrocarbons. 13 away from the Refuge. Concerning an alternative that pulls the pads back from the coast, the This is a huge industrial facility that Applicant's Technical Brief #1 stated that a "Pad location further inland from the 15 would be quite close to the Refuge. It's a vital 16 area for migratory birds, polar bears, fish, coast will increase the throw on all wells and potentially preclude the ability to recreational values, as well as it's a integral reach portions of the reservoir necessary for full field development. This may of the intact Arctic National Wildlife Refuge. So lead to additional pads being needed in the future to reach bottomhole targets we that cannot be reached from a pad that has been located further inland." In other 19 recommend that the alternative and the concept of words, a trade-off of moving pads inland would be the potential future need for alternative that can minimize the impacts to the 20 additional pads closer to the reservoir (i.e., along the coast) in order to reach 21 Refuge needs to be given a harder look and that bottomhole targets, given the present 13,000-foot limit of extended-reach more drilling. 22 of those factors be taken into account. 23 Finally, I'll mention that the pads being 24 right along the Arctic shoreline is of concern to 115 not only because of the wildlife values that are really concentrated right along the shoreline, but the risk of blowout spills to the marine and nearshore environment could be reduced if the pads were moved further inland, as well as the coastal 5 erosion from global warming is of real concern to us. And we urge the Corps to further minimize impacts by taking a harder look at an alternative that pulls in the pads, in from the coast, and consolidates or moves west what's now called the East Pad. So thank you for this opportunity to 12 comment. We'll give more comments in writing. Thank you.

Comment	Response
	167 Comment noted; no action required.
0182_Lisa.Herbert_FPM_NGO	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska	
Statement of Support for Alternative B 167	
LISA HERBERT: Good evening. My name is 5 Lisa Herbert and I'm Executive Director of the 6 Greater Fairbanks Chamber of Commerce. And I thank 7 you for the opportunity to present testimony on the 8 Draft Environmental Impact Statement for ExxonMobil's 9 Point Thomson natural gas condensate project. 10 I'm here today to speak in favor of 11 Alternative B, as this alternative provides the 12 safest, most environmentally responsible solution for 13 developing Point Thomson's resources in a timely, 14 cost-effective manner. 15 The Fairbanks Chamber represents over 700 16 businesses and organizations, many here are 17 represented in this room tonight. One of our 18 organization's core values is free enterprise and the 19 Point Thomson project will provide wide-ranging 20 benefits to many of our members in the form of 21 business opportunities, jobs for Alaskans, and 22 revenues. In a time when our nation's facing high 23 unemployment levels, it seems appropriate to move 24 forward on a project that will employ many Alaskans 25 who are highly trained, willing and able to work. The Chamber's number one priority, and of 2 course has been for many years, is reducing the high 3 cost of energy that plagues our residential and 4 business communities. It's stifling our economic 5 development in our area. 6 I would like to emphasize that we became a 7 state only after Congress was convinced that Alaska 8 could support itself economically through development 9 of its vast natural resources.	

Comment	Response
Tomment 10 With an estimated eight trillion cubic feet 11 of natural gas and 200 million barrels of condensate, 12 developing Point Thomson is essential to construction 13 of any natural gas pipeline. That would reduce the 14 high cost of energy that we all face in this room 15 today. 16 Furthermore, development of this project 17 will increase throughput in TAPS. 18 Exxomboil has demonstrated that 19 exploration and development can occur with minimal 20 impact to the environment. And I thank them for 21 their excellent presentation here earlier today. 22 By using long-reach directional drilling 23 technologies from onshore pads to recover offshore 24 resources, Alternative B ensures a minimal 25 environmental footprint with the use of barging, ice roads, aviation and in-field roads. 2 Alternatives other than B, with unnecessary 3 requirements that provide little incremental 4 benefits, should be avoided so that the project can 5 move forward to provide jobs to Alaskans and set the 6 pathway to bring gas to Fairbanks, reducing our energy costs. 8 Responsible resource development can be 9 done in Alaska. It has been done and has been 10 proven. 11 I thank you for your time and for a very 12 comprehensive EIS for us to comment on today.	Response

Comment	Response
	168 Comment noted; no action required.
0183_Kevin.Pomeroy_FPM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska	
Statement of Support for Alternative B 168 KEVIN POMEROY: I'll be brief. My name is 14 Kevin Pomeroy. 15 I recognize more elegant speakers in the 16 audience than myself but, you know, I can't 17 picking up where Mr. Lowry left off, I don't think 18 there's anyone in this room, or anyone I can think 19 of, that can halt global warming, can halt coastal 20 erosion and halt the exit of wildlife out of the 21 Refuge. There's a boundary that was set for a reason 22 and what happens outside of that boundary is is 23 deemed to be oil and gas development. 24 So that being said, I spent quite a bit 25 time online and these maps here were quite helpful 26 in being able to see the different proposed 27 alternatives 2 right next to each other. So it just helped kind 28 off 3 solidify my opinion that, well, Alternative B 29 seemed 4 to be the most logical of the alternatives 20 presented. 3 Seems like ExxonMobil has done their 4 homework, their due diligence involving 28 stakeholders 3 that are, you know, could be directly impacted from 29 testimony in Anchorage, they're here tonight and 20 to be they had a full agenda to get input	
11 through all of the planning phases of this project. 12 And I'm sure a lot of that has been taken into 13 account by the Corps of Engineers. 14 So it seemed like, you know, as you take a	
15 look at the development over the last several decades	

Comment Response 16 up on the Slope, we've been able to or the 17 producers have been able to responsibly shrink their 18 footprint, minimize and taking into concerns some of 19 the group that, you know, have got environmental 20 concerns. And I'm sure as the technology advances, 21 we'll be able to someday minimize our footprint
even 22 more. 23 But of the options presented, in my 24 opinion, I would be in full support of moving forward 25 with Alternative B. Thank you.

Comment	Response
	169 Comment noted; no action required.
0184_John.Swortfigeur_FPM_NGO	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska Slatement of Support for Alternative B 169 15 JOHN SWORTFIGUER: Good evening. My name 16 is John Edgar Swortfiguer. I'm here in affiliation 17 with the Laborer's International Union of North 18 America, Local 942, of which I'm a 15 year member. 19 Thank you for this opportunity to voice my 20 support for the implementation of Alternative B, 21 coastal pads with in-field gravel roads for the Point 22 Thomson natural gas condensate development project. 23 It's my strong conviction, based on the 24 Draft Environmental Impact Statement that Alternative 25 B, coastal pads with in-field gravel roads offers the optimum cultural sensitivity and most responsible 2 environmental accountability, while achieving and 3 maintaining the economic viability of the Point 4 Thomson development project. 5 Alternative B ensures that polar bears and 6 other wildlife essential to traditional subsistence 7 lifestyles will be protected by the cooperation and 8 coordination with the U.S. Fish and Wildlife Service 9 and other state agencies. 10 Alternative B allows for a coastal barge 11 route outside the main migration corridor of bowhead 12 whales with close to 200 barging trips relative to 13 the upcoming project already occurring with no impact 14 to marine mammals or subsistence lifestyles. 15 Alternative B creates the smallest environmental 16 footprint and affords features that are the safest 17 and most efficient for conducting operations.	
14 to marine mammals or subsistence lifestyles. 15 Alternative B creates the smallest environmental 16 footprint and affords features that are the safest	

Comment	esponse
In project is vital to Alaska and Alaskans. Development 20 of this world-class resource will provide jobs for 21 Alaskans, new revenue to the state and local 22 governments, increased throughput for the Trans 23 Alaska Oil Pipeline and increased business activity 24 and revenue to the private sector, while ensuring 25 protection and respect for traditional subsistence 1 lifestyles and the environment. 2 As a 30-year resident of the great state of 3 Alaska and a proud father of two beautiful daughters 4 of Alaska Native ancestry, I've grown increasingly 5 frustrated and fatigued with the notion that 6 non-development of this state's natural resources is 7 somehow the moral high ground from an environmental 8 standpoint. Nothing could be further from the truth. 9 Allowing these great resources to lie 10 dormant while it's within our reach technologically 11 to develop them, along with implementing the 12 necessary environmental protections and respecting 13 cultural traditions is a forfeiture we can ill afford 14 to endure. 15 Thank you for your time this evening.	esponse

Comment	Response
	170 Comment noted; no action required.
0185 Jim.Plaquet FPM Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska	
Statement of Support for Alternative B 170	
JIM PLAQUEST: My name is Jim Plaquest. 17 I'm a 38-year member of the International Union of 18 Operating Engineers, Local 302. 19 Of the design alternatives considered, 20 Alternative B provides the safest, most 21 environmentally responsible solution for developing 22 Point Thomson's resources. 23 The petroleum industry is an invaluable 24 component of Alaska's and Fairbanks' economy. With 25 Prudhoe Bay oil reserves in decline, it is 25 essential that new areas be developed. 2 Alternative B ensures a minimal 3 environmental footprint by incorporating a 4 combination of summer coastal barging, winter ice 5 roads, aviation and in-field roads. These features 6 are essential to the project's safe and efficient 7 operations. 8 Point Thomson is a highly technical project 9 with high costs. Unnecessary requirements that 10 provide very little, if any, incremental 11 environmental benefits should be avoided as not to 12 compromise the economic viability of the project. 13 Approval of the Point Thomson project as 14 proposed in Alternative B is vital to the development 15 of this world-class resource and North Slope gas 16 commercialization. 17 Alternative B will provide the needed 18 employment for Fairbanks workers to support their 19 families. The oil industry is a major driver in the 20 Fairbanks economy that many businesses in this town 21 depend on. 22 Thank you for letting me testify.	

Comment Response 171 The EIS includes a separate resource section on the Arctic Refuge due to its proximity to the project and the Thomson Sand Reservoir. The analysis of 0186 Jenna.Hertz FPM Ind impacts to the refuge and the wilderness perception within the refuge is presented in Section 5.14, Arctic National Wildlife Refuge, of the EIS. The Corps will decide on appropriate mitigation to minimize potential impacts from POINT THOMSON PROJECT EIS PUBLIC MEETING the project. COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska JENNA HERTZ: My name is Jenna Hertz. And 10 this project is of concern to me because, as we've 11 mentioned, it's very close, only two miles from the 12 Arctic National Wildlife Refuge, which is a very 13 important place to me. 14 It's a very big project. It would include: 15 Three production drill sites; the central processing 16 facility would be only 5.5 miles west of the border 17 and located right above the coast; 12 miles of gravel 18 roads; a new mile-long airstrip and staging sites; 19 major new gravel mine where 2.6 million cubic yards 20 of gravel would be evacuated from 162 acres of tundra 21 wetlands; 282 acres of tundra covered by gravel fill; 22 and a gravel boat ramp and a pier with the dredged 23 area offshore for barge off-loading. 24 These new industrial facilities, like drill 25 rigs, towers, flare stacks, support facilities, air traffic and lighted facilities will be seen across a 2 long viewshed. To contrast that, the coastal plain, 3 the way it is, is flat at this point and treeless and 4 any development this close to the Refuge would be 5 assault to the wilderness character and values of this incredible piece of the world. So my main message tonight is to thank Corps of Engineers for the work that you've done in generating that near mountain of a document back on 10 that table and putting together a friendly and 11 helpful public process this evening. I appreciate

12 your ingenuity and creativity. These qualities 13 inspire me to think that we can do even more to 14 protect the Arctic in light of this project. I am not yet convinced that Alternative B 16 is the safest, most environmentally responsible way to develop this area. I think that the most 18 environmentally responsible way to develop it will come from a combination of elements from different alternatives in the final plan. The noise and visual resources studies wnership are 22 a good place to start. The DEIS reports that 23 increased noise levels could be heard from 20 miles 24 away and states that resources such as caribou, polar 25 bears, and birds, which are shared by the Refuge and the project area, created the potential for impacts on Arctic Refuge resources. The EIS predicts that this noise, visual effects, and other industrial activities would pose impacts to wildlife and other Refuge resources due to 6 its close proximity. So I'd ask that you please create a larger buffer zone for the coast and for the Refuge. Climate change, as you all know, is a daily and Coastal 10 reality here in Alaska. Across the Arctic there 11 documented cases of shoreline erosion and increasingly intense weather. Yet this project proposes three production sites, including a processing plant that would be situated only 250 to 500 feet away from the Beaufort Sea's shoreline. A spill in this <u>sensitive region would</u> devastate the coastline. And I appreciate that Alternatives C and D move infrastructure away from 19 the coast. Since helicopters are a very fossil and intensive way of operating, I would, I think, prefer ice roads to air transportation in those This is not the only proposed development in this region. As you probably also know, Shell's - cont on next page

Comment

Response

- 172 The Corps will consider multiple factors, such as impacts to the environment identified during the NEPA process, the project purpose, practicability (as part of the 404[b][1] Guidelines analysis), public interest determination, and mitigation options, when making its permit decision.
- 173 Modeling of potential noise from the project within the Arctic Refuge predicted very small increases over existing natural conditions within the refuge (up to 20) miles from the western border) and that noise decays with increasing distance from Point Thomson. (See Appendix O, Noise Technical Report and Section 5.20, Noise.) Noise impacts to birds, terrestrial mammals, and polar bears would occur in close proximity to the project, but noise is not anticipated to affect animals within the Arctic Refuge. As noted in Section 5.14, Arctic National Wildlife Refuge, impacts to wildlife and other Arctic Refuge resources were determined to be minor in magnitude, possible or unlikely, and limited in extent. Mitigation measures have been proposed in order to lessen impacts to wildlife resources and habitats within and near the project area and the refuge. The State of Alaska holds title to the project area and land west up to the Arctic Refuge approximately 2 miles away from the Point Thomson Project, including submerged lands under ocean waters up to 3 miles. The state has designated this area for oil and gas development and general public uses (See Figure 3.13.1). No buffer zones have been proposed by the state or federal government for this area, and the Corps does not have legal authority to impose a buffer for the refuge. Mitigation measures have been designed for the Point Thomson Project to minimize potential impacts.
- 174 The Applicant conducted a coastal engineering assessment (Draft Metocean Design Criteria Study; PND 2009a), which addresses long-term coastal erosion forecasts relative to the project design. Additional information from this report has been added to the discussions of shoreline erosion relative to the Central, East, and West Pads under Section 5.5.3.1, Alternative B: Construction and Operation. Additionally, Figure 5.5-1 has been added to this section to show the historical and projected shoreline changes with time.
- 175 Comment noted; no action required.
- 176 Comment noted; no action required.
- 177 The Draft EIS acknowledged the presence of the offshore development and discussed the cumulative impacts to the extent information on the other projects was known. The Corps was notified by Shell during the Draft EIS comment period of their interest in making use of the Point Thomson export pipeline. Shell also provided the Corps with additional general information regarding their anticipated OCS exploration activities. The additional information provided by Shell has been incorporated into the Chapter 4 description of potential OCS activity. The Corps believes that, even with this additional general information, the cumulative impact discussion in the EIS concerning barging is sufficient, based on best available information.

Comment Response 178 The horizontal reach of 13,000 feet is still a valid distance. Information available on drilling technology has not changed since the publishing of the Draft EIS. The appendix referred to (Appendix C) is the Draft Section 404 (b)(1) Guidelines Evaluation. This evaluation is part of the Corps' permit process that is - cont from previous page related to, but not the same as this NEPA process. As recommended by CEQ, the 25 proposed offshore site is only 14 to 16 miles offshore from Point Thomson and is expected to begin Corps has determined that it will not include certain confidential information, 2 next summer. I would appreciate more detail on the such as cost data, in the NEPA process. However, the Corps can use confidential interface of these two projects, especially the information to inform the 404(b)(1) process, and ultimately the Corps' permit barging in the cumulative impacts section of the decision. The DEIS states, "current directional 6 drilling technology in reservoir conditions similar 179 As noted in the Draft EIS, Section 5.10, Terrestrial Mammals, impacts to to those found in Point Thomson sands only has a proven reach of approximately 13,000 feet." In caribou, regardless of the herd, were determined to be minor to moderate in Appendix C, page 20, the Corps said that more magnitude and ranged from less than 1 percent of caribou potentially disturbed 10 economic information upon which to evaluate the under Alternatives B and E to 14 percent under Alternative C due to the gravel 11 practicability of the alternatives is still needed. 12 And I appreciate if you could find that access road. The impacts under Alternative C would primarily occur in the so western portion of the study area and would mainly affect the Central Arctic and we can make responsible choices in this public process, which we can't really do if we don't have Teshekpuk Herds. The Porcupine Caribou Herd is defined as calving east of the all of the information regarding the limits of Canning River and their overall range typically overlaps with a very small 16 horizontal reach. So please make that information portion of the eastern part of the study area (see Figure 3.10-6). Therefore, available. And the final place that I see room for impacts to the Porcupine Herd would likely be even less than 1 percent of the improvement is addressing how direct and cumulative 179 herd disturbed. impacts to subsistence resources, including the The subsistence impact analysis considered the conclusions of the biological 21 Porcupine Caribou Herd could affect the Gwich'in 22 villages and Canadian First Nations, not just analysis that the project would not result in large scale changes in migration and that impacts would primarily be limited to local in geographic extent. Therefore, nations. The Arctic is a system and all the places are connected. the majority of impacts for subsistence users would occur for residents who Thank you for considering my comments. travel to the project area for caribou hunting and could experience reduced success in that area. According to available data, Kaktovik is the primary community that uses the project area for caribou harvesting activities. The conclusions of the terrestrial mammals impact analysis (Section 5.10) do not indicate that the project would result in changes to the migration of the Porcupine Herd or Central Arctic Herd, and therefore impacts for subsistence users outside the project area, such as those from Nuigsut, Anaktuvuk Pass, or Arctic Village, would not occur.

O187_Dougleaccon_FPM_LGOV FOINT THOMSON PROJECT EIS	Comment	Response
15 ski trails. I like the fox that are on the property. 16 I need more land. I've got an acre, it's not enough. 17 We can't just be emotional about these 18 things. We have ecosystems that are connected	POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska DOUG ISAACSON: Thank you. I'm Doug 14 Isaacson, and just for the record, I'm the mayor of 15 North Pole. I sit on the board of the Greater 16 Fairbanks Chamber of Commerce and I'm on the board of 17 the Alaska Municipal League. 18 And I am speaking on my own cognizance, 19 rather than in any official capacity. But I want to 20 make reference of several of the comments. And I 21 appreciate the passion and the consideration that 22 folks have on both sides. In fact, I get very 23 passionate about this topic myself. 24 One of the reasons I get passionate is, I 25 took an oath, as an elected official, to uphold the constitution of the State of Alaska. Let me read 2 to you what Article 8, Natural Resources says. 3 "It is the policy of the state to encourage 4 the settlement of its land and the development of its 5 resources by making them available for maximum use 6 consistent with public interest." It's not just 7 should we do it, it is the policy of the state, we 8 must do it. 9 Now you say, but give us buffer zones. My 10 neighbor wanted to build a house on their property. 11 It's all zoned residential but I didn't want them to 12 build a house, so I go to the borough and I say, 13 don't build that house. Why? Because I don't like 14 it. I have family use for that property. It's our 15 ski trails. I like the fox that are on the property. 16 I need more land. I've got an acre, it's not enough. 17 We can't just be emotional about these	There is not a buffer zone around the Refuge, nor has a buffer zone been proposed in the EIS. The EIS includes a separate resource section on the Arctic Refuge due to its proximity to the project and the Thomson Sand Reservoir.

Comment	Resp	onse
19 throughout Alaska, but Alaska, first and foremost, is 20 a state that must provide for its people. 21 What's adjacent to this area is 1002, which 22 is set aside for consistent use with what we're 23 looking at right now, the development of oil and gas. 24 And so for that reason, I say proceed with this. It 25 is necessary to ask the questions "what happens if". In fact, I was going to address the oil 2 spills. North Pole is not a stranger to petroleum. 3 We are a major industrial area in the state of Alaska 4 with two refineries, two of the four commercial 5 refineries, with the fifth on the North Slope. We 6 know what it's like to live with the potential of 7 spills. We have sulpholine in our water. But that 8 doesn't mean we can't mitigate it, or that the	181 A	onse Is described in Section 5.24, Spill Risk and Impact Assessment, the Applicant would prepare plans describing spill prevention and response, including an DDPCP, an SPCC Plan, and FRPs. Further, Section 5.24.12, Mitigative Measures, details the measures proposed by the Applicant as part of the project lesign to prevent and respond to spills. Comment noted; no action required.
8 doesn't mean we can't mitigate it, or that the 9 companies can't take known technologies. 10 I appreciate the abundance of caution that 11 especially Alternative B demonstrates. It says that 12 they are taking more than enough reasonable steps. 13 Let's make sure that they do have reasonable steps 14 for oil spill mitigation. 15 Shell has invested billions of dollars in 16 defining what they're going to do if there's an oil 17 spill on the Beaufort or Chukchi Seas. I hope Exxon 18 is communicating. I think so. I didn't see that 19 necessarily. 20 But I believe that the industry has the 21 ability to meet those. We need to make sure though 22 that those plans are in place. 23 When we look at 51 percent of the	cloeconomics ?	

183 Comment noted; no action required. 184 Comment noted; no action required. 5 appreciated cost in our state. 6 And that's inconsistent with owners. We 7 should be finding ways of making it more available	
5 appreciated cost in our state. 6 And that's inconsistent with owners. We	
6 And that's inconsistent with owners. We	
8 us at an owners' price. But we need to be looking at 9 encouraging this because it's going to help keep our 10 refineries in North Fole alive. 11 And as I asked, it will give opportunities 12 for the welding companies, two of which are located 13 in North Fole. One consistently makes modules for 14 the North Slope. 15 So I'm looking at my little community and 16 I'm saying, yay, this is great. What's good for 17 North Pole is good for Fairbanks. And what's good 18 for North Pole is good for fairbanks. And what's good 18 for North Pole is good for the entire state. Because 19 our fuel gets down to Ted Stevens International 20 Airport and the Fort of Anchorage, it provides 21 revenue for the railroad, it keeps the economy of 22 Alaska rocking and rolling, not just in the Interior. 23 So I wanted to speak to that. 24 One last thing, the Alaska Municipal Lague 25 passed Resolution 20 2012-02, and it encourages the prolonging the life of the Trans Alaska 0il 2 Pipeline. This is consistent with that objective. 3 And to preserve in-state refining capability, this is 4 consistent with that. 5 For all the eloquence of previous speakers, 6 I won't go into details. My time is up. But I am in support of option or Alternative B.	

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0188_Diane.Shoemaker_FPM_Ind	mment noted; no action required.
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska DIANE SHOEMAKER: My name's Diane Shoemaker and I'm with Fountainhead Development. And my job, what I do for a living is sell hotel rooms. And originally, I really wasn't going to speak tonight, but I think I have a little different perspective than some of you. I, obviously, am not, you know, terribly involved in all the research and all of that. But I've been up to the North Slope a couple of times. And I think anyone that visits up there, it just they are so safety conscious, and what they do up there is just incredible; the amount of money they spend to do responsible development is incredible, and the extra time that I know the projects must take, based on what I saw up there. And from what I saw up there. And from what I saw, the animals are not bothered by what's going on up there. I was up there there this spring and there were a lot of the migratory birds right there at Deadhorse. And, you know, they're on the lake, right there in Deadhorse, and they're not bothered by what's going on. And, you know, I just think I've been impressed with all the responsible development that you've done. And one thing that I do support plan shade and the complete that one with the least environmental impact. And also, this land, like someone said earlier, was meant for development. And I think that's what we need to do. We need to develop more of our natural resources up here. This side this was set aside for preservation or there are area sorry	

Comment	Response
	210 Comment noted; no action required.
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But we also get a whole lot of tourists that come up and stay with us in the summertime. And like obviously, those people need these great lands to go is explore, and they want to see all of our beauty up here. So, yeah, we kind of get it from both like sides. But I think we can reach a balance. And I is think the oil and gas industry up here has done a great job so far with that. Another thing, I really like the handout that was a simulation here of what it will look like. Another thing, I really like the handout there and realizing —— one time when I went up, I went with Carlile in a big truck up there. And another time I went up in a van and then flew home. And it really just points out how small of area we're talking about. And I think that's what a some people don't understand, is this is just a speck out of millions of acres that we're talking about developing. And I really like this piece here that tries to point that out. So good job on whoever did that. Another area that I wanted to point out is, Another area that I wanted to point out is, Another area that I wanted to point out is, Another area that I wanted to point out is, But as far as my business, if something was to happen, if we continue on this reduction in the oil going through the pipeline, we would probably have to close one of our hotels in the wintertime and And, you know, there's a lot of other	port

Comment	Response
21 businesses that rely on a lot of business from the 22 oil and gas industry. And that would really affect 23 our town. So, you know, we need to do everything we 24 can to get more gas or more oil in the pipeline, 25 and a gas pipeline would be good, too. Another area I wanted to point out was when 2 I was up there in Prudhee Bay, I just could not 3 believe the care. The one thing that got me is the 4 little oil pan things that you have to put under your 5 truck every time you stop. I don't know if everyone 6 realizes this, you stop your car, you have to get out 7 and put these little cannulas, whatever, oil pan, 8 under your car so that you don't get one little speck 9 of oil on the tundra up there. 10 I just couldn't believe that. And I just 11 think that's such a good example of how far the 12 developers up there go to make sure that they're 13 protecting the environment up there. And I just 14 think that's a good example of the balance. 15 I know there's you know, we can do this. 16 They've shown that they're very responsible in 17 developing and we can protect the environment, too. 18	Response

Comment Response 186 It is outside the Corps' jurisdiction to establish land use buffers or boundaries as suggested in this comment. The Corps will consider multiple factors, such as 0189 Debbie.Miller FPM Ind impacts to the Refuge (e.g., noise and visual impacts) identified during the NEPA process, the project purpose, practicability (as part of the 404[b][1] Guidelines analysis), the public interest determination, and mitigation options, POINT THOMSON PROJECT EIS PUBLIC MEETING when making its permit decision. COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska DEBBIE MILLER: (Indiscernible) -- written 13 testimony -- (indiscernible). 14 I spent a good portion of the last 40 years 15 exploring the Arctic National Wildlife Refuge. And 16 the one thing that occurs to me is my camping on the 17 Canning River, which is adjacent to this area. And 18 when you're camping out on the coastal plain of the 19 Arctic Refuge, you know, it's this amazing expanse 20 that you look out across the tundra towards the 21 beautiful Romanzof Mountains. It's an extraordinary 22 view when you're out there, especially when you have 23 50,000 caribou walking right by you. Having a large facility, production 25 facility and drilling rigs and roads and all the noise associated with development, two miles is a 2 pretty close distance to this area. And I would 3 encourage the Army Corps to consider moving the East Pad, or considering that as not the last -the last of the last of the options for development, because that is so close. The central processing facility would be 8 about what -- five, five and a half miles? And that 9 still is close. But, you know, two miles -- I just 10 went on a two mile walk today on Chena Ridge. It 11 took me about 15, 20 minutes to make this loop, you know. And this is a close distance, particularly 13 because of the expanse, and how noise travels, 14 travel, and the impacts to the wildlife, the water fowl, the nesting birds, the caribou, denning polar 16 bears and all that there are in the Arctic Refuge. This is a wildlife refuge and there are a 18 number of biospheres, biosphere reserves around the

187 Well blowouts are addressed in Section 5.24.3.5, Well Blowouts and Uncontrolled Releases. Also, the Applicant's Well Control Blowout Contingency Plan (BCP) and training for prevention and response to blowouts are addressed in Section 5.24.12, Mitigative Measures. 19 world, that's set up, designated buffer zones as part 20 of the plan to protect those areas. And I I don't 21 know, it would be interesting for the Army Corps to 22 look at those zones to see if there's an average 23 distance that that these different reserves have 24 to protect the wildlife resources. 25 This is a big operation. We know that, and we have a lot of oil development on state lands 2 which, you know, supports our whole economy. I think 3 all of us, to a certain extent, we know that that is our lifeblood in the state, whether we like it or not. 5 not. 6 At the same time, I think we need to look 7 at sensitive areas in the state, wildlife refuges, 8 national parks, and we have to be aware that, you know, should we be putting something that's right on 10 the you know, right on the other side of the 11 fence? Or maybe, if we have an alternative, that 12 puts it at five miles versus two miles, that's a 13 little more sensitive placement for the wildlife, for
the people that are enjoying the beauty, the 15 wilderness values. 16 The only thing no one has brought up 17 tonight that worries me is the oil spill response and 18 cleanup plans that Exxon has in place. I wanted to 19 ask that question, but I think the gentleman might 20 be no, he's here. Maybe he'll have a chance to 21 address that. 22 Because I thought it was a wonderful 23 presentation, really gave me a good feeling as to 24 what is planned for this development. The one thing 25 that I saw was you highlighted prevention for oil spills, but I didn't see anything in the presentation 2 that talks about what do we do if we have a blowout 3 in these waters that are so close to the Arctic 4 Refuge. 5 What is the plan, since our Coast Guard

Comment	Response
7 miles away by boat? What is the plan for oil spill 8 cleanup and response? I think that's a very 9 important question that I would like to see addressed 10 fully, you know, in the final. 11 Thank you very much.	
	188 Comment noted; no action required.
O190_Cathy.Jones_FPM_Ind POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska Statement of Support for Alternative B 188 CATHY JONES: Hi, I'm Cathy Jones. I'm a 11 member of the Local 942. 12 I've been up at Prudhoe for about ten 13 years. I hear things about the environment and 14 everything. And it does have a little bit of an 15 impact on the environment. We do watch, we are 16 cautious. We have sometimes double liners for our 17 trucks so that oil doesn't spill. When it does, we 18 have a spill response there to clean.	
I'm in support of Alternative B. I also want this for me, myself, for my children. I'm a single parent, I have two kids. In ten years I haven't had to be on Food Stamps, Medicare, or anything like that. I've supported them, had them through braces, medical, you name it. I've done it on my own. So I'm in support of Alternative B.	

Comment	Response
0191_Carl.Weed_FPM_Ind	189 The use of the Point Thomson Project study area by caribou and the potential impacts of the project on caribou (including caribou use of gravel pads and other infrastructure) are discussed in Chapters 3 and 5 of the Draft EIS.
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska CARL WEED: Well, that's okay. That wouldn't be the first time. Well, I don't have any notes or anything. My name's Carl Weed. I've only been in Alaska, in Fairbanks for 40 plus years, so I'm a newcomer. I worked on the Slope for many years. Fortunately, I retired out of Laborer's Union. I was going to represent just myself tonight and that's what it was, because I've made a very good living out out of the Laborer's Local 942. My son is also working out of there, and my grandkids probably will. Year I seen people talk about the caribou herd, the fox and everything. And I've had personal problems with the caribou, waiting hours for them to cross the road, thousands at a time supposedly. I adon't know, I miscount after 900. I figure that's I've seen the problems that the caribou have risen on the pads, because they get up on the pads to try to get out of the heat and away from the mosquitos and bugs. Maybe that's positive, maybe that's negative. I don't I don't know. I I se hopefully that the more development on the North Slope for my grandkids who live here in Tairbanks. I plan on living here hopefully another of the heat and away from the sentence of the heat and away from the pads to try to get out of the heat and away from the sentence of the heat and away from the sentence of the heat and away from the sentence of the heat and away f	190 Comment noted; no action required.

Comment	Response
20 generation benefit from the oil industry.	
20 generation benefit from the oil industry. 21 That's what I've got to say. Alternate B 22 is fine with me. 23 I have no written notes.	
I have no written notes.	

O192_Buzz.Otis_FPM_NGO POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska BUZZ OTIS: Good evening. Good evening. My name is Buzz Otis. I'm the executive director of North Pole Economic Development Corporation. And I've been in business in the Fairbanks community since May of 1976, and still am in private	 Response	mment
5 enterprise. 6	-	POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska BUZZ OTIS: Good evening. Good evening. My name is Buzz Otis. I'm the executive director of 2 North Pole Economic Development Corporation. And 3 I've been in business in the Fairbanks community 4 since May of 1976, and still am in private enterprise. 6 I started a landscaping business in 1976 7 here. And as you can imagine, landscaping was, you 8 know, really wasn't the first thing to come to mind 9 around this community. Most people are interested in 10 going fishing or hunting or blueberry picking, or 11 something like that. So we, out of necessity, 12 started to get into the earth moving business and 13 over the 30 years I was with the company that I 14 started, we grew into a major civil construction 15 company. 16 In 1975, I worked out of the Laborer's 17 hall; in June, went to Franklin Bluff, spent a year 18 there prior to coming back to town and starting my 19 business. And so I saw the construction of the 20 pipeline, the Trans Alaska Pipeline, as well as the 21 gasline from Prudhoe Bay to Pump 4. 22 And I mention these things because it gives 23 me a sense of balance for what's important, a balance 24 of development and a balance to the environment. I 25 think we've taken good care of the environment in Alaska. I think the oil industry has taken great 2 care. The way they've progressed from 1976 to today, 3 in the realm of safety and in the realm of

Comment	Response
	192 Comment noted; no action required.
8 our country. It burdens me to think that we support 9 countries that hate us and would just as soon shoot 10 us and export our dollars there when we have the 11 ability to develop conscientiously in the United 12 States of America, starting right here in Alaska. 13 I think it's very, very important that our 14 children have the opportunities that we had to live 15 in this wonderful state. And they can only have that 16 if we do things to create jobs, value added, in our 17 communities, to refining, what have you. 18 It was mentioned maybe moving the project 19 closer to the sea, the Beaufort. If you look at the 20 maps, it's already very close to the sea. In my 21 experience as a working up there, we've done some 22 work doing armor protection along the Kuparuk River 23 bridge. And we've built ice roads along the ocean, 24 Arctic Ocean there. 25 And it's very important I mean, 26 it's mentioned that the weather is changing, the storms 27 are maybe a little more severe. Well, you want 38 to have those roads, those permanent roads a little 4 further from the shore. 5 And for goodness sakes, ANWR is huge. How 6 much more ANWR do we need? I think that it's been 7 very well Alaska has an overabundance of 8 oversight. We need more timely permits issued. 9 Environmental impact statements take way too long 10 to you know, it shouldn't take five years to 11 develop a project. We can do it right. We've proven 12 that in the past, and we'll prove it again in the 13 future. 14 And I appreciate everybody being here 15 tonight, having this part of the process. This is 16 America, this is Alaska. Whether it be which side 17 of the issue you're on, it's all about balance. How 18 do we move forward as a community, how do we move 19 forward as a country.	

Comment Res	esponse
And I applaud ExxonMobil in their efforts 21 to do it right, and the oil industry on doing it 22 right. And I urge people to think about the fact we 23 only have 570 thousand barrels of oil going through 24 the pipe. It's compared to two million when we 25 started in 1977, '78, it's a huge reduction. And itcreates problems, it creates problems for refining, 2 and we need a lower cost source of energy to heat our 3 homes. The gas can help us as far as our particulate 4 matter and we can grow this community in a better 5 way. 6 Thank you for listening to me ramble on, 7 and appreciate you being here.	spouse

Comment	Response
	193 Comment noted; no action required.
0193_Amy.Cook_FPM_Ind	
POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 7, 2011 Wedgewood Resort - Taiga Center Fairbanks, Alaska	
Statement of Support for Alternative B 193	
AMY COOK: Hi, my name's Amy Cook. I'm a 8 lifelong Alaskan and I work for Carlile 9 Transportation Systems. 10 I'm here to support Alternative B. 11 Alaskans and the state of Alaska depend on the North 12 Slope's hydrocarbon resources. So I support a 13 proposal from one of the world's best project 14 managers to develop at Point Thomson. 15 I support Alternative B because it is 16 ExxonMobil's proposal. Economic activity has been 17 slow to arrive on the eastern North Slope. At this 18 early stage of development, when financial risks are 19 great, the proponent should be allowed to follow the 20 conclusions of its engineering and environmental 21 studies expressed in its development plan. 22 The barge facility seems to be the 23 objectionable piece of Alternative B. But to see 24 this development grow, a barge facility is necessary. 25 A growing development at Point Thomson will continue to provide good jobs to Alaskans. A growing 2 development at Point Thomson will help Badami and 3 bring us closer to commercializing Alaska's stranded 4 gas. 5 Thank you for this opportunity to 6 comment.	

Comment	Response
0194_Vera.Williams_BPM_Ind POINT THOMSON PROJECT EIS	194 The pipeline design calls for it to be elevated 7 feet off the ground. This design would allow sufficient clearance for wildlife and humans to pass underneath.
PUBLIC MEETING COMMENTS December 15, 2011 Hopson Middle School Barrow, Alaska	
VERA WILLIAMS: My name is Vera Williams. 14 I work for Inupiat Community of the Arctic Slope as a 15 realty director.	
Alternatives Development 194 17 if there could be some consideration for the caribou 18 that migrate in the area, and make some caribou 19 crossings and possibly check to see if there's been 20 any studies on the actual migratory areas of the 21 caribou in that area, so that the caribou would not 22 be affected by such a pipeline; if they need to cross	
23 somewhere, to make some considerations for caribou 24 crossings. 25 And also, to have a policy for possible	
areas where hunters in the that goes from village 2 to village. Those could be also used for the hunters 3 to cross from one area to the other. 4 So those are areas of concern on the 5 pipeline, if that could be considered on this 6 project. That would be my concern, as a person that	
7 does subsistence hunting and that does harvest Native 8 food, not to alter their pathway, but to at least -	
where 10 they would be easily accessable to go from one side 11 of the pipeline to the other.	
7 does subsistence hunting and that does harvest Native 8 food, not to alter their pathway, but to at least - 9 to assist them in making them caribou crossings where 10 they would be easily accessable to go from one side 11 of the pipeline to the other.	

Comment	Response
HANK BAIJ: One more time: Anybody else, 25 at all? We can probably take a break from recording VERA WILLIAMS: This is Vera Williams. 4 Clearance, do you have any information for the 6 NAGPRA, for possible graves in the area? If 7 people if my office could be notified of those, in that section, I'd really like to put some information 9 in that section for the NAGPRA areas. 10 I am researching graves throughout the 11 Arctic Slope area, the whole region, for ICAS, and 12 that would be great information for my knowledge. 13 And, also, since I do work for a Native not a 14 Native village, but for Inuplat Community of the 15 Arctic. 16 you know, jurisdictional boundaries between villages, 18 between Kaktovik and Nuiqsut. And on the Nuiqsut 19 sector, Prudhoe Bay lies right within the Nuiqsut 20 jurisdiction. And if these areas if you know. 21 if they're going to be getting close to Native 22 allotments, I want to make sure that my office is 23 notified, also, in the realty section. Because I how the federal permits, from the the tribal side, for 19 for the concern. 2 this 10 years and there was several Native allotments in 2 the vicinity, but weren't so close that I needed to 3 federal permits from my office. So but that 6 dialogue did take place, and I'm appreciative of 7 that, and that, you know, when projects do come, 8 agencies do call our office, and that's very	195 As NAGPRA only applies to federal lands and there are no gravesites identified to date on federal lands, the Corps does not have additional information to provide. However, these types of concerns and resources would be appropriate for inclusion in the Programmatic Agreement that is being developed among consulting parties, including ICAS. To date, there are Native allotments that are in the vicinity of the project, but not directly within the identified project area. Coordination with allotment holders, permitting, and BIA would continue as the project is developed.

9 appreciated, coming from the tribal status, for doing 10 the federal permits on our end as a tribal 11 government. 12 And, also, the one concern, the big
And, also, the one concern, the big 13 concern, is just making sure that — that NAGPRA 14 is — is something that's very, very important, and 15 that families have graveyards all over the place 16 are not marked, and if there is any findings of 17 those, I truly would like to know of those. Thank you.

Comment Response 211 The Draft EIS acknowledges that pipelines and roads could cause potential blockage areas for caribou migration and could affect subsistence hunters. The subsistence and traditional land use impact analysis in Section 5.22 of the Draft 0195 Rosemary.Ahtuangaruak BPM Ind EIS found that impacts to subsistence hunting would occur, but would be predominantly minor in the project area. Environmental commitments to POINT THOMSON PROJECT EIS PUBLIC MEETING minimize impacts to wildlife migration and subsistence hunting will be COMMENTS considered during the Corps' development of the final Record of Decision. Pages 1 - 17, inclusive Commencing at 7:15 p.m. December 15, 2011 Hopson Middle School Barrow, Alaska ROSEMARY AHTUANGARUAK: Hi. My name's 25 Rosemary Ahtuangaruak. I live here in Barrow. I lived for years in Nuigsut. A meeting process, in relation to these discussions, and what we're facing today, is very different. Early discussions --(Reporter requested clarification.) ROSEMARY AHTUANGARUAK: There were discussions that said some of these activities would be limited, or there would be efforts to help give 8 us 9 our hope that traditional activities near the coast 10 would continue to occur. A lot of the changes that are showing up 11 on these maps would increase the concentration of 13 activities in this area. In connection to the 14 additional areas here, this would be, and other 15 development of where I'm at -- technically, 16 Endicott -- is more concerning. Having activities with roads and pipes that 18 go east to west is very disrupting to animals that 19 are migrating the coast. 20 Increased concentration of activities near the coastline also are very concerning for us, for the fall whaling activities of our two communities in 23 that area, at Kaktovik and Nuigsut. 24 We discussed ways of trying to limit activities during the increased subsistence use

Comment Response 212 The project would require compliance with numerous health and safety laws and regulations, many of which are described in Appendix F, Laws, Policies, and Plans Applicable to the Point Thomson Project. The Corps recognizes the potential impacts to local communities and culture from the Point Thomson Project and discloses them in the Draft EIS. Among other resources, the Draft activity times, and it's really important to enforce 2 that with real guidelines that are going to be EIS analyzes potential impacts to socioeconomic characteristics (Section 5.15), enforced in other ways. subsistence and traditional land use (Section 5.22), and human health (Section We've had words on papers that said other 5 sites would limit like activities, but without the 5.23) and provides mitigation measures that the Applicant proposes to be enforcement of those kinds of things, throughout incorporated into the project design to minimize impacts to the natural and all human environment. The cumulative impacts of existing and future North Slope the contracts, they're just words on paper. We talked about changes that are development are also evaluated within each of these resource sections of the happening EIS. 9 to our health, with changes in access for our 10 traditional foods and concerns related to that. 11 Nearshore activity, offshore activity, seismic activity creates changes to how we use our -- these 13 lands and waters, when that affects our harvesting. 14 Increased manhour contact changes the way 15 the animals interact in these areas, and it causes lot of concern. I don't want to see the pipelines go east 18 to west. That's going to be real disruptive. I'd 19 like to see the activities stay away from the 20 coastline to give us some hopes of having traditional 21 whaling activities continue, all the protective 22 mechanisms that you put into place to give some hopes 23 of having clean water and clean air in your area and 24 activities Our people deserve to have regulatory enforcements. Regulatory guidelines are in existence 2 in other areas. We're trying to limit some of 3 emissions. The way industry runs their equipment 4 24/7, it's not very good for us, for our health and 5 our activities, and it's very concerning. It's beneficial for you and your profits, but we're depending on these grounds and waters, and it's very important that these kind of things don't 8 just be allowed to happen. When our communities talked about what's happening to us in our lives, in our activities, many

Comment	Response
12 responded to these type of things that are bringing 13 us compounding impacts created to increases of 14 social impact. All of these types of things are 15 causing a lot of changes within us. 16 Bringing up the amount of meetings that 17 we've had this week, we didn't have the attendance 18 here tonight, which is very devastating for us and 19 the community members, not having the leadership 20 here, to participate in the discussions and give us 21 some education in the process that's occurring. 22 Your development plans have gone through 23 variety of changes, and you have a variety of 24 alternatives. 25 Having an increased placement of gravel, 26 placement increases disruption of the waterways that 2 are near the nearshore environment, and protecting 3 fish migratory pathways are very important for our 4 continued harvest of our important species. Multiple 5 species tend to be impacted with some of your 6 activities here, and that can be very devastating to 7 the communities nearby. 8 We ve seen that happen in Nuigsut with 9 other activities, and it's really important that you 10 don't go there with your activities. 11 Listen to your communities and try to abide 12 by what's important to their subsistence usage and 13 hopes of continuing to have harvesting. 14 The activities that you're having on these 15 maps, the various alternatives, you have lots of ways 16 to increase your environmental impacts, and I'm 17 concerned with all of the alternatives. I'd rather 18 not see more activities there. But, if we have to 19 see activity, I'd rather see it onshore than 0 offshore. 21 emissions, to air quality concerns, I don't want to 23 see an increase in concentration of activities when	The subsistence and traditional land use impact analysis in the EIS (Section 5.22) found that impacts to subsistence hunting would occur, but would be predominantly minor in the project area. As stated in the EIS (Section 5.22.3.2, Cumulative Impacts), past, present, and future projects on the North Slope could impact subsistence in the project area.

	esponse
24 we're trying to do our subsistence usage. There are 25 multiple species that we depend on with this migration, and all of them need to be protected to 2 allow us our continued traditional and cultural 3 activities. 4 We want to stay healthy, in our lands and 5 waters, and you're dumping of materials into the 6 waters can be risky for us. We have a vested 7 interest of having our lands and waters healthy for 8 our generations to come. 9 Things that are already in the water are 10 giving us many concerns. Anything you're going to 11 add into our waters can only add to these concerns. 12 Anything that disrupts our whalings are going to be 13 much more compounding to the amount of impacts 14 familiar to us. 15 Disrupting a few caribou for a short period 16 of time can cause limited impacts, but when you 17 disrupt the migration for longer periods of time, 18 that's much more devastating. And we've already seen 19 that happen with other activities. And we have never 20 had some restoration of migratory pathways with 21 the with the oil development activities, and that 22 needs to happen. 23 We need to have some of these discussions 24 of what you're going to do with the restoration. You 25 don't see it, but we need to see it. It's really important. There are other areas where activities 2 have to happen, and yet infrastructure and stuff 3 the stuff's left behind decades later. Part of your 4 activity needs to go back out and clean up other 5 areas that have already been impacted. 6 Thank you.	Caponac

Comment	Response
Is there anybody else? 1	214 The State of Alaska Department of Health and Social Services completed a Health Impact Assessment (HIA) for the Point Thomson Project. The overall goal of an HIA is to disclose potential impacts to human health related to a particular action. The HIA is contained in Appendix R and evaluates the health impacts from each alternative in relation to transportation corridors, exposures to hazardous materials, local emergency medical services, continued evolution of subsistence and nutrition behaviors, and psychosocial effects, particularly related to anxiety. The findings of the HIA were considered in the development of Section 5.23, Human Health.

Comment Response 196 The Draft EIS contains an analysis of impacts to socioeconomics (Section 5.15) which considers the social and economic effects of the Point Thomson Project 0196 Forrest.Olemann BPM Ind on the local communities and the North Slope. Future projects are also considered in this analysis in the cumulative impacts section (Section 5.15.8). In addition, impacts to subsistence and traditional land use are analyzed in Section POINT THOMSON PROJECT EIS PUBLIC MEETING 5.22. The State of Alaska Department of Health and Social Services has also COMMENTS undertaken an HIA for the Point Thomson Project. The State's HIA is contained December 15, 2011 Hopson Middle School in Appendix R and evaluates the health impacts from each alternative in relation Barrow, Alaska to transportation corridors, exposures to hazardous materials, local emergency medical services, continued evolution of subsistence and nutrition behaviors, and psychosocial effects, particularly related to anxiety. The HIA was used in the FORREST OLEMANN: Okay, this is the way Human Health 196 development of Section 5.23, Human Health, in the EIS. 20 it's going to work... 21 Good evening. My name is Forrest Olemann, 22 and the opinions that I'm sharing are mine and --23 not going to say -- mine alone. Because over the years I've listened to a 24 25 lot of our community members express a lot of about exploration and development in the geographic 2 areas that are outlined here and all across our coastal home; but one thing that I will say is that over time -- I know this, all these alternatives, 5 didn't fly-by-night. This is something that has been 6 tried over the years and certainly we've learned a lot of things from. Where the one community in the North Slope has experienced more impact than any other community from exploration 9 and 10 development, that's Nuigsut. So there's a lot of there's a lot of knowledge that comes from those 12 kinds of expressions and comments. what 13 I am here to talk about, and I hope gets carried back 14 to the tables that are going to look for a better 15 solution to helping alleviate impacts. Of course, 16 you have environmental impacts, and that's where 17 of the focus has been over the last 30 years, the environmental impacts. And only recently did the 19 health impact assessments start to become a focal 20 point. And what I'm interested in is making sure

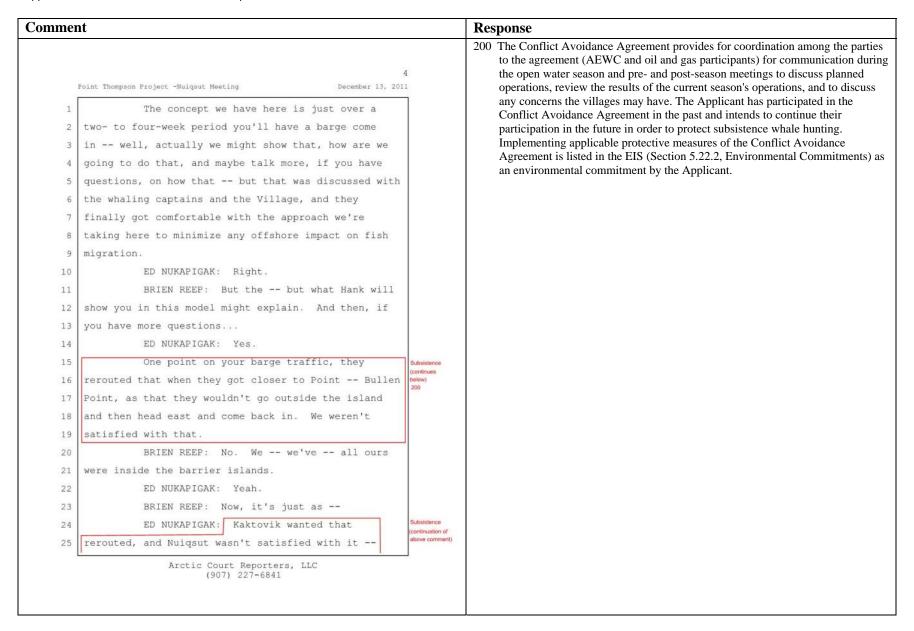
Comment	Response
22 that the governmental agencies working with the 23 industrial sector take into consideration the	
social 24 impact and an assessment of whatever baseline	
studies 25 that need to occur.	
For so many decades, we've had the 2 industrial development of these billion-dollar	
3 corporations come in and extract, and when they're 4 done, there's nothing left for the people that are	
5 impacted all around in the geographic area. And, you	
6 know, the state certainly benefits from all the 7 exploration and activity that's going on.	
8 The federal government certainly benefits,	
9 and, to some degree, the local North Slope Borough 10 government, as it pertains to life, health and	
11 safety. But anything outside that arena, where a lot	
12 of the social impact is felt deeply, there is 13 nothing. And I think we need to do a better job in	
14 addressing those areas, where federal and state and 15 the industrial entities come together and partner	
in 16 addressing the social impacts that are felt	
17 throughout throughout the geographic area. 18 It's not just Kaktovik or Nuiqsut or	
Barrow 19 or Wain it's it's everyone that lives within	
20 that region. Because all these communities are 21 interconnected, in one way, shape or form.	
22 So I would urge the federal agencies and 23 the state agencies and the industrial sector to	
start 24 paying more attention to the social impact	
25 assessments, because I think, by default, the environmental impacts, there's no way around there	
2 are no shortcuts anymore. 3 The federal government, I think, is doing	
a 4 real good job, along with the state government,	
doing 5 a real good job, to look out for what's best for	
the	

Comment	Response
6 environment. And it's always been my belief that if 7 the industrial sector comes in and puts up pads or 8 pipelines, or any kind of infrastructure that's put 9 on the land, that when they're done, that land has to 10 be the same way it was arrived at. And I think that 11 there's guidelines and principles that support that. 12 But what I really want to see come out of 13 future assessments is a clear-cut line as to how are 14 we going to address the health and social impacts of 15 those communities that are more affected than those 16 that are out of sight, out of mind. 17 Thank you.	197 Bird studies were conducted specifically for the Point Thomson Project, including surveys for spectacled and Steller's eiders and yellow-billed loons.
O197_Ernest.Nageak_BPM_Ind POINT THOMSON PROJECT EIS PUBLIC MEETING COMMENTS December 15, 2011 Hopson Middle School Barrow, Alaska	These studies were conducted by the Applicant and were provided to the Corps for use in preparing the EIS. These studies and others were used in describing the affected environment for birds (Section 3.9 of the Draft EIS) and evaluating the potential impacts of the project on birds (Section 5.9 of The Draft EIS). Birds were not included in the Executive Summary of the Draft EIS because the impacts to birds were not high relative to other resources evaluated, and they did not provide substantive differentiation among the alternatives.
ERNEST NAGEAK: Ernest Nageak. I seen the list of the impacts to animals and land. I didn't see the migratory birds on there. Tons of birds come here for nesting. And being in Barrow, we have machines that we data'd birds that had their feather eider inspected for eider; and the Yellow-billed Loon. I think there should be studies on those birds in that area, and they should be on the impacted list. Thank you.	

ment	
Point Thompson Project -Nuiqsut Meeting	0198_Ed.Nukapigak_NPM_Ind December 13, 2011
roint inompson Project -Nuiquit meeting	December 13, 2011
POINT THOMSON PROJE	
PUBLIC MEETING COMMENTS	G
Pages 1 - 15, incl	lusive
Commencing at 6:30	
December 13, 20	
Nuiqsut Trapper So Nuiqsut, Alask	
Arctic Court Reporte (907) 227-6841	ers, LLC

1			100 FI
	oint Thompson Project -Nuigsut Meeting December 13, 201		198 The project would not involve offshore production. Barging activities would be coordinated with the Conflict Avoidance Agreement to avoid impacts to marin mammals.
	NUIQSUT, ALASKA; TUESDAY, DECEMBER 13, 2011]	
2	POINT THOMSON PROJECT EIS PUBLIC MEETING		
3	EXCERPT		
4	(Whereupon, following a presentation by the		
5	applicant, ExxonMobil, the applicant, fielded the		
6	following question(s) by Community Attendee/Meeting		
7	Interpreter Ed Nukapigak.)		
8	BRIEN REEP: I guess, if there's any		
9	questions, of course, we can we can answer		
10	those.		
11	HANK BAIJ: Thank you, Brien.		
12	ED NUKAPIGAK: I did have one earlier. On	Subsistence 198	
13	your offshore, during whaling, fall whaling, are you		
14	going to be in the development stage when you guys		
15	are start going to start producing from offshore?		
16	HANK BAIJ: That's a question for	L	
17	ED NUKAPIGAK: What kind of affects are we	Subsistence (continued from	
18	going to have on those marine mammals?	above comment)	
19	BRIEN REEP: Well, we will be the only		
20	thing offshore really is the barge off-loading;		
21	that's the only off the offshore facility will		
22	have. And in the future, we don't envision anything		
23	offshore.		
24	The wells, of course, will be 13,000 feet		
25	deep, and we will reach that from onshore, drilling		
_	Arctic Court Reporters, LLC (907) 227-6841	•	

mmer	nt		Response
	Point Thompson Project -Nuiqsut Meeting December 13, 2011	3	199 The project would not involve offshore production. Barging activities would b coordinated with the Conflict Avoidance Agreement to avoid impacts to marin mammals.
1	onshore. So we're we're not seeing that there]	
2	would be any impact.		
3	ED NUKAPIGAK: Is that in a phase right		
4	now? Is that still ongoing?		
5	BRIEN REEP: Well, right now nothing's		
6	going on; we've totally demobilized the site, so		
7	there' no activity coming up this year.		
8	The next year we won't be drilling again		
9	until, what, 2014, I think, and we will drill one		
10	additional well then; then the year after, I think		
11	one more well. We en	W790 x 2000 x	
12	ED NUKAPIGAK: Reason why I'm asking is	Subsistence 199	
13	that, at one meeting we had, offshore was also		
14	brought up, because the whales still migrate inside		
15	the barrier islands, and Arctic cisco and the other		
16	fish species are migrating from Mackenzie River,		
17	heading west into the major rivers.		
18	BRIEN REEP: Right.		
19	ED NUKAPIGAK: How is it going to affect	Subsistence (continued from above comment)	
20	that area?	above comment)	
21	BRIEN REEP: Well, ten years ago, there was		
22	a concept of a small gravel causeway out into the		
23	water. Well, we've removed that from our design.		
24	And that was one of the big concerns, was fish		
25	migration.		
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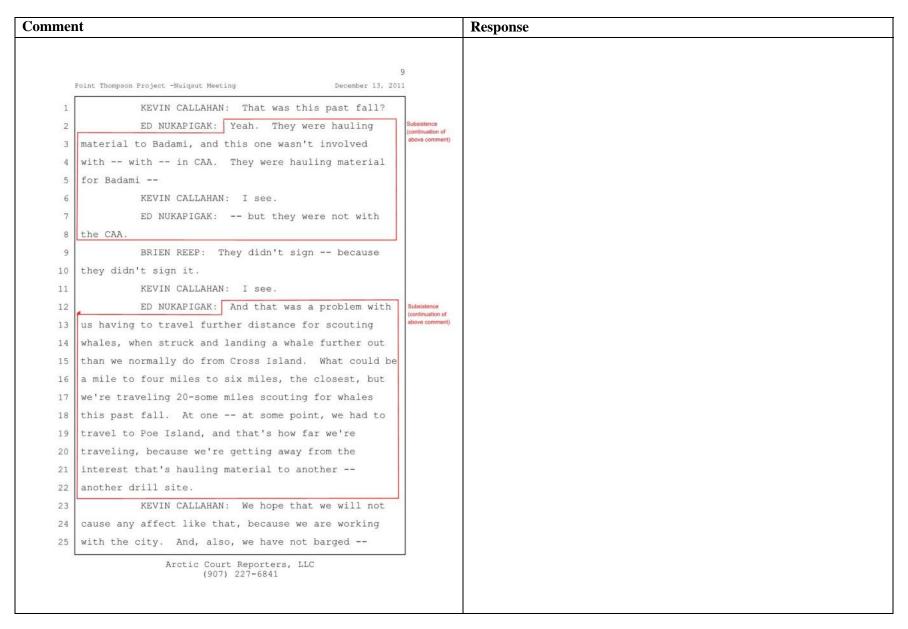


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		5	
	Point Thompson Project -Nuiqsut Meeting December 13, 2011	1	
1	BRIEN REEP: Ah.	(continuation of above comment)	
2	ED NUKAPIGAK: because it was on the		
3	route of the a lot of marine mammals out there.		
4	BRIEN REEP: I see.		
5	ED NUKAPIGAK: So we asked ExxonMobil and		
6	the other agencies to see if they can come closer to		
7	the shore, because the noise is not going to affect		
8	the caribou		
9	BRIEN REEP: Right.		
10	ED NUKAPIGAK: by barges coming by. And		
11	that was Kaktovik's concern. And Nuiqsut didn't like		
12	that. So having to come towards Bullen Point, then		
13	to come out outside the islands, and then come by		
14	Mary Sachs entrance, I believe that's where they come		
15	back in.		
16	BRIEN REEP: For the one when we have		
17	the module barges, of course, we will be trying to		
18	bring those in, in that two- to four-week period,		
19	outside of the whaling season. And those will be		
20	that heavy sealift module barge will be outside the		
21	barrier island, then come in. The coastal barges,		
22	the regular supply barges, would be inside the		
23	barrier islands, like our drilling program was.		
24	ED NUKAPIGAK: Yeah. Because due to free	Subsistence (continuation of above comment)	
25	ice, and the whales are depending on the islands for	South Community	
	Arctic Court Reporters, LLC	7	
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nen	nt		Response
		5	
	Point Thompson Project -Nuigsut Meeting December 13, 201	1	
1	navigation heading westward, that's what we see,	Subsistence (continuation of above comment)	
2	whales more whales closer, on the on the on	above comment)	
3	the islands, than we usual normally do, back		
4	back then. We would have to travel further distance		
5	to scout and during harvesting of whales. But today,		
6	with ice free, they're closer, like in less than 100		
7	feet of water, when they're migrating westward.		
8	So that's why I was asking, during your		
9	barge traffic, and how it was rerouted. And and		
10	Nuiqsut whalers wasn't satisfied with that.		
11	BRIEN REEP: Well, the last three years, I		
12	mean, we've had communication with Nuiqsut. And		
13	through the Conflict Avoidance Agreement, you know,		
14	there is a provision for coastal barging, which is		
15	viewed differently, different provisions, as long as		
16	you're coastal barging, versus the offshore barging.		
17	And for the recent activities that we've		
18	had, we've been coastal barging; so near the coast.		
19	And that's what I understood you've communicated		
20	through the AEWC. And we worked with them, on our		
21	Conflict Avoidance Agreement, just on that basis. We		
22	haven't been doing any sea offshore barging. And		
23	the coastal barging will continue in that same		
24	fashion, close to the coast. That's the plan that		
25	we've proposed.		
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mer	nt		Response
	7 Point Thompson Project -Nuigsut Meeting December 13, 2011		201 Regarding the Porcupine Caribou Herd, see the response to Comment 179 in Comment Document 186. Regarding marine mammals, the commenter is referring to an operator that may not have participated in the Conflict Avoidanc Agreement, not the Applicant or an aspect of this project. The Applicant has participated in the Conflict Avoidance Agreement in the past and intends to
1	Kevin and Kevin's been very involved in		continue its participation in the future in order to protect subsistence whale
2	that.		hunting.
3	KEVIN CALLAHAN: One thing I might add is,		
4	you know, under the Conflict Avoidance Agreement,		
5	we have the marine mammal observers onboard, and a		
6	lot of those folks have been training out of Wuksavik		
7	(ph), and and then they communicate with the		
8	communication centers, who communicate with the		
9	whalers. But they keep records of all the marine		
10	sightings, all the marine mammals that are sighted.		
11	And during the three years we were barging, we did, I		
12	think, 188 trips. And, if I'm not if I'm correct,		
13	I think only one whale was sighted.		
14	So the area we were routing for our trips,		
15	we did not see marine mammal observers, not us,		
16	marine mammal observers, who were trained, didn't		
17	didn't only saw one whale.		
18	So we think we're in a route that is good		
19	for avoiding interference with the whales and good		
20	for avoiding any interference with subsistence		
21	whaling. But we'll keep consulting with the whaling		
22	captains and		
23		Subsistence 201	
24	at two issues here: Number one, Kaktovik is		
25	concerned about caribou mi Porcupine Herd going		
l	Arctic Court Reporters, LLC (907) 227-6841		

mment		Response	
	8	3	
0	Point Thompson Project -Nuiqsut Meeting December 13, 201	1	
1	through the Point Thomson; but second issue we're	Subsistence (continuation of	
2	talking about is the offshore marine mammals that	above comment)	
3	that we depend on, that we hunt. In that area, at		
4	some point, when we're near and Cross Island.		
5	So, when they make their first		
6	presentation, when they first came here and made that		
7	presentation, I've seen that, that one portion up		
8	there, coming close to Bullen Point, was to go		
9	outside and reroute their their vessel traffic		
10	hauling material to Point Thomson, and I don't know		
11	if you folks knew about that.		
12	BRIEN REEP: Where was the		
13	ED NUKAPIGAK: It maybe was on one of	Subsistence (continuation of	
14	the one of the presentations that had that they	above comment)	
15	had made.		
16	And that was of, kind of, concern to us,		
17	because it will affect our marine mammals, and		
18	like like I told you, about the noise, how noise		
19	can affect bowhead whales, and makes it difficult to		
20	go out scouting when it's icy like that.		
21	When it's ice free, they're a lot closer.		
22	But you hear a vessel traffic, they know; they're		
23	further out.		
24	So we had a problem that was not involved		
25	with the CAA this past fall.		
88	Arctic Court Reporters, LLC (907) 227-6841	19 8	
	(201) 551-0041		



nment		Response	
	10	ř	
00	Point Thompson Project -Nuigsut Meeting December 13, 2011		
1	we've gone beyond the CAA in our approach, and		
2	we have not barged during whaling season; we have		
3	stopped.		
4	Now, at the very end of one year, in 2009,		
5	we had to bring in some barges		
6	ED NUKAPIGAK: Yes.		
7	KEVIN CALLAHAN: at the very end, when		
8	the when the season bad weather extended the		
9	season very late, and then we talked to the whaling		
10	captains and brought in a few barges while there was		
11	whaling going on, but it wasn't anywhere near where		
12	our barges were.		
13	So our goal was to avoid even having our		
14	barges in the water during whaling season, and when		
15	we do, to have the MMOs and the CAA. We understand,		
16	though, it's a problem when you have those who are		
17	not under the CAA, and		
18	ED NUKAPIGAK: And most don't have no		
19	and the most		
20	BRIEN REEP: Right, to communicate.		
21	ED NUKAPIGAK: and they're they're on	Subsistence (continuation of	
22	silent mode.	above comment	
23	BRIEN REEP: Right, yeah.		
24	ED NUKAPIGAK: So those are the ones that	Subsistence (continuation of	
25	we have to deal better, and causing us to travel	above comment)	
	Arctic Court Reporters, LLC	ł.	
	(907) 227-6841		

omment	Response		
Il Point Thompson Project -Nuigsut Meeting December 13, 2011	within the conflict rivolatine rigitement are outside the parview of the corps		
further distance. But still, you know, they're hauling material to the oil industry. So that was a problem this past fall, was, one, vessel interference, was causing us to travel further eastwards. KEVIN CALLAHAN: I wonder if that's something which can be addressed by the Whaling Commission and the industry. There was a meeting, actually, that was in Anchorage, I think, yesterday and today ED NUKAPIGAK: I know we'd like we'd	Subsidence 2002		

ment		Response	
		_	
	12		
	Point Thompson Project -Nuigsut Meeting December 13, 2011		
1	HANK BAIJ: Good.		
2	Well, the Corps of Engineers is going to be		
3	responsible for the decision whether there is a		
4	permit issued on the applicant's proposal for one of		
5	the alternatives or a combination of the different		
6	components. So part of that is protection of		
7	endangered species.		
8	Now, you're able to harvest legally an		
9	endangered species, the bowhead whale. So it could		
10	come under the regulatory authority through the		
11	Endangered Species Act. Subsistence would be		
12	something that the tribe finds to be of subsistence		
13	value, culture, so that we could bring that in with		
14	the public interest and general welfare.		
15	So you've given you've given your		
16	comments, and they've been recorded by Gail here.		
17	So barging would be part of the		
18	construction of this project, if and when a permit is		
19	issued.		
20	So there's also this Conflict Avoidance		
21	Agreement. So conditions of a permit would		
22	potentially take care of your concerns with this		
23	particular action, you know, this project, and the		
24	barging associated with delivery of materials, like		
25	the big sealift modules, to try to address your		
	Arctic Court Reporters, LLC		
	(907) 227-6841		

nment			Response	
			203 See response to Comment 200 in Comment Document 198.	
		3		
	Point Thompson Project -Nuiqsut Meeting December 13, 201	7		
1	concerns with barging at certain times, with certain			
2	routes, and whether they go up by Bullen Point.			
3	And there's a there's a channel that			
4	goes between Flaxman and, is it, Bullen Point there?			
5	There's a narrow place; it's fairly shallow. Was			
6	that what you were talking about? You didn't want			
7	them to go through that entrance and then on beyond?			
8	ED NUKAPIGAK: What happened was before	Subsistence		
9	they'd reach Bullen Point they had them rerouted	(continued below) 203		
10	straight north and outside the islands and started	203		
11	heading eastward. At some point, before they got			
12	close to Point Thomson, then they'll come right back			
13	in.			
14	I think that's how Kaktovik rerouted their			
15	barge traffic, so that it would not affect caribous			
16	at Bullen Point.			
17	BRIEN REEP: But that's not what we did.			
18	HANK BAIJ: It doesn't sound like it to			
19	me.			
20	BRIEN REEP: No.			
21	HANK BAIJ: And we can show you on this			
22	computer simulation that was modeled, that there's			
23	barging in there, and it shows you their route. The			
24	big sealift barges that would come in, they would			
25	have it's like a flotilla, several big barges and			
	Arctic Court Reporters, LLC (907) 227-6841	_		
	TEOD 32 VIACI			

nment		Response	
	1		
1	Point Thompson Project -Nuiqsut Meeting December 13, 201	1 7	
1	tugs.		
2	ED NUKAPIGAK: Yes. That's one of the		
3	HANK BAIJ: And, also, the coastal barging		
4	is different they would hug the coast more for		
5	a small you know, like those containers,		
6	containers and equipment and supplies; that would be		
7	a different route.	1 C. tulstone	
8	ED NUKAPIGAK: Yeah. And one of their	(continuation of above comment)	
9	employees told me, "Do you like this route?" "No."	ALCOS MONTH IN	
10	"We don't like it either." And they must have		
11	re-modified their barge traffic there.		
12	BRIEN REEP: Yeah.		
13	HANK BAIJ: I'm thinking that that		
14	happened, but I haven't been involved with		
15	development of the		
16	BRIEN REEP: We meet every		
17	HANK BAIJ: Conflict Avoidance		
18	Agreement.		
19	BRIEN REEP: every season.		
20	KEVIN CALLAHAN: We did modify our barge		
21	route and moved it closer to the coast, because we		
22	were requested by the captains at Kaktovik to do		
23	that. We did that a couple years ago.		
24	(Whereupon, the meeting excerpt was concluded.)		
25			
	Arctic Court Reporters, LLC (907) 227-6841		

mment		Response
		204 Comment noted; no action required.
	0199 Scott.Thorson Ind	
Davis, Cecile		
Sent: Wednesd To: comment	lay, January 04, 2012 4:38 PM s@pointthomsonprojecteis.com	
Cc: extraski@	gmail.com	
Subject: Online for	rm submission	
Name: Scott Thorson		
Email: scott@nbsys.com		
Address: 1161 Briggs Court		
City: Anchorage		
State: AK		
Zip: 99516	Statement of Support for Alternative B 204	
Contact Phone:		
	mment on the Point Thomson Project Draft Environmental Impact	
Statement. I strongly suppor	t Alternative B. Here are my thoughts on this project.	
As a former airline pilot in	Alaska, I can tell you without doubt, the longer runway found	
	better access in bad weather. It also reduces the number of	
flights by allowing larger ai	rcraft for routine cargo shipments and allows for aircraft to	
	pabilities in the event of an emergency. This is a very	
important piece of the entire	project.	
Alternative B would create a	minimal environmental footprint by incorporating a combination	
	nter ice roads, aviation, and in-field roads. These features are	
essential to the project's sa		
	de many benefits to Alaska in the form of new business	
	nues. As a small business owner, this is critical for the economy. Approval of the Point Thomson project, as proposed in	
	North Slope gas commercialization and other development	
	lirect benefits to the State of Alaska from Point Thomson include	
	s, new revenues to the state and local governments, increased	
	ka oil pipeline, and increased business activity and revenue for	
the private sector.	and the state of the second second second second and the second s	
Please approve Alternative B.		
Sincerely,		
Scott Thorson		
	1	

Comment



0200_Pamela.Bergmann_FGOV

TAKE PRIDE

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
1689 C Street, Room 119
Anchorage, Alaska 99501-5126

9043.1 PEP/ANC ER 11/1071 January 5, 2012

Harry A. Baij, Jr. Department of the Army U.S. Army Engineer District, Alaska Regulatory Division P.O. Box 6898 JBER, Alaska 99506-0898

Dear Mr. Baij:

The U.S. Department of the Interior (Department) has reviewed the November 2011 Point Thomson Project Draft Environmental Impact Statement (EIS) for the proposed development by Exxon Mobil Corporation and PTE Pipeline LLC. Department comments on the subject document are made in accordance with the National Environmental Policy Act and the National Historic Preservation Act.

It should be noted that any comments the Department's Fish and Wildlife Service (FWS) may have on this Draft EIS will be submitted to the U.S. Army Corps of Engineers by the FWS under separate cover in accordance with their role as a Cooperating Agency for the EIS. The Department would also like to note that the Draft EIS includes within the project area, the Leffingwell Camp National Historic Landmark (NHL), which is located on Flaxman Island. Our review suggests that while proposed project activities generally appear to be on the mainland, the map titled "North Slope Alaska Vicinity Map" shows Flaxman Island within an "Oil and Gas Unit." Based on the information provided, the NHL does not appear impacted by the project. However, if that is not the case, we recommend you contact Janet Clemens (NHL Historian, National Park Service-Alaska Regional Office via phone at 907-644-3461 or via email at janet clemens/@nps.gov) for additional information regarding the NHL. We believe the Final EIS should specifically address and clarify this point.

We appreciate the opportunity to provide comments on this document. If you have questions regarding our comments, please feel free to contact me at via phone at 907-271-5011 or via email at pamela_bergmann@ios.doi.gov.

Sincerely,

Pamelo Bergman

Pamela Bergmann Regional Environmental Officer – Alaska

Response

205 The Leffingwell Camp National Historic Landmark (NHL) located on Flaxman Island would not be impacted by the proposed project. Should the project design change to affect Flaxman Island, the Corps will coordinate with the National Park Service, State Historic Preservation Officer, and consulting parties to identify and manage any potential effects to the NHL.

mment		Response
		206 Comment noted; no action required.
Davis, Cecile	0201_Cynthia.Allen_Ind	
Sent: To: Cc: Subject:	Thursday, January 05, 2012 8:25 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission	
oudjeon.		
Name: Cynthia Alle Email: <u>cyaln04@yal</u> Address: 3902 W 80 City: Anchorage	hoo.com	
State: AK Zip: 99502	Statement of Support for Alternative B 206	
Contact Phone:		
in-field gravel re around 25% of the	iting to express my support for the ExxonMobil plan for coastal pads with oads. It has been determined that Point Thomson potentially represents North Slope's current known natural gas resource. It would be abysmally development of such an expansive gas field.	
Plan B has been do well worth the min	esigned to provide the most environmentally safe development; the benefit is nimal environmental risk, not only for Alaska, but the entire nation.	
	been thoroughly assessed and there is no need for further delay in the	
approval of this	vital work.	
	ï	

mment		Response	
		207 Comment noted; no action required.	
Davis, Cecile	0202_Bret.Helms_IND		
Sent: To: Cc: Subject:	Thursday, January 05, 2012 2:42 PM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission		
Name: Bret Email: Helms Address: 770 Ber City: Fairbanks State: AK Zip: 99712 Contact Phone: S Add me to mailir Comments: To Who	907-456-2349		
	Statement of Support for Alternative B 207		
Pipefitters Loca field constructi economy, especia	Helms and I am the Training director for the United Association of Plumbers & al 375. I was born and raised in Fairbanks and have worked many years in oil ion and maintenance. The development of Point Thomson is vital for Alaska's ally at a time when throughput is declining. Development of the field will g opportunities and future jobs for the existing workforce that resides in		
I am writing in	support of Alternate B for the following reasons:		
	provides a minimal environmental footprint by including a number of ired for safe and efficient operation.		
	ked with the U.S. Fish and Wildlife Service and state agencies to ensure ildlife with minimal impact.		
• The infield ro efficient water	bads proposed are routed to minimize the gravel footprint and maximize drainage. \ensuremath{C}		
	C & D incorporate unnecessary challenges and the elimination of summer barging osts and tundra travel.		
	equirements that provide little, if any environmental benefit should be e complexities of project such as Point Thomson.		
Thank you,			
Bret Helms			
	1		
	8		

Comment	Response
	208 Comment noted; no action required.
Sent: Friday, January 06, 2012 12:40 PM To: comments@pointthomsonprojecteis.com Cc: extraski@gmail.com Subject: Online form submission Name: Judy P Patrick Email: jpp@mail.com Static State: AK Zip: 99654 Contact Phone: 907223-4704 Comments: I fully support ExxonMobil's proposed Point Thomson plan of development Alternative B. Industry has proven that oil and gas can be responsibly extracted in the Arctic environment with minimal, and sometimes positive impact. (Such as in the case of the carbou herd population increasing around Prudhoe Bay since oil was first produced in the 1970s.) Alternative B provides important options for transportation to/from and in and around the Pt. Thomson area. With a development of this complexity, and in a remote location, it is necessary to consider not strictly the environment, but also the safety of the people who will work there. Alt. B takes into consideration these and other measures to ensure wildlife, the tundra ecosystem, aquatic and human life are protected. It also allows for subsistence users as well. Alaska is a resource based state. For our residents and governments mutual benefit, (survival even) we need to move forward with responsible resource development, such as Pt. Thomson, for the jobs and revenue it creates, My wish is for regulatory agencies to see themselves as partners in this process.	
file:///C//Documents%20and%20Settings/cedavis/Desktop/Point%20Thomson/Draft%20EIS%20Comments/010612_Judy.Patrick.txt[1/6/2012 4:52:59 PM]	

Comment Response 607 Comment noted; no action required. 0204 Steve.Post Bus NORTH STAR TERMINAL & STEVEDORE CO. LLC NORTH STAR EQUIPMENT SERVICES Operated Crane Services Drilling/Driving VSM's & Pile Bare Equipment Leasing ANDERSON TERMINAL TEL: (907) 272-7537 FAX: (907) 272-8927 790 Ocean Dock Road, Anchorage, AK. 99501 Anchorage Valdez Seward **Dutch Harbor** To: Harry Baii January 4, 2012 US Army Corps of Engineers Statement of Support for Alternative B 607 Subject: Support of Alternative B for the development of Pt. Thomson Dear Mr Baij, North Star Terminal & Stevedore Co LLC and North Star Equipment Services has operated in Alaska since 1950. Our livelihood in great part depends on responsible resource development. We have been active in developing solutions in support of the marine cargo handling needs and construction of the bridges and marine facilities for the Pt Thomson project. This will generate over 40 high paying jobs for our company and needs your support. The proposed project is important to the state of Alaska and to Alaskans. Of the design alternatives considered, Alternative B provides the safest, most environmentallyresponsible solution for developing Point Thomson's resources. Alternative B ensures a minimal environmental footprint by incorporating a combination of summer coastal barging, winter ice roads, aviation, and in-field roads. These features are essential to the project's safe and efficient operations. Through Alternative B, ExxonMobil will implement comprehensive mitigation measures to minimize impact on tundra, wildlife, aquatic resources, and subsistence activities. The Point Thomson project will provide wide-ranging benefits to Alaska in the form of new business opportunities, jobs, and revenues. Approval of the Point Thomson project, as proposed in Alternative B, is vital to the development of this world-class resource and North Slope gas commercialization. Direct benefits to the State of Alaska from Point Thomson include training and jobs for Alaskans, new revenues to the state and local governments, increased throughput for the Trans-Alaska oil pipeline, and increased business activity and revenue for the private Point Thomson is a highly-technical project with high costs. Unnecessary requirements that provide very little, if any, incremental environmental benefits, should be avoided as to not compromise the economic viability of the project.

Response

Comment		Response
j.		608 Comment noted; no action required.
	0205_Jeremy.Bryant_Ind	
	J BeyouT	
	GOI WINTER HANKIN	
	ANEN AK	
	HANK BAIT, PROJECT MANAGER 99504	
	U.S. ARMY CORPS OF ENGINEERS	
	ALASKA DISTRET, REQUESTORY DIV.	
	P.O. Box 6898	
	JBER, ALMSKA 99506-0898	
	Statement of Support for Project 608	
1-11-1-11	To WHOM IT MAY CONCERN,	
	ALASKA'S ECONOMY DEPENDS ON NEW	
he lesses to the second	DEVELOPEMENT, AND OUR FUTURE LIES IN	
	NATURAL GAS. POINT THOMSON IS A NEW	
111	DEVELOPMENT, BUT IT'S CLEAR THAT ITS	
	ENVIRON MENTAL INPACT 'S NOT DEATHCALLY	
	DIFFERENT FROM THAT OF THE FIELDS	
1-1-2-1-1-1	THAT ARE ALREADY IN PRODUCTION ON	
	THE NORTH SLOPE, THERE IS NO REASON	
1.	TO DELAY THE APPROVAL OF THE FINAL	
(1)	EIS ANY LONGER. THERE ARE STILL QUESTIONS	
	ABOUT HOW GAS WILL FLOW OUT OF THE	
H1	RESERVOIR AT POINT THOMSON, AND THE	
,	DNLY WAY THOSE QUESTIONS CAN BE	
	ANSWERED IS FOR THE BUREAUCRACY TO	
	GET OUT OF THE WAY AND LET EXXON	
of the contract of the contrac	GET TO WORK.	
	The second secon	

Comment	Response
AFTER PEVIEWING THE	ENVIRON MENTAL
IMPACT STUDY FOR POINT TH	Homson , I I
Am LEST WITH ONLY ONE WHAT'S THE HOUR	E QUESTION:
WHAT'S THE HOLD	U P!
SENERILY	
1)196	
1 1/2/	
JEREMY BRANT	

Comment	Response
STEELFAB ALASKA'S STEEL SOURCE 0206_Richard.Faulkner_Bus	454 Comment noted; no action required.
2132 Railroad Ave. ~ Anchorage, AK 99501 ~ 907-276-4303 ~ Fax 907-276-3448	
January 11, 2012	
Congressman Don Young Anchorage District Office 4241 B Street, Ste. 203 Anchorage, AK 99503 Subject: Point Thomson Dear Congressman Don Young, Not a Comment on EIS 454 I was disheartened this month to learn that the public comment period on the Environmental Impact Study (EIS) for Exxon's Point Thomson project has been extended due to the fact that no comments opposing the project were received during the original public comment period. My initial objection this new delay should be obvious. Clearly, based on what have apparently been overwhelmingly positive comments already received by the U.S. Army Corps of Engineers, the majority of Alaskans support moving forward with development at Point Thomson. This should come as no surprise to anyone who understands Alaska's economy. Extending the public comment period won't change the fact that Alaskans support responsible oil and gas production. My second concern, however, is the real source of my – and many of my friends' and neighbors' – frustration: Why have we been forced to sit through yet another delay? Point Thomson holds one quarter of the North Slope's known gas reserves – 8 trillion cubic feet of gas and 200 million barrels of gas condensate. The filed has the potential to play a role in securing Alaska's economic future for years to come. Production must begin at Point Thomson before the field's full value can be assessed, and before the technical challenges of recovering Point Thomson gas can be fully understood. Point Thomson's potential can't be realized – or even accurately measured – while its progress is tied up in bureaucratic red tape.	

Hundred of Alaska businesses, including mine, depend on the oil and gas industry. Point Thomson will have a direct and lasting impact on our livelihoods, and we have been considered to the lawaints of the lawaints to end. We waited for the flawaints to end. We waited for the lawaints to end. We waited for the business to end the public comment period to close — twice. And now, more than two years after the EIS process began, we are still variing for the final approval so Excondibility and the public comment period to close — twice. And now, more than two years after the EIS process began, we are still variing for the final approval so Excondibility and the public process that the public comment period to close — twice. This process has been held up for for too long already. After years of lingation and delays, it's time to more forward. The source is fluid EIS is approved the source we can put Point Thomson to work for Alaska. Excon has sone everything it can do. It is now up to the U.S. Army Corpor of Engineers and orthey government deadline is just one more needless delay standing between Alaska and economic security. I know I don't have to explain to you how important the petroleum industry is to Alaska's seconomy, and I'm sure you can understand my frustration at having to write this letter. I am calling on you, as the elected representative of the people of Alaska, to take action to put an end to the waiting. We need Point Thomson. We can't wait any longer. Sincerely, Sincerely,

_

Comment	Response
Hank Baij, project manager Brandon Spaulding US Army Corps of engineers 19732 second St. Alaska District, Regulatory Div Eagle River Ak Po Box 6898 99508-0898 Statement of Support for Project	
We Should go forward with Point Thompson project for Alaskans and Their families in Alaska many people depend on these industrys for employment in Anchorage.	
Render Spubling Concerned Hoskan	

Comment		Response
TO	Hank Bais project manager Nick Faughnan U.S. Army corps or engineers 4950 C. 24th apt. #1 Alaska District, Regulatory Division anc. Atk P.O. box 6898 TBER, Haska 99506 Statement of Support for Project 458 To whom it may concern, There is simply no good reason to Keep sitting an this report and holding up a project that has the recognized potential to do so much good. Why are we sitting around and waiting For someone to invent a reason to delay development yet again? Approve the EIS and allow Exxon to move Forward as planned. Sincerely, Neer Fourn	Response 458 Comment noted; no action required.
	Sincerely, Wier Four	

Comment		Response	
Hank Baij, Project Man U.S. Army Corps of Engin Alaska District Regulation P. O. Dox 6898 JBEIR, Alaska 99.506-00 Tt is time to moun Point Thompson project. In the Middle East, it move forward with our and development. If you U.S. to have to pay \$10.0	Statement of Support for Project 459 E forward with the Due to engoing unjest is crucial that we Own gas + oil exploration want everyone in the oun a gallon for gasoline, oublic comment period	459 Comment noted; no action required.	

Hank Baiji project manager Softhice Blud US Army Corps of engineers #7! Alaska District, Pegulatory Div. Machange Ak P.O Rox 6898 J88R, Alaska 99508-0898 Statement of Support for Project 400 To whom it may Concern, Work at Point Thormson has Been De layed for far too long, with this law Suits, Dickering and Bureaucracy. Alaska's economy relies on Continued Oil and gas production. Alaska Been doing this for year's we know what we're doing 80 (et's get going) and let us do what we do!	Comment	Response
	Hank Bail project manager 3007 Artic Blod US Army Corps of engineers #71 Alaska District, Regulatory Div. Anchorage Ak, P.O. Box 6898 JBBR, Alaska 99508-0898 To whom it may Concern, Work at Point Thomsom has Been De layed for far too long, with this law Suits, bickering and bureaucracy. Alaska's economy relies on Continued Oil and gas production. Alaska Been doing this for year's we know what we're doing So let's get going	

Comment	Response
Hank Baij, Disject Manager Jacie Pmiller	461 Comment noted; no action required.
U.S. Army Corps of Engineers P.O. Br. 841096 Alaska Vishied Ragil fory Division Waster 99687 1.0. Box, Alaska 99506-0898 Statement of Support for Project 461	
To whom it may concard Affor reviewing the environmental Stody	
for Point Thorson, I am left with only love guardon: what's the hold up?	

Comment		Response
		462 Comment noted; no action required.
-		
2	0214_Robert.Johnson_Ind.pdf	
	Hant Bais, prisest manager Robert Johnson	
	U.S Army corps of Engineers 10 Box 243312	
	Alask District, Regulary Division Archorage AK 99524	
	Po. Box Alaská 99506-6895 907-884-1774	
1		
	Statement of Support for Project 462	
	To whom it may concern;	
	The draft EIS makes it clear that the point Thomson	
	project does not pose any greater rish to the	
	Environment than any other responsibly-developed	
	oil and gas project. The North Slope is not a new environment for oil and gas project. Production has been going on there formore than 30 years.	
	en viron ment for oil and gas companies.	
-	troduction his been goingon There toomore Than syears,	
	The risks and special considerations are well known	
	to the producers that operate in the Arctic, Looking	
1	at the EIS, it's clear Exxon has taken stepsinit's	
1	planning to minimize the projects improved on the	
§-	to the producers that operate in the Arctic Looking at the ETS, it's clear Exxon has taken steps in it's planning to minimize the projects imaged on the Environment. So leshy are we facing yet anther	
	necoless delay,	
	I like most Families, adependon theo; I and	
	Gos companies to Feed are Families	
	Thooks OI O. A. A.	
	Thanks, Polit Johnel	
	<i>y</i>	
L		

Comment	Response
	463 Comment noted; no action required.
0215_Rick.Euscher_Ind Bick Euschle 13345 Lamb DL Anchology, Nr 99516 Hank Baij, Project Manager	
Hank Baij, Project Manager U.S. Army Corps of Fragineers Alaska District Regulatory Division P.O. Box 6898	
JBER, Alleska 99505-0978 Statement of Support for Project 463	
It's my understanding that the public comment period for the Point Thompson Environmental Impact	
study has been given extended by more than two weeks because no negative comment were received. That	
in a unanimous election It's obvious Alaskons support moving focused with this project. There is no need for further delay.	
lik book	
1	

Comment	Response
	464 Comment noted; no action required.
0216_Tou.Tham	pithank_Ind.pdf
Hank Bay Project Manager Tou To	hampithak
	le Band eiros
Adoska Vistrict, Regulatory Div. Anchorage,	1k 99507
P.O.Box 6898	
JBer, Alaska 985-06-0898	
Z William of man concern : Statement of Support	not for Deplace ASA
To Whom it may concern: Statement of Support	NT OF Project 464
Work at foint Thomson box been	1. Parcel
long enough by lowswith buttering a busearacy alaska's economy relies	
continued oil and gas production. Poi	17 honson
is located on the North Slope, When	e oil
companies lave been operating for	decades.
They understand the environme	nt, the
sich and Their per sonsibilities. Holde	ing up
this study will not change any of What's the problem.	that.
What's the problem	
0.1	
Sincely	
2. Oh.	madale
an open	

Comment		Response	
Davis, Cecile From: Bat Sent: From: To: Tro: Tro: Tro: Tro: Tro: Tro: Bat Subject: Ri Hi Thomas and thanks for you They will be given full conside 2012. Hank Harry A. Baij Jr. US Army Corps of Engine harry. a. baij@usace.army Office: 907.753.2784 Cell: 907.350.5097	ration and included in the administrative record. The comment period ends on Jan. 18, eers, Alaska y.mil /reg	Response 465 Potential impacts to employment in the NSB are discussed in Section 5.15, Socioeconomics. During the 2008 to 2010 exploratory phase of the Point Thomson Project, the Applicant and its contractors hired NSB residents for several subsistence and wildlife monitoring positions as well as for project management, labor, and heavy equipment operations (ExxonMobil 2010d). For the current proposed project, the Applicant has committed to continuing to hire local residents and Alaska Natives and has, to date, sponsored annual job fairs in Kaktovik and supported other training and education programs in the NSB and in Alaska (ExxonMobil 2010d). The Applicant has also committed to using local suppliers, contractors, and subcontractors, provided that they meet safety, health and environmental requirements. While the number of positions filled by NSB residents cannot be estimated at this time, it is likely that the Point Thomson Project would have a temporary and minor positive impact on resident employment in the NSB.	
Sent: Thursday, January 12, 7 To: Baij, Harry A Jr POA			
Point Thompson			
Some of my concerns is local h	socioeconomics 465		
Subsistence advisor need to l	be hired they have all the Traditional knowledge and knows the land pretty wells.		
Especially when high tide com	es in case of an ice road		
Work with tribal govt's on hiri	ng people North Slope Borough has a lot of unemployment		
	1		

mment		Response
		466 Comment noted; no action required.
Davis, Cecile	0218_Larry.Larson_	<u>Ind</u>
From: Sent: To: Subject:	Baij, Harry A Jr POA [Harry.A.Baij@usace.army.mil] Friday, January 13, 2012 12:07 PM Begjier, Erin; Alcantra, Rosetta M. FW: Point Thompson; Larry Larson's comment	
Comment received. I	Please log in. Thanks, Hank	
Harry A. Baij Jr. US Army Corps of harry.a.baij@usa Office: 907.753. Cell: 907.350. www.poa.usace.ar	Engineers, Alaska uce.army.mil 2784 5097 mmy.mil/reg	
From: Larry Larson Sent: Thursday, Janu To: Baij, Harry A Jr P Subject: Point Thom	mailto:llarson@steelfabak.coml uary 12, 2012 11:23 AM OA opson	
Mr Baji,	Statement of Support for Project 4	
my ongoing employm	this project moving forward in the near future. The Exxon-Point Thomson development is crucial nent and many others in this state who depend on oil development. Please do whatever is in you project to a realization. Thank you.	
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nment		Response
		467 Comment noted; no action required.
Davis Casila	0219 Kevin.Mesceda In	
Davis, Cecile	0215_Reviii.Mesceda_iii	
From: Sent: To:	Baij, Harry A Jr POA [Harry A.Baij@usace.army.mil] Friday, January 13, 2012 12:05 PM Begjer, Erin; Alcantra, Rosetta M.	
Subject:	FW: Point Thomson DEIS; Kevin Mesceda's comment	
Comment received.	Please log in. Thanks, Hank	
Harry A. Baij Jr.		
US Army Corps of harry.a.baij@usa	f Engineers, Alaska	
Office: 907.753 Cell: 907.350	.2784	
www.poa.usace.a		
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	la [mailto:kmesceda@steelfabak.com] uary 12, 2012 10:35 AM	
To: Baij, Harry A Jr F	POA	
Subject: Point Thon	ISON DEIS	
Mr. Baij,		
Laur mairia a manaria kina	Letter in accordance the Deigh Thomas DEIC	
ram writing you this	letter in regards to the Point Thomson DEIS. Statement of Support for Project 467	
	S Army Corps of Engineers to conclude this DEIS and give the green light for development of the	
	nd Gas field. The delays and extensions of comment periods have become cumbersome and	
	reasonable to extend an "open" comment period for lack of opposition? The process of studying las gone on long enough. This is an Onshore development with planned Gravel Working Pads, that i	
	the planned environment that has been working for 40years! I believe the time is now for this	
project to be moving	forward and creating jobs for Alaskans and Americans as a whole.	
As a resident of the S	State of Alaska for the last 39 years I believe that Alaskans in partnership with the Oil Producers	
	o responsibly develop these new fields. Enough of the Red Tape and bureaucracy when this	
comment period end	ds I urge your office to release Exxon-Mobil to begin development of Point Thomson.	
Respectfully yours,		
Kevin Mesceda		
Business Developme	nt Manager	
STEELFAB 907-264-2813		
907-830-2868 Cell		
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Comment Response 468 Comment noted; no action required. 0220 Fredd.Parady NGO January 12, 2012 Mr. Harry Baij, Jr. harry.a.baij@usace.army.mil FAX 907-753-5567 Army Corps of Engineers PO Box 6898 CEPOA RD JBER, AK 99506-0898 Re: Point Thompson EIS Dear Mr. Baij, Statement of Support for Alternative B 468 The Alaska Miners Association supports Alterative B as the preferred alternative for the Point Thompson Environmental Impact Statement. The Alaska Miners Association is a non-profit membership organization established in 1939 to represent the mining industry in Alaska. The AMA is composed of more than 1400 individual prospectors, geologists and engineers, vendors, suction dredge miners, small family mines, junior mining companies, and major mining companies. Our members look for and produce gold, silver, platinum, diamonds, lead, zinc, copper, coal, limestone, sand and gravel, crushed stone, armor rock, and other materials. Our members live and work throughout the state and all depend on petroleum products for their businesses and for their personal lives. Alternative B is the logical choice for a number of environmental, technical and economic reasons. From the environmental viewpoint Alternative B provides the safest, most environmentally-responsible solution for developing Point Thomson's resources. It would have a minimal environmental impact by using a combination of summer coastal barging, winter ice roads, aviation, and in-field roads. All of these modes of transportation are essential for the movement of people, equipment and material. Alternative B includes various mitigation measures to minimize impact on other resources including tundra, water, wildlife, and subsistence. These measures include protecting polar bears and other wildlife and waterfowl. Furthermore the barge route proposed is outside the main fall migration corridor of bowhead whales. Under Alternative B gravel pads, roads and bridges have been cited to minimize the footprint and allow for drainage and water flows. It is important that the longer runway is utilized to [provide safer access during bad weather and will reduce the number of flights by accommodating larger aircraft. This is also a benefit because it will allow use of larger aircraft for shipping cargo and equipment. The result will be fewer larger flights which are

Comment	Response	
exploration wells have been drilled in the Point Thomson area to date, both onshore and offshore, without any incident whatsoever. As the proposed project moves forward, revenues will flow throughout the state. Point Thomson resources are vital to efforts to commercialize Alaska's gas. Given the minimal impacts to tundra, wildlife, aquatir essources, and subsistence activities, and the benefits the project would provide the state and Alaskans, the Alaska Miners Association joins others in urging the Corps to select alternative B in the Final EIS. Given all of the above, it is vital that this EIS proceed in a timely manner to a sound decision, which in this case is the approval of Alternative B. If you have any questions on these comments, please do not hesitate to contact me. Statement of Support for Alternative B 469 Cordially, Fred Parady Executive Director, AMA ce: The Hon. Lisa Murkowski – U.S. Senator The Hon. Don Young – U.S. Representative K. Knutson – State of Alaska		

Comment

0221 Christine.Reichgott.FGOV

STATES TO STATES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 900 Seattle, WA 98101-3140

> OFFICE OF ECOSYSTEMS, TRIBAL AN PUBLIC AFFAIRS

January 17, 2012

Harry A. Baij, Jr. U.S. Army Corps of Engineers Alaska Regulatory Division P.O. Box 6898 JBER, Alaska 99506-0898

Re: EPA comments on the Draft Environmental Impact Statement for the U.S. Army Corps of Engineers ExxonMobil Corporation Point Thomson Project (EPA Project # 09-070-COE).

Dear Mr. Baij:

Thank you for the opportunity to review the Draft Environmental Impact Statement (EIS) for the ExxonMobil Corporation Point Thomson Project in the North Slope Borough, Alaska (CEQ # 20110387). We have reviewed the EIS in accordance with our responsibilities under National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, as well as our role as a Cooperating Agency on the EIS.

Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions as well as the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA. We have given the EIS an overall rating of EC [(Environmental Concerns-Adequate Information). A description of our rating system is enclosed.

We appreciate the tremendous effort of the U.S. Army Corps of Engineers (Corps) to produce a readerfriendly and succinct document that clearly articulates the anticipated impacts of the proposed project. We believe that the visual graphics, index, glossary, impact summary statements and numerous appendices are extremely useful to the reader. We also commend the Corps for developing high quality visual simulations of the alternatives and a helpful project website.

Below are the issues we believe warrant additional consideration for the Final EIS:

Air Quality

In our February 25, 2010, scoping letter, we provided extensive comments regarding what we believe to be the adequate approach and level of analysis for potential impacts to air quality for this project. While the current analysis offers much improvement from the preliminary analysis we previously reviewed, we have additional recommendations for your consideration below.

Greenhouse Gas Reporting Rules

As identified in Section 5.4.1.8, EPA has finalized greenhouse gas (GHG) reporting rules applicable to Point Thomson facilities. Because these rules are final, we recommend that the Final EIS describe the specific reporting requirements for the specific facilities at Point Thomson. In addition, the EIS should define what a facility is with regard to this project. The

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Response

- 470 Comment noted; no action required.
- 471 Draft response to be replaced by pending EPA text--The Corps believes that the general discussion of GHG reporting requirements included in the Draft EIS is appropriate for a NEPA document, which is focused on assessment of environmental impacts. Additional details on specific GHG reporting requirements, including identification of applicable NAICS codes, are typically included in the state's air quality permit or associated technical support document.

Comment

final petroleum and natural gas reporting rule provides examples of the types of facilities affected by this subpart and their associated North American Industry Classification System (NAICS) codes, which should be identified in the Final EIS. This information is particularly important because it will determine the method used to calculate emissions and operational data. Finally, the rule's preamble also notes that many facilities covered in Subpart W have GHG emissions from multiple source categories listed in other subparts of the rule. Therefore the Final EIS may need to indicate other sources that are covered by this rule. The rule and associated fact sheet can be accessed at: http://www.epa.gov/climatechange/emissions/subpart/w. For additional information or questions, please contact Madonna Narvaez, our GHG Reporting Rule expert, at 206-553-2117.

Arctic Haze

Previous development projects on the North Slope have identified arctic haze, a reduction in air quality primarily from Asian industrial and mid-latitude city emissions, as an existing regional air quality concern. Currently, the air quality section does not address arctic haze. Since this issue has been identified as a concern by North Slope residents, we recommend including a discussion of arctic haze in the Final EIS.

Monitoring Site Information

In Section 3.4.1, for available monitors or monitoring sites, we recommend providing information about the location, the purpose of monitoring, data collection periods with start and end dates, frequency of monitoring, monitoring methodology (i.e. federal reference or equivalent methods), and data quality assurance and quality control.

Compliance Data

Any violations of standards identified from monitoring data should be noted along with the date on which they occurred in Section 3.4.2. Data for all averaging times for each pollutant should be presented. The data should include, at a minimum: pollutants measured, maximum and minimum concentrations, average concentrations, averaging times, time and date stamps, and specific location information in UTM or lat/long coordinates as well as all other pertinent information required to make valid observations for the specific type of monitor. This data may be included as an appendix and referenced in the EIS.

Emission Effects on Other Resources

The Draft EÏS analyzes the direct, indirect, and cumulative impacts in the foreseeable future of this project. Analysis of impacts should be conducted from two perspectives: 1) potential effects on air quality (i.e., the concentration of pollutants in the atmosphere) and 2) the potential effects of air pollution on human health and other aspects of the environment (the potential injury to natural resources and other elements of the affected area/ecosystem). Section 5.4.2 discusses the methodology to assess air quality impacts based on comparison with Prevention of Significant Deterioration (PSD) thresholds and modeling. We believe a discussion on methodology for assessing air quality impacts on other aspects of the environment and identification of any indirect adverse effects (such as deposition of pollutions as NOx and SOx which contribute to acidic precipitation and can cause acidification of lakes and severe ecosystem impacts) should be included.

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Response

Air Quality

Air Quality 473

Air Quality

- 472 The following information was added to the end of Section 3.4.5, Ambient Air Quality: "The North Slope is subject to a condition known as "arctic haze." Arctic haze is a condition of reduced visibility in arctic regions. When viewed away from the sun it appears grayish-blue; looking into the sun it appears reddish-brown. It has no distinct upper and lower boundaries. Arctic haze peaks in the spring and is most severe when stable, high-pressure systems produce clear, calm weather (NSIDC 2011). Sampling in the 1970s revealed that the haze was largely composed of industrial pollutants (sulfur compounds and black carbon particles--the products of iron, nickel and copper smelters and inefficient coal-burning plants) from Eurasia (Roznell 1996). Sampling in 2008 indicated that much of the arctic haze at that time was a result of soot from forest fires and burning of farm fields in Eurasia (Roznell 2009). Additionally, submicron organic particles sampled during 2008 and 2009 in Barrow were characteristic of emissions from northern Asia, Siberia, and, to a lesser extent, interior regions of Alaska and Canada (Frossard et al. 2011). The haze is worse in spring due to stagnant air and the lack of precipitation. Conditions improve in the summer, as the atmosphere mixes more and precipitation washes the pollutants from the air."
- 473 Section 3.4.1, Key Information About Air Quality is a brief summary of Section 3.4. Additional information regarding the monitoring data (e.g., location and dates) is provided in Section 3.4.5, Ambient Air Quality. Section 3.4.5 states: "Information regarding the purpose of these monitoring sites, frequency of monitoring, monitoring methodology, and data quality assurance and quality control can be found in the monitoring reports submitted to ADEC." This text has been changed to: "Additional information regarding the purpose of the monitoring, frequency of monitoring, monitoring methodology, and data quality assurance and quality control is included in the monitoring reports submitted to ADEC. These are provided in Appendix X."
- 474 The available monitoring data within the study area (defined at the beginning of Section 3.4, Air Quality, as the area from Deadhorse to Point Thomson) are summarized in Table 3.4-3 (see Section 3.4.5, Ambient Air Quality) along with a comparison to the NAAQS. As indicated by the table and associated text, no violations of the standards have occurred. The highest pollutant concentration relative to the NAAQS is the 1-hour concentration for NO₂ (98th percentile of daily maximum 1-hour values over a 1-year period) for the Point Thomson site, which was 70 percent of the respective NAAQS. Detailed monitoring data are now provided in Appendix X. The text in Section 3.4, Air Quality has also been clarified relative to the use of the terms "project area" and "study area."
- 475 The potential effects of air emissions on human health are addressed in Section 5.23, Human Health. A statement to that effect has been added to Section 5.4.2. Also, Section 5.4.4.6, Other Potential Air Emission-Related Impacts, has been added to address potential deposition impacts.

Comment Response 476 The timing of the construction season would vary depending on the project component. The following text has been added to the first paragraph in Section 5.4.4.1: "Figure 2.4-12 in Chapter 2.0 provides the details of the construction seasons for Alternative B." Estimated construction emissions for Alternative B are conservatively shown as the "Total" in Table 5.4 2 and include stationary Construction Season emission units, mobile sources, and fugitive dust. The construction phase In Section 5.4.4.1, three construction seasons are identified as being required for Alternative B. It overlaps the primary drilling phase and the start of production operations. would be useful to have an idea of the duration of each construction season, and the time of year Therefore, the "Total" emissions include emissions from drilling and production, construction is expected to commence and end, as well as an analysis of resulting air emissions. as well as construction. Tables 3-2 and 3-3 in the Applicant's air quality permit application (Application for a Prevention of Significant Deterioration Air Also in Section 5.4.4.1, please provide the emission inventory used to calculate the potential emissions "Total" and "Stationary Sources" for the listed pollutants in table 5.4-2, and provide a Quality Construction Permit for the Point Thomson Project, July 2011, Permit comparison of the alternatives. No. AQ1201CPT07A) provide detailed summaries of the potential emissions during operation and drilling and during construction and drilling, respectively. Water Quality While we do not have substantial concerns regarding potential impacts to water quality based on the Further detail regarding emissions is provided in Appendix B-1 of the air quality information presented in the Draft EIS, we do have several specific recommendations to improve the permit application. technical accuracy of the water quality discussion. 477 Emission inventories are provided in the Applicant's air quality permit For Section 3.7.3, we recommend changing the language on 3-65, line 1, to "The CWA is the primary Quality 744 application (see Comment 476). This document is now referenced in the EIS for law governing water pollution into U.S. waters, which consist of ... " Also, for the discussion regarding 18 AAC 70, we recommend that the EIS clarify that since the Manual is adopted by reference in 18 further details. Emissions were not calculated by the Applicant for Alternative C, AAC 70.020(b), it is not "in addition" to 18 AAC 70 but a part of it. Under Section 3.7.3.2 we suggest D, and E. However, the only differences in emissions between the alternatives that the EIS include more specific information concerning which discharges will need coverage during construction under AKG-33-1000. Also, please note that when we reissue the permit on February 2, would be from mobile sources and drilling. Because the mobile sources are 2012, the permit number will change from AKG-33-0000 to AKG-33-1000. dispersed in time and space (i.e., not concentrated at a single location as with stationary sources), they are not expected to measurably impact the local air For Section 3.7.3.3, it is unclear why there is no reference to the State of Alaska's Drinking Water Standards in 18 AAC 80. If applicable, we recommend referencing applicable administrative code. Also, quality. For Alternative E, the drilling emissions would be spread out over 5 Section 3.7.4.4 should refer to Drinking Water Standards for potability, not water quality standards. We years but the actual drilling time would be the same as for Alternative B. Under also recommend that the discussion regarding nitrogen in the first paragraph of Section 3.7.4.7 include a declarative statement with regard to water quality standards. Under Section 5.7.2, please note that Alternatives C and D, drilling emissions would be greater due to the longer permits AKG-57-0000 and AKG-57-1000 are issued by the ADEC and cover domestic wastewater wells. The Corps was not able to provide a quantitative comparison of the discharges. emissions associated with each alternative, but the alternatives were compared There is some discussion regarding the impacts of discharges into the marine environment (minimal and qualitatively in Section 5.4. Section 5.4.10, Alternatives Comparison and confined to mixing zone), but no identification of what discharges are being referenced (Section Consequences, has been modified for clarification. 5.7.4.1). Please identify discharge types and which permit(s) authorizes a mixing zone, as well as the size of the mixing zone. 744 The text in Section 3.7.3, Regulations, has been clarified as recommended by the comment. Finally, in Section 5.7.4.3, we recommend removing the statement "The EPA has not issued trace metals emissions standards for any natural gas fired equipment because levels are so low." This statement is 478 The following text has been added to Section 3.7.3.2, Water Discharges: "Only technically not correct. activities specified in the permit are allowed, such as hydrostatic test water, Alternatives and the Least Environmentally Damaging Practicable Alternative stormwater, gravel pit dewatering, construction dewatering, and treated We appreciate the Corps' inclusion of a draft 404(b)(1) analysis as an appendix (Appendix C) to the discharge from mobile spill response or secondary containment." AKG-33-0000 Draft EIS. However, as we identified in our comments on the Agency Review Draft EIS, without a has been replaced with AKG-33-1000 and this sentence has been removed from complete 404(b)(1) analysis, we cannot make any preliminary determination that the least environmental damaging practicable alternative (LEDPA) is currently analyzed as a single alternative or as components Section 5.7.2, Permits: "This permit expired in January 2009 but was proposed of the EIS alternatives. We believe that additional information may be needed to ensure that alternative for reissuance with a draft permit in July 2011." 745 The title of Section 3.7.3.3 has been changed from "Safe Drinking Water Act" to "Drinking Water Standards," and a statement regarding State of Alaska Drinking

Water Standards has been added to the section. The first sentence in Section 3.7.4.4 now states: "A potable water supply is a water supply that meets federal

Comment	Response
	and state drinking water standards and is considered safe and fit for human consumption."
	746 Information on the water quality standards for nitrogen has been added to the first paragraph of Section 3.7.4.7, Organic Nutrients, as follows: "The water quality standard for nitrogen as ammonia is dependent on pH for determination of the acute value for freshwater and also whether fish are present. For the chronic value the standard is pH and temperature dependent. For the samples collected during 2002, the acute water quality standard ranged from 17 mg/L to 39.1 mg/L based on the site-specific pH values. The chronic standard ranged from 3.98 mg/L to 6.12 mg/L based on site specific conditions."
	479 The existing text in Section 5.7.2, Permits has been modified to state: "General Permits AKG-57-0000 and AKG-57-1000 are issued by the ADEC and cover domestic wastewater discharges during construction and operations to surface freshwaters (including tundra) and marine waters."
	480 The reference to a mixing zone in Section 5.7.4.1 under Discharge was intended to refer generally to the area around the discharge point rather than a permit-specified mixing zone. The text has been clarified by replacing "mixing zone" with "area immediately surrounding the discharge point."
	481 The referenced text has been removed from Section 5.7.4.3, Alternative B: Operations.
	482 Comment noted; no action required.

Comment Response 483 In the Applicant's Technical Brief #1, they stated that a "Pad location further inland from the coast will increase the throw on all wells and potentially preclude the ability to reach portions of the reservoir necessary for full field development. This may lead to additional pads being needed in the future to reach bottomhole targets that cannot be reached from a pad that has been located components do include the LEDPA for this project. This may include additional analysis of different further inland." In other words, a trade-off of moving pads inland would be the project components such as a sea ice road to connect the Central pad to the East Pad, reconfiguration of the Central Pad to ensure future use for large structure movement, and relocation of the compressors to potential future need for additional pads closer to the reservoir (i.e., along the an inland pad. We recognize that, with further information and analysis, a combination of various coast) in order to reach bottomhole targets, given the present 13,000-foot limit of alternatives, or alternative components, may be the LEDPA. For specific recommendations regarding the evaluation of alternatives under 404(b)(1) and identification of the LEDPA, please see our comment extended-reach drilling. letter for the Public Notice of Application for Permit, POA-2001-1082-M1. Through the NEPA process and the 404(b)(1) Guidelines analysis, the Corps will Finally, we believe that additional verification of the setback distance (currently at 0.5 miles) for the take many factors into consideration, including minimizing impacts, before pads and support infrastructure should be included in the Final EIS. making a final decision on pad locations. **EPA Regulatory Role** 484 Section 1.3 of the Final EIS has been changed to read, "As currently defined, the Currently, the discussion in Section 1.3 regarding the EPA does not identify the EPA's authority under project would not require additional EPA-issued permits. However, EPA the Safe Drinking Water Act (SDWA) for issuing Class I Underground Injection Control (UIC) wells, authority includes oversight of many project-related actions pursuant to the which are an integral component to waste disposal for the Point Thomson Project. We recommend that this section be revised to reflect this authority Similarly, we recommend that the Table 5.24-1 indicate CWA, the Clean Air Act (CAA), the Resource Conservation and Recovery Act that Class I wells are under the EPA's authority. (RCRA), the Safe Drinking Water Act (SDWA), and the Oil Pollution Act Mitigation and Monitoring (OPA)." It is the Corps' understanding that a UIC permit has already been issued We recognize the extensive work by the Corps and the applicant to incorporate avoidance and mitigation Mitigation for this project. Table 1.6-1 in Chapter 1 lists the UIC well permit and indicates into the project alternatives. Overall, we recommend the final EIS consider additional physical or operational changes that could further mitigate any adverse impacts, particularly those that are identified the EPA's authority for the permit. as high or moderate. For example, some type of "natural" barrier could be constructed to mitigate noise 485 Table 5.24-1 already indicates that an EPA UIC well permit would be required or visual impacts to coastal resources. Any additional mitigation that is evaluated needs to consider the recent Council on Environmental Quality's mitigation and monitoring guidance. Finally, and also in line for the Class I disposal well. However, we have added a new footnote to "EPA with the recent CEO guidance, we recommend that a draft adaptive management plan be identified and UIC Well Permit" that states, "EPA would have authority under the SDWA for included in the Final EIS to monitor the success of mitigation efforts. the Class I UIC well." Again, we appreciate the opportunity to offer comments on the Draft EIS and look forward to continuing 486 During the 404(b)(1) Guidelines analysis, the Corps will consider mitigation to work with the Corps on addressing the issues we have identified herein in the Final EIS. Please options along with impacts to the environment identified during the NEPA contact me at (206) 553-1601 or by electronic mail at reichgott.christine@epa.gov, or you may contact Jennifer Curtis of my staff in Anchorage at (907) 271-6324 or by electronic mail at process before making its final permit decision. An adaptive management plan curtis.jennifer@epa.gov with any questions you have regarding our comments. will not be included in the Final EIS, but will be considered before the Corps makes a final permit decision. anta B. Kerchot Christine B. Reichgott, Manager Environmental Review and Sediments Management Unit Enclosure

Comment Response U.S. Environmental Protection Agency Rating System for **Draft Environmental Impact Statements** Definitions and Follow-Up Action® **Environmental Impact of the Action** LO - Lack of Objections The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal. EC - Environmental Concerns EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce EO - Environmental Objections EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts. EU - Environmentally Unsatisfactory EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ). Adequacy of the Impact Statement Category 1 - Adequate EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information. Category 2 - Insufficient Information The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS. Category 3 - Inadequate EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ. * From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February,

Comment Response 0222 Isaac.Nukapigak_ACOR January 18, 2012 VIA EMAIL TO: Harry.a.Baij@usace.army.mil Original to follow by U.S. Mail United States Army Corps of Engineers Alaska, Regulatory Division Post Office Box 6898 JBER, Alaska 99506-0898 Attention: Harry A. Baij, Jr. Project Manager Re: Public Notice Date: 18 November 2011 Expiration Date: 18 January 2012 Point Thomson Project Draft Environmental Impact Statement Project: Dear Mr. Baij: Kuukpik Corporation submits these comments on the Draft Environmental Impact Statement ("EIS") for the Point Thomson Project. The Project is proposed by Exxon Mobil Corporation and PTE Pipeline LLC. WHO WE ARE Kuukpik Corporation ("Kuukpik") is the Alaska Native Claims Settlement Act ("ANCSA") village corporation for Nuiqsut. About 90 to 95% of Nuiqsut's approximately 500 residents are Kuukpik shareholders, are married to shareholders or are descendants who will someday become shareholders by inheritance. The heavy dependence of Kuukpik's shareholders and their families on subsistence resources and subsistence activities is well documented in the Northstar Final EIS (pp. 7-30 to 7-48) and in the Nuigsut Profile subsection of the North Slope Borough's 2003 Economic Profile and Census Report. (p. 33) Harvesting and using those subsistence resources is at the core of our Inupiat culture. To give the Corps a sene of the degree of that dependence, the North Slope Borough's 2003 Economic Profile and Census Report found that seventy percent of all households in Nuiqsut get half or more of their diet from local subsistence resources. (Nuiqsut Profile subsection, p. 28). P.O. Box 89187 • Nuiqsut, AK 99789-0187 • TEL: (907) 480-6220 • FAX: (907) 480-6126

Comment			Response
A	9		487 Comment noted; no action required.
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1			490 Comment noted; no action required.
	United States Army Corps of Engineers January 18, 2012 Page 2 of 3		470 Comment noted, no action required.
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	At the same time, in the Arctic environment, where levels of available resources fluctuate constantly, subsistence users have to range widely to meet their subsistence needs. Modern equipment such as snowmobiles and outboard motors are an essential part of sustaining the present-day population levels of our people, and the need for that equipment and the fuel and supplies to operate it makes the Inupiat partially dependent on a Western, cash-based economy instead of the purely subsistence-based and bartering-dependent economies of our ancestors. Kuukpik, and more generally, Nuiqsut's residents, are generally supportive of the development of oil and gas resources when projects can be constructed and operated in an environmentally responsible manner. The people of our area of the North Slope of Alaska, the Kuukpikmiut, are supportive of environmentally balanced development and can live with some limited potential impacts to our traditional lands and subsistence resources because we recognize the national interest in doing so and recognize that employment of Nuiqsut residents in construction and operation of oil field facilities provides income that helps pay to heat homes and to buy the equipment and supplies used for subsistence activities. The critical requirements are that the development be environmentally responsible and that it not threaten the health of critical subsistence resources.	487	
Г	COMMENTS	EIS General	
	The lands traditionally used by the Kunkpikmiut for subsistence extend all the way east to Prudhoe Bay (Northstar FEIS, Figure 7.3.2.), but typically not so far east as the location of the Point Thomson Project. Accordingly, Kunkpik defers for the most part on environmental issues and on preferences among the various alternatives to the Native residents of Kaktovik.	488	
	There are, however, some general comments that Kuukpik wants to make. First, we have found Exxon Mobil to generally be an environmentally responsible operator. Unlike some of its peers, Exxon Mobil quickly signed a Conflict Avoidance Agreement with the Alaska Eskimo Whaling Commission and did so without a long, drawn out struggle. Exxon Mobil is typically among the first of the oil companies to sign its Conflict Avoidance Agreement each year and does so without dragging its feet every step of the way, unlike some of its peers. Then Exxon Mobil consistently abides by the terms of its Conflict Avoidance Agreement, again unlike some of its peers.	Subsistence 489	
	Exxon Mobil works to mitigate the impacts of oil and gas development and to be a good neighbor to Nuiqsut.	Mitigation 490	
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1	491 Comment noted; no action required.
	492 Comment noted; no action required.
	e e
United States Army Corps of Engineers January 18, 2012 Page 3 of 3	
	Subsistence 491
s	Subelistence 992
Thank you for your time and consideration.	
Sincerely yours, KUUKPIK CORPORATION As an Vulley of State Nukapigak President	
cc: Mayor Charlotte Brower, North Slope Borough Rhoda Ahmaogak, Planning Director, North Slope Borough Bernice Kaigelak, President, Native Village of Nuiqsut Thomas Napageak, Mayor, City of Nuiqsut AEWC, Johnny Aiken Lanston Chinn Brian Carter Boyd, Esq.	

Comment	Response
	493 Comment noted; no action required.
0223_Jim.Sampsoi	on NGO
January 17, 2012	
Department of the Army	
U.S. Army Engineers District, Alaska	
Regulatory Division P.O. Box 6898	
JBER, Alaska 99506-0898	
Re: Point Thomson Project Draft Environmental Impact Statement (EIS)	
Dear Sir: Statement of Support for Alternative	B 493
This letter is being written in support of responsible and transparent oil and gas develop After review of the Point Thomson Project Draft Environmental Impact Statement (EIS), clear that proposed Alternative B is an environmentally responsible approach to oil and development for the Point Thomson area. It is also clear that the EIS process has provid publicly available transparency; which is not only a requisite for legal compliance with th National Environmental Policy Act (NEPA), but more importantly ensures the opportunit public trust. Again, my conclusion is that proposed Alternative B is an environmentally responsible approach to oil and gas development in the Point Thomson area. I further of that the EIS process has been open, transparent and logical. The linear approach to NEPA and the subsequent EIS is apparent: Establish and review development alternatives Balance the need for resource development with environmental risk Consider economic risk Mitigate both environmental and economic risk Identify the least environmentally damaging practical alternative (LEDPA) Determine whether or not the LEDPA is in compliance with federal laws, associat regulations and executive order Ensure meaningful public comment Make a record of decision	it is gas sled he ty for conclude

Further, as Director of the Fairbanks Pipeline Training Center, I am particularly concerned that Alastans First indigenous Peoples affected by the development be provided the first opportunity for employment to the pin mighter desiryoblasts other or and substantine lifeties. In experiment of the provided of the first opportunity for employment to the pin mighter desiryoblasts of the real substantine lifeties. In experiment of the provided of

Comment Response 494 Comment noted; no action required. Representative Mike Hawker Alaska State Legislature 0224_Mike.Hawker_SGOV Jan. 17, 2012 Session: State Capitol Juneau, AK 99801 907 465-4949 direct Harry A. Baij Jr., Project Manager U.S. Army Corp of Engineers 800 478-4950 toll free Alaska, Regulatory Division 907 465-4979 fax P.O. Box 6898 JBER, Alaska 99506-0898 Interim: 716 W 4th Avenue Anchorage, AK 99501 907 269-0244 office RE: Pt. Thomson Project Draft Environmental Impact Statement (DEIS) 907 269-0248 fax Mr. Baij, Statement of Support for Alternative B 494 Please accept these comments in support of your selection of Alternative B as the House District 32: preferred alternative in the Pt. Thomson Project DEIS. Eagle River Anchorage With an estimated 8 trillion cubic feet of natural gas and 200 million barrels of Rainbow condensate, the Pt. Thomson development holds a quarter of the known North Indian Slope gas resource and as such will be the lynchpin to a successful Alaska gas Bird pipeline project, to the Lower 48 or for export as markets allow. Development of a Girdwood gas pipeline is expected to extend the economic life of other North Slope Portage hydrocarbon plays that support Alaska's economy and thousands of jobs, while Whittier providing a reliable supply of clean-burning American energy. Sunrise Hope Careful review of the DEIS compels me to support Alternative B, which I believe is conscientiously designed to best meet the unique geographic, environmental and human concerns on our Alaska North Slope, while also providing a foundation for a safe, responsible and reasonable project the proponents will be able to succeed in. This alternative combines several seasonal approaches that should minimize the project's environmental footprint while allowing efficient operations. I appreciate your consideration of these comments in support of your prompt action selecting Alternative B as the preferred alternative in the Pt. Thomson Project DEIS. Development of this project is critical for Alaska, and for the nation. Representative Mike Hawker Alaska State Legislature, House District 32 Rep.Mike.Hawker@legis.state.ak.us • http://www.akrepublicans.org/hawker/

0225_Sarah.Conn_FGOV



United States Department of the Interior

Fairbanks Fish and Wildlife Field Office 101 12th Avenue, Box 19, Room 110 Fairbanks, Alaska 99701 January 12, 2012

Mr. Harry Baij U.S. Army Corps of Engineers Regulatory Division Post Office Box 6898 Anchorage, Alaska 99506-0898

> Re: Pt. Thomson Draft EIS POA-2001-1082-M1

Dear Mr. Baij:

The U.S. Fish and Wildlife Service (Service) appreciates the amount of work the Army Corps of Engineers (Corps) has invested in the development of the Draft Environmental Impact Statement (DEIS) for the proposed Point Thomson project. We feel the DEIS dated November 2011 is exemplary in addressing many concerns and issues from a variety of stakeholders regarding the proposed development, including those of the Service. We further appreciate the willingness of the Corps to address these concerns and make changes to the DEIS when and where it was deemed appropriate.

In October 2009 Exxon Mobile Corporation (Applicant) submitted a draft permit application to the Corps for an oil and gas development project in the Point Thomson Unit located on the Arctic Coastal Plain approximately 60 miles east of Prudhoe Bay and adjacent to the western boundary of the Arctic National Wildlife Refuge (Arctic Refuge). The Corps subsequently determined the project warranted an Environmental Impact Statement (EIS) as part of its National Environmental Policy Act (NEPA) review process. The Service, the Environmental Protection Agency (EPA), and the State of Alaska Department of Natural Resources (ADNR) were invited to be co-operating agencies in the EIS process due to their respective permitting and regulatory responsibilities.

The primary hydrocarbon resources associated with Point Thomson are natural gas and gas condensate from the Thomson Sand Reservoir. A limited amount of oil also may be produced from a thin oil rim within the reservoir. The target reservoir is primarily offshore and is deeper and under higher pressure than other oil and gas reservoirs in development on the North Slope. The Point Thomson area is not connected via a permanent road to any other oil and gas facility or community.

Response

495 Comment noted; no action required.

The Arctic Refuge shares a portion of its western boundary with the Point Thomson Unit, including refuge waters that are within the National Marine Protected Area System. As such, potential impacts to refuge resources from the proposed development are identified in the DEIS, including caribou and other subsistence resources. Visual and noise assessments also were conducted, in part to ascertain potential impacts to Arctic Refuge and to determine if mitigation is warranted. The Service has one minor editorial comment in regards to the language used to describe the Service's management of the 1002 Area of Arctic Refuge. We note that corrections have been made in the body of the DEIS, but not in the appendices and request those be made for the Final EIS.

Fish and Wildlife Resources

The DEIS describes in detail the fish and wildlife resources of the Point Thomson area. Approximately 70 species of migratory birds are known to move through or nest within the development area. Of these, eight (red-throated loon, peregrine falcon, whimbrel, bar-tailed godwit, red knot, dunlin, buff-breasted sandpiper, and arctic tern) are considered to be Birds of Conservation Concern by the Service due to their small population size, population decline, and/or sensitivity to disturbance. Terrestrial mammals known to utilize the project area on a regular basis include caribou, muskoxen, brown bears, foxes and small mammals. Caribou ranging within the Point Thomson area are comprised of animals from the Central Arctic Herd (CAH), the Porcupine Herd (PH), and occasionally the Teshekpuk Herd (TH). The CAH is known to calve in the project area, and all three of these herds have been documented using the Arctic Refuge. Caribou of the CAH and PH are an important subsistence resource for the residents of Kaktovik, including the period when caribou are expected to be present within the project area. Caribou of the CAH and PH also are vital for the subsistence needs of Arctic Village residents during fall through spring, when these caribou migrate south of the Brooks Range. Seventy-one fish species are known to frequent the Beaufort Sea, nearshore environment, and/or freshwater habitats adjacent to and within the Point Thomson area. Of these, 10 species (arctic and least cisco, Dolly Varden, arctic grayling, broad and humpback whitefish, arctic cod, and pink and chum salmon) are considered to be important subsistence species for Kaktovik and Nuiqsut. Essential Fish Habitat (EFH) has been established within the nearshore marine habitat for arctic cod. In addition, EFH has been designated for pink and chum salmon in four streams and in marine portions of the area.

Threatened and Endangered Species

The proposed project site is within the range of threatened spectacled and Steller's eiders Spectacled eiders and the Alaska breeding population of Steller's eiders were listed as threatened under the Endangered Species Act of 1973, as amended, in 1994 and 1997, respectively. Spectacled eiders have been recorded in the Point Thomson area, although none have been documented as breeding there since the late 1990s. Steller's eiders have not been recorded in the Point Thomson area in recent years, although historically they have been observed in the Kadleroshilik, Shaviovik, and Canning River deltas and at Bullen Point. The yellow-billed loon, a candidate species for listing, also occurs within the Point Thomson area although no nests have

Response

- 496 Changes regarding management of the 1002 Area have been made in Appendix N, Visual Resource Assessment, and in the body of the EIS to correct language that stated or suggested that the 1002 Area was designated as a wilderness study area, to help clarify distinctions between the dictionary definition of "wilderness" and the designated unit of the National Wilderness Preservation System, and to clarify how the USFWS actually manages the area. These changes have occurred primarily in the following EIS sections: Land Use, Management, and Ownership; Arctic National Wildlife Refuge; Recreation; and Visual Aesthetics, as well as in Appendix N.
- 497 Birds of concern to the USFWS, ADF&G, and other conservation organizations are discussed in Section 3.9.8, Conservation Birds of Concern and listed in Table 3.9-2. The potential impacts of the Point Thomson project on bird species of concern are discussed in Section 5.9, Birds. Red-throated loons, peregrine falcons, whimbrels, bar-tailed godwits, red knots, dunlin, buff-breasted sandpipers, and arctic terns are included in the analysis of impacts.
- 498 Each of these species is described in Section 3.10 (Terrestrial Mammals) and the potential impacts to these species from each of the alternatives are analyzed in Section 5.10. The CAH, PH, and TH are each discussed in sections 3.10 and 5.10. In addition, subsistence is discussed in sections 3.22 and 5.22 (Subsistence and Traditional Land-Use Patterns).
- 499 The species of fish most likely to be affected by the Point Thomson Project (including arctic and least cisco, Dolly Varden, arctic grayling, broad and humpback whitefish, arctic cod, and pink and chum salmon) are discussed in Chapters 3 and 5. Potential impacts on fish subsistence harvest for the villages of Kaktovik and Nuiqsut are also discussed in the EIS. EFH impacts are assessed in the EIS and an EFH Assessment has been submitted to the NMFS in compliance with the Magnuson-Stevens Fishery Conservation and Management Act.
- 500 Spectacled and Steller's eiders, yellow-billed loons, and the polar bear are discussed in the EIS and impacts to these species are evaluated including impacts to critical habitat. The final Biological Assessment for Spectacled Eider, Steller's Eider, Yellow-billed Loon, and Polar Bear was submitted to the USFWS in January 2012 as part of the ESA consultation process.

Comment	Response
been located. Draft Biological Assessments for the spectacled and Steller's eider and yellow- billed loon are included in the DEIS.	
The Polar Bear was listed as a threatened species in May 2008, primarily due to concerns regarding the threat to habitat posed by the trend of diminishing sea ice cover and thickness in the Arctic Ocean, primarily during the summer. Critical habitat for the polar bear was designated by the Service in December 2010. There are three critical habitat units designated: (1) sea ice habitat over the continental shelf; (2) terrestrial denning habitat; and (3) barrier island habitat. All three of these habitats are found within the Point Thomson area. A draft Biological Assessment for the Polar Bear is included in the DEIS.	
The Service will develop Biological Opinions for both the spectacled and Steller's eiders and polar bear as soon as soon as the respective BAs are finalized by the Corps.	
Alternatives	
The EIS outlines five alternatives (Alternatives A-E), including a No-Action Alternative (Alternative A) and the Applicant's Proposal (Alternative B), for the development of oil and gas resources within the Point Thomson Unit. Alternatives C-E include components designed to minimize impacts to coastal resources, wetlands, and/or the hydrology of the Point Thomson area while allowing for production of oil and gas resources. All alternatives utilize onshore pads and pipelines. Although the Thomson Sand Reservoir is located primarily offishore, the use of onshore facilities and extended-reach drilling to access the reserves is deemed to be the most efficient method and poses the least amount of risk to the marine environment. While the Corps does not identify a Least Environmentally Damaging Practicable Alternative (LEDPA) in the DEIS, reviewers are encouraged to suggest a LEDPA either by selecting an existing Alternative, creating an Alternative using components of existing Alternatives, or by creating an entirely new Alternative.	
The No Action Alternative (Alternative A) does not allow for further development of the Point Thomson Field, however it does include continued monitoring of the two drilled and capped production wells on the existing Central Pad. Access to and from the pad would be via helicopter.	
Alternative B (the Applicant's proposed action) includes placing 2.2 million cubic yards of gravel fill material into approximately 215 acres of wetlands to construct a 55-acre central processing facility (CPF) pad, 2 (east and west) auxiliary pads, a 5,600-ft by 200-ft airstrip, 12 miles of infield roads, associated infield pipelines, a 58-acre gravel pit, a service pier, and sealift facility. The auxiliary pads and central pad would be located on the coast to maximize the efficacy of the extended reach drilling. Infield roads and pipelines connecting the east and west pads to the central pad generally would parallel the coastline. The proposed development would be connected to Prudhoe Bay and the Trans-Alaska Pipeline (TAPS) via an export pipeline elevated on Vertical Support Members (VSMs) and a 60-mile seasonal ice road.	

Comment	Response
Alternative C (Inland Pads with Gravel Access Road) is designed to minimize coastal and marine impacts by pulling infrastructure away from the coast and by eliminating barging. The auxiliary pads would be constructed approximately ½ mile inland from the coast and the CPF pad approximately 2 miles in from the coast; a coastal central well pad would remain. Infield roads would be aligned primarily north-south to maintain hydrologic connectivity. In addition, a 45-mile gravel access road to the Endicott spur road is proposed to provide year-round access to Point Thomson thereby eliminating the need for barging. A 5,600-foot x 200-foot gravel airstrip would provide air access. The gravel use (5.4 million cubic yards) and foot-print (605 acres) would increase significantly compared to Alternative B, primarily due to the all-season gravel road to Endicott. Alternative D (Inland Pads with Seasonal Ice Access Road) also is designed to minimize impacts to coastal resources. Pad placement, infield roads, and airstrip are similar to Alternative C. A seasonal ice access road to Endicott replaces the permanent gravel road thereby reducing the gravel footprint (285 acres) compared to Alternative C. Barging would not be required as modules would be transported from Prudhoe Bay in winter via ice road. Storage facilities in Prudhoe Bay likely will need to be constructed to hold modules transported via sea-lift until winter. Alternative E (Coastal Pads with Seasonal Ice Roads) reduces the overall gravel footprint and minimizes impacts to wetlands and water resources. The auxiliary pads and CPF pad would be located on the coast, similar to Alternative B, however their overall size is reduced. During drilling the pad sizes would be expanded by adding multiyear ice pad extensions to accommodate equipment. Once drilling is complete, the ice pads would be allowed to melt. Infield ice roads would be constructed to further decrease the gravel footprint. A barging and	Response 501 The Corps will evaluate fully all of the alternatives and all of the components in determining whether the Applicant's proposed project is the LEDPA.
sealift facility would be constructed, similar to Alternative B. A seasonal ice airstrip would be constructed along the coast for the first two years; a gravel airstrip (3,700-foot x 200-foot) would be constructed inland after year 3. A seasonal ice road to Endicott would be constructed each year. The overall gravel footprint is estimated at about 155 acres.	
Agency Preferred Alternative	
As per the Corps direction, the Service proposes an Alternative encompassing several components of Alternatives B, C, and D be developed as a LEDPA for the Point Thomson Development. While we appreciate the objective of reducing the gravel footprint in Alternative E, several of the components such as the ice airstrip and the use of infield ice roads likely would have a greater impact to fresh water resources and wetland habitats over the life of the project than other alternatives. The Service suggests the following components be incorporated into an Alternative for further analysis.	Alternatives Comparison 501
 Well Pads – Pad placement is similar to Alternative C. Auxiliary pads and the CPF pad should be moved approximately 1 to 2 miles inland from the coast to eliminate concerns regarding coastal erosion. Moving the pads and processing facility inland also will reduce the likelihood of bird collisions with structures during periods of 	

Comment Response 502 The implementation of an adaptive management plan as part of potential mitigation will be considered before the Corps makes a final permit decision. inclement weather as well as allow for unimpeded movement of caribou during periods of mosquito harassment. Furthermore, the East Pad should be moved west at least 1/2 mile to reduce visual and noise impacts to the Arctic Refuge. · Infield Roads - Infield roads should be gravel-based and primarily oriented northsouth, similar to Alternative C. This orientation allows for fewer impacts to hydrology and wetlands as well as allows for unimpeded movement of caribou along the coast. All infield roads should be separated from pipelines by at least 700 feet to allow for free-passage of caribou during calving, post-calving and migration periods. • Airstrip - Placement and size (5,600-foot x 200-foot) of the airstrip as in Alternative C is preferable. Locating the strip as far south and west as practicable will reduce bird/aircraft collisions, especially during migration, and will lessen the impact of air traffic noise to the Canning River Delta and the Arctic Refuge. It also may allow for future use by developments further south. · Barging and Sea Lift Facilities - We support the development of a Barge and Sea Lift facility as described in Alternative B. This will allow for the "3-prong" access approach (air, land, sea) the applicant proposes and which likely is necessary to fully develop the project. The barge facility however should be strategically located where it can be fully utilized for future projects once the infrastructure on the central pad is · Power Lines - In order to prevent bird collisions with overhead power lines, all electric/communication lines should be strung on VSMs or buried in roads. • Infield Pipelines - Infield oil pipelines should be set back from the coast at least 2 miles to allow free passage of caribou during periods of mosquito harassment. The bottom of the pipe rack should be at least 7 feet above tundra grade and the pipeline should have a dull coating to prevent reflection. Water pipelines from the fresh-water reservoir should be elevated on VSMs at a height of 7 feet or buried in the roadbed. The Service believes the incorporation of the above components into the design of the proposed project will reduce impacts to fish and wildlife resources, hydrology, and subsistence and recreational use of Point Thomson and adjacent areas of the Arctic Refuge. Impacts Associated with Project Design As with any development project, unavoidable impacts to the area surrounding the Point Thomson Development are likely to occur. However, the Service believes some of these impacts such as excessive light, noise, and dust pollution can be mitigated through the incorporation of specific design features during construction of the facilities. Other aspects of project operations (e.g., barging) necessitate long-range planning and should be updated throughout the life of the project to ensure minimal impact to resources.

Comment Response 731 During the 404(b)(1) Guidelines analysis, the Corps will consider mitigation options to reduce lighting impacts along with those impacts that were identified during the NEPA process before making its final permit decision. 732 During the 404(b)(1) Guidelines analysis, the Corps will consider mitigation options for noise along with impacts to the environment identified during the NEPA process before making its final permit decision. Lighting of coastal facilities can cause episodic bird collisions with infrastructure, especially during migration and inclement weather. On the North Slope birds are especially vulnerable to 733 The use of chemical dust palliatives will be considered as a measure to mitigate collisions during fall (mostly westward) migration when ambient light is low and there are fugitive dust. frequent periods of stormy weather and fog. Birds are attracted to the lights and become disoriented colliding with buildings and drill rigs. To mitigate the collision risk, the Service has 734 As stated in the comment, sea-lift barges are expected to be a one-time requested that lighting of the Point Thomson facilities be shielded from above thereby reducing occurrence. They are also the barges that may be staged while waiting to be reflectivity in clouds and fog. We further suggest that, where possible, lighting be shielded on the east side of buildings through the installation of shaded windows. Shielded lighting also may offloaded. The Corps does not anticipate the need for coastal barges to be staged. lessen the visual impact of the proposed development as viewed from the Arctic Refuge, During the 404(b)(1) Guidelines analysis, the Corps will consider mitigation especially during late summer and fall. options, including barge plans, along with impacts to the environment identified Noise from the Point Thomson facility, especially from the compressors necessary for the during the NEPA process before making its final permit decision. production of gas condensate and the drill rigs, will be pervasive. In addition, the proposed facility is isolated from other developments, the closest of which is Badami, located approximately 20 miles to the west. Weather conditions (e.g., cloud cover, wind direction and speed) and seasonality however, will influence the direction and distance of detectable noise. The noise study conducted in association with the Point Thomson DEIS determined that under specific conditions, noise from the development could be detectable inside the western-most portion of the Arctic Refuge, approximately 2 to 3 miles from the Central Pad. It is unknown if, or how, noise from the development may impact the movement of wildlife, especially caribou, through the area. In order to mitigate the potential noise impacts, the Service suggests the Applicant utilize the latest technology to muffle the compressors as well as investigate other structural techniques, such as constructing berms, to shield the surrounding area from noise emanating from the facility. Dust pollution from roads during summer on the North Slope is known to impact adjacent vegetation, especially on the downwind side. Dust abatement is generally attempted through watering of the roads during periods of dry weather. However, the success of this method is extremely variable and depends upon the availability of equipment and frequency of watering. The fairly recent application of chip-seal as a surface sealant on some North Slope roads has significantly reduced the amount of dust produced and subsequently the need for constant watering of roadways. The Service suggests the applicant investigate the use of chip-seal on the Point Thomson infield roads to reduce dust impacts to adjacent vegetation. The DEIS indicates the Applicant has signed a Conflict Avoidance Agreement in which they have agreed to avoid barging during the whaling season (late August to late September). The Service supports such an agreement. During scoping, the Applicant indicated there would be two types of barging: Sea-lift barging and coastal barging. Sea-lift barging would be a one-time occurrence during July when modules would be delivered to Point Thomson. Coastal barging would be an ongoing occurrence throughout each summer. The Applicant indicated that barges may travel either along the coast or seaward of the barrier islands and may be staged in Mary Sachs Entrance while waiting to be offloaded. The Service is concerned that coastal barging and staging may impact brood-rearing and molting birds, especially in waters between the shore and

Comment	Response
barrier islands. We suggest the Applicant create a yearly barge plan, indicating perspective routes, estimated number of barges, and staging locations, to be shared with the cooperating agencies and resource users from the villages, to avoid potential conflicts.	735 During the 404(b)(1) Guidelines analysis, the Corps will consider mitigation options, including possible compensatory mitigation, along with impacts to the environment identified during the NEPA process before making its final permit decision. A discussion of compensatory mitigation is provided in Section 4.4.5.2.
Compensatory Mitigation The Service supports compensatory mitigation for the unavoidable impacts associated with the Point Thomson development. Recently, for North Slope projects, we have used in-lieu fees administered through the Conservation Fund for the purchase of at-risk habitats elsewhere in the State, as little private land is available on the North Slope for "in-kind" purchase. Alternatively, there are several abandoned pads and airstrips within the vicinity of the proposed project that may be appropriate for restoration as partial compensation for project impacts. We are willing to discuss other mitigation alternatives however, such as the establishment of a North Slope mitigation bank, with the cooperating agencies for the Point Thomson development.	
Thank you for the opportunity to comment on the Point Thomson DEIS. Please contact Louise Smith at 907-456-0306 or Louise Smith@fws.gov should you have questions concerning these comments. Sincerely, Sincerely, Field Supervisor Fairbanks Fish and Wildlife Field Office	
Cc: Ted Rockwell, EPA, Anchorage Gayle Martin, EPA, Anchorage Sara Longan, ADNR, Anchorage Charlotte E. Brower, Mayor, NSB, Barrow	

Comment		Response
		503 Comment noted; no action required.
AOGA	Alaska Oil and Gas Association 0226 Kate.Williams NGO 121 W. Fireweed Lane, Suite 207 Anchorage, Alaska 99503-2035 Phone: (907) 272-1481 Fax: (907) 279-8114 Email: williams@aoga.org Kate Williams, Regulatory Affairs Representative	
Impact Dear Mr. Baij: The Alaska Oil and Gas Assoc on the Draft Environmental In a private, nonprofit trade assoc oil and gas exploration, develorativities in the state. AOGA strongly supports alter ("ExxonMobil") submitted its the EIS process. Since then, E ("Corps") extensive support, in hosting 23 workshops on the pwetlands vegetation mapping, proposed project is the safest, alternatives and should be selest Action alternatives C, D and E greater impact on the environr prohibit barging which would barging, alternative C propose road system that would require located about every 10 miles a	ents on the Point Thomson Project Draft Environmental Statement (EIS No. 20110387) ciation ("AOGA") appreciates this opportunity to submit comments appact Statement ("EIS") for the Point Thomson Project. AOGA is ciation whose 16 member companies account for the majority of opment, production, transportation, refining, and marketing mative B, the proposed project. ExxonMobil Corporation draft application for wetlands permits in October 2009 initiating exxon Mobil has provided the U.S. Army Corps of Engineers including responding to 82 requests for information, 22 follow-ups, proposed project, and facilitating or funding field studies such as noise studies and eider and yellow-billed loon surveys. The most environmentally sound and economic option of the action exted as the preferred alternative in the Final EIS. E all prohibit or require project components which would have a ment than the proposed project. For example, alternatives C and D necessitate a substantial increase in truck traffic. Instead of est a 44-mile gravel road from Point Thomson to the Prudhoe Bay et an additional 336 acres of gravel and five additional mines, along the proposed road corridor, and create a much larger tundra and would not be built in time to facilitate construction and drilling	

Comment	Response
Mr. Harry Baij Page 2	
Point Thomson Project January 16, 2012	
resulting in environmental and operational issues associated with more limited air and overland access issues. In fact, during project construction, an estimated 7.5 million gallons of fuel would have to be trucked to Point Thomson via ice road and stored to fuel all activities before the next ice road is functional. As the Corps acknowledges, it would take one fuel truck per hour, 24 hours a day leaving Deadhorse for Point Thomson for the entire ice road season to deliver that amount of fuel.	
Conversely, barging has long been established as a safe means of delivering supplies to coastal communities throughout the state. Approximately 188 barge trips have taken place in support of the Point Thomson project since 2008 with no adverse impacts to marine mammals or subsistence use. The barge route is located inside barrier islands away from the main fall migration corridor for bowhead whale, consistent with the Alaska Eskimo Whaling Commission Conflict Avoidance Agreement ("CAA"). Should the proposed project move forward, barging operations would continue to be conducted in accordance with the CAA and in direct consultation with local whaling communities.	
Alternative E would eliminate infield gravel roads and shorten the project's proposed airstrip by almost 2000 feet, instead relying solely on helicopters and seasonally limited off-road vehicles for transportation. This would create unnecessary safety risks as well as emergency response limitations and operational inefficiencies. Compared to the proposed project, the shorter airstrip would triple fixed-wing air traffic during construction and increase air traffic by 40 percent during operations, adding to any noise disturbances.	
The infield roads associated with the proposed project have been routed to minimize the gravel footprint and maintain natural drainage patterns; no new streams would be created nor would existing streams be eliminated, and bridges would be constructed to ensure anadromous fish passage. In comparison, moving roads inland as proposed in alternatives C and D would increase the project's gravel footprint by 30 percent and have greater impacts on drainage patterns and fish passage.	
The proposed project has been designed to have minimal impacts on subsistence activities. Residents of Kaktovik, the nearest community to the Point Thomson project area, were consulted and their input incorporated into the design of the proposed project such as pipelines being elevated at least seven feet above the tundra to allow free passage by wildlife and subsistence hunters, textured and coated pipelines to reduce glare and contrast, and thicker pipeline walls to withstand accidental bullet strikes from hunters. Of the action alternatives, the proposed project has the least potential to affect polar bears and polar bear critical habitat. Generally speaking, ExxonMobil has and will continue to have strong marine mammal and wildlife protection plans in place, which the U.S. Fish and Wildlife Service has recognized as a North Slope industry best practice.	
As the Corps recognizes, based on historical data and the reservoir conditions at Point Thomson, the most likely spill scenario under any of the action alternatives would be a very small or small	

Comment	Response
Mr. Harry Baij Point Thomson Project January 16, 2012	504 The EIS includes a separate section on the Arctic Refuge due to its proximity to the project and the Thomson Sand Reservoir. Section 3.13, Land Use, Land Ownership, and Land Management, explicitly states that the Point Thomson project area is located on land owned and managed by the State of Alaska. 505 Comment noted; no action required
spill with the probability of a large or very large spill being very low and approaching zero as the size of the potential spill increases. Additionally, ExxonMobil has designed and committed to a comprehensive set of processes, procedures, and systems to prevent, detect, and mitigate potential spills that could occur during the life of the project.	
AOGA does not believe that it is appropriate for the Corps to analyze impacts from the proposed project as if it were located within the Alaska National Wildlife Refuge ("ANWR"). AOGA is concerned that the Draft EIS places too much emphasis on the project's proximity to the refuge. The proposed project is located on state land and should be analyzed as such. The refuge contains over eight million acres of designated wilderness; prohibiting access to resources on state lands designated for oil and gas development outside the boundaries of the refuge is beyond the Corps' authority.	
Point Thomson represents approximately 25 percent of known North Slope gas resources, holding an estimated 8 trillion cubic feet of gas and 200 million barrels of gas condensate. The initial project will produce approximately 10,000 barrels per day of condensate and test and delineate other hydrocarbon resources, including oil and gas. To date, 21 exploration wells have been drilled in the Point Thomson area, both onshore and offshore, all without any incident. Since 2008 alone, ExxonMobil has contracted with 170 Alaska-based firms, investing \$700 million in Alaska businesses and employment opportunities. Should the proposed project move forward, revenues will flow throughout the state. The Point Thomson resources are also a vital component of any effort to commercialize Alaska's gas. Given the proposed project's minimal impacts to the tundra, wildlife, aquatic resources, and subsistence activities, and the benefits the project would provide the state and Alaskans, AOGA urges the Corps to select alternative B in the Final EIS.	
If you have any questions regarding AOGA's comments, please do not hesitate to contact me. Sincerely, Fate Willey KATE WILLIAMS Regulatory Affairs Representative	

Comment		Response
		506 Comment noted; no action required.
Founded 1889 Letters should be confined to one subject	UNITED ASSOCIATION of Journeymen and Apprentices of the Plumbing and Pipe Fining Industry of the United States and Canada UA Local Union: 375 3908 Boat Street, Fairbanks, Alaska 99709 Subject: Point Thomson Public Comment	500 Comment noted, no action required.
	January 18, 2012 Hank Baij, Project Manager U.S. Army Corps of Engineers Alaska District, Regulatory Division PO Box 6898 JBER, Alaska 99506-0898	
	Dear Mr. Baij, Statement of Support for Alternative B 506 This letter is in support of Alternative B of the proposed Point Thomson Development Project. I represent 500+ pipetrades members. Construction, operations, and maintenance work stemming from a project like this is important not only to our membership but also Alaska's economy as well as domestic energy production. Additionally, rural outreach has been an integral part of our apprenticeship recruitment program for decades. Our current apprenticeship program Alaska Native utilization is 26%. I feel this project will further support these and all our members ability to provide for their families.	
	Thank you for your consideration, James Laiti Business Manager	
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Comment Response 526 Comment noted; no action required. 527 Comment noted; no action required. INUPIAT COMMUNITY of the ARCTIC SLOPE an IRA Regional Tribal Government 0228_George.Edwardson.TGOV PO. Box 934 · Barrow, Alaska 99723 January 18, 2012 Mr. Harry Baij Jr. Department of the Army, U.S. Army Engineer District P.O. Box 6898 JBER, AK 99506-0898 E-mail: harry.a.baij@usace.army.mil Public Comments on Point Thomson Project Draft EIS, and Permit Application POA-200101082-MI Dear Mr. Baij, Jr., We provide public comment on ExxonMobil's Point Thomson Project Draft Environmental Impact Statement and U.S. Army Corps of Engineers permit. Please consider these public comments in response to 1) your public notice on the availability of the draft Environmental Impact Statement for the Proposed Point Thomson Project (hereafter "DEIS") (76 FR 70979-70980, November 16, 2011); and 2) the Public Notice of Application for Permit (POA-2001-1082-M1; November 18, 2011) for the proposed dredge, excavation and fill work in the waters and navigable waters of the United States including streams, wetlands, and Beaufort Sea marine waters. ExxonMobil's proposed Point Thomson gas condensate development on State of Alaska lands includes three production well sites next to the Beaufort Sea coast, including one drill site within two miles of the Arctic National Wildlife Refuge. The adjacent Arctic Refuge boundary comprises the Canning River delta, an area rich in migratory birds, fish, polar bear denning, a popular recreational floated river, and a key subsistence resource and use area. This proposed project will be a significant expansion of the oil and gas industrial complex to the EIS General East of Prudhoe Bay. Exxon's Development Plan is analyzed in the DEIS as Alternative B. Three drill sites including a processing plant at the Central pad would be situated only 250-500 feet from the Beaufort Sea's eroding shoreline, with the East Pad just 2-miles away from the Arctic Refuge along its Canning/ Staines River border. The development project would connect via a 22-mile long pipeline to the Badami oil field (in a Comparison positive step, there is no permanent access road proposed from Prudhoe Bay east to this project). There would also 12-miles of permanent gravel roads within the field, a new mile-long airstrip and staging sites, a major new gravel mine where 2.6 million cubic yards of gravel would be excavated from 162-acres of tundra wetlands, 282 acres of tundra covered by gravel fill, and a gravel boat ramp and pier with a dredged area offshore for barge offloading. Although most of the Thomson reservoir is located offshore, we appreciate that the currently proposed project will

Comment Response 528 The Arctic Refuge is a protected area; however, the area outside the refuge is state land, which is leased for the purpose of oil and gas development. Through the NEPA process, the public interest review, and the 404(b)(1) Guidelines analysis, the Corps will take many factors into consideration, including not entail new drilling from barrier islands or offshore. In a positive step, Exxon removed an minimizing impacts, before making a final decision on the East Pad location. earlier proposal for a gravel causeway / dock into the Beaufort Sea (although the exact frequency The Corps is not considering an alternative that does not include an East Pad. and duration of the use of the currently proposed barge offloading facility should be made This alternative (Concept 6) was eliminated from detailed consideration for not clearer). We also appreciate that the proposed project does not include a connecting road back to Endicott and Prudhoe Bay. meeting the purpose and need of the project. The language in Section 2.2.4.2, Concept 6: Limit Activity Near the Arctic Refuge, has been supplemented to We note that this proposed project is extremely close to the Arctic National Wildlife Refuge, the only area of wetlands, rivers, deltas, bays, lagoons, and other aquatic resources across the entire make this decision clearer. Without the ability to drill wells from the vicinity of North Slope that area off-limits today from oil and gas exploration, development and production the proposed East Pad, the Applicant would not be able to access eastern We urge the Corps to do more to reduce and minimize adverse environmental impact to the Refuge and its resources. We outline our request, below, for the Corps to consider a new resources that have already been identified in approximately one-third of the alternative that would do more to reduce impacts by eliminating or moving the East pad farther Thomson Sand Reservoir. A well from the Central Pad would have to reach from the Refuge. Secondly, this new alternative should move the permanent drilling and processing facilities away from the eroding Beaufort Sea coastline as well as farther from the more than 30,000 feet, which is technologically infeasible. Reduced access to the rich ecological zone where land meets sea that is so important to fish, wildlife, and people, eastern portion of the reservoir would limit the Applicant's ability to continue evaluation and delineation activities, including fully delineating the eastern edge Because of the high reservoir pressures at Point Thomson, the DEIS states that a blowout or uncontrolled spill from production may result in a greater discharge rate than might be of the reservoir, testing connectivity with the central portion of the reservoir, and experienced elsewhere on the North Slope. The probability of small or medium sized spills is fully evaluating the Thomson Sand oil rim and Brookian Group sandstones relatively high, based on historic North Slope spill data and "while highly unlikely, a very large hydrocarbons. spill event would be catastrophic and could be exacerbated by environmental conditions that could enhance the spread of spilled materials or interfere with response and cleanup," (DEIS ES-The Applicant's Technical Brief #1 stated that a "Pad location further inland 61). Drill pads and processing facilities need to be moved farther away from the shoreline to from the coast will increase the throw on all wells and potentially preclude the reduce risks of environmental damage to the nearshore and marine ecosystem from major spills. ability to reach portions of the reservoir necessary for full field development. Summary of Concerns on the Permit Application: This public comment timeframe is Public Notice for Permit This may lead to additional pads being needed in the future to reach bottomhole premature and inappropriate until the Final EIS process is completed with respect to the Corps's Public Notice of the permit application for public review and comments for the Corps' targets that cannot be reached from a pad that has been located further inland." Authorizations under Section 10, Rivers and Harbors Act, and Section 404 of the Clean Water In other words, a trade-off of moving pads inland would be the potential future Act, including review of whether this project complies with the Section 404(b)(1) Guidelines, the need for additional pads closer to the reservoir (i.e., along the coast) in order to Public Interest Review, and compliance with other laws and regulations. reach bottomhole targets, given the present 13,000-foot limit of extended-reach At this time, the public does not have before us the refined project, including additional drilling. mitigation measures or modifications that will be necessary to address the public interest and other requirements. It is essential that the public have before it the Corps' analysis and selection 529 A blowout would typically occur while drilling through the producing zones of of the environmentally preferred alternative before commenting on the project. The menu the reservoir. For the two wells drilled in 2009-2010, seasonal restrictions were approach to alternatives presented in the DEIS (see p. ES-63) does not identify or provide the environmentally least damaging alternative nor the environmentally preferred alternative, and placed so that drilling could not occur during breakup or open water. The same based on our analysis of Exxon's proposed project analyzed as DEIS Alternative B it fails this restrictions would presumably be imposed on the proposed wells. Therefore, the test as do other alternatives as presented. Therefore the public needs to have adequate information on which to provide comment on the permit. location of the pads at the coast versus inland would not make a difference relative to impacts on the shoreline and marine waters. The difference in location We formally request that the public comment period on the permit application be suspended until could make a difference if a large to very large spill during production occurred the FEIS is completed or at a minimum that it be re-opened for another 30 days to public comment once the FEIS is completed. This is a complex project proposal for a unique field due during breakup or when the sea ice is absent. However, as stated in the EIS, the to its extremely high pressure, facility locations 250-500 feet from the Beaufort Sea coast in a likelihood of such a spill is very low. Further, there are two wells already sensitive zone of wildlife and subsistence habitats, due to its close proximity to the Arctic completed on the PTU-3 Pad that could not be moved. The Corps is taking these factors into consideration, along with other issues relevant to pad location, in assessing the alternatives to determine the environmentally preferred alternative.

Comment Response 530 The Corps will consider multiple factors, such as impacts identified during the NEPA process, the project purpose, practicability (as part of the 404[b][1] Guidelines analysis), public interest determination, and mitigation options, when making its final permit decision. Refuge, and that it will contribute to major industrialization of the Eastern North Slope that poses 531 Comment noted; no action required. significant cumulative effects. 532 The Arctic Refuge is a protected area; however, the area outside the refuge is Summary of Concerns on the Pt Thomson Draft EIS: We are concerned about the negative state land, which is leased for the purpose of oil and gas development. Through environmental and human impacts of the proposed project on the adjacent Arctic Refuge wilderness, wildlife and subsistence values due to the project's proximity to this protected area, the NEPA process, the public interest review, and the 404(b)(1) Guidelines as well as to the subsistence resources and activities in the project area along the sensitive analysis, the Corps will take many factors into consideration, including Beaufort Sea coastline. None of the DEIS alternatives combine the best mitigative features in a minimizing impacts, before making a final decision. See also responses to way that adequately reduces negative impacts to Beaufort Sea nearshore resources and also to the Arctic Refuge. Comments 539 and 751. We appreciate that the impacts to the Arctic Refuge were addressed as one of the major issues of Arctic Refuge 533 The description of full field development is based on the best available the DEIS, and particularly that the Corps commissioned the Visual Resource Assessment and information. Part of the Applicant's stated purpose for the proposed project is to Noise Technical Report (Appendices N and O, respectively). further delineate the reservoir so that the Applicant can better understand, and This proposed project is so close to the Arctic Refuge that we believe that the Corps can do more thus define, a full field gas development project. Moreover, at this time, there is to reduce and minimize adverse environmental impact to wetlands, rivers, streams, and marine no gas pipeline to transport gas to market. Therefore, full field development is waters and their associated functions and values. While Exxon and its allies assert that Exxon's appropriately considered a reasonably foreseeable future action, as described in proposed project (Alt. B) is the most "environmentally responsible solution" for Point Thomson development, we disagree, and find that there are a number of meaningful and feasible ways that Section 4.2.3.3, Relevant Past, Present, and Reasonably Foreseeable Actions more can be done to reduce impacts to aquatic resources and to the nearby Arctic Refuge Considered in Cumulative Impacts Analysis. including to visual resources and from noise, as well as the Beaufort Sea nearshore waters. Therefore, we recommend that the Corps consider a New Alternative with a greater buffer - such as 5 miles away-- from the refuge (eliminating East Satellite Pad) and fully evaluate the "Concept 6: Limit Activity Near the Arctic Refuge," which was prematurely dropped from consideration in the DEIS without sufficient economic or technical information or independent analysis of feasibility.1 The public and agencies had identified the need for such an alternative in scoping comments (see DEIS at 2-3). In order to provide the best overall mitigating features that results in less environmental damage, this alternative should also consider moving the other drilling and production processing pads away from the coastline and other ways of avoiding greater cumulative impacts. This alternative should also eliminate permanent gravel roads or drilling pads for the exploration / delineation phase drilling for the East (and West pad) that is proposed as per standard North Slope practice, such drilling can be done from winter ice pads and ice road access. Furthermore, the environmentally preferred alternative should also move the Central Facility pad (as well as any other permanent facilities) away from the coast to reduce impacts to wildlife and subsistence resources Cumulative impacts from offshore drilling and development in the federal OCS waters need to be addressed in the FEIS, particularly from Shell Oil's proposed Sivalliq and Torpedo drilling operations on their federal leases located off the coast from the Point Thomson project. The DEIS gives contradictory information about whether such federal OCS exploration and development will occur and will be a reasonably foreseeable activity. While neither Sivalliq {aka Hammerhead prospect} nor Kuvlum prospects are listed on Table 4.2-2, DEIS at 4-9, the text states that for OCS leases approximately 15 miles offshore, development of the Point However, as we describe later in the comments, the buried subsea pipeline which the Corps considered within Concept #6 should not be included due to spill risk issues

Comment Response 534 Estimates of how much gas condensate, oil, or natural gas are not available for public release partly because the information is proprietary and partly because the intent of the proposed project is to further delineate and determine connectivity within the reservoir in order to estimate what quantities may be Thomson area would "improve their development feasibility."2 However, the adverse accessible for recovery. cumulative impacts to coastal and marine habitats, subsistence, marine mammals, birds, fish and 535 The Corps believes that the Draft EIS sufficiently discussed the geologic other wildlife from the combination of these impacts were not addressed in the DEIS. This is a major deficiency of the DEIS as the Corps cannot consider the benefits of an aspect of this uniqueness of the Point Thomson Reservoir. The Corps also does not see the development without also considering the costs associated with it as well. need to describe the use of nitrogen or carbon dioxide to maintain pressure in the **Detailed Comments** reservoir when the proposal is to cycle the natural gas back into the reservoir, not to extract it. Purpose and Need for the Project. The purpose and need for this project is not clearly The description of full field development is based on the best available provided to the public. What is the total gas condensate, oil, and natural gas is proposed to be produced from this proposed project and over what timeframe? This is not provided in the information. Part of the Applicant's stated purpose for the proposed project is to further delineate the reservoir so that the Applicant can better understand, and Information about the geologic uniqueness of the Point Thomson field and its differences from thus define, a full field gas development project. Moreover, at this time, there is existing, producing North Slope fields, such as its greater depth, extreme and abnormally high no gas pipeline to transport gas to market. Therefore, full field development is pressures, and existence as a retrograde gas condensate reservoir, that entail greater challenges and special hazards should be described in the DEIS. It is also appropriate to describe another appropriately considered a reasonably foreseeable future action, as described in technique described by AOGCC used for developing retrograde condensate fields, which is to Section 4.2.3.3, Relevant Past, Present, and Reasonably Foreseeable Actions substitute nitrogen or carbon dioxide to replace the produced gas in order to maintain pressures. Considered in Cumulative Impacts Analysis. This project for initial development of Point Thomson does not entail the development of the large natural gas field or its associated sales gas pipeline, and the nexus between this project and that vaguely defined later step of "full field development," listed as a Reasonably Foreseeable Future action in Table 4.2.2, DEIS at 4-9, is not clearly explained. However, the full cumulative impacts of the Point Thomson gas field development are not analyzed in the DEIS despite this being a reasonably foreseeable action, as well as the Corps considering that the viability of alternatives "should provide adequate infrastructure for probable future production," (DEIS at 2-6). While the DEIS contains a vague outline of the "full-field development" (DEIS at 4-11 to 4-12), this "conceptual general description," based on information provided by Exxon⁵ is insufficient upon which to evaluate its impacts, including "Development of the Point Thomson Project could facilitate development of other oil and gas resources in the immediate area... There are also hydrocarbon resources currently planned for exploration and development within OCS leases approximately 15 miles offshore of the Point Thomson Area. Construction of Point Thomson barge facilities, airstrip, and export pipeline could be used to support future development of these prospects and improve their development feasibility by reducing costs through shared facilities. For the purpose of this analysis, it is assumed that the infrastructure of the proposed Point Thomson Project could support development of other actions n proximity to Point Thomson, once any necessary contractual agreements and regulatory requirements were met." DEIS at 4-10. Estimated oil, gas, or gas condensate reserves are not described in the existing environment section on geology (DEIS at 3-5 to 3-11). In the Cumulative impacts section for geology, a figure for Point Thomson is based on Alaska Department of Revenue is provided (ADNR 2010b), but how much of this would be from the gas cycling roduction and Point Thomson sand potential is unclear (DEIS at 5-7 and 5-8). AOGCC, 2007. http://www.arcticgas.gov/sites/default/files/documents/role-aogcc-approving-pool-rules-point-Bill White, June 13, 2011, Why Point Thomson natural gas field struggles to produce. Alaska Dispatch. http://www.alaskadispatch.com/article/why-point-thomson-natural-gas-field-struggles-produce?page=full The referenced citation, RFI #52, Appendix D, was not included in the DEIS.

Comment cumulative. The DEIS needs to include the expected timeline for the project as well as a mapped Cumulative scenario of additional facilities that may be necessary later. It is unacceptable to consider initial steps for Point Thomson gas field development in a piecemeal fashion that ignores the full scope of the integrally related project. The DEIS wording is vague and ambiguous about the purpose and need for the project. It is clear that the State of Alaska has terminated the Point Thomson leases except for reinstating two of them "pending new development at Point Thomson that would 'provide for producing from wells by 2014." (DEIS at ES-1 and 3-302). Would the entire project be feasible in the event that the Point Thomson Unit is not found to be valid and only 2 leases are under Exxon's control? How this proposed action intersects with the state's requirements is unclear as no citations to documents, such as the court ruling or court filings are provided. If the purpose of the project is for Exxon to comply with agreements or commitments it has made to the State of Alaska in order to retain its leases and the Point Thomson Unit, this factor alone does not substantiate a need for the project that is in the public interest. Impacts on the Beaufort Sea Coast and other important subsistence resources The project's primary impacts on subsistence uses include impacts on subsistence use areas, resource availability, and user access for caribou (DEIS ES-59). The DEIS predicts moderate impacts to subsistence and traditional land use, moderate effects to wilderness values that would be essentially irreversible, and major effects to wildlands recreation particularly along Canning In light of this information regarding major issues of concern to the public, the Corps should require that the project should do more to avoid and minimize adverse environmental impacts to fish and wildlife, wetlands, the aquatic ecosystem, coastal waters, subsistence, noise impacts and visual resources, recreation, and Arctic Refuge wildlife and wilderness values A New Alternative to reduce impacts to Beaufort Sea coastal resources is necessary. The Corps needs to consider an alternative with a greater buffer - such as 5 miles -- from the Arctic Refuge and Screening

A New Alternative to reduce impacts to Beaufort Sea coastal resources is necessary. The Corps needs to consider an alternative with a greater buffer – such as 5 miles — from the Arctic Refuge (climinating East Satellite Pad) and that moves all pads further inland. An alternative to reduce impacts to the refuge had been addressed in Concept 6: Limit activity near the Arctic Refuge, which was inappropriately dropped from analysis without adequate independent review of its practicability and merit in minimizing environmental impact. However, the aspect of Concept 6, buried subsea pipeline for gas condensate export (DEIS at 2-3), should not be considered in the new alternative, due to the lack of a long-term proven track record of such technology, difficulties of spill detection and response, and the fact that the longest distance built to date in the Beaufort Sea is 6 miles for the Northstar field compared with the dozens of miles that would be required in this case.

In this Alternative, the Corps should also set back drilling and processing pads farther from the eroding and melting Beaufort Sea shoreline to avoid uncertain impacts in a rapidly warming climate and to reduce spill risks to nearshore waters, consider further reductions in permanent infield roads and provide for further pad consolidation, and no construction of permanent roads to the satellite Pads at least during the exploratory/delineation phase.

Response

- 536 The description of full field development is based on the best available information. Part of the Applicant's stated purpose for the proposed project is to further delineate the reservoir so that the Applicant can better understand, and thus define, a full field gas development project. Moreover, at this time, there is no gas pipeline to transport gas to market. Therefore, full field development is appropriately considered a reasonably foreseeable future action, as described in Section 4.2.3.3, Relevant Past, Present, and Reasonably Foreseeable Actions Considered in Cumulative Impacts Analysis.
- 537 The overall purpose of this project is to produce liquid hydrocarbons from the Thomson Sand Reservoir and further evaluate and delineate the reservoir and evaluate the Brookian Group sandstones. As far as this NEPA process and the Corps is concerned, the question at hand is whether or not to issue a permit allowing the filling of wetlands and other waters of the U.S. The Corps' requirements regarding permit application decisions does not require a permittee to hold title to the land (or by extension, have valid leases) for the Corps to make a decision to either approve or deny a permit. Conflicts between the Applicant and the State of Alaska concerning rights to the land, leases, or standing court proceedings are outside the scope of this environmental review and the jurisdiction of the Corps.
- 538 During the 404(b)(1) Guidelines analysis, the Corps will consider mitigation options along with impacts to the environment identified during the NEPA process before making its final permit decision.
- 539 The Corps will consider multiple factors, such as impacts to the environment identified during the NEPA process, the project purpose, practicability (as part of the 404[b][1] Guidelines analysis), public interest determination, and mitigation options, when making its final permit decision. The Corps has no jurisdiction and there is no precedence to impose a "buffer" on State land around the Arctic Refuge. Language has been added to Section 2.2.4.2 to help the reader understand why Concept 6 would not meet the purpose and need of the project and has therefore been eliminated from detailed consideration. The State of Alaska verified that a reach of more than 30,000 feet, which would be needed in order to access the eastern portion of the reservoir from the Central Pad, is technologically infeasible. Without the ability to drill wells from the vicinity of the proposed East Pad, that Applicant would not be able to access resources that have already been identified in approximately onethird of the Thomson Sand Reservoir. This conclusion is based on the general areal extent of the reservoir, which has been determined through delineation data gathered from the 16 exploration wells drilled since hydrocarbons were first discovered in the Point Thomson area in 1975 (Appendix D, RFI 63; Hartz et.al. 2008). Reduced access to the eastern portion of the reservoir would limit the Applicant's ability to continue evaluation and delineation activities, including fully delineating the eastern edge of the reservoir, testing connectivity with the central portion of the reservoir, and fully evaluating the Thomson Sand oil rim

Comment	Response	
	and Brookian Group sandstones hydrocarbons. Finally, reduced access and the inability to delineate, evaluate, and ultimately recover hydrocarbons from the eastern portion of the reservoir would hamper the collection of data needed to develop a strategy for full field development. All season access to the East and West Pads is preferred by the Applicant because delineation would occur year-round. "Delineation" for the Point Thomson Project would consist of evaluating the connectivity of the reservoir. To determine connectivity, gathering lines would need to be built and cycling occur. Cycling could occur during non-ice road seasons, and therefore, other access to the East and West Pads would be needed. The coastal location of the pads presents a trade-off of impacts and the purpose of the project. The Applicant's Technical Brief #1 states that a "Pad location further inland from the coast will increase the throw on all wells and potentially preclude the ability to reach portions of the reservoir necessary for full field development. This may lead to additional pads being needed in the future to reach bottomhole targets that cannot be reached from a pad that has been located further inland." In other words, a trade-off of moving pads inland would be the potential future need for additional pads closer to the reservoir (i.e., along the coast) in order to reach bottomhole targets, given the present 13,000-foot limit of extended-reach drilling, which has been independently verified by the State of Alaska.	

Comment Response 751 The State of Alaska verified that the horizontal reach limit of long reach directional drilling in high pressure and depth reservoirs such as the Thomson Sand Reservoir is approximately 13,000 feet. In addition, the Corps is continuing to request information about the long-reach directional drilling and project costs Based on the information contained in the DEIS including its Appendices, better economic and from the Applicant and will use this information as part of the 404(b)(1)technical information is necessary upon which to evaluate the lack of feasibility and Guidelines analysis and the final permit decision. practicability of the alternative of removing the East Pad to achieve the goals of limiting activity and permanent infrastructure near the Arctic Refuge, as well as to the feasibility of moving pads 729 All season access to the East and West Pads is preferred by the Applicant farther from the coast. because evaluation of reservoir connectivity would occur year-round after The technical information upon which Concept 6 was not addressed as a DEIS alternative, installation of the wells and would be part of the currently proposed project. The particularly the elimination of East Pad, is not provided. The DEIS states, "current directional type of wells that are needed to evaluate the reservoir connectivity for the Point drilling technology in reservoir conditions similar to those found in the Thomson Sands only has Thomson Project are not like traditional one season exploratory wells. The a proven reach of approximately 13,000 feet (Appendix D, RFI 63)"6 (DEIS at 2-8). However, the cited information (e.g. RFI#63) is not found in Appendix D. testing needed for commercial viability is long-term testing, which would be done during production of gas condensate. Production would occur year-round, In the discussion of minimization of coastal infrastructure as part of the Draft Section 404(b)(1) Evaluation, it again refers to a citation that is not included in the DEIS, and the Corps further and therefore the East (and West) Pad would need to be gravel with gathering notes that Exxon's information regarding the limits of horizontal reach remains proprietary and lines connecting them to the central processing unit. Long-term testing during was not made available to the Corps: production would determine connectivity of the reservoir. Through this testing "Based on currently available public information, however, it is not possible to determine the applicant would be able to determine, with greater accuracy, the commercial how far inland the drilling pads may be moved while still allowing sufficient access to and development potential of the reservoir. the reservoir to fully delineate and develop the hydrocarbon resources of the Thomson Sands. The proposed project, is, in part, intended to provide additional reservoir information in support of a more comprehensive development plan. Current LRD drilling technology in reservoir conditions similar to those found in the Thomson Sands reservoir has a proven horizontal reach of approximately 10,0000 to 13, 000 feet (Appendix D, RFI 63 of the Draft EIS. Based on proprietary information not currently available to the Corps, the Applicant has determined that the drilling reach from the proposed pads in Alternatives B and E would provide adequate access to drilling targets and would be sufficient to fully delineate and develop the Thomson Sands reservoir (Appendix D, Technical Brief 1 of the Draft EIS).' The Corps notes that additional economic information upon which to evaluate practicability of the various alternatives is still needed. (Appendix C at 20). Exxon's confidential information regarding the limits of horizontal reach should be made available to the Corps so it can fully assess this alternative. It appears that the Viability decision was based on Exxon's assertion that without East pad it could not achieve its purpose of "fully delineating and development the reservoir" because it would not access "one-third of the gas resource" (Appendix C, p. 9). This muddles the stated need for further delineation wells (i.e. exploratory phase work proposed to be done from the East pad) by combining it with development of the reservoir. It is also unclear whether this refers to the gas condensate, or the "full-field development" of the natural gas field for which environmental impacts are not comprehensively addressed here - its specific infrastructure is not included in the Point Thomson Project. "The wells on the East and West Pads would be used initially to delineate and evaluate the reservoir, and to determine whether the rim of oil surrounding the gas reservoir is viable for production." (Appendix C, p. 12). 13,000 feet - 2.46 miles DEIS, Appendix C, p. 24

Comment Response 540 The Draft EIS referred to the wells as delineation wells, but in order to determine connectivity of the reservoir, these wells would need to be put into production. Production would occur year-round and therefore the East and West Pads would need to be gravel with gathering lines connecting them to the central processing The DEIS documents that the actual hydrocarbon production from this project (gas condensate) unit. Long-term testing during production would determine connectivity of the would be viable and technically feasible without the East Pad and with drill sites placed further reservoir. Through this testing the Applicant would be able to determine, with inland, (see DEIS, Table 2.2.2). For this project, Exxon has not yet fully delineated the oil and gas condensate resources. Exxon plans to produce the gas condensate, with "initial production greater accuracy, the commercial and development potential of the reservoir. targeted at 10,000 bpd from a central well, while maintaining the ability to produce natural gas in the future should the required infrastructure be put in place to transport natural gas to market." At the least, the Corps should not approve new construction for the East pad nearest the Arctic Refuge, nor its connecting road, until its need as a production site is established. The detailed documentation in Appendix D provided by ExxonMobil indicates that there is not a confirmed need for this drill site. Therefore, construction of gravel pads and roads is phase is unnecessary the project calls for drilling more exploratory/delineation wells to evaluate the commercial viability for producing crude oil and natural gas. In consideration of the alternative which is least damaging to the environment, including its services, the simple factor of direct gravel fill "footprint" quantity is an insufficient measure of the full effects to wetlands and other aquatic resources at stake here. Although there are existing gravel pads from earlier exploratory drilling placed decades ago, these may not be the most favorable location to minimize adverse impacts for the long-term Point Thomson project -including full-field natural gas exploitation-given their location next to the eroding sea coast as well as the fact that they are in the zone of highest wildlife uses including caribou insect relief, and high subsistence use. Furthermore, the zone of impacts is larger than the direct "footprint" and the proposed pad shoreline locations risk higher impacts to the nearshore waters resources including bird, marine mammal, and fish migrations. Other Alternative Considerations. In the DEIS, all project alternatives consider permanent gravel drill sites for the East and West pads. However, the DEIS describes that the satellite drill sites (i.e. East Pad and West Pad) are proposed as delineation wells at this time, 8 and the justification of proven need for future development has not been provided in the DEIS. Similarly, the need for the infield gathering lines to the East and West Pads has not yet been documented based on proven production needs at this time. Therefore consideration of an alternative without those 2 permanent gravel fill pads, along with the connecting permanent gravel roads and gathering lines, is appropriate. Alternative C's impact analysis masks the environmental benefits of moving the East and West pads inland (it hardly moves the Central pad inland and assumes barging is not possible) because it adds construction of a new 44-mile gravel road back to Endicott, and adds an additional 28 miles of new export pipeline with tie in at Endicott instead of Badami. Therefore, that alternative is inadequate to evaluate the mitigative effect of moving the gravel pads inland. Impacts to Caribou. "The wells on the East and West Pads would be used initially to delineate and evaluate the reservoir, and to etermine whether the rim of oil surrounding the gas reservoir would be viable for production." DEIS at 2-18.

Caribou are an important subsistence resource to the Kaktovik, Nuiqsut and other North Slope communities, and more information is needed to address how impacts on this resource may in turn affect subsistence activities over the long run.

The caribou map (Fig. 3.10-6) should also include post-calving and movement areas for females and their importance described in the Affected Environment section of the DEIS at 3-120. These are sensitive habitats used at a time period that is so important to lactating females with the highest energetic demands.

The summary of impacts to caribou downplays impacts, by only highlighting the "footprint" of direct caribou habitat loss (e.g. for Alternative B, 880 acres directly covered by gravel infrastructure causing habitat loss, alternation and disturbance; see Table ES-2), and this misleads the reader as to the total potential effects on caribou. The methodology to determine caribou habitat alteration by using a 165-foot buffer distance (DEIS 5-260) fails to combine the direct loss with this degradation factor along with the other negative impacts to caribou habitat from potential displacement from roads and pipelines at the distance of 2.5 miles (Cameron et al 1992). It is important that the Executive Summary as well as the detailed analysis address this broader habitat area loss and degradation, including where caribou behavior and migratory movements would be affected due to habitat fragmentation and disruption. For example, for Alternative B, the area where habitat and forage is potentially disturbed (within 2.5 miles) was estimated at 38,505 acres, compared to the 880 acres shown in Table ES-2). However, this estimate fails to acknowledge any potential loss or disruption from the pipeline corridors and only considers a buffer around the infield roads (see Figures 5.10-1 and 5.10-2), even though pipelines may also alter movement patterns and additional disturbance sources such as helicopte and other surveillance of the pipelines would be present.

The analysis of potential disturbance to caribou from project construction and operation (see Table 5.10-4, p. 5-271) also contains flawed estimates of impacts to calving and post-calving because it appears to be based on point counts and fails to address the entire habitats needed by females and their calves as they move around during their entire calving and post-calving periods. The map shows a concentration of 1001-5000 caribou out in the Beaufort Sea north of Flaxman Island; the significance of this caribou use (if this is correct information) and the obstacles the new infrastructure might pose to such use in the future should be explained.

Impacts to Beaufort Sea Resources. We greatly appreciate the noise study that was done, but insufficient information is provided for evaluation of changes to sound levels in the marine environment. A specific study to provide baseline assessment of underwater noise levels in the marine environment should be done to address potential project related noise to bowhead whales and other marine life, as well as the cumulative effects. For example, the sound of directional drilling under the ocean needs to be analyzed. Northstar monitoring found a significant sound attributed to drilling, as the Noise Technical Report notes (see Appendix O at 157). All of the onshore, as well as below ocean sounds, need to be considered in an full evaluation of the cumulative impacts of drilling that would affect the marine environment, including from activities on nearly OCS leases.

¹⁸ "Existing available marine noise data from similar North Slope oil and gas development projects was used to assess potential project-related noise in the marine environment and therefore, underwater noise levels were not measured as part of the baseline acoustic data collection." Noise Technical Report, Appendix O, DEIS at 3.

Response

541 The effects of the proposed project on Kaktovik and Nuigsut subsistence activities are addressed in Section 5.22, Subsistence and Traditional Land-Use Patterns. The impact analysis for terrestrial mammals, caribou in particular, was used as part of the impact assessment for subsistence resources. Figures 3.10-8 and 3.10-9 identify caribou group size and location and movement density during the post-calving time period. Additionally, Figures 5.10-3, 5.10-6, 5.10-9 and 5.10-12 identify locations of Central Arctic Herd (CAH) caribou movement densities in June, July, and August. The Corps re-evaluated these figures and other available post-calving data and determined that the data presented in the Draft EIS are adequate for evaluating post-calving caribou movements. Data showing movement areas specifically for female caribou is inferred in Figures 3.10-8 and 3.10-9. A discussion of the importance of caribou post-calving areas has been added to Section 3.10.3.2, Caribou, of the Final EIS. Table 5.10-2 identifies direct habitat loss (footprint and buffer) and indirect habitat loss up to 2.5 miles away from available habitat and foraging areas that would potentially be disturbed. The buffer of 2.5 miles is broad enough to include behavioral response buffers that cover a range of possible disturbances including noise and visual. The buffers used are based on known displacement distances evaluated in multiple studies of caribou behavioral responses to disturbance (Dau and Cameron 1986; Cameron et al. 1992, 1995; Wolfe 2000; Noel et al. 2004; Haskell et al. 2006; Haskell and Ballard 2008). Potential impacts from pipeline corridors are discussed for each Alternative under Habitat Fragmentation. The Draft EIS notes that the pipeline heights (minimum of 7 feet) are greater than the minimum 5-foot height that has been recommended to prevent blockage of caribou movements during summer or winter (Cronin et al. 1994, Lawhead et al. 2006). Therefore, it is not expected that pipelines would alter movement patterns of caribou when they are not placed in close proximity to roads. Section 5.10 of the Final EIS was updated to note that aircraft could disturb caribou during routine maintenance and surveillance of pipelines. The analysis of potential disturbance to caribou from project construction and operation used ADF&G and other data made available to the Corps. The purpose of Table 5.10-4 is to identify the average number of caribou potentially occurring within 2.5 miles of Alternative B that could be disturbed and displaced. The intent of this table is not to identify important habitat for females and calves outside of the 2.5 miles. Impacts to habitat outside of the 2.5 mile buffer are not included in the analysis based on literature that has evaluated displacement distances in studies of caribou behavioral responses to disturbance (Dau and Cameron 1986; Cameron et al. 1992, 1995; Wolfe 2000; Noel et al. 2004; Haskell et al. 2006; Haskell and Ballard 2008). The photocensus data used to show caribou herd sizes was provided to the Corps by ADF&G. An explanation of the point location of 1,001 to 5,000 caribou north

of Point Thomson (not north of Flaxman Island as suggested in this comment) was not provided by ADF&G and the Corps cannot speculate on the accuracy of

Comment	Response		
Comment	the location or the behavior of the caribou in the group. The potential for project infrastructure to affect the movements of caribou was analyzed by using the data showing the density of caribou movements shown on the same figures. 542 A review of published reports was conducted to determine the availability of baseline underwater ambient noise measurements for the nearshore waters of Point Thomson. While ambient noise data specifically for Point Thomson do not exist, various acoustic monitoring efforts off the North Slope were identified. As stated in Section 3.20.2 of the Draft EIS, Review and Adequacy of Information Sources for Noise, discussions with acousticians involved in acoustic monitoring in the Beaufort Sea confirmed that the best available data for shallow water ambient noise measurements near Point Thomson are associated with acoustic monitoring of industrial sounds for BPXA's Northstar development project. The Liberty development project was also considered to be a suitable candidate for comparison because, like Northstar and Point Thomson, Liberty occurs adjacent shallow waters (less than 66 feet in bottom depth). Point Thomson shares similar characteristics with Northstar and Liberty, specifically shallow water and topographical characteristics. The Corps determined that the available data from Northstar and Liberty were accurate, timely, and sufficiently similar to warrant direct comparison to the Point Thomson Project area and concluded that these data should be used for assessing the potential impacts of the Point Thomson Project on the marine soundscape. Drilling within the hydrocarbon zone at Point Thomson would occur during the winter months when most marine mammals are not in the area (see Sections 3.11 and 5.11, Marine Mammals, for details). Because the Point Thomson area is a shallow water environment with islands, sound transmission is limited. The Northstar EIS found that industrial sounds are unlikely to be detectable far enough offshore to be heard by spring-migrating whales, but		

Comment The marine mammal effects analysis considers a study area that extends 25-miles seaward (DEIS at 5-324) but fails to conduct a detailed cumulative impacts analysis that also combines impacts from OCS exploration and development operations in this zone. In particular, impacts to marine mammals and their habitats from noise and the impacts of major spills, in the event that they occur, should be addressed with a robust analysis. The page and a half analysis of cumulative effects to marine mammals is insufficient given the importance of these species (DEIS at 5-353 to 5-354). Its conclusions are also flawed, for example, "cumulatively... spills would have little impact on marine mammals (see Section 5.24, Spill Risk and Impact Assessment)" (DEIS at 5-354). Yet, this contradicts the actual findings in that section which state, "in the very unlikely event that a large or very large spill were to occur, it could result in major to catastrophic impact to wetlands and vegetation, birds, and marine mammals. Other resources could be impacts to lesser degrees and subsistence impacts could be magnified by perception." (DEIS at 5-633). The Spill chapter also states, "though highly unlikely, a large to very large spill in the nearshore marine habitat during breakup or freeze-up could result in long-term, extensive, and possibly major to catastrophic impact to marine resources due to the difficulty of containing and cleaning up spilled oil in those conditions. " (DEIS at 5-663). We are concerned that in the event a major spill enters the Beaufort Sea, such as from a production well blowout during broken ice such as late fall, the impacts could be devastating to marine mammals and these should be fully evaluated in the marine mammal section, including through use of a trajectory analysis for marine waters. Spill Risk and Impact Analysis. This section opens with a sweeping statement that over the past 40 years there has been a "reduction of the likelihood of spills on the North Slope," without any supporting data (DEIS at 5-634). Exxon still needs to provide a new Oil Discharge and Prevention Contingency Plan for this project (DEIS at 5-634),11 and therefore the consideration of prevention and response measures cannot yet be completed. It is not a reasonable assumption that less than 63,000 gallons of a 1,134,000 gallons per day spill would be released into the environment over a 15-day period, because of ExxonMobil's Spill plan assumption that voluntary ignition of the gas condensate at the well head (burning up the well) as its response tactic would reduce the spill volume (DEIS at 5-638). The DEIS assumes that a gas condensate well blowout could be ignited in 2 hours (DEIS at 5-641) but the DEIS should evaluate the full impacts of a blowout spill continues without control, The DEIS fails to provide a trajectory analysis in the event that a large or very large oil or condensate spill enters the Beaufort Sea marine environment. The conclusion that "most of the toxic components would evaporate rapidly or be diluted and dispersed below toxic levels," is wrong. It does not consider the higher persistence of spills occurring in broken ice or below sea ice, nor the slower weathering and longer persistence of spilled oil in Arctic regions in general. 12 Environmental Justice Findings. We find the Environmental Justice analysis and conclusions to be fundamentally flawed. It states, "potential impacts to subsistence resources, subsistence user access, and human health would not be disproportionately high and adverse impacts on the Appendix U, is misleading in its title, Oil Discharge Prevention and Contingency Plan, as it is not the new plan fo EPPR. 1998. Field Guide for oil spill response in Arctic Waters. http://eppr.arctic-

ouncil.org/content/fldguide/fldguide.pdf p. 2-4.

Response

543 The Draft EIS cumulative impacts analysis for marine mammals does include an evaluation of OCS activities based on the past, present, and reasonably foreseeable future actions presented in Chapter 4. The marine mammals section does not evaluate the potential impacts of spills because spills impacts are addressed in Section 5.24, Spill Risk and Impact Assessment. As noted in the comment, the impact analysis in Section 5.24 does evaluate the impacts of a large or very large spill on marine mammals, stating that the impacts could be major to catastrophic, although very unlikely to occur. The Corps has determined that a trajectory analysis is not needed for this project because the likelihood of cumulative impacts associated with very large spills is extremely small (see Section 5.24.13.2, Cumulative Impacts). The conclusions in the marine mammal section of the cumulative impacts analysis quoted in the comment are not contradictory with the spills section, because the sentence is discussing impacts from non-oil and gas related activities and spills; the full sentence reads: "Cumulatively, non-oil and gas activities and spills would have little impact on marine mammals (see Section 5.24, Spill Risk and Impact Assessment)."

Aspects of noise impacts to marine mammals from the proposed project are discussed in both the marine mammal and noise sections of the EIS. Cumulative noise impacts were addressed by using the best available information regarding the type of activities anticipated for OCS exploration and development; specific data and types of activities that may occur simultaneously during OCS exploration and development are currently unknown and given the minor impacts of noise on marine mammals anticipated as a result of this project, the level of analysis is appropriate.

Assessing the potential risk of spills is the appropriate focus of the EIS, rather than analysis of worst-case impacts of a very unlikely event. The Applicant's amended ODPCP, required for the proposed project, would further address spill scenarios and mitigation and would be reviewed for consistency with 18 AAC 75 by the ADEC.

747 The statement at the beginning of Section 5.24, Spill Risk and Impact Assessment, "Over the past 40 years, the combination of stricter agency regulations, improving industry operating practices, and advancements in spill control technology have resulted in a reduction of the likelihood of spills on the North Slope," is a professional judgment based on the following: improved technology, including advances in the ability to use long-reach directional drilling to access offshore reservoirs from land-based facilities, better engineering design, greater stress on clean operations, and greater awareness of spill prevention, reporting and cleanup on the part of all the oil field personnel. We have modified this statement in the Final EIS (introduction to Chapter 5.24, Spill Risk and Impact Assessment) by adding "likely" before "resulted." See Section 3.24.3, Overview of North Slope Spill History, for a more detailed assessment of North Slope spill data.

Comment	Response		
Comment	 Response 748 The amended ODPCP that would be prepared for the proposed project, as required by 18 AAC 75.415, would be reviewed and approved, if deemed appropriate, by the ADEC. The Corps does not have the authority to determine the adequacy or suitability of the spill prevention and response measures for the Point Thomson Project. The approved ODPCP for the existing wells at the Point Thomson site was included in the EIS as background information for assessing potential impacts due to spills. However, an amended ODPCP is not required for the EIS. Section 5.24.1 explains that the ODPCP appended to the EIS is for the existing wells at the Point Thomson site and that this plan would need to be amended to cover the additional project components if the proposed project is approved. 749 The spill scenario presented in Section 5.24.2.3, Phases of Oil Field Development, is taken from the ODPCP for the existing wells at the Point Thomson site. The ODPCP was approved by the ADEC, and therefore, it is appropriate to use for assessing impacts in the EIS. 544 Weathering is described in Section 5.24.4.1, Weathering. As indicated in this section, weathering depends on environmental conditions. Weathering may be generally slower in the Arctic, but that does not mean these processes do not occur. The quoted text was taken from a discussion of impacts on marine water quality (Section 5.24.11.4, Water Quality) and is accurate. The EIS does consider Arctic conditions and, relative to sea ice, states in Section 5.24.5.2, Fresh or Marine Water: "Weathering processes in fresh or marine water are generally similar and mainly impacted by seasonal ice cover, which could greatly slow weathering in both systems (BLM 2004)." An aerial trajectory analysis for both oil and condensate well blowout events were included in the ODPCP (Appendix U) for the two wells drilled in 2009-2010. These wells are representative of the type of wells that would be drilled for the proposed project, and it is assumed that th		

minority and low-income communities of Kaktovik and Nuiqsut." This defies common sense given the public hearings testimony on this project both on the DEIS, the scoping process for the Corps' EIS, and the EPA's scoping hearings back in 2002, and the factual analysis provided by the National Research Council (2003).

The short evaluation of environmental justice (Section 5.16, DEIS at 5-425 to 5-431) fails to give the proper context of this project's adverse environmental and human health impacts – including to the subsistence, traditional activities, Inupiat culture, and human health – for the low-income, minority Inupiat communities of Kaktovik and Nuiqsut as compared to the broader society of Alaska and the United States. Incomplete and piecemeal analysis of impacts to subsistence and traditional land uses in Section 5.22, as well as downplaying the combined impacts, underestimates the impacts of this major eastward explanation of industrial infrastructure and activities on the local communities in the long-term.

The project is proposing permanent industrial facilities in a traditional use area that will be in place for many decades – not impacts that will be temporary in duration as stated by the DEIS at 5-426.

While Point Thomson's noise and visual resource impacts will not be direct impacts within the two communities, the Environmental Justice impact criteria (DEIS at 5-426) fails to grasp that noise, visual intrusions, and other fundamental changes to traditional hunting grounds and subsistence use areas are relevant and significant to people from the communities. The National Research Council (2003) said, "the committee heard repeatedly from North Slope Inupital residents that the imposition of a huge industrial complex on the Arctic landscape was offensive to the people and an affront to the spirit of the land." (p.138) The NRC also noted, "Even where access is possible, hunters are often reluctant to enter oil fields for personal, aesthetic, or safety reasons. There is thus a net reduction in the available area, and this reduction continues as the oil fields spread." (p.156)

The Environmental Justice analysis exaggerates local hire benefits over the long-run (DEIS at 5-426) and fails to provide the factual context with respect actual, minor, local village Inupiat hiring numbers, as noted earlier in the socioeconomic section (DEIS at 5-411; note that this does not break it down by village). The National Research Council (2003) said, "that few who live in the North Slope Borough are directly employed by the oil and gas industry has been noted for almost two decades (Kruse et al. 1983 and is supported by findings of both the NSB survey (NSB 1999) and the Alaska Department of Labor (Alaska Department of Labor and Workforce Development 2001)." (p.146)

The Environmental Justice analysis fails to adequately address cumulative impacts with any thorough analysis for the effects on the Inupiat people from Nuiqsut and Kaktovik. Additionally, noise and other negative impacts from this project, combined with nearby OCS drilling and other exploration and development activities on OCS leases to the marine and coastal environment have not been adequately analyzed in the underlying section on subsistence and traditional landuse patterns, and marine mammals, and have not been addressed in this section.

Cumulative Impacts. For the natural gas development of the Point Thomson reservoir, "additional infrastructure anticipated for full-field development" with a "conceptual general

13 Table ES-2, Comparison of Impacts, DEIS Executive Summary at ES-77.

Response

545 As discussed in Section 3.16, Environmental Justice, the Corps' evaluation of the potential for a disproportionately high and adverse effect on minority and low-income populations was based on the CEQ guidance on environmental justice under NEPA (Environment Justice: Guidance Under the National Environmental Policy Act. Referenced as CEQ 1997a in the Draft EIS). The findings of the environmental justice analysis incorporated the impact evaluations for subsistence and traditional land use, socioeconomics (including community cohesion and culture), and human health (Section 5.22, Section 5.15, and Section 5.23, respectively). The environmental justice analysis also included consideration of qualitative information gathered through the tribal consultation and public participation process. Impacts to these resources were thoroughly evaluated in the Draft EIS within each of the respective sections and findings were referenced and summarized within the context of environmental justice in Section 5.16.

Based on the comment received, the Corps reevaluated the environmental justice section and its conclusions, and maintains that the impacts identified within the subsistence and traditional land use, socioeconomics, and human health sections, individually or additively, do not support a finding of a disproportionately high and adverse effect. This finding is consistent with the CEQ guidance on environmental justice on which the Corps' analysis was based (CEQ 1997a). See also the response to Comment 585 in Comment Document 231.

Comment Response 546 The description of full field development is based on the best available information. Part of the Applicant's stated purpose for the proposed project is to further delineate the reservoir so that the Applicant can better understand, and thus define, a full field gas development project. Maps at this stage would be description of potentially necessary additional facilities," was provided by Exxon and RFI 52 speculative and would suggest a greater level of understanding of a future was cited (DEIS at 4-11 to 4-12) - but RFI # 52 was not included in Appendix D. Another project that is not presently designed. description of this issue is found at DEIS p. 1-1. Maps are a fundamental way of addressing potential scenarios, but none were are provided to assess this additional infrastructure that would 730 The Alaska Pipeline Project is included in the reasonably foreseeable future be added later. The vague conceptual description fails to identify or quantify all additional actions and the impacts are discussed within the cumulative impact sections. The facilities needed, including an expanded Central Pad to accommodate additional production facilities, additional wells on the proposed Central East, and West Pads, a gas export line, a new Corps agrees that it is uncertain whether or when an export gas line would be or expanded gravel mine, additional in-field pipelines, gas treatment plant and export pipeline built. It is still to be seen where the line would be located and by whom. Because from the North Slope and additional water sources and quantity, waste quantities and disposal, of these unknowns, the discussion of the export gas line remains in the air pollution quantities. Given that ExxonMobil is a project proponent for the Alaska Pipeline Project¹⁴ which shows the pipeline leg east to Point Thomson, the combined environmental reasonably foreseeable future actions section of the EIS. The building of the gas impacts of these projects need to be fully addressed in the cumulative impact analysis. While the line is a large undertaking that stands alone. The Point Thomson Project is project is described in the DEIS at 4-10 to 4-11, its project features are not mapped nor its environmental effects fully addressed in this environmental analysis proposed to extract condensate and oil. The proposed export pipeline would connect to TAPS. If a gas pipeline were to be built and resources from Point Will an Alaskan natural gas pipeline ever get built from the North Slope? No one knows for sure, but the ongoing related projects for transportation of the Point Thomson conventional gas need to 730 Thomson connected to it, then a gas line would have to be built from Point be analyzed in the EIS. This document needs to provide more integration of existing Thomson to tie in. A gas pipeline from Point Thomson to Deadhorse is shown as information regarding simultaneous processes underway on the Alaska North Slope pipeline, part of the Alaska Pipeline Project because ExxonMobil is a proponent of the including consideration of permit applications for pipeline rights-of-ways, etc. We note that the Federal Energy Regulatory Commission (FERC) announced on December 9, 2011 that it would project and therefore would want to connect Point Thomson to it. holding scoping meetings and accept public comment for its environmental review process until 752 The two projects (Point Thomson and the Alaska Pipeline Project) are separate. February 27, 2012 on the Alaska Pipeline Project being advanced by TransCanada Alaska Company, LLC and ExxonMobil Alaska Midstream Gas Investments, LLC.15 This project The Point Thomson Project is proposed to extract condensate and oil and the shows the Point Thomson to Prudhoe Bay pipeline as part of the Proposed Alaska Pipeline export pipeline proposed as part of the Point Thomson Project would connect to Project. 16 Is it reasonably foreseeable that this project will meet the proposed operational startup of a gas line in service by 2020?17 This DEIS should carefully evaluate the inter-relationship of TAPS. A natural gas pipeline export from Point Thomson would only be these projects with a fact-based analysis and rationale to help the public understand the nexus of constructed if a natural gas pipeline (such as the Alaska Pipeline Project) were these projects. to be built and the Point Thomson Project was expanded to include natural gas The DEIS dodges the necessity to consider the additive, synergistic, and comprehensive production. environmental impacts from the project, and cannot evaluate them in a separate and segmented fashion to avoid the full picture. On one hand, ExxonMobil is involved with permitting and right-of-way review processes for the major Alaska Pipeline Project. On the other hand, it is divorcing this current Point Thomson project from that effort by not showing its full plans here, at the same time as it is saying that this project must to accommodate significant future development (see Table 2.2-2, DEIS at 2-7). If the significant, future development is a necessary feature of this project, then it needs to be better and comprehensively analyzed in the DEIS. http://gasline.alaska.gov http://gasline.alaska.gov/newsroom/Media%20Releases/FERC%20Notice%20of%20Public%20Scoping%20Meet http://gasline.alaska.gov/newsroom/Presentations/GPPO-APP%20Permitting%20Phase%20timeline.pdf

Comment	Response
Looking at the cumulative effects sphere of influence also harkens back to the poorly articulated and unsubstantiated "need" for the Point Thomson Project. While the full-field development has not been included "as part of the Point Thomson Project because of the number of uncertainties surrounding gas production at Point Thomson" and there are other uncertainties including outstanding legal issues including "resolution of the dispute over the Point Thomson Unit" (DEIS at 4-12), what data supports the public interest and need in this proposed Point Thomson project? Finally, the EIS summary of cumulative effects (ES-62 to 63) provides a biased picture of its	753 The overall purpose of this project is to produce liquid hydrocarbons from the Thomson Sand Reservoir and further evaluate and delineate the reservoir and evaluate the Brookian Group sandstones. The Corps' public interest determination will include the findings of the EIS, the 404(b)(1) Guidelines analysis, and consideration of all comments received on the Draft EIS and public notice of the permit application. 754 The Executive Summary section in question has been rewritten as follows: "Key Impacts/Issues • Potentially adverse cumulative effects were identified for coastal waters, hydrology, caribou, Arctic Refuge, environmental justice, visual aesthetics, cultural resources, and subsistence and traditional land use. • Potentially beneficial cumulative effects were identified to the economy."

Comment		Response	
		507 Comment noted; no action required.	
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Claire Fitzpatrick Chef Fuerous Officer Alesia Strategic Ploternance Unit	O229_Clair.Fitzpartick_Bus 82 Exploration (Alassed) Visc. PO Box 1996/02 900 first themical Biological of 6412 Alassed State (Alassed Stat		
January 18, 2012	Main: 997-964-9111 Fra. 397-564-9598 Mobile: 397-222-9664 frac/30tg-cnn		
Mr. Harry Baij, Jr. Department of the Army U.S. Army Engineer District, Alaska Regulatory Division P.O. Box 6898 JBER, Alaska 99506-0898 RE: Comments on the Point Thomson Dr	Statement of Support for Project 507 aft Environmental Impact Statement		
Dear Mr. Baij:	•		
BP Exploration (Alaska) Inc. (BPXA) is ple the Point Thomson Draft Environmental Im operator on the North Slope and a 32% own strong interest in the development of Point I field significant to BPXA, it is also importan This resource contains an estimated 8 trillion approximately 25 percent of known North S Thomson is critical to developing this resour Benefits for Alaskans include training and ju and increased throughput for the Trans Alas	pact Statement (Draft EIS). As the largest er of the Point Thomson field, BPXA has a Thomson. Not only is development of the it to the State of Alaska and to all Alaskans, a cubic feet of gas and represents lope gas resources. Development of Point ree and securing Alaska's energy future, obs; State revenue; business opportunities;		
State of Alaska, and we support responsible of Engineers to promptly issue a Final EIS a	ant project. Thank you for the opportunity to		
Please contact me if you have any questions	or concerns.		
Claire Plant (Claire Fitzpatrick Senior Vice President			

Comment		Response
P.O. Box 190257 Anchorage, Alaska 99519-0267 907 564 3668 Telephone 907 743 9809 Facsimile	0230_R.Lee.Bruce_APP R. Lee Bruce Senior Project Manager Point Thomson Project	
	E x onMobil	
January 18, 2012 ER-2012-OUT-003		
ExxonMobil appreciates the opportunity to DEIS. We commend the Corps, the EIS of HDR Alaska, Inc. on reaching this importe (NEPA) process review of the Point Thomefforts in maintaining the current schedule ROD in August 2012 and start of construct. ExxonMobil believes that the DEIS is a swith the requirements of NEPA and relate implementing regulations. Specifically, the including components which could be intelled by detailed analyses on a wide range of elincluding those raised during the EIS scot Evaluation of these alternatives in the DE public on different approaches about how concerns raised during scoping and facilit reduced. The DEIS has been supported be fieldwork such as wetlands, noise and vis are in many respects unprecedented in the gas development project. Our enclosed comments suggest improve distinguishing empirical impacts from the are unlikely to occur or are of negligible crevisions to impact criteria, methodology, among the action alternatives. Such imp the environmental impacts of the Project.	o provide comments on the Point Thomson Project cooperating agencies and the third party EIS contractor ant milestone in the National Environmental Policy Act nson Project. We also appreciate the successful e during the previous 9 months which will lead to an ction this coming winter. Dound and comprehensive document that fully complies and Council on Environmental Quality and agency the DEIS provides a reasonable range of alternatives erchanged among alternatives. The DEIS is supported environmental, socioeconomic and technical issues	

Comment	Response
Mr. Hank Baij -2- January 18, 2012 The proposed Project (Alternative B) reflects four years of engineering, many supporting environmental and engineering studies, and experience gained during the 2008-11 drilling program. ExxonMobil firmly believes the Project provides the necessary and essential facilities, logistical support, and access to the reservoir with the least wetlands footprint possible for a safe operation in a remote location. For the reasons detailed in our comments, the proposed Project, Alternative B, is both the best overall environmental alternative and Least Environmentally Damaging Practicable Alternative (LEDPA).	609 This comment is in response to the Corps' Public Notice of the permit application and will be responded to as part of the permitting process. No action required for the EIS.
A significant label of resident surgest After executing as related to costs, technology and	Public Notice or Permit Application 909
work with you, the Cooperating agencies and HDR to achieve this schedule. Again, thank you for this opportunity to comment on the Point Thomson DEIS. If you desire additional information or clarification on these comments, please contact Brien Reep (907) 223-9255, brien.e.reep@exxonmobil.com or Steve Calder (907) 564-3787, steve.calder@exxonmobil.com. Sincerely, Agent and Attorney-In-Fact for Exxon Mobil Corporation RLB:ber:eaa	
Attachment: ExxonMobil's Comments, Point Thomson Project Draft Environmental Impact Statement cc w/attachment: Tim Gallagher, HDR Sara Longan, Alaska Department of Natural Resources Ted Rockwell, U.S. Environmental Protection Agency Louise Smith, U.S. Fish and Wildlife Service	

Comment	Response
E ‰onMobil	Comment Document 230 continued.
POINT THOMSON PROJECT	
ExxonMobil Comments Point Thomson Project Draft Environmental Impact Statement	
January 18, 2012	

Comment	Response
	Comment Document 230 continued.
Contents	
1 Overview	
1.1 ExxonMobil Comments on Impacts and Methodology2	
1.2 Background5	
2 Applicant's Proposed Action (Alternative B) Is the LEDPA6	
2.1 Applicant's Proposed Action (Alternative B) is the Best Environmental Alternative and	
Other Alternatives Have Significant Adverse Effects6	
2.2 The Applicant's Proposed Action (Alternative B) is the Only Practicable Alternative8	
2.3 Remote Coastal Project Site Dictates Logistics and Practicability9	
2.3.1 All Modes of Transportation are Essential9	
2.3.2 Action Alternatives C, D, and E Severely Constrain Logistics and Create Emergency	
Response and Safety Concerns	
Environmental Benefit	
2.3.4 Barging is a Routine and Essential Activity Throughout Coastal Alaska	
2.4 Cost 12	
2.5 Technology	
2.6 The Reservoir Location and Drilling Technology Limitations Determine the Coastal Well	
Pad Locations	
2.6.1 The Location of Proposed Pads Avoids the Potential Need to Construct Additional	
Well Pads for Reasonably Foreseeable Future Development	
3 Comments on the Resource Sections of the DEIS17	
3.1 Hydrology Impacts Are Negligible or Minor and Do Not Provide a Basis to Differentiate	
Among Alternatives	
3.1.1 Introduction and Summary	
3.1.3 Context of Spring Break-up in the Project Area	
3.1.4 Comments on DEIS Hydrology Impact Criteria and Conclusions	
3.1.5 Comments on Hydrology Analysis, Appendix S19	
3.1.6 Hydrology Impacts of Specific Project Components	
3.2 Vegetation and Wetlands (DEIS Section 5.8)	
3.2.1 Introduction and Recommendations22	
3.2.2 Key Findings	
3.3.1 Introduction and Recommendations 27	
3.3.2 Impact Thresholds and Bird Project Area	
3.3.3 Equating Displacement and Disturbance with Population Loss Overstates Impacts 28	
3.3.4 Habitat Loss, Habitat Alteration, and Behavioral Disturbance29	
3.3.5 Disturbance Buffer-Zone Sizes	
3.3.6 Collisions with Infrastructure	
3.3.7 Barge Collision Risk31	
ExxonMobil DEIS Comments ii	

Comment	Response
	Comment Document 230 continued.
3.4 Terrestrial Mammals (DEIS Section 5.10)	
3.4.1 Introduction and Recommendations	
3.4.2 Key Findings - Caribou	
3.4.3 Impact Criteria and Thresholds	
3.4.4 Quantitative Impact Measures	
3.4.5 Disturbance Buffer-Zone Sites	
3.4.6 Habitat Loss and Habitat Alteration	
3.5 Marine Mammals – Whales and Seals (DEIS Section 5.11)	
3.5.1 Introduction and Recommendations	
3.5.2 Beaufort Sea Barging Track Record	
3.6 Marine Mammals - Polar Bear (DEIS Section 5.11)37	
3.6.1 Introduction and Recommendations	
3.6.2 Annual Ice Road Impacts on Denning Polar Bears	
3.6.3 Calculation of Habitat Area Impacts	
3.6.4 Habitat Fragmentation	
3.7.1 Introduction and Recommendations	
3.7.2 Impact Criteria for Negligible, Minor, and Moderate Impacts	
3.7.3 Speculative Effects Associated with Mooring Dolphins	
3.7.4 Effects Associated with Barge Activity are Overstated	
3.7.5 Fish Habitat Issues 40	
3.8 ANWR (DEIS Section 5.14)	
3.8.1 ANWR and the Point Thomson Unit Are Equally Valid Land Uses Which Do Not	
Conflict 41	
3.8.2 The "No More" Clauses of ANILCA Reflect Congress' Determination of the	
Geographical and Jurisdictional Limits of ANWR41	
3.8.3 The Point Thomson Project Has No Effect on Wilderness in ANWR42	
3.8.4 The 1002 Coastal Plain Is Not Wilderness and Is Not Managed As Wilderness 43	
3.8.5 "Perception" Inconsistent With Established Land Use Is Not a Valid Criterion of	
Impacts 45 3.8.6 Another "Perception" of ANWR46	
3.8.6 Another "Perception" of ANWR	
3.9.1 "Wildemess Type Recreation Experience"46	
3.9.2 Potentially Affected Users	
3.9.3 Potential Empirical Impacts on Lower Canning River Users	
3.9.4 Presumed "Disappointment," "Avoidance," and Loss of "Perception" of Wilderness 50	
3.10 Visual Aesthetics (DEIS Section 5.19)	
3.11 Noise (DEIS Section 5.20)	
3.12 Subsistence and Traditional Land Use Patterns (DEIS Section 5.22)56	
3.12.1 Introduction and Recommendations56	
3.12.2 Key Findings and Differentiators56	
3.12.3 Limitations in Impact Assessment Methodology56	
3.12.4 Organization and Sequencing of the Impact Analysis	
3.12.5 Moving Facilities Inland to Address Potential Effects on Subsistence Activities57	
ExxonMobil DEIS Comments iii	
	1

Comment	Response
	Comment Document 230 continued.
3.12.6 Applicant Design and Mitigation	
4 Appendix A – Comparison of North Slope Projects59	
5 Appendix B - Public Use of the Canning River61	
ExxonMobil DEIS Comments iv	
EXAMINION DETA CONTINENTS	

Comment	Response
	610 Comment noted; no action required.
1 Overview	
ExxonMobil appreciates this opportunity to convey its comments and perspective on the Point Thomson Project Draft Environmental Impact Statement (DEIS), the issues addressed in the DEIS, and the proposed alternatives and impact conclusions.	
The issuance of the DEIS represents a significant milestone in the National Environmental Policy Act (NEPA) review of the proposed Point Thomson Project (Project). The DEIS is the product of an extensive agency and public review process which began with informal preapplication consultations in March 2009 and submittal of a draft permit application to the Corps of Engineers (Corps) by ExxonMobil. The Corps issued a public notice of Intent to Prepare a Draft Environmental Impact Statement (DEIS) on December 4, 2009.	
Two years of effort has followed including the public scoping process, development of alternatives, analysis of environmental impacts, and drafting of the DEIS. Public scoping comments have been considered. Public review of the DEIS should now lead to timely completion of the NEPA process and a fully considered, comprehensive Final EIS followed by the Corps' Record of Decision and issuance of the Section 404/10 permit.	
In this document, ExxonMobil first provides a summary of its key comments. Then ExxonMobil addresses why Alternative B (Applicant's Proposed Action) is the best environmental alternative and the Least Environmentally Damaging Practicable Alternative (LEDPA). ExxonMobil provides specific comments on Chapter 5 of the DEIS, including methodology.	
A Comprehensive and Sound EIS	
The DEIS provides a comprehensive overview of the proposed Point Thomson Project and a "hard look" at all significant issues. The DEIS fully meets the requirements of NEPA and applicable regulations to examine potential impacts to the environment and to inform the public of all relevant issues.	G General O
The DEIS reflects a great deal of work and commitment by all concerned, as well as the direction of the Corps as the Lead Federal Agency, the expertise of both the Corps and the Cooperating agencies, and the broad based environmental analysis and drafting support of third party contractor HDR Alaska, Inc. and its subject matter experts. This included numerous original environmental field studies conducted by HDR specifically for the EIS process where deemed appropriate by the Lead Federal Agency. ExxonMobil fully appreciates the magnitude of the effort.	
The DEIS Provides a Reasonable Range of Alternatives	
A critical area in any EIS is consideration of alternatives to the action being proposed. The DEIS alternatives were developed in light of public and agency scoping comments through an eleven meeting, three month independent process of interagency deliberations. Alternatives C, D, and E to the proposed action (Alternative B) are largely conceptual in nature and broadly frame approaches which seek to address public and agency concerns raised during scoping. The environmental analysis then seeks to evaluate the potential environmental benefits which might be obtained as a result of the different approaches that could be taken. These reflect a more than reasonable range of alternatives. No additional reasonable or practicable alternatives have been identified for consideration, either pursuant to NEPA or the integrated review under the Clean Water Act Section 404(b)(1) Guidelines ["(404(b)(1) Guidelines"].	
ExxonMobil DEIS Comments 1	

Comment Response 611 The Corps agrees that an empirical approach is best for determining and describing impacts within an EIS and that is why it is the approach used, when such empirical data were available, within this document. The resource-specific impact criteria definitions presented in Chapter 5 of the Final EIS are based on scientific literature and the best professional judgment of the Corps, cooperating The Executive Summary Is A Concise and Accessible Overview of the DEIS. agencies, and third-party EIS contractor subject matter experts. The definitions The Executive Summary is a concise, accessible and balanced overview of the DEIS which serves the fundamental purpose of informing the public of the issues and impacts addressed in allow for analyses based on quantitative data, where available, and qualitative the overall document. This will also serve as a guide to the document as a whole for those information and best professional judgment where quantitative data were interested in particular issues unavailable. **Applicant Support for the NEPA Process** ExxonMobil has supported the NEPA process with the best technical information it can provide concerning the proposed Project as well as the DEIS alternatives. This support was necessary to define how the conceptual DEIS alternatives might be engineered and constructed in order for the EIS team to evaluate the potential environmental impacts. The technical basis for this support comes from several important sources. Numerous field studies were conducted by ExxonMobil and pertinent information was provided to the Corps. ExxonMobil has a full team of engineers and other technical experts in many fields involved in the actual design and engineering of the Project. The experience of the 2008-11 drilling program has provided real world development of best practices for the Project. ExxonMobil has drawn on this team to support the EIS process with technical information and analysis as deemed appropriate by the Lead Federal Agency. 1.1 ExxonMobil Comments on Impacts and Methodology ExxonMobil generally supports the conclusions of the DEIS. At the same time, the purpose of a Draft EIS is to provide the opportunity for potential improvements or corrections. The goal is a Final EIS based upon the most accurate information available and which carefully and properly assesses the impacts identified, both for the proposed Project and the DEIS alternatives. The comments which follow are intended to serve these purposes. ExxonMobil respectfully suggests that the assessments in certain sections be reconsidered in light of the comments provided herein. Please note that in the context of providing these overall comments it is not possible to address all technical content of the DEIS. ExxonMobil will continue to support the DEIS process as appropriate to help assure the technical accuracy of Focus on an Empirical Approach for Impact Assessment ExxonMobil believes that an empirical approach is most accurate in predicting impacts. This is ElS General particularly the case given that the design components and impacts of oil and gas projects on the North Slope, including the proposed Project, are similar and well known and have been addressed in other project reviews.1 ExxonMobil believes empirically identified effects should be clearly distinguished from theoretical analyses. Such an empirical approach would help serve the fundamental purpose of advising the public of the environmental issues in a concise and readable EIS. Examples are found in the Arctic National Wildlife Refuge (ANWR), Recreation, and Subsistence and Traditional Land Use sections of Chapter 5. (also include Appendix A with this comment) Other North Slope Oil and Gas Developments With Similar Project Components - An Empirical Baseline Appendix A illustrates components and features of recently approved North Slope projects. ExxonMobil DEIS Comments

612 Comment noted: no action required. 613 Section 5.11.3.1, Alternative B: Construction, was revised in the Final EIS under the Vehicle and Vessel Collision Injury or Mortality subsection to include data regarding barge Milko Observations. From NSB marine mammal monitoring reports understanding environmental impacts from diffing park, ipsellines, lifetid roads, sealth and coastal barging and related facilities, production facilities, great limited and water supplies. Projects ultimate these comprehents beauty contributed to a transport the point from the commentation of the Project is subject to 8 inclinemental, companying who been used and half part of the Project is subject to 8 inclinemental, companying who been used and half part of the Project is subject to 8 inclinemental, companying who been used and half participation of the Project is subject to 8 inclinemental, companying used such basic design elements and previous projects is an important empirical. And the project is superiorized parasiting and previous projects is an important empirical. And the project is superiorized program - Another Empirical Basesine The Point Transmon 2008-2011 Drilling Program - Another Empirical Basesine The drilling ring was the most permissed relative of the drilling program may be unabled to the Project in the EE. The drilling program may be unabled to the Project in the State of the Project in the State of the Project in greater in the State of the Project interests and the Project interests and the Project interests and the Project interests associated to the access of the drilling program may be unabled to the Project interests associated to the drilling program may be unabled to the Project interest associated for the drilling program and will be once of the own the project interests associated to the drilling program and will be process for the drilling program may be unabled to the Project interest to the project interests and the project of the state of the project interests and the project of the state of the

any potential impacts. Further, the inclusion of a specific section in the CAA³ dealing with barging is recognition by the whaling community that it is a routine activity and that straightforward communication and operational procedures can avoid impacts to subsistence whaling as well as the marine mammals themselves.

Impact Criteria and Mechanisms

The Final EIS should have a high level of consistency in the definition and application of the standards and criteria for determination of impacts. This is important to ensure an integrated approach is used in the final evaluation of impacts.

One aspect of this is to identify impacts which may be negligible or minor and clearly and consistently distinguish them from those impacts which are greater. This helps the reader to focus on those impacts that are truly important and to distinguish those which are not. An example is impacts to small numbers of recreational users or wildlife which may not be present.

Another aspect is to clearly identify the methodology used to identify and assess impacts and to relate those impacts to the assignment of impact levels. While the DEIS uses a consistent format to address these factors, the underlying analyses in some resource sections are not fully clear with respect to application of impact criteria or identification of causal mechanisms to support a finding of potential impact. For example, there is a lack of documentation to show what the underlying bases are for buffer zones, what the impacts are within them, and whether these are equivalent to direct impacts. Example resource sections include Birds, Fish, and Land Ownership/Use/ Management.

Our later comments on the individual resource sections in Chapter 5 identify those areas which we believe would benefit from greater consistency and documentation of the impact criteria, causal mechanisms for potential impacts, and identification and application of buffer zones.

Impact Criteria Should Include a "Negligible" Category

For the most part the DEIS uses impact categories of Minor, Moderate and Major. However, it is clear that in a number of Chapter 5 resource sections, the definition of Minor would more appropriately be categorized as negligible. The term "negligible" is routinely used as a magnitude of impact in NEPA compliance documents to recognize potential for impacts 1) with no measurable effects, 2) that are extremely low in intensity, duration, or extent, or 3) that do not affect unique resources. A number of the resource impacts described in the DEIS fall into these levels of impacts.

The term "negligible" is used informally in a number of the DEIS sections. Adoption of negligible as a formal impact term would promote consistency and allow for more accurate categorizations, e.g., Section 5.9 Birds uses the magnitude category 'No Effect' which could be defined as negligible. In other sections, impacts have been categorized as minor that would more appropriately be negligible, e.g., in Section 5.12 Fish, no measurable impacts are listed as Minor.

Addition of a negligible category would also lead to some impacts that are now considered Moderate as being reclassified to as Minor. An example is hydrology as explained in our hydrology comments.

ExxonMobil DEIS Comments

- 615 The Corps and cooperating agencies developed and agreed to the framework and general methodology for impact criteria (see Chapter 4), which provides a solid framework for analyzing impacts to the environment. The resource-specific impact criteria definitions presented in Chapter 5 were based on scientific literature and the best professional judgment of the Corps, cooperating agencies, and third-party EIS contractor subject matter experts. The definitions allow for analyses based on quantitative data, where available, and qualitative information and best professional judgment where quantitative data were unavailable. The methodology subsections within each resource section provide detail regarding assumptions used in determining impacts and buffer zones, including the literature referenced. To help the public and decision maker focus on the impacts of importance, each resource section includes multiple summaries of the relevant impacts. For example each section: begins with a table that summarizes the key impact findings and differentiators among alternatives; includes impact evaluation tables for each alternative or a summary table with all alternatives; and concludes with a comparison and consequences discussion of the alternative that summarizes the important issues regarding that resource, provides context for the impacts, and discusses potential consequences.
- 616 The Corps has considered the commenter's recommendation for improvements to the impact criteria and has made the decision not to incorporate the recommendations in the Final EIS. The Corps and cooperating agencies developed and agreed to the framework and general methodology for impact criteria (see Chapter 4), which provides a solid framework for analyzing impacts to the environment. The resource-specific impact criteria definitions presented in Chapter 5 are based on scientific literature and the best professional judgment of the Corps, cooperating agencies, and third-party EIS contractor subject matter experts. The definitions allow for analyses based on quantitative data, where available, and qualitative information and best professional judgment where quantitative data were unavailable. The Corps also believes that the impact categories of minor, moderate, and major are sufficient and will not be including a category of "negligible" in the Final EIS.

³ Title 3 of the 2010 CAA separates coastal barging from other oil and gas activities.

Consideration of Project Design and Execution Mitigation Measures in Impact Assessments

The comprehensive design and execution mitigation measures and commitments are documented in the Environmental Mitigation Report, June 17, 2011 (Environmental Mitigation Report) attached to the Section 404 permit application. The DEIS Executive Summary properly acknowledges the role of Project design as environmental mitigation, and individual sections of the impact analyses list these mitigation commitments. In some of the Chapter 5 resource sections, however, it is not clear if, or how fully, those measures were taken into consideration in the impact analyses. Because these measures are fundamental to determining the actual environmental impacts of the Project, it is important that the Final EIS fully reflect the mitigation measures described in the EMR.

1.2 Background

Comment

Point Thomson Project and the Arctic National Wildlife Refuge (ANWR)

ExxonMobil does not believe there is any inherent conflict between the Point Thomson Project and ANWR. The Point Thomson Unit is located on land intended by the United States, the State of Alaska, and the North Slope Borough for oil and gas development. This purpose is equally as valid in its designated area as the purposes of ANWR are within the Refuge.

In particular, there is no inconsistency between development on state land at Point Thomson and the ANWR 1002 coastal plain. Purposes of the 1002 area include potential oil and gas development. Indeed, a number of exploratory wells have been drilled near ANWR and one well (KIC Well 1) has been drilled within the coastal plain.

Actual and theoretical identified impacts of the Project which may reach into ANWR are minor to non-existent. A presumption of conflict or higher ANWR sensitivity, including symbolic or "perceived" impacts, appears to arise from possible public preconceptions, not from empirical effects or actual designated land uses. This includes misapprehension of provisions of the Alaska National Interest Lands Conservation Act (ANILCA), which established the Arctic National Wildlife Refuge in its present form in 1980 and control its management.

Point Thomson Unit

Leases at Point Thomson were issued beginning in 1965. Construction of gravel pads and drilling of wells first began in the winter of 1969/70. In 1977 the Thomson Sand reservoir discovery well, Point Thomson Unit No. 1 (PTU No. 1), was completed. In August 1977, DNR approved an agreement to "unitize" area leases as the Point Thomson Unit, with Exxon (now ExxonMobil) as the Operator. To date, 21 wells have been drilled in the Point Thomson area. Figure 1 shows the location of these 21 wells. Drilling of the deep, high pressure wells at such a remote location required significant commitment of resources for operations and logistics support.

In addition to drilling wells, the Point Thomson Unit has been the subject of ongoing efforts by ExxonMobil and its partners in the form of exploration and delineation drilling, seismic studies, computer modeling, and engineering work. These activities involved extensive on the ground field activities at various times, including construction of gravel pads, airstrips, and ice roads and

ExxonMobil DEIS Comments

- 617 Chapter 5 has been reviewed and edits made where deemed necessary to improve clarity that the design measures proposed by the Applicant in the Environmental Mitigation Report were taken into consideration when studying potential impacts.
- 618 The EIS indicates that the proposed development of Point Thomson would be on state land managed for oil and gas development. It is the purpose of the EIS to disclose impacts of the proposed development. The EIS reflects the intent of the State and the Applicant to develop these lands, and it reflects the impacts that would occur. The occurrence of impacts is not meant to imply that the development cannot proceed or that the management intent for such development is not valid.

Other major working interest owners (in current company names) are BP Exploration (Alaska) Inc., Chevron U.S.A. Inc., and ConocoPhillips Alaska, Inc.

Comment	Response
pads; surveys; placement of camps; barging of materials, camps, fuel, etc. These activities at Point Thomson are in fact an important empirical part of the environmental baseline in the area. The context of the proposed Project cannot be understood, and its impacts properly assessed, if these historical activities are not considered in the environmental baseline and applied to the analysis of potential environment consequences. The current Project was first proposed to the State in 2008. In early 2009 the State conditionally approved the drilling of two wells and development efforts currently underway. These wells, the PTU-15 and PTU-16, were drilled in 2009-10 utilizing existing gravel pads. The drilling program required a significant commitment of resources, including more than 150 Alaska companies and hundreds of contract workers. The efforts included specially refitting and operating a drilling rig, constructing three annual winter ice roads to Prudhoe Bay infrastructure, conducting 188 barge supply trips, acquiring dozens of State and North Slope Borough permits, and implementing numerous environmental mitigation measures. By the end of October 2010 about \$1.5 billion (unadjusted), including \$730 million since October 2008, had been invested in Point Thomson. 2 Applicant's Proposed Action (Alternative B) Is the LEDPA ExxonMobil believes the proposed Project represents the best overall environmental alternative B considered as a whole are less than the impacts from the other action alternatives of the intended environmental benefits from other action alternatives would not be realized if implemented and these alternatives would result in other significant adverse environmental impacts. Further, many of the intended environmental benefits from other action alternatives would not be realized if implemented and these alternatives would result in other significant adverse environmental	619 This comment is in response to the Corps' Public Notice of the permit application and will be responded to as part of the permitting process. No action required for the EIS. Public Notice for Permit Agriculture of the permitting process of the permitting process. No action required for the EIS.
minimus difference. This is particularly the case when the carefully engineered Project design mitigation measures are fully considered in analyzing environmental impacts. Further, many of the intended environmental benefits from other action alternatives would not be realized if implemented and these alternatives would result in other significant adverse environmental consequences. A separate, and equally important review of the Project and the alternatives will be determination of the LEDPA under the 404(b)(1) Guidelines. While this determination is the responsibility of the Corps, and will be made later in the permitting process, it is appropriate for the applicant to set forth the reasons why its proposed project is the LEDPA. In providing technical information on how the alternatives might be executed, ExxonMobil conducted an analysis of practicability ("Practicability Analysis") ⁶ which is incorporated by reference in these comments. As explained in detail in that analysis and summarized below, there are serious doubts with respect to the practicability of the proposed action alternatives. ExxonMobil contends Alternative B is the only practicable alternative and the only alternative that meets the overall project purpose. Even if one were to consider the alternatives to be practicable, it is unclear that any of them truly has less overall adverse impacts to the aquatic ecosystem and instead they each have other significant adverse environmental consequences. Therefore, none of them can be considered the LEDPA. 2.1 Applicant's Proposed Action (Alternative B) is the Best Environmental Alternative and Other Alternatives Have Significant Adverse Effects	
The Project represents a carefully considered, well mitigated design approach intended to minimize overall environmental impacts and tundra footprint, while providing the facilities, infrastructure and logistics which are truly necessary for safe and efficient operations. The 5 Corps determined in 2008 that drilling of these wells on an existing pad did not require Section 404/10 permits. 6 Section 404 (b)(1) Practicability Analysis of Point Thomson Project Preliminary Draft Environmental Impact Statement Alternatives, Rev. May 13, 2011. ExxonMobil DEIS Comments 6	

Comment	Response
Environmental Mitigation Report provides a comprehensive summary of the mitigation measures that will successfully reduce environmental impacts. As explained in these comments, if implemented all, of the action alternatives would cause other significant adverse environmental consequences. Thus, Alternative B results in the least overall environmental impacts of the four action alternatives. The following list key advantages of Alternative B and other adverse consequences of Alternatives C, D, and E. • Alternative B was designed with potential full field development scenarios (e.g. expanded pas cycling, gas sales) in mind to reduce overall environmental impacts during the life of the Project. Specifically, Alternative B's coastal pad locations are necessary to ensure full access to the offshore portions of the reservoir and thus assures that no additional drilling pads would be required. The inland locations for East and West Pads in Alternatives C and D limit ability to access the reservoir. This creates the risk that additional pads will be required in the future thereby potentially eliminating a portion of the perceived benefits. • Alternative B's logistics strategy reduces impacts on resources such as wetlands footprint, polar bears, and fresh water. The logistics strategy also allows the Project to have the shortest construction and drilling phases of all the action alternatives, which reduces the duration of related impact categories such as noise, visual, and air emissions. • Alternative C would duplicate major pipeline infrastructure and create a 2 nd pipeline right-of-way corridor in the area between Badami and Prudhoe Bay.	Response
 in Alternatives C and D limit ability to access the reservoir. This creates the risk that additional pads will be required in the future thereby potentially eliminating a portion of the perceived benefits. Alternative B's logistics strategy reduces impacts on resources such as wetlands footprint, polar bears, and fresh water. The logistics strategy also allows the Project to have the shortest construction and drilling phases of all the action alternatives, which reduces the duration of related impact categories such as noise, visual, and air emissions. Alternative C would duplicate major pipeline infrastructure and create a 2nd pipeline right- 	
 Reliance on annual ice roads in Alternative D as the primary means of construction and operational re-supply require larger gravel pad footprints to provide sufficient space for storage between ice road seasons. Annual ice roads required during operations for Alternatives D and E increase fresh water needs and potential impacts to polar bears for the life of the Project vs. Alternative B. Lack of infield gravel roads in Alternative E requires additional storage space on the Central Pad for supplies transported by barge but not able to be moved to the East or West Pads until ice roads are established the following winter season. Additional space will likely also be needed at the East and Wet Pads. Alternative E would create other significant environmental consequences as a result of 	
eliminating infield gravel roads including noise, visual and air emissions impacts due to ExxonMobil DEIS Comments 7	
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use of helicopters for accessing East and West Pads for about nine months each year. Another significant adverse consequence is the reduced capability to respond to oil spills or other emergency events when ice roads would not be available. • DEIS Sections 2.4.4 and 2.4.5 states that Alternatives C and D were: "intended to minimize impacts to coastal resources such as marine mammals, marine fish, subsistence activities, coastal processes, and to avoid potential impacts to the proposed project from coastal erosion." As discussed further in comments on resource sections below, the specific impact mechanisms to these resources from coastal facilities and activities which would demonstrate an environmental benefit to moving inland are not identified. For most coastal resources, there is very little that differentiates the action alternatives. • Alternatives C and D for example do not demonstrate any benefit to coastal based subsistence activities. These activities are relatively infrequent in the Point Thomson area and account for a very small portion of Kaktovik's subsistence harvest. The limited coastal frontage of the project's facilities, pipeline setback and design, and ExxonMobil's commitment to work with Kaktovik to continue subsistence access to the Project area (in a plan to be agreed with residents) should mitigate subsistence related issues due to the presence of the Project. 2.2 The Applicant's Proposed Action (Alternative B) is the Only Practicable Alternative As noted above, ExxonMobil believes that Alternative B has the least overall environmental impacts and should therefore be considered the least environmentally damaging alternative. An additional indispensable consideration under the 404(b)(1) Guidelines is the practicability of alternatives with respect to the Project's overall purpose. This evaluation focuses on logistics, cost, and technology (as well as health and safety considerations). ExxonMobil respectfully submits that the Applicant's proposed action is the only alternative which mee	Response
submits that the Applicant's proposed action is the only alternative which meets the 404(b)(1) practicability standards related to logistics, technology, and costs and the Applicant's Purpose and Need and is therefore the LEDPA. • Alternative B provides the best year round access for safe operations and emergency response. Under Alternative E, an emergency shelter for personnel safety at East and West Pads would be required at a safe distance from the wells for workers that may be stranded due to weather, which would require an increase in footprint. In addition, provisions would have to be made in Alternative E for emergency evacuation of workers from the pads in the event of a serious well control emergency or blow-out during the	
nine months of each year in which ice roads are not available. This includes emergencies such as heart attack or serious injury. • Alternative B is the most logistically efficient of the all the action alternatives using all available forms of transportation: ice roads, aviation, and barging. Logistics is one of the important parameters to be considered under a LEDPA analysis and, in the case of Point Thomson, impacts to logistical efficiency also translate into impacts on cost and schedule and ability to achieve the Applicant's Purpose and Need.	
There are significant technology issues related to the safe and timely transport of large modules on a 50-mile ice road as required by Alternatives C and D. This length of module transport via ice road has never been attempted on the North Slope, and increases risks to timely project execution.	

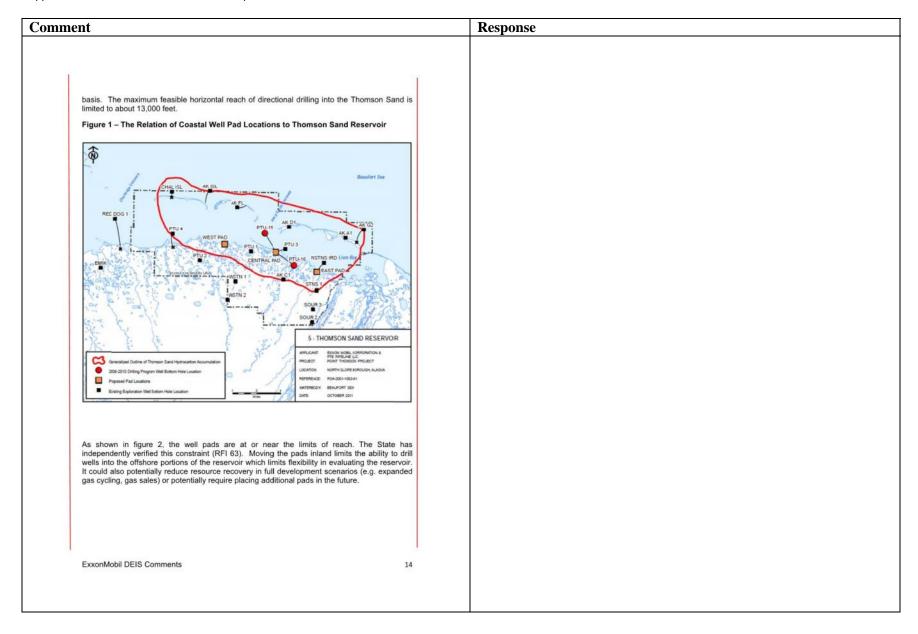
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Access to bottom hole targets is essential for the current Project and potential future development options (See section 2.4 below). The Alternative B pad locations provide as much coverage of the field as possible within the 13,000 ft. Long Reach Directional Drilling (LRDD) technical limit. Use of larger sealift modules planned for Alternative B reduce gravel pad footprint by consolidating the facilities and minimizing the area required for heavy construction equipment and material storage. The number of module interconnections, associated hydro-testing, etc. is reduced by testing and commissioning the piping systems in the fabrication yard to a greater extent. Alternatives C and D by contrast require more onsite personnel and time to install, hook up, and commission the larger number of smaller modules (32 modules vs. 11 in	Response
Alternative B). This increase in modules and onsite labor requirements translate into greater space needs for accommodations and related support infrastructure, increasing pad size requirements and footprint. • Alternatives C, D, and E cause significant increases in Project costs. ExxonMobil has provided the Corps with comparative incremental cost information to demonstrate that the action alternatives from a cost comparison alone are not practicable (Practicability Analysis). • Alternative B meets the Applicant's Purpose and Need including the commitment to the State to initiate production by the winter season 2015-16. Alternatives C, D, and E fall short on the need to initiate production and to provide for future full development of the field.	
2.3 Remote Coastal Project Site Dictates Logistics and Practicability The location of the Project is on the central North Slope coast, 50 to 60 miles east of Prudhoe Bay and 22 miles east of the Badami oil field. The location of the Project on the coast is fixed by the Thomson Sand reservoir which straddles the coast and is predominately offshore. This is a remote area unconnected to the existing, road accessible infrastructure on the North Slope. This greatly impacts Project design and logistics strategy, and requires management of special health and safety considerations. The coastal location allows for efficient access by barge, which is a key component of the logistics strategy. 2.3.1 All Modes of Transportation are Essential This section demonstrates why it is essential that every available mode of transportation be available to execute the Project efficiently and in a safe manner. Challenging and expensive logistics are required to transport and support personnel, materials, equipment and production modules to the remote site with limited seasonal work and supply windows, and logistics is the principal consideration driving schedule and cost. Logistics also drive potential impacts to personnel safety, health, emergency response and the environment including wetlands impact and limited structures in marine waters. A fundamental reality is that the elimination of one mode of transportation results in increased	
use of other modes of transportation in the same or different seasons. For example a coastal barge operating in summer can carry the equivalent of ten truck loads. If that cargo is ultimately carried by truck, it would have to be transported in winter via ice road, and additional pad ExxonMobil DEIS Comments	

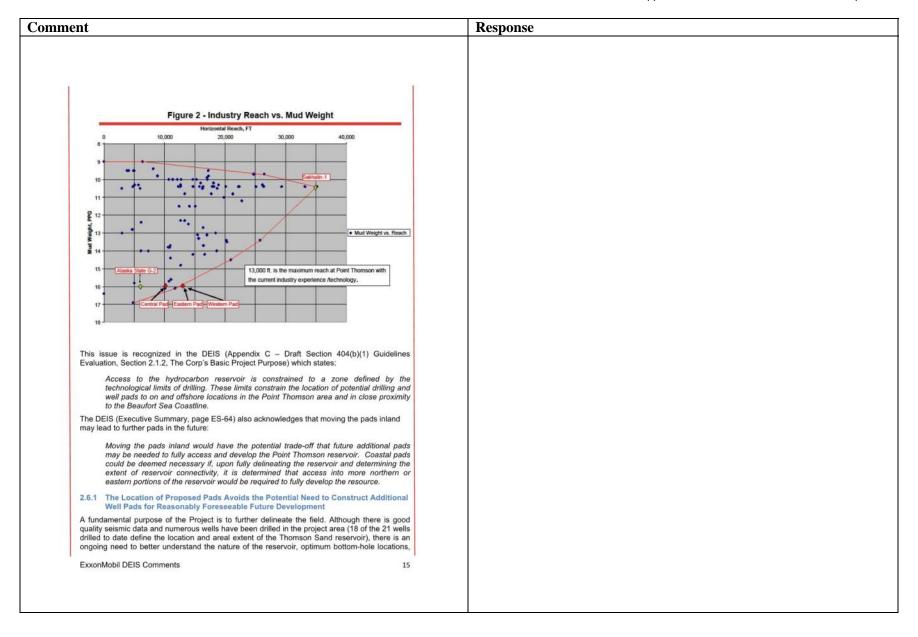
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storage space may be required due to limited opportunities for resupply. These shifts in logistical configurations also result in environmental tradeoffs described above and in Appendix C to the Practicability Analysis.	
Helicopters provide the only year-round mode of access until a gravel airstrip is constructed. Winter ice roads, summer barging, and early winter tundra travel are the other means to access the site and they are only available during limited seasonal windows. These windows are brief (2 - 3 months of summer barging and 3 months of winter ice road travel, 1 - 2 months of early winter tundra travel), and access during these periods is often uncertain due to variations in weather, ice conditions, wildlife interactions and other circumstances. The experience of the 2008-2011 drilling program showed weather-related helicopter downtime occurs about 20% of the time and field work undertaken to support the EIS has shown that summer fog can shut down helicopter flights for several days or more at a time. Phase 3 white-out winter conditions can shut down both air and land transportation for several days at a time	
2.3.2 Action Alternatives C, D, and E Severely Constrain Logistics and Create Emergency Response and Safety Concerns	
A project with material, supply and facility requirements equivalent to the Point Thomson Project undertaken in the Prudhoe area would require careful execution planning. Executing this development at the remote Point Thomson site considerably increases the difficulty and expense. Limiting logistical flexibility as would be required by Alternatives C, D, and E in one aspect or another elevates Project execution risk considerably while at the same time creating additional risk to personnel safety, health, emergency response and the environment. Chapter 2 accurately represents technical information related to how the Project and the alternatives might be executed.	
Safety is a paramount consideration for ExxonMobil. As has been shown in the Practicability Analysis and other communications with the EIS agencies, there are serious safety concerns that come into play with the Alternatives. Safety must be given sufficient weight in the 404(b)(1) Guidelines analysis and Record of Decision.	
2.3.2.1 Increased Execution Risk to Construction	
The Alternatives increase risk to construction schedule and execution certainty. Executing construction activities at a remote location when drilling and other simultaneous activities are undertaken requires careful planning and sequencing to ensure safety and that materials, supplies and equipment are transported to the site when they are needed. Gravel work, pile driving, equipment installation, and drilling overlap at certain times and at different places in the Project area and each has specific logistical support requirements. They require precise planning and execution to ensure necessary equipment and material will be available for the work to be completed on schedule. If not accomplished, this can result in the work being carried over to a following season thereby delaying project completion and potentially introducing new conflicts with activities scheduled for that season.	
2.3.2.2 Increased Execution Risk to Module Delivery	
Technology is one of the components of practicability. As explained in the Practicability Analysis and response to Request for Information No. 24, the proven limits of module size for overland ice road transport is about 1300 tons. Even within this proven size, there are transportation risks associated with the multiple handling of modules and actual transportation over ice roads. ExxonMobil originally considered delivery of modules via ice road as would be required by Alternatives C and D. A modularization study was conducted during the conceptual	
ExxonMobil DEIS Comments 10	

Comment	Response
engineering phase of the project to investigate all options for transporting facilities to Point Thomson ranging from all-truckable modules to larger sealift modules. It was determined that consolidating facilities and infrastructure into larger sealift modules (potentially up to 4,000 tons) and transporting them directly to the site by sealift barge significantly increase execution certainty and efficiency. In this case, execution certainty refers to the ability to transport the modules from the point of origin, offload them at the site, and successfully install /commission them by a specified date. Modules of the size that can be sealified directly to the site also reduce the number of personnel and risks associated with working in a remote arctic environment by maximizing work performed in an established offsite fabrication facility. As explained above, this activity must be coordinated with other activities within the limited space of the pad and Project area. Transporting modules over long ice roads as would be required in Alternatives C and D involves an increased risk of failures and environmental incidents. The risks stem from transporter equipment durability, ice road failures, weather impacts, and fuel and hydraulic fluid management. Potential impacts to the environment could occur from these failures due to load instability, hydraulic line failures, and mechanical breakdowns (Practicability Analysis, Appendix D and Technical Brief - Module Transport). Finally, allowing modules to travel by barge for thousands of miles only to stop 50 miles short of the destination, offload and transport them to a storage site, then re-mobilize them several months later (triple handling) is illogical given that the negligible and mitigated impacts of additional barge travel contrasted with the risks of transporting large modules over long distance ice roads. 2.3.2.3 Infield Gravel Roads Alternative E eliminates infield gravel roads between the Central, East and West Pads. The significant constraints that are impos	Response
of additional noise and related environmental impacts. If infield gravel roads are not constructed, an emergency shelter for personnel safety at East and West Pads would be required at a safe distance from the wells in the event of a serious well	
ExxonMobil DEIS Comments 11	

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	2.3.3 The Alternative E Airstrip Severely Reduces Logistical Capability Without	
	Significant Environmental Benefit	
	The shorter airstrip in Alternative E would only accommodate cargo aircraft with load capacities of about 5000 lbs. DC-6 aircraft are planned for routine cargo flights during project construction and operations, while C-130 aircraft would be essential in the event of a major spill response or other emergency event requiring transport of large equipment and large amounts of supplies. A DC-6 aircraft can carry about 24,000 lbs. Eliminating the capability to use this aircraft and reducing the aircraft cargo capacity to 5,000 lbs. will increase the number of cargo flights and associated environmental impacts by a commensurate amount.	
	2.3.4 Barging is a Routine and Essential Activity Throughout Coastal Alaska	
	An important context for barging is the routine and essential nature of the activity and its importance to commerce and the economy of coastal Alaska communities, particularly those that are not connected to the road system. Marine transportation plays a crucial role for delivery of cargo to NSB communities. Materials too large or expensive to ship by cargo aircraft – such as bulk goods, building materials, fuel and vehicles – are transported by barge each summer to these communities.	
	Barge related oil industry operations have occurred on the North Slope for over 40 years. Recently, the Prudhoe Bay West Dock had 182 barge landings made in 2010 and approximately 50 were made in 2011. Northstar makes over 25 barge trips per season during its current operations and made hundreds per year during construction. Between 2006 and 2008, alone, barges servicing oil and gas programs made over 400 trips between July and October ranging annually from 7,270 to 15,534 miles?	
	The combination of barging, ice roads and air access to the proposed Project allows more regular delivery and resupply during project construction and operations, and reduces the amount of storage space needed on gravel pads.	
	As described above, ExxonMobil's experience during the drilling program demonstrated barging can be safely conducted without impacts to marine mammals, other coastal resources, or subsistence. Approximately the same level of barging is anticipated for Project construction and drilling as was undertaken for the drilling program, and significantly less will be required for operations. As part of the Project mitigation program, ExxonMobil has committed to continue consultation with Kaktovik, to conduct barging under the terms of a CAA, and to avoid barging during periods of subsistence whaling to the greatest extent practicable. All barging, including any that may be necessary during whaling, will comply with the CAA's proactive measures to avoid conflicts between industry vessels and subsistence whalers.	
	Given the innovative approach to minimize in water facilities to support barging, the generally benign nature of barging, the documented experience of safe operations with no adverse impacts, and the comprehensive mitigation measures established by ExxonMobil's commitments and specific requirements of the CAA, there is no basis to eliminate barging ⁸ .	
	2.4 Cost	
	Cost is an important element of practicability. While all of the elements are interrelated, logistics is a principal driver affecting the Project costs due to the Project's remote location.	
	7 Funk et al. 2009. Full citation can be found in the Draft Biological Assessment of the Bowhead Whale (Balaena Mysticetus), Ringed Seal (Phoca Hispada), and Bearded Seal (Erignathus Barbatus); included as Appendix M of the DEIS.	
99	ExxonMobil DEIS Comments 12	

Comment	Response
T r	
ExxonMobil conducted a detailed evaluation of the cost differences between Alternative B and the other action alternatives in the Practicability Analysis. This cost analysis was based on the best Project cost estimates available at the time. Conceptual execution plans and schedules were developed by ExxonMobil for each of the action alternatives. The cost analysis identified many drivers that significantly increased project costs for Alternatives C, D and E. Some of these cost categories were unique to a specific alternative (e.g. gravel access road for Alternative C) and others common to all action alternatives (reengineering and escalation costs of extending project schedule). The resulting cost increases were so large as to make the alternatives impracticable from a cost standpoint.	
2.5 Technology	
Technology is the third element of practicability. There are two key technology challenges related to Alternatives C and D. The first is the requirement to transport the facility modules overland using ice roads from the Prudhoe Bay area. This is discussed above in these comments.	
The second technology challenge related to Alternatives C and D relates to long reach directional drilling (LRDD) limitations and the one-half mile set back of the East and West well pads from the coast. This technology limitation is discussed in the following section.	
2.6 The Reservoir Location and Drilling Technology Limitations Determine the Coastal Well Pad Locations	
ExxonMobil's Project Purpose and Need in Tab 19 of ExxonMobil's Section 404/10 Permit Application October 2011 states:	
"A principal goal of the Project is to establish a design footprint that facilitates future full field development of the reservoir and delineation of the hydrocarbon resources of the PTU with the least environmental impact practicable. The Project features a three-pad configuration, the optimal development design for resource recovery, delineation and conservation, and encompasses the smallest footprint necessary for these purposes. The configuration of the Project is designed to delineate and produce reservoir resources using LRDD techniques from onshore pads."	
As shown in Figure 1 below, the Thomson Sand reservoir is predominately offshore.	
As discussed in the Environmental Mitigation Report, from a drilling and reservoir development perspective only the optimal sites for many of the well surface locations would be offshore because the offshore portions of the reservoir could be accessed by drilling vertical or shallower angle directional wells. They were not pursued, for this project, however, because there are practicable options to develop the reservoir from onshore well locations using LRDD. The Project well pad locations and potential reservoir targets rely upon drilling wells that are at the industry limits of LRDD. This is illustrated in Figure 2 which plots drilling mud weight vs. horizontal departure (drilling mud weight is a measure of density, expressed in pounds per gallon, and relates to reservoir pressure). At a depth of 13,200 feet and over 10,000 psi reservoir pressure, the Thomson Sand is an "abnormally pressured" reservoir, which means it has a higher pressure than normal for a given depth, and must be drilled with higher density drilling mud (e.g., higher mud weights) than normally pressured reservoirs. The mud weights required to drill and complete Thomson Sand wells are among the highest used on a world-wide	
ExxonMobil DEIS Comments 13	





Comment	Response
continuity in the hydrocarbon bearing formation and other highly technical issues. It is important to recognize that six of these 21 wells were drilled from barrier sland locations and were beyond the reach of directional drilling from the maintained at the time they were drilled. There is still uncertainty in the interpretation and definition of the reservoir, in both shructure and quality, and this requires retaining maximum flexibility in placing well bottom-hole targets. Key points include: • Preserving the ability to reach the maximum amount of the reservoir is essential to allow for full investigation of the extent, nature and connectivity of the reservoir. • The reservoir understanding will change as additional wells are drilled, more information is gathered, and the reservoir interpretation refined. Potential changes in the reservoir understanding and subsequent changes to bottom-hole targets can be considered to a commodate potential changes in the reservoir understanding. • Pad location further inland from the coast will increase the horizontal departure on all wells with offshore targets and potentially preclude the ability to reach portions of the reservoir necessary for full field development. This may lead to additional pads being needed in the future to reach bottom-hole targets that cannot be reached from more inland pads. Future potential development options such as gas sales development and expanded gas cycling, are not part of the current Project, but are reasonably foreseeable actions. A key purpose of the Project is to private the optimum footprint for Project operations that will also accommodate potential development options to accomplish full field development while avoiding redundant infrastructure in the form of additional pads sheeply minimizing overall environmental effects. In this important regard, the proposed three well pad locations near the coastline allow wells to be drilled that will adequately evaluate and develop the Thomson Sand reservoir without the need for addition	Response
ExxonMobil DEIS Comments 16	

ment	Response
3. Comments on the Resource Sections of the DEIS 3.1 Hydrology Impacts Are Negligible or Minor and Do Not Provide a Basis to Differentiate Among Alternatives 3.1.1 Introduction and Summary The DEIS concludes that all the action alternatives would have moderate to major long-term impacts to hydrology. ExxonMobil believes that these potential impacts are more realistically likely to be negligible or at most Minor for the following reasons: 1. The hydrology characteristics of the immediate project area (small, short and slow moving fundra streams, with flow dominated by short term spring breakup effects) are not changed to any significant extent by any alternative. 2. Hydrology impacts are mostly related to short term inundation effects of gravel roads at breakup, which the DEIS correctly characterizes as "negligible" effects with respect to vegetation and wetlands (p. 5-141). 3. Mitigation is provided for Alternative B by careful, field survey based road routing and conservative bridge and culvert design. 4. The impact categories (Table 5.6-2) have such a very low threshold that any measurable changes to hydrologic regime are categorized as Moderate, even if rehabilitation is not required to maintain pre-project hydrologic function. ExxonMobil agrees with the DEIS that the differences between the action alternatives are relatively small with respect to hydrology (particularly the infield road networks if equally engineered) and are not a key differentiator among alternatives, ExxonMobil agrees with the DEIS (p. 5-141) conclusions that the effects of inundation from infield gravel roads are negligible. Even under the conservative assumptions and methodology in Appendix S, the time for inundation for Alternative B is only 10 hours and 4.4 days for Alternative C. 3.1.2 Stream Morphology and Discharge in the Project Area In assessing the potential environmental impacts and the need to mitigate hydrology impacts in the project area, it is necessary to consider the characteristics of the coastal streams in the P	620 The magnitude determinations for hydrology impacts must be viewed within the context of the established criteria, even though they may have conservative thresholds. Further: (1) the analysis assessed such factors as whether water would be diverted, an increase or decrease in sediment transport would occur, (a change in flow volume would occur; (2) the factors assessed for hydrology impacts were not the same as those assessed for vegetation and wetland impact and therefore the impact determinations for these two resource areas should not be compared; (3) the EIS assumes the same mitigation for all similar components, and (4) the terms used for magnitude are defined in the methodology section (Section 5.6.1). 621 The Key Impact Finding and Differentiators for hydrology (page 5-65 of the Draft EIS) is intended to provide a brief summary of the conclusions. Explanations of the hydrology impacts assessment are included throughout Section 5.6, Hydrology, and a more detailed summary is provided in Section 5.6.9, Alternatives Comparison and Consequences. 622 Comment noted; no action required. 623 The characteristics of the coastal streams were described in Section 3.6, Hydrology, and were taken into consideration for the hydrology impacts analysis. The fact that the small streams do not have flow for the majority of th year does not mean that impacts, when they do occur, are of lesser magnitude. Larger rivers are also present in the project area considered by the EIS. Three large rivers are crossed by various project components depending on the alternative. 624 Characteristics of the streams in the project area are described in Section 3.6, Hydrology.

3.6, Hydrology. As described in the EIS, not all water bodies in the study an considered by the EIS are small and originate on the ACP. The Kadleroshik Sagavanirktok, and Shaviovik are larger water bodies with drainage basins extending beyond the ACP. These rivers would be crossed by the tundra ice under Alternatives B, D and E and by the gravel access road and export pip under Alternative C. All the streams in the Project area are very small and originate in the ACP tundra. These are much smaller than the major rivers and streams of the other areas of the Central North Slope. For example, the peak of flow of Stream 22B, the largest in the immediate Project area, has a predicted 50-year revent flow for major rivers on the Alaska's North Slope (e.g., Kadleroshilik, Colville, Sagavanirktok) varies from 20 to 800 times greater. The Project area streams are also very short and do not become "channelized" until close to the coast. Distinct stream channels in areas to the south on the ACP are absent. This is a significant factor when selecting road routes near to the coast in the project area. Althout the magnitudes of the gravel pad impacts are major, the extent is "local." The Corps agrees that channel migration would be very slow and the following sentence was deleted for clarity in Section 5.6.3.1 under Gravel Pads: "How banks or the development of gravel bars. Many of these streams exhibit beaded stream morphology with narrow channels connecting a series of deep pools. The beaded pools form by melting of ice wedges at the perimeter of ice-wedge polygons. Beaded streams are the smallest type of permanent streams on North Slope, with flows too small or gentle to errode their channels sextensively (Lewellen 1972). A misunderstanding of this stream morphology changes due to natural channel migration." A misunderstanding of this permanent streams flow may be impacted by the gravel pads in the future stream morphology changes due to natural channel migration." That fact that this period is short does not affect t	nt	Response
summertime, there are precipitation events in the summer, although their magnitude of impacts of Alternative B and other action alternatives on hydrology in the DEIS should focus on those effects that occur during the very short spring break-up. (This is presumably the reason for the analysis in Appendix S, The effects of gravel roads and other structures on break-up flows are very transitory with no lasting adverse effects on habitat or wildlife. Breakup of the small streams in the Project area starts in late May or early June and lasts about two weeks, with most of the runoff occurring over a peak breakup period lasting just a few days. Typical breakup timing and conditions in the Project area re illustrated in photographs in ExxonMobil's 2009 and 2010 Hydrology Reports for the Point Thomson Project which were provided in support of the DEIS process. Aerial video of the 2010 breakup temporal public meetings. The spring flooding is the peak hydrologic annual event, by far, and during the few days of peak flow significant portions of the tundra are inundated as the snow and ice thaws and gradually drains into nearby thaw lakes or into the low-gradient drainages. Permafrost prevents any seepage into the ground. Even the near surface active zone, which thaws each summer and refreezes the following winter, is still frozen during the breakup period. As a result there are not really any areas that could be characterized as "cirer" down gradient of the infield roads during	smaller streams, and increase the time required for stream banks to erode and channel migration to occur. The frozen ground also prevents damage to vegetation and soils during the brief flooding periods. All the streams in the Project area are very small and originate in the ACP tundra. These are much smaller than the major rivers and streams of the other areas of the Central North Slope. For example, the peak of flow of Stream 22B, the largest in the immediate Project area, has a predicted 50-year flow event of 900 cfs whereas by comparison the 50-year event flow for major rivers on the Alaska's North Slope (e.g., Kadleroshillik, Colville, Sagavanirktok) varies from 20 to 800 times greater. The Project area streams are also very short and do not become "channelized" until close to the coast. Distinct stream channels in areas to the south on the ACP are absent. This is a significant factor when selecting road routes near to the coast in the project area. The Project area streams are slow moving, with low gradients which have not caused steep cut banks or the development of gravel bars. Many of these streams exhibit beaded stream morphology with narrow channels connecting a series of deep pools. The beaded pools form by melting of ice wedges at the perimeter of ice-wedge polygons. Beaded streams are the smallest type of permanent streams on North Slope, with flows too small or gentle to erode their channels extensively (Lewellen 1972). A misunderstanding of this stream morphology is reflected in Section 5.6.3.1 (Gravel Pads) which states "off-channel stream flow may be impacted by the gravel pads in the future as stream morphology changes due to natural channel migration." This apparently led to the conclusion in DEIS Table 5.6-7 that impacts to drainages from pads for Alternative B are "Major." However, numerous studies have found that channels like those in the study area migration to occur	 625 Information regarding streams and rivers in the study area is provided in Sec 3.6, Hydrology. As described in the EIS, not all water bodies in the study ar considered by the EIS are small and originate on the ACP. The Kadleroshik, Sagavanirktok, and Shaviovik are larger water bodies with drainage basins extending beyond the ACP. These rivers would be crossed by the tundra ice under Alternatives B, D and E and by the gravel access road and export pipe under Alternative C. 626 The impact determinations are based on the impact criteria. The gravel pads would have a major impact on drainage patterns because there would be no drainage through the pads. The gravel roads would be constructed with culv and bridges to allow drainage, therefore impacts would be moderate. Althout the magnitudes of the gravel pad impacts are major, the extent is "local." The Corps agrees that channel migration would be very slow and the following sentence was deleted for clarity in Section 5.6.3.1 under Gravel Pads: "How streams exist less than one-half mile from each of the proposed pad location and off-channel streamflow may be impacted by the gravel pads in the futur stream morphology changes due to natural channel migration." 627 The analysis of hydrology impacts does recognize the spring breakup period That fact that this period is short does not affect the magnitude of the impact defined by the impact criteria. 628 Whether the ground is frozen or not, the areas upstream of the road would be
The true magnitude of impacts of Alternative B and other action alternatives on hydrology in the DEIS should focus on those effects that occur during the very short spring break-up. (This is presumably the reason for the analysis in Appendix S.) The effects of gravel roads and other structures on break-up flows are very transitory with no lasting adverse effects on habitat or wildlife. Breakup of the small streams in the Project area starts in late May or early June and lasts about two weeks, with most of the runoff occurring over a peak breakup period lasting just a few days. Typical breakup timing and conditions in the Project area are illustrated in photographs in ExxonMobil's 2009 and 2010 Hydrology Reports for the Point Thomson Project which were provided in support of the DEIS process. Aerial video of the 2010 breakup taken by ExxonMobil was also provided and shown during the DEIS public meetings. The spring flooding is the peak hydrologic annual event, by far, and during the few days of peak flow significant portions of the tundra are inundated as the snow and ice thaws and gradually drains into nearby thaw lakes or into the low-gradient drainages. Permafrost prevents any seepage into the ground. Even the near surface active zone, which thaws each summer and refreezes the following winter, is still frozen during the breakup period. As a result there are not really any areas that could be characterized as "drier" down gradient of the infield roads during		summertime, there are precipitation events in the summer, although their
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precipitation which either infiltrates the active layer or is immediately impounded by tundra vegetation and small ponds. Also in summer, there would likely be no flow in cross drainage culverts.

For Project hydraulic design purposes, this break-up period has been assessed on a 50-year basis. This, in effect, takes an unusual and brief event as a basis for design and comparison. It is also important with respect to breakup backwater (inundation) effects as detailed below.

3.1.4 Comments on DEIS Hydrology Impact Criteria and Conclusions

A review of the impact criteria listed in Table 5.6-2 suggest these criteria and their application be revisited, particularly in their application to roads. For example, the definition of a Moderate magnitude impact includes:

"Changes to the hydrologic regime that are measurable, yet do not require rehabilitation to maintain pre-project hydrology" and cites as an example "drainage patterns change, yet impoundment and draining are similar to annual flooding and seasonal inundation extents"

We submit this is more appropriate for a negligible or Minor than a Moderate impact.

In a similar manner, the duration impact categories vary from:

Long Term Impact to hydrologic regime would exceed 4 years.

Temporary Impact to hydrologic regime would be seasonal and associated with only the construction or drilling phases.

Given the hydrology impacts due to roads are of extremely short duration, e.g., the DEIS on page 5-75 states: The <u>maximum</u> (underlining added) time of inundation upstream for all alternatives due to the gravel roads would be 4.4 days in addition to normal sheet flow duration." and on page 5-141 describes this short-lived phenomena as ". . . , such impoundment is estimated to last less than four days so any effects are expected to be negligible." These statements address both magnitude and duration further suggests the criteria and application of them should be revisited.

3.1.5 Comments on Hydrology Analysis, Appendix S

ExxonMobil appreciates the challenge the DEIS faced in developing a methodology to assess hydrology impacts, specifically breakup inundation effects of infield gravel roads. In order to compare the action alternatives, Appendix S uses a simplified methodology to assess inundation areas and their durations.

For alternative comparison purposes, this apparently required that the mitigation provided in Alternative B hydraulic design of bridges and culverts based on detailed engineering and field work not be considered. Rather Alternative B was considered as conceptual along with the other action alternatives. The result is that the impacts of Alternative B do not realistically reflect the benefits of its fully engineered bridges and culverts as efficient hydraulic structures which limit both the size and duration of potential breakup inundation. Appendix S thereby overstates the impacts and understates the benefits of the mitigation provided by the conservative and actual fully engineered design of Alternative B.

Specifically, the analysis is based on assumed backwater depths of 4 feet along the upstream side of the gravel roads. This assumption is much greater than would be expected with appropriately located and designed bridges and culverts, as is the case with respect to the field

ExxonMobil DEIS Comments

19

- 629 The Corps has considered the commenter's recommendations for improvements to the impact criteria and has made the decision not to incorporate the recommendations in the Final EIS. The Corps and cooperating agencies developed and agreed to the framework and general methodology for impact criteria (see Chapter 4), which provides a solid framework for analyzing impacts to the environment. The resource-specific impact criteria definitions presented in Chapter 5 were based on scientific literature and the best professional judgment of the Corps, cooperating agencies, and third-party EIS contractor subject matter experts. The definitions allow for analyses based on quantitative data, where available, and qualitative information and best professional judgment where quantitative data were unavailable. The Corps also believes that the impact categories of minor, moderate, and major are sufficient and will not be including a category of "negligible" in the Final EIS.
- 630 The quoted conclusions regarding wetlands impacts ("..., such impoundment is estimated to last less than four days so any effects are expected to be negligible.") should not be applied to the hydrology impacts because the two resources were assessed separately based on different impact criteria.
- 631 In order to compare alternatives, the analysis in Appendix S had to make general assumptions relative to the design of bridges and culverts to be consistent between the alternatives. The analysis in Appendix S was conservative and still showed there were negligible impacts to wetlands and vegetation so the analysis was not refined further. Text has been added to Section 5.6.3.1, Alternative B: Construction, Drilling, and Operations, to clarify the purpose of the analysis in Appendix S and the assumptions used: "The analysis in Appendix S is intended to provide a conservative estimate of the duration of inundation upstream of gravel fill roads during breakup. The purpose of estimating inundation time is to determine whether it could potentially be long enough to affect vegetation growth. Although preliminary engineering is available for one alternative that would affect the calculation of inundation times, it is not available for other alternatives. In order to provide a comparison across alternatives, the same conservative assumption that up to 4 feet of water could be impounded upstream of the gravel road was applied."
- 632 See the response to Comment 631.

survey based design for Alternative B. Most of the water upstream of the roads will naturally flow to the larger streams which have bridges for drainage. These bridges are designed to have 1 to 2 feet of backwater under the 50 year design flood conditions. Culverts will be placed in identified low areas and topographic depressions and will not fill up completely. The assumed 4 feet of backwater at the culvert inlets is an overly conservative estimate that does not account for both transient flow routing effects and the reality that most backwater would be largely contained within the low area or channel depression.

With respect to inundation duration, even with the very conservative results in Appendix S, the duration of inundation is estimated to be increased from only 0.4 to a maximum of 4 days and Wetlands superimposed on an already short break-up event. Since the active layer is still frozen during breakup, from a wetlands habitat perspective this is in any event insignificant.

The DEIS concludes on p. 5-141 that the transitory effects of road system impoundments (e.g. 10 incremental hours for Alternative B), their limited area superimposed upon widespread break-up flooding would have negligible effects on vegetation and wetlands. In turn, the inundation effects on wetlands habitat should also be negligible. This supports ExxonMobil's belief that the hydrology impacts of all action alternatives are negligible or Minor and that hydrology is not an important differentiator of the action alternatives particularly with respect to infield mads.

3.1.6 Hydrology Impacts of Specific Project Components

3.1.6.1 Infield Roads

While it does not appear that impacts to hydrology were identified as a significant environmental concern in the development of the project alternatives, the DEIS states with respect to the infield road routing of Alternatives C and D (p. 2-82).

The location and placement of the infield gravel roads would be aligned in a general north-south orientation to minimize water flow obstruction for most streams, as well as sheet flow during spring, which generally flow from the south to the north.

ExxonMobil does not believe it would be correct to suggest that this type of road alignment minimizes effects on hydrology.

There are two basic hydrology issues related to the routing of infield roads when comparing the impacts of Alternatives B, C and D: (1) the interception of sheet flow during break-up and efficient passing of these flows across roads, and (2) impoundments (backwater inundation) created upstream during breakup.

The DEIS (Section 5.6.4.1, p. 5-65 and Section 5.6.4.1, p. 5-85) recognizes that the East Pad road in Alternatives C and D, which is set much further south in the area of sheet flow during breakup, has a greater potential to impound sheet flow. Where the drainage is less defined, it is more difficult to identify where culverts are required. With comparable data and engineering effort to Alternative B, these issues could be mitigated to some extent. In contrast, Alternative B East Pad Road is only 2 miles inland and close to the hydrologic transition to distinct stream drainages where culverts can locate to maximize flow.

DEIS Sections 5.6.4 (p. 5-85) 5.6.5 (p. 5-93) imply that the infield roads of Alternatives C and D between the Central Pad, West Pad and airstrip will have less potential to impact to sheet flow than will road alignments running approximately perpendicular to the hydraulic gradient. However, the most effective means of passing sheet flow through road obstructions is to align roads perpendicular to the flow and provide sufficient culverts. Where roads are constructed at

ExxonMobil DEIS Comments

Response

- 633 The Corps agrees with this statement. The Draft EIS makes the following statement on page 5-141: "While impoundment of water upgradient from a road during spring snowmelt could extend well over 1,000 feet upgradient of a road, such impoundment is estimated to last less than four days so any effects are expected to be negligible..."
- 634 The Corps agrees that hydrology is not an important differentiator of the action alternatives with respect to gravel infield roads and that conclusion was taken into account in the comparison of alternatives. The conclusions regarding wetlands impacts (effects are expected to be negligible) should not be applied to the hydrology impacts, because the two resources were assessed separately based on different criteria.
- 635 During scoping, the federal cooperating agencies voiced a general concern that roads oriented perpendicular to surface water flow on the North Slope have greater impacts than roads oriented parallel to the flow. The sentence in Section 2.4.4.3, Alternative C: Access and Transportation, "The location and placement of the infield gravel roads would be generally aligned in a north-south direction, parallel to the existing hydrologic drainage patterns" has been changed to: "With the exception of the road to the East Pad, the location and placement of the infield gravel roads would be generally aligned in a north-south direction, parallel to the existing hydrologic drainage patterns." Additionally the following sentence in Section 2.4.5.3, Alternative C: Access and Transportation: "The location and placement of the infield gravel roads would be aligned in a general north-south orientation to minimize water flow obstruction for most streams, as well as sheetflow during spring, which generally flow from the south to the north" was changed to "The location and placement of most infield gravel roads would be generally aligned in a north-south direction, parallel to the existing hydrologic drainage patterns."
- 636 Relative to the hydrology impacts from the infield roads, there are tradeoffs between having the roads located at the coast versus farther inland. For example, crossings for more defined stream channels (conditions closer to the coast) are more easily engineered because the locations are defined and discharges are easier to estimate. Without defined channels, subtle local conditions control where the majority of water is. This can make optimum culvert placement difficult and increase the potential for diverting water from one watershed to another. Without a defined channel, there is rarely an aquatic environment (i.e., plants, macros, and fish) that can be disturbed. However, for perennial channels, the crossing structures are more likely to disturb aquatic organisms, disturb the substrate, and increase erosion. The Corps does not believe that either scenario is clearly favored based on consideration of other resource impacts.

and Screening

shallow angles to the hydraulic gradient (similar to Alternatives C and D northerly-oriented roads) sheet flow and shallow groundwater will naturally flow along the road alignment and consequently culverts will be less effective in passing all of the flow and maintaining natural drainage patterns and stream flow. A comparable field survey and engineering effort as was undertaken for Alternative B could mitigate these disadvantages. However, the perceived benefits of this road design strategy to mitigate hydrology would not likely fully be realized and the increased wetlands fill of Alternative C and D infield roads not justified given the low magnitude of impacts.

3.1.6.2 Airstrip

In Table 5.6.7, the impacts of the gravel airstrip are stated to be of "Major" magnitude with respect to drainage patterns and stream flow for Alternative B. Applying the definitions contained in that table, however, should yield "Moderate" ratings for drainage patterns and stream flow because the hydrologic functions of the adjacent areas are unchanged. In this regard the following considerations are important supporting this conclusion:

- There is no evidence of any significant erosion or deposition occurring in the Stream 22 drainage, nor is there any basis to presume that the airstrip will create erosional or depositional characteristics that are not extant in the first place
- The impact of an increase in spatial extent of inundation during breakup flooding will not cause significant impacts because the entire study area is frozen ground that is not affected by breakup flows during the brief spring inundation, regardless of the inundation water depth:
- There is no evidence that changes of a few hours, or even a few days, in the duration of inundation during spring break-up, while the ground is still frozen, would have any impact on the vegetation or hydrologic function of the basin;
- 4. Summer drainage patterns will not be substantially impacted by the airstrip because there is generally very little precipitation during the summer, which either infiltrates or is immediately impounded by tundra vegetation and small ponds (Streams 22 and 23 spring runoff diversion is very temporary and could thus be considered irrelevant). During the summer there is no runoff to speak of clearly a "Moderate" impact, is more appropriate than "Major".
- 5. Although using percentage of flow diverted during breakup as an impact criterion (DEIS Table 2.5-1) at first glance appears a reasonable approach, this does not take into consideration that the predominant diversion occurs only during a brief period during breakup which, as already noted, has minimal impact.

3.1.6.3 Gravel Mine

DEIS Section 5.6.3.1 states that the impacts to Stream 24 from the Alternative B mine site should be "Minor" yet DEIS Table 5.6-7 characterizes the drainage pattern impact is "Moderate". The Minor conclusion should be correct. The gravel mine under Alternative B only affects the mine footprint area and a small area outside it, but otherwise leaves drainage patterns unchanged. The DEIS text correctly notes the mine site is separated from the adjacent Stream 24 by topography – a swale. ExxonMobil has monitored the re-charge experience of the former C-1 mine site which was the principal water source for the recently completed drilling program and the planned major water source for infield construction and operations activities. Though not connected to any existing streams, re-charge has been complete after each breakup. Similarly, it is expected that the new gravel mine will be filled by spring breakup flows and not by diversion of water from streams.

ExxonMobil DEIS Comments

Response

- 637 1. The fact that significant erosion or deposition is not evident in the Stream 22 drainage doesn't mean it can't happen anywhere in the project area;
 - 2. This statement is consistent with the Corps' findings;
 - 3. This statement is relevant to the wetlands impact analysis, not hydrology;
 - 4. It is agreed there is little runoff during the summer but that does not change the conclusions; and
 - 5. The short time period for spring breakup is not relevant to the magnitude determination. The magnitude of impacts for the airstrip under Alternative B has not been changed.
- 638 Under Gravel Mine, Section 5.6.3.1 states: "The gravel mine would have minor impacts to Stream 24 because it is partially separated by topography and would have moderate impacts to Stream 23." Table 5.6-7 reflects the potential for moderate impacts to Stream 23.

21

Comment Response 639 This comment summarizes more specific comments related to vegetation and wetlands. See responses to the specific comments below (Comments 640-651 and 3444-3446). 640 The impact evaluation defined an impact based on the percentage of a type of wetland/vegetation type, which sometimes did not correspond with the greatest overall amount of wetlands fill or impact. The Key Findings for Section 5.8 has 3.2 Vegetation and Wetlands (DEIS Section 5.8) been revised in the Final EIS to clarify this. The intent of the Key Findings text 3.2.1 Introduction and Recommendations box was to highlight the impact findings that provided the greatest amount of ExxonMobil agrees, as stated in the Executive Summary (ES 4.3 Vegetation and Wetlands) that differentiation among the alternatives. vegetation impacts for Alternatives B, D, and E are generally similar in magnitude and extent. However, the analysis of impacts to vegetation and wetlands could better present the key 639 641 The Corps has considered the commenter's recommendation for improvements to differentiators of the action alternatives. Our comments on the analysis of impacts to vegetation and wetlands focus on three primary issues: the impact criteria and has made the decision not to incorporate the 1. The inconsistency between the results of the magnitude of impacts presented in the Key recommendations in the Final EIS. The Corps and cooperating agencies Findings compared with the actual footprint of the alternatives, developed and agreed to the framework and general methodology for impact The subjective impact criteria methodology, and The overstated and inconsistently applied impact ratings and discussion of impacts. criteria (see Chapter 4), which provides a solid framework for analyzing impacts There are some inconsistencies in impact conclusions between hydrology and to the environment. The resource-specific impact criteria definitions presented in vegetation and wetlands (see Section 3.1). Chapter 5 are based on scientific literature and the best professional judgment of 3.2.2 Key Findings the Corps, cooperating agencies, and third-party EIS contractor subject matter Alternative B has a much smaller footprint than Alternative D (directly and indirectly affecting experts. The definitions allow for analyses based on quantitative data, where approximately 200 acres less than Alternative D) but the key findings state Alternative B as available, and qualitative information and best professional judgment where having greater impact to vegetation and wetlands (moderate) than Alternatives D and E (minor). In addition, the Key Findings only present one result for impacts to vegetation and wetlands for quantitative data were unavailable. The Corps also believes that the impact each alternative even though individual impact criteria are defined separately for both vegetation categories of minor, moderate, and major are sufficient and will not be including and wetlands (see Table 5.8-1). These concerns are discussed further under Impact Criteria a category of "negligible" in the Final EIS. The impact criteria for vegetation and wetlands were intended to capture 3.2.2.1 IMPACT CRITERIA (TABLE 5.8-1) The rationale for the impact thresholds for determining the magnitude of impacts to vegetation whether an alternative affected a disproportionate acreage of an uncommon or and wetlands (minor: <5%, moderate: 5-25%, and major: >25%) is not provided in the DEIS for rare wetland type in study area that was defined in Section 3.8.1 of the Draft EIS a basic understanding of the basis for the analysis (e.g., biological basis, regulatory basis, professional judgment). Table 5.8-1 refers the reader to Section 4.1 for a basic rationale of the (Key Information About Vegetation and Wetlands). Overall acreage of wetland impact categories and intensity; the section lists the impact levels for each of the four evaluation fill was also evaluated in the Draft EIS but it was not included in the impact categories, but provides neither the definition of each impact level nor any rationale for the thresholds or long-term duration. criteria and was not included in the impact summary tables for each alternative. The Corps agrees that the difference between 4.7 percent and 5 percent is small; The impact criteria for the magnitude of impacts as defined in Table 5.8-1 is, subjective and leads to an illogical result: Alternative B is assigned a moderate impact based on filling 5% of however, the impact analysis process was followed consistently for each one mapped vegetation type (Vc: Dry Dwarf Scrub), while Alternative D impacts more than 200 additional acres yet is assigned a minor impact because it only impacts 4.7% of any one alternative and 4.7 percent and 5 percent were included in different impact vegetation type. This approach can lead to misleading comparisons of alternatives and categories for magnitude. understates the impacts of Alternative D. For example, engineering for Alternative B was tailored (to the extent possible) to construct in "higher and drier" areas from structural integrity As noted in this comment, the term "project area" is defined on page 3-1 of the and hydrology standpoints and to avoid wetter communities, which are typically considered Draft EIS and is used consistently throughout the document. Vegetation class higher value wetlands (floodplains, Arctophila fulva communities, etc.). The other alternatives are conceptual and do not give the same regard to topography and water regime. It should be and wetlands type are discussed in detail in Section 3.8 of the Draft EIS and the noted that Alternatives D and E are just below the 5% threshold to meet the definition of a definitions are not repeated in Section 5.8 to reduce redundancy. As stated on moderate magnitude of impacts and that design work to advance these alternatives to the page 5-126 in Section 5.8.1 of the Draft EIS: "Impacts within the footprints of project components were calculated by overlaying the project component ExxonMobil DEIS Comments footprints of each alternative onto the baseline vegetation and wetland mapping

(Schick and Noel 1995; Noel and Funk 1998, 1999, 2001; OASIS 2009, 2010; HDR 2011i) described in Section 3.8, Vegetation and Wetlands, and calculating the areas of each vegetation and wetland type within the footprints." This statement clearly indicates that analyses of impacts for each alternative were

Comment	Response
	based on the same mapped area. Statements regarding Tables 5.8-3, 5.8-4, 5.8-6, 5.8-7, 5.8-9, 5.8-10, 5.8-12, and 5.8-13 are discussed in specific comments below.
	642 Wetland impacts were calculated based on vegetation classification as shown in Tables 5.8-3, 5.8-4, 5.8-6, 5.8-7, 5.8-9, 5.8-10, and 5.8-12. This is appropriate because more than 99 percent of the study area is considered wetlands. The intent of the Key Findings at the beginning of each section in Chapter 5 of the Draft EIS was to allow the reader to quickly grasp key "take home" messages about the impacts from each of the alternatives. For Section 5.8, Vegetation and Wetlands, the Key Findings has been revised in the Final EIS based on a previous comment.

Comment	Response
same level of Alternative B would likely result in similar ratings for their magnitude of impacts as Alternative B. At this conceptual stage, the difference between 4.7% and 5% is negligible. The terms "project area", "vegetation class", and "wetlands type" used in the impact criteria definitions for Vegetation and Wetlands need to be defined and should be cross referenced with appropriate footnotes to the impact summary tables in this section so that it is clear what is being used to determine the magnitude of impacts for each alternative. The project area is defined differently in Chapter 3 (page 3-1) than it is in Section 5.8 (page 5-126). It is also not clear if the same mapped subset is being applied for each alternative to calculate the Percentage of Mapped Type Affected, which is used to determine the magnitude of impacts. In addition, the definitions for determining the magnitude of impacts to Vegetation and Wetlands in Table 6.8-1 need to specify if the impact thresholds apply to direct impacts only of if they also include potential disturbance from adjacent effects (dust, snow accumulation, impoundments, and thermokars) and ice roads and pads. The analyses of potential disturbance from adjacent effects were not performed consistently for vegetation type and wetland function. The potential disturbance to vegetation from gravel roads, pads, and mine (Tables 5.8-4, 5.8-6, 5.8-9, 5.8-12) sum the acres from potential adjacent effects and direct ground disturbance which appears to be used in generating the percentage used to determine the magnitude of impacts summarized in the Key Findings. A separate percentage for potential disturbance from ice roads and pads is provided. This approach overstage used to determine the magnitude of impacts summarized in the Key Findings. A separate percentage for potential disturbance from ice roads and pads is provided. This approach overstage summarized to determine the magnitude of impacts of a determine the magnitude of impacts of a determine the magnitude of impacts	643 All sections of Chapter 5 were written to include a detailed discussion of impacts under Alternative B (the first action alternative presented) and to reference back to Alternative B where appropriate under the remaining alternatives. Impacts that occurred under Alternatives C, D, and E that were substantially different than Alternative B were discussed in detail, as warranted for the impact. This was done to reduce redundancy in the EIS.

Section 5.8.1 (Methodology), pages 5-126 to 5-127. The methodology for the hydrology study (Appendix S) is summarized in this section and the discussion states that the estimated by the hydrology analysis were used to predict impacts of gravel roads for each end alternative. However, this is in contrast to impoundments discussion on page 5-141, which states that the effects are encompassed by the average indirect effects buffer width (164 feet), and table footnotes that indicate the 164-foot buffer was applied. The methodology section needs to be revised to reflect the analysis that was actually performed.

Section 5.8.1 (Methodology), page 5-127 and Tables 5.8-3, 5.8-6, 5.8-9, 5.8-12. Clarification on what adjacent effects the 164-foot buffer is being applied to is needed in the methodology and section and should be added as footnotes to the appropriate tables. Applying the 164-foot buffer to all potential adjacent effects (dust, snow accumulation, impoundments and thermokarst) exaggerates the impacts of some of these effects and is not justified by literature citations or explanations in the corresponding consequences section. For example, impacts to vegetation and wetlands associated with impoundments are expected to be negligible (as stated on page 5-141), yet impacts associated with impoundments is included in the 164-foot buffer used to calculate acreages of adjacent effects. In addition, these acreages are summed with direct ground disturbance and are used in generating the percentage used to determine the magnitude of impacts summarized in the Key Findings. This overstates the direct impacts for all action alternatives. These impacts are in no way comparable to the direct impacts of gravel placement on the tundra. Additionally, as discussed in previous hydrology comments, hydrologic impacts are not accurately assessed and the impacts of gravel roads on the extent and duration of inundated areas provided in Appendix S are greatly overestimated.

Section 5.8.1 (Methodology), page 5-127, and Tables 5.8-4, 5.8-7, 5.8-10, 5.8-13. The text states that acreages are listed in impact tables, even for functions that would not be affected. For example, the ice road footprint acreage within an area shown to produce and export organic matter is listed even though that function would not be affected by an ice road. The gravel mine footprint acreage within the flood flow moderation area is listed even though the mine area would still store spring snowmelt water in Alternative B. This is misleading as it implies a larger effect to wetland functions than is likely to occur. It also does not facilitate comparison of alternatives as there is no easy distinction between components that will affect a function from components that will not. The presentation requires flipping back to Table 5.8-2 for to see if a certain project component may or may not affect a particular function.

Section 5.8.3 (Alternative B). The analysis of impacts to vegetation and wetlands under Alternative B addresses all potential impacts first with very little information on the expected likelihood for these impacts to occur. The intensity of impacts and likelihood for these impacts to occur is often not presented until the end of the section and the extent and detail of the discussion in the consequences sections are not always appropriate for the end result (e.g., negligible or minor impact). The analysis should focus on actual and likely impacts and should clearly state upfront the duration, potential to occur, and geographic extent of the impacts

Section 5.8.3.1 (Alternative B, Dust), page 5-131. The volume of dust emissions from an unpaved road are directly related to traffic volume, vehicle weight, moisture content of the road and surface, and use of suppressants (EPA 2006, Everett 1980). The deposition of dust has been we shown to decrease logarithmically with distance from the road (Santelmann and Gorham 1988, Everett 1980), with the ultimate distance and location of dust deposition driven by particle size, wind speed, and wind direction (EPA 2006, Farmer 1993, Everett 1980). While a 164-foot buffer will capture dust deposition (even a very light deposition), it is reasonable to assume that the total volume of dust being deposited within this buffer along project infield roads will be substantially less than that along the heavily traveled Dalton Highway and Prudhoe Bay Spine

ExxonMobil DEIS Comments

- 644 The text of Section 5.8.1, Methodology, was revised in the Final EIS to clarify that the analysis of impacts from impoundment was considered when predicting the impacts for each alternative. The revised sentence now reads: "The estimates generated by the above analysis were considered when predicting impacts of gravel roads for each alternative." See Section 5.8.3.1 under Impoundments on page 5-141 of the Draft EIS for how the consideration of hydrological analysis was incorporated into the analysis for Alternative B.
- 645 Indirect effects are interrelated, and the buffer does not apply to a single indirect effect. The 164-foot buffer refers to the area in which indirect effects on vegetation from snow accumulation, increased moisture, increased thaw depth, and dust deposition are most likely to occur. While the direct impacts are summed with the indirect impacts to determine the magnitude of impact, the direct and indirect impacts are shown independently of one another in the tables referenced in this comment as an aid to the reader.
- 646 Impacts to functions are listed by disturbance type in the tables referenced in this comment. Most of the disturbance types that would not have an effect on wetland functions are negligible and have not been quantified (e.g., winter water withdrawal, VSMs). Overall, impacts to wetland functions from all alternatives except Alternative C were considered minor. Under Alternative C, wetland function impacts were considered moderate because of the gravel access road.
- 647 Reorganizing the section would not change the analysis, impact evaluation, or overall findings, so no changes have been made to the text.
- 648 Indirect effects are interrelated and the buffer does not apply to dust alone. The 164-foot buffer used in Section 5.8, Vegetation and Wetlands, of the Draft EIS refers to the area in which effects on vegetation from snow accumulation, increased moisture, increased thaw depth, and dust deposition are most likely to occur. The reference used cites a multi-year study conducted on the West Dock Road in Prudhoe Bay. Traffic volume estimates were not provided by the Applicant for the Draft EIS for the infield gravel roads. While traffic volumes could be anticipated to be less for the Point Thomson Project, no other multiyear studies exist on less-traveled roads on the Arctic Coastal Plain and the reference cited is considered by the Corps to be the best available data.

Road. The Dalton Highway is the supply link between Fairbanks and Prudhoe Bay, and conveys a large volume of heavy traffic at moderate speeds; the Prudhoe Bay Spine Road is the major arterial road through the Prudhoe Bay field, conveying both light and heavy duty traffic accessing the Prudhoe Bay, Milne Point, Endicott, and Kuparuk fields. The Point Thomson Project would involve substantially less traffic than either the Dalton Highway or the Prudhoe	 Indirect effects are interrelated and the buffer does not apply to a single indirect effect. The 164-foot buffer refers to the area in which indirect effects on vegetation from snow accumulation, increased moisture, increased thaw depth, and dust deposition are most likely to occur. Because culverts would not be placed in the airstrip, the potential to interrupt the natural drainage patterns for a longer period of time exists, which could lead to subsequent effects on vegetation and wetlands. The Corps re-evaluated the impact analysis for ice roads and ice pads in Section 5.8, Vegetation and Wetlands, based on this comment. The Corps agrees that the impact criteria were not consistently applied for this analysis. The impact findings for ice roads and ice pads in Section 5.8 of the Final EIS are now as follows: Alternative B: Minor, Temporary, Possible, Local (revised from Minor, Medium Term, Probable, Local) Alternative C: Moderate, Temporary, Possible, Local (revised from Moderate, Medium Term, Probable, Local) Alternative D: Minor, Medium Term, Possible, Local (revised from Minor, Medium Term, Probable, Local)
	Medium Term, Probable, Local) Alternative E: Minor, Medium Term, Probable, Local (no change)
by construction of the airstrip leading to 'subsequent effects on wetlands and vegetation. Diversion would be limited to spring breakup flows over frozen tundra. In addition, during breakup, the entire Project area is inundated. During the rest of the summer season, wetlands downstream of the airstrip would not be affected because most of the source water comes from melting of the active layer and limited precipitation. Ice Roads and Pads—All Alternatives. The discussion under Section 5.8.3.1 states that standard ice road construction practices have improved over time and lists some ice road construction best management practices, but it appears that the summary of impacts does not fully consider the mitigation measures in its determination of impacts. Although estimated ice road footprints can be quantified, the magnitude of impacts to vegetation and wetlands is in no way comparable to gravel and should not be analyzed the same way. Also, this quantitative analysis initial to that used for off-road tundra travel seems appropriate; however the duration intensity types and the potential for impacts to occur need to be correctly applied to differentiate between alternatives. For example, "medium term" duration and "probable" impact ratings are given for ice infrastructure for all action alternatives even though Alternatives D and E involve greater annual use of ice roads during facility operations. The same ratings are also applied to multi-season ice pads associated with Alternative E, which clearly has a higher potential for impacts to occur. Because the effects of multi-season ice pads in place for more than one summer on vegetation are unknown, a "long-term" duration rating for this component of Alternative E sems more appropriate (Table 5.8-14). Due to the regulated nature of the activity, implementation of best management practices (see ExxonMobil's Ice Road Workshop presentation - April 21, 2011) and because Alternative B only involves use of ice roads on an as needed basis (compared to annual reliance fo	Alternative E: Minor, Medium Term, Probable, Local (no change)

Water Removal—All Alternatives. The text for Water Removal under Alternative B (page 5-143) accurately portrays the regulated nature of water removal activities, including permit stipulations in place to minimize impacts. However, the duration intensity type is ascribed as medium term for all action alternatives. Although water removal activities may occur through the duration of the project, it seems that any negative effects would be ameliorated within one season of withdrawal, if they occur at all; therefore, a temporary term rating seems more appropriate. The impact comparison of water removal between the action alternatives is also lacking. For example, the discussion under Alternative D would have greater effects associated with annual water withdrawal for ice road construction than Alternative B, but both alternatives are given the same impact evaluations for water removal (minor, medium term, possible, and limited). A discussion of water removal appears to be missing from Alternative E (Section 5.8.6.1), but again Alternative E is given the same impact evaluation for water removal as all other alternatives even though there would be more water removal associated with annual ice road construction.

Off Road Tundra Travel—All Alternatives. Use of summer and winter off-road tundra travel needs to be clarified for all action alternatives and the intensity of impacts need to be revisited. The text under Off Road Tundra Travel for Alternative B (Page 5-145 to 5-146) needs to be revised. For example, the introductory paragraph on page 5-145 appears to rely upon dated material and does not reflect current regulatory requirements and off-road tundra travel practices, which are described later on page 5-146. This may lead the reader to incorrectly conclude that the off-road tundra travel associated with the Project is likely to cause significant damage to the tundra.

Off-road tundra travel is subject to strict requirements by the Alaska Department of Natural Resources and North Slope Borough which allow one form or another of off-road tundra travel during all periods of the year except break-up (approximately May through mid-July). Damage to the tundra is prevented by the limitations placed on the types of vehicles and load capacities allowed during each period of the year. Several references in the Off Road Tundra Travel section of Alternative B allude to more heavily disturbed areas (deep ruts in wet tundra) requiring 20 to 30 years for recovery. However, this does not reflect current permits and practices under which only approved summer tundra approved vehicles would be used for off road travel to avoid creating such tundra impacts as deep ruts. As correctly stated in the text, winter off-road tundra travel generally results in lower amounts of possible damage to tundra vegetation.

Potential impacts between the alternatives would be differentiated as follows:

- Alternative E would require use of tundra travel during the summer, fall, and early winter
 on a routine basis to access the East and West Pads (e.g., to move anything too big to
 be transported by helicopter, or during periods of inclement weather) while Alternative's
 B, C, and D would use infield gravel roads.
- Alternative E would require more use of tundra travel to move items that exceed 5,000 pounds because of the shortened airstrip; most likely in fall/winter since barging is allowed.
- Alternative D would require more use of late fall/early winter tundra travel from Deadhorse due to lack of barging and need to move materials early in the winter before the main ice road is constructed.

ExxonMobil DEIS Comments

26

Response

- 3446 The medium term duration is applied to all alternatives because water withdrawal would occur throughout the life of the project for all alternatives, which could have possible impacts to vegetation and wetlands. Due to the regulated nature of water removal activities, impacts from water withdrawal would be minor, possible, and limited for all alternatives.
- 650 The purpose of an EIS is to disclose the potential impacts of a project on the environment. Discussing possible environmental impacts, followed by why those impacts are unlikely to occur as a result of the proposed project (or alternative) is appropriate and is done throughout Chapter 5. As noted in this comment, the EIS presents the permit stipulations currently placed on projects to minimize impacts to tundra from tundra travel and analyzes impacts based on the implementation of the permit stipulations.

Potential impacts from tundra travel for each alternative were based on information provided to the Corps in a practicability report provided by the Applicant. The practicability report provided comparable information about how the Applicant would construct, drill, and operate under each of the proposed alternatives. In the report, the Applicant estimated tundra travel for each of the Alternatives as follows: Alternative B: 377 to 427 tundra travel trips during construction and drilling; Alternative C: 587 to 687 tundra travel trips during construction and drilling; Alternative D: 682 to 807 tundra travel trips during construction, drilling, and operations; Alternative E: 557 to 647 tundra travel trips during construction and drilling. The practicability report did not alert the Corps to the likely need for tundra travel to occur during time periods or conditions in conflict with current permit stipulations, except for emergency situations under Alternative E. The Corps did, however, anticipate that under Alternative E some tundra travel during summer may be needed in case of emergency or other unusual situations, because of the lack of gravel roads to the East and West Pads.

nent	Response
Taking into consideration the regulated nature of the activity and permit stipulations to minimize impacts, temporary or medium term seems more appropriate than long term. A long term duration rating for Alternative E is appropriate given the higher potential for summer tundra travel and its longer term effects. Dredge Materials Disposal Site The discussion of impacts to vegetation and wetlands for the Alternative B disposal site are overstated. The initial vegetation mapping was conducted using a combination of 1993 and 1995 aerial photography. Over one decade of coastal processes have modified near shore communities, and a review of more recent (2006) aerial photography indicates that adjacent communities, and a review of more recent (2006) aerial photography indicates that adjacent communities, and a review of more recent (2006) aerial photography indicates that adjacent communities, and a review of more recent (2006) aerial photography indicates that adjacent communities, and a review of more recent (2006) aerial photography indicates that adjacent communities, and in the disposal and the communities are predominantly, if not entirely, partially barren sall tolerant communities. We agree with the conclusion that the dredge disposal and would not depend a rearial would be deposited on unvegetated gravel beach, it is upgradient from the dredge disposal and thus it is unlikely runoff would deposit sediments here. The dredge spoils placement location arial. Internative B is a non-vegetated area that has an exposed ut bank along the beach marian. Internative B is a non-vegetated area that has an exposed ut bank along the beach marian. Internative B is a non-vegetated area that has an exposed ut bank along the beach and olice transport could relocate some sediments into the partially barren communities, however we anticipate minimal effects as 1) the community is predominantly barren communities, however we anticipate minimal effects as 1) the community is predominantly barren sall tolerant and regularly affec	651 As noted in this comment, a review of aerial photography over time indicates that the shoreline is changing where dredge disposal is proposed under Alternatives B and E. The shoreline also may change between the most currer available aerial photography and the time when dredged materials would be disposed if dredging is approved by the Corps. If dredging is approved, the fin location for dredge disposal should be determined in consultation with the Co during final permitting. 652 The Corps has considered the commenter's recommendation for improvement the impact criteria and has made the decision not to incorporate the recommendations in the Final EIS. The Corps and cooperating agencies developed and agreed to the framework and general methodology for impact criteria (see Chapter 4), which provides a solid framework for analyzing impa to the environment. The resource-specific impact criteria definitions presented Chapter 5 are based on scientific literature and the best professional judgment the Corps, cooperating agencies, and third-party EIS contractor subject matter experts. The definitions allow for analyses based on quantitative data, where available, and qualitative information and best professional judgment where quantitative data were unavailable. Long-term habitat loss/alteration due to gravel extraction or placement was differentiated in the analyses from temporary habitat loss and medium-term habitat alteration that results from tundra ice roads (see Table 5.9-4 on page 5 212 of the Draft EIS and related discussion as an example). To the extent possible, given available research, impacts related to disturbance (air, barge, tundra traffic) were differentiated from habitat impacts in the EIS (see Tables 5.9-3, 5.9-4, and 5.9-6 and related discussions as examples).

3.3.2 Impact Thresholds and Bird Project Area

The protocol for determining overall levels of impacts needs to be more fully explained. Although four categories of impacts are listed, only magnitude is discussed in all text sections, the remaining three are discussed inconsistently so that it is not clear how each species group could be categorized for each type of impact. We suggest that the No Effect threshold of potentially affecting <1% of a local bird population or < 0.1% of an ACP population be listed as Negligible, consistent with our general recommendation on impact criteria.

The impact assessments in the DEIS could be strengthened by providing some biological rationale for the impact parameters chosen. For example, for impact-magnitude thresholds, it would help to describe how ≥25% of a local population or ≥5% of an ACP population were chosen as the affect thresholds for impacts to be assessed as major in magnitude. Providing similar biological reasoning for how the affect thresholds were selected to separate moderate and minor impact magnitudes would be helpful. Additionally, it would help to provide some biological rationale to indicate why the area within a 2.5-mile buffer surrounding the proposed project infrastructure was selected as the bird project area in which to assess impacts. The size of the impact assessment area is one of the most important elements in an impact analysis, and it plays an even more important role when quantitative impact analyses are conducted; hence it is critical to provide an explanation of the basis for the size of the bird project impact area in the

Surf Scoters are listed as having moderate impacts under Alternative E because 23 breeding birds could be displaced (0.7% of the ACP population, which is above the threshold set for moderate impacts). However, there are no definitive nesting records of Surf Scoters along the Alaska portion of the Beaufort Sea; in the Beaufort Sea area, this species is a common nester only in the Mackenzie Delta in Canada (Johnson and Herter 1989). Hence the estimated number of breeding Surf Scoters in the project area undoubtedly is incorrect because the species is not known to nest there. Curiously, the DEIS recognizes (in Chapter 3; see Table 3.9-2 on p. 3-91) that Surf Scoters occur only as non-breeders on the ACP.

The population estimates for Common Eider must be inaccurate because more birds are listed for the local Point Thomson post-breeding population than are estimated to occur across the enitre ACP. This is impossible unless a large number of Common Eiders move into the Point Thomson area from the Canadian Arctic following breeding, and that somehow those additional birds were not accounted for in the population estimate for the ACP.

The DEIS lists a population estimate of <50,000 Red Knots on the ACP, but this species is guite rare in Alaska, Johnson and Herter (1989) indicate that only small groups or single birds have been recorded on the ACP; the species breeds sparingly in the Point Barrow area and in mountains in northwestern Alaska. The population estimate of <50,000 birds appears to be the estimate for the entire North American continent (the species is far more common in the Canadian Arctic), as reported in ASG (2008), although this reference is not listed in the sources for population estimates for birds reported in Chapter 3 (see Table 3.9-2 on p. 3-91).

3.3.3 Equating Displacement and Disturbance with Population Loss Overstates Impacts

Project impacts are, for some species, overstated in part due to the impact thresholds utilized. When impacts are determined to be of moderate magnitude for birds (e.g., Common Eider under Alternatives B and E, and Surf Scoter under Alternative E), the conclusions are based on the percentages of populations (above specific thresholds) in the Point Thomson area and/or the ACP that could be displaced by habitat loss, habitat alteration, and disturbance. What is not specified is what effect such displacement would have on the birds and the bird population(s) in

ExxonMobil DEIS Comments

Response

653 The Corps has considered commenter's recommendation for improvements to the impact criteria and has made the decision not to incorporate the recommendations in the Final EIS. The Corps and cooperating agencies developed and agreed to the framework and general methodology for impact criteria (see Chapter 4), which provides a solid framework for analyzing impacts to the environment. The resource-specific impact criteria definitions presented in Chapter are based on scientific literature and the best professional judgment of the Corps, cooperating agencies, and third-party EIS contractor subject matter experts. The definitions allow for analyses based on quantitative data, where available, and qualitative information and best professional judgment where quantitative data were unavailable. The Corps also believes that the impact categories of minor, moderate, and major are sufficient and will not be including a category of "negligible" in the Final EIS.

Regarding the bird study area, the Corps determined that a 2.5-mile buffer provided both a conservative view of potential area of impacts for all alternatives collectively. It is understood that tundra roads and other features' locations could move slightly to avoid water bodies and other species-specific habitat features to minimize overall impacts.

As noted in this comment, it is agreed that there are no definitive nesting records of surf scoters along the Alaska portion of the Beaufort Sea. One of the datasets used for the analysis of conservation birds of concern impacts (Dau and Bollinger 2009) is a breeding bird survey conducted by the USFWS, and the sightings of surf scoters were recorded during this survey. This dataset appears in a column of the analysis table described as "breeding birds." The Corps understands how this may appear misleading and has added a footnote to Tables 5.9-5, 5.9-9, 5.9-13, and 5.9-17 of the Final EIS to identify surf scoters in the analysis as non-breeding birds.

Regarding the common eider population estimates, the difference between the local population estimate and the ACP-wide estimate is because the Point Thomson breeding estimate is based on densities calculated for the EIS from project-specific studies, whereas the ACP estimate is reported in referenced literature. Due to the higher concentration of common eiders within the lagoon area adjacent to proposed project infrastructure, multiplying this density out to the broader tundra area of impact, which is appropriate for other species, artificially inflated the results for common eiders. In order to maintain consistent methodology, the discrepancy has been identified in the footnotes of Tables 5.9-5, 5.9-9, 5.9-13, and 5.9-17 of the Final EIS rather than altering methods for one species of concern. Given the higher concentration of common eider in the lagoon area, which is causing the inflation of broader study area estimates, it remains relevant for the impact call to stay at "moderate."

Based on the comment regarding the ACP population of red knots, the Corps reviewed Johnson & Herter (1989) and other relevant sources and agrees that the red knot is a rare species in the study area. Because it is difficult to provide an

Comment	Response
	adequate ACP population estimate for the red knot, Tables 5.9-5, 5.9-9, 5.9-13, and 5.9-17 of the Final EIS were adjusted to show the ACP population estimate field without a numeric figure, as is the case for the other population estimates for the red knot.
	654 The issues raised in this comment regarding bird displacement are discussed in paragraphs two and three of Draft EIS Section 5.9.3.1 under "Habitat Loss and Alteration." The section includes a discussion regarding availability of nesting habitat not being a limiting factor for distribution or abundance (TERA 2000) and notes that birds that may be displaced would likely nest in adjacent undisturbed habitats. Paragraph three continues with a discussion regarding the potential for birds to use altered habitats. See the response to Comment 653 for a discussion of the analysis regarding common eiders.

question. It is unlikely displacement would result in a loss of displaced birds from the population (i.e., mortality), but the expected effects are not discussed with regard to the bird populations in the Point Thomson area and the ACP.

The moderate impact magnitude for Common Eiders under Alternative B seems overstated. Impacts that affect 0.5% of the ACP population are probably better interpreted as negligible to minor, not moderate, especially considering that (1) the impacts were determined to be minor at the project-level scale (i.e., it is difficult to envision minor local-scale impacts that are manifested as greater, moderate-level impacts when considered at a broader regional scale); and (2) all birds affected likely will not be lost from the ACP population (i.e., some displaced birds likely will successfully forage and reproduce elsewhere in appropriate habitat).

We believe that it would be more appropriate to conclude that only negligible to minor, not moderate, impacts could be expected for any bird species to be found within a study area from the Sagavanirktok River to the Canning River Delta and inland 9 miles.

3.3.4 Habitat Loss, Habitat Alteration, and Behavioral Disturbance

Direct habitat loss (e.g., from gravel placement) is combined with temporary habitat alteration (e.g., from ice roads); the two impacts are not equivalent. Habitat alteration is a change in habitat that results from a change in vegetation and/or plant community structure or a change in prey occurrence, which is short of complete habitat loss. The two types of habitat impacts differ in magnitude, duration, and geographic extent and they must be quantified separately. Also, the authors have combined direct and indirect habitat loss with behavioral disturbance.

The DEIS treats the effects of habitat loss, habitat alteration and behavioral disturbance similarly in terms of bird displacement, when in fact there is substantial variability in response to habitat alteration and disturbance depending on the species. In the text and in some tables, the differences in impacts to birds from these different effects are clearly recognized, which is good, but when impact magnitudes are determined (e.g., for birds of conservation concern, including threatened species), the effects of habitat loss, habitat alteration, and behavioral disturbance are combined additively to derive the number of birds of each species that could be displaced by the proposed project. This treatment assumes that each of the three effects yields the same result (100% displacement), which is overly simplistic and results in an overstatement of the potential impacts. This could be corrected by evaluating the displacement of birds because of habitat loss, habitat alteration, and disturbance separately.

3.3.5 Disturbance Buffer-Zone Sizes

In the DEIS, behavioral disturbance around roads and pads is treated as a component of habitat alteration within a relatively narrow (330 ft.) effect zone or buffer. In contrast, the barge facilities and airstrip are assigned a large effect zone (1640 ft.) in which behavioral disturbance is expected to occur, without adequate justification. In addition, there is no analysis or documentation as to why the potential disturbance buffer is the same for aircraft and barges. This section should discuss the basis for establishing the disturbance buffers, the impact mechanisms from barge and aircraft resulting in disturbance, and address the frequency, seasonal aspects, and duration of potential impacts on birds from these activities. Based on the history of barging support of oil and gas activities during the last 40 years, and lack of literature documenting bird disturbance from barge activities, we feel that the size of the buffer and magnitude of potential impact are overstated.

The effects of behavioral disturbance and direct and indirect habitat loss and alteration are intermixed in this treatment, even though disturbance and habitat loss and alteration clearly

ExxonMobil DEIS Comments

29

- 655 The analysis results for conservation birds of concern (Tables 5.9-5, 5.9-9, 5.9-13, and 5.9-17) were presented as a summary because providing the same level of detail for individual species as was done for the general bird analyses (Tables 5.9-4, 5.9-8, 5.9-12, and 5.9-16) would have been too large and complex for general EIS reader comprehension. Specific types of impacts (e.g., habitat alteration) are discussed in the EIS text where noteworthy, and the final summary of impacts (e.g., Section 5.9.3.5 and Table 5.9-6), includes bird species of concern that were determined to have moderate or greater impacts.
- 656 Section 5.9.1, Methodology, provides discussion and scientific references for each of the buffer zone types, including those for areas classified as habitat loss from gravel roads and pads (330-foot buffer) and habitat alteration from ice features (no buffer). As explained in the text, project features constructed from ice were not buffered because most of the construction and use would occur in winter when birds are not present, therefore minimizing disturbance to bird populations in the project area. As explained in the same section, the buffer for barge and air traffic was extended to a larger area due to farther reaching noise and visual disturbance, as well as the risk for bird strikes in inclement weather (as explained in the response to Comment 658 for barges, specifically). More detailed discussion of the effects of each type of disturbance vessel traffic, air traffic, vehicle traffic is provided in the impacts discussions for each alternative (e.g., Section 5.9.3.1, pp. 5-214 to 5-215 of the Draft EIS).

Comment	Response
have different effects on birds (as is recognized in the text) and require different measures to mitigate those effects. Habitat alteration occurs on relatively small scales (for example, dust effects) and the second of the se	657 The Corps evaluated the references provided in this comment and additional references, and consulted with the U.S. Fish and Wildlife Service (USFWS) regarding the potential for bird collisions with project infrastructure. The USFWS has expressed concern about oil and gas infrastructure constructed in coastal locations because of past bird collision events that have occurred at Northstar and other North Slope infrastructure located on the coast compared to other infrastructure located inland from the coast. The discussion of infrastructure collision impacts was revised for clarification and includes acknowledgement of Applicant proposed mitigation to minimize impacts from bird collisions (downward shielded lighting).

Comment Response 658 The EIS does not discuss impacts associated with birds colliding with moving barges. The EIS analysis for bird collisions focuses on the potential for migrating birds to collide with lighted infrastructure during periods of inclement weather. The EIS analysis related to bird collisions with infrastructure does mention the minor possibility for sea ducks and loons flying along the coast In a study of king eiders in the Beaufort Sera, more than 80% of marked king eiders spent > 2 weeks in the Beaufort Sea before continuing molt migration westward, suggesting that the sea during poor weather conditions to hit the barge bridge during offloading is an important flyway and staging area for this species during postbreeding (summer/fall) (Philips et al. 2007). The broad distribution of male locations in the sea after breeding could activities because of the flight behavior of these species. The EIS analysis of reflect high ice cover in June, which forces male king eiders to dispersed pockets of open water potential impacts to birds related to barges also discusses the potential for during post breeding. During the post breeding period, females were closer to shore (mean = 12.8 km) than males (mean = 14.8 km). disturbance and/or displacement of breeding and post-breeding birds in marine and coastal areas, focusing on disturbance during molting and brood-rearing The moult migration of sea ducks was also studied during summer in the Beaufort Sea (Johnson and Richardson 1982). Results showed that few of the male eiders that leave the waterfowl concentrate in Lion Bay. Beaufort Sea in summer travel west along coastal study areas. Instead, the main route may be seaward of the barrier islands until the eiders approach Point Barrow. The study indicated that there is no evidence of a concentrated flight pattern of eiders along the coast of the Beaufort Sea from Canada west past Simpson Lagoon (just west of Prudhoe Bay). Instead, they suggested that eiders fly west on a broad front over the Beaufort Sea with little concentration along the coast. The main route across the Beaufort Sea may be over relatively shallow water just north of the barrier islands. Westbound eiders then concentrate near the coast between Simpson Lagoon and Point Barrow, and approach Point Barrow close to the shore. For these reasons it is suggested that the following references be considered in preparing the FEIS: Richardson, W.J. and S. R. Johnson, 1981, Water bird migration near the Yukon and Alaska Coast of the Beaufort Sea: I. Timing, routes, and numbers in spring. Arctic Phillips, L.M., A.N. Powell, E.J. Taylor, and E.A. Rextad. 2007. Use of the Beaufort Sea by king eiders breeding on the North Slope of Alaska. Journal of Wildlife Management 71(6):1892-1898. Johnson, S.R. and W. J. Richardson, 1982. Water bird migration near the Yukon and Alaskan coast of the Beaufort Sea: moult migrations of sea ducks in summer. Arctic 35(2): 291-301. 3.3.7 Barge Collision Risk Any discussion of migrating bird collision risk with barges is speculative because there is no scientific literature to support that slow-moving marine vessels pose any threat of mortality risk Barge-related activities would not moderately affect (> 5%) of local common eider populations under Alternatives B and E because any disturbance of local nesting or post-nesting eiders or their habitat would be negligible to minor. In addition, barging under Alternative B and E would not present collision hazards for spring-and fall-migrating yellow-billed loons. Individual birds located in the path of a barge or tug boat would merely move out of the vessel path to another suitable location by either swimming or flying as would occur in reaction to any natural disturbance. ExxonMobil DEIS Comments 31

3.4 Terrestrial Mammals (DEIS Section 5.10)

3.4.1 Introduction and Recommendations

ExxonMobil agrees, as stated in the Executive Summary (ES 4.4 Terrestrial Mammals), that the gravel access road under Alternative C and the inland location of gravel infrastructure under Mara Alternatives C and D have the greatest potential to impact terrestrial mammals. We also agree 650 that Alternative E would have the greatest potential noise disturbance to terrestrial mammals because the primary means of transportation between the Central Pad and East and West Pads would be by helicopter.

Two areas where the analysis in Section 5.10 could be improved are:

- The analysis of impact to caribou could be improved by adding context regarding the coexistence of Alaskan oil and gas development and caribou populations.
- 2. Other issues in the impacts analysis for terrestrial mammals relate to the criteria used for classifying and quantifying impacts and consideration of proposed mitigation measures. Specifically, there are concerns with the definitions of impact criteria (Table 5.10-1), how affected habitats are defined and quantified (i.e., disturbance buffer zones), the methodology for estimating the number of animals potentially impacted by the various alternatives, and incorporation of mitigation to better distinguish among potential impacts for the various alternatives.

3.4.2 Key Findings - Caribou

ExxonMobil agrees that Alternatives C, D, and E would most likely have a greater impact on caribou than Alternative B. However, any impact on caribou must be kept in perspective with the history of the caribou and North Slope oil and gas activities. Over four decades of development on the North Slope have shown that caribou can co-exist with these activities (Haskell et al. 2004, Cronin et al. 2000, Cronin et al. 1998).

Strong empirical evidence that oil and gas exploration and development has not negatively impacted the productivity of caribou populations is shown by the Central Arctic Caribou herd. In the early 1970s, while oil development was first occurring in the Prudhoe Bay area, the population of that herd was estimated at 5,000. The 2008 population estimate put the size of that herd at roughly 67,000, a more than ten-fold increase in the four decades that this region has experienced oil exploration and development.

Under Alternative B, the conclusion that probable moderate or possible major, long term adverse effects are anticipated for caribou habitat conflicts with 40 years of empirical evidence cited above. In addition, support should be provided for the conclusion that caribou or muskoxen would lose significant foraging habitat and be adversely impacted from gravel placement. Habitat has not been shown to be a factor limiting the North Slope caribou population, nor does any methodology support a result that the area could support more caribou if not for the project or any alternative.

3.4.3 Impact Criteria and Thresholds

The DEIS should provide more adequate supporting information to explain why the particular impact criteria in Table 5.10-1 were chosen (e.g., for the selection of the entire ACP under magnitude and geographic extent, and for the time periods specifically identified under duration). It would also be helpful to provide some biological rationale and explain why these particular impact criteria and thresholds were chosen.

ExxonMobil DEIS Comments

32

- 659 This comment summarizes more specific comments related to terrestrial mammals. See the responses to specific comments below (Comments 660 to 664).
- 660 Caribou population increases on the North Slope are discussed in Section 3.10.3.2 (Caribou). The studies referenced in this comment (and additional references) were used in developing the discussion of impacts to caribou. The analysis of impacts to caribou in the EIS focus on aspects of their life history known to be most sensitive to development: disturbance during calving, close proximity of roads and pipelines that may provide a barrier to movements, and individual pipelines that may become barriers to movements. The EIS does not suggest that caribou habitat is limiting in the study area and does not state that a "significant" amount of foraging habitat for caribou or muskoxen would be adversely impacted. Page 5-263 of the Draft EIS states: "While the amount of forage loss could support a considerable number of caribou or muskoxen, forage is plentiful in the surrounding areas and these animals would likely move to other areas to forage (Figure 5.10-2)." However, gravel fill does result in a longterm loss of habitat that can be measured and compared among alternatives. The EIS finds that impacts to caribou from the construction of Alternative B would be minor, long term, possible, and limited. The only major impact listed for Alternative B would be to arctic fox dens and/or den habitat because of the location of proposed gravel infrastructure relative to known den sites and/or potential den habitat.
- 661 The Corps has considered the commenter's recommendation for improvements to the impact criteria and has made the decision not to incorporate the recommendations in the Final EIS. The Corps and cooperating agencies developed and agreed to the framework and general methodology for impact criteria (see Chapter 4), which provides a solid framework for analyzing impacts to the environment. The resource-specific impact criteria definitions presented in Chapter 5 are based on scientific literature and the best professional judgment of the Corps, cooperating agencies, and third-party EIS contractor subject matter experts. The definitions allow for analyses based on quantitative data, where available, and qualitative information and best professional judgment where quantitative data were unavailable. The Corps also believes that the impact categories of minor, moderate, and major are sufficient and will not be including a category of "negligible" in the Final EIS.

Comment Response 662 Because this comment does not provide sufficient reference to a page, section, or species in the document, no changes have been made to the EIS. 663 For impact analysis methods with no references cited, no standardized impact buffers have been established in the literature. For these species, the subject Providing this information will help readers understand the scientific rationale supporting the matter expert evaluated available information for the species and/or other species conclusion that Alternative B will have a Major Impact (affecting > 25% of arctic fox habitat or that may have similar behavioral responses to establish a reasonable impact population) whereas Alternatives C, D, and E will have only Moderate Impacts (affecting 5-25% of habitat or population). The impact assessments could be improved by restructuring and more evaluation buffer for the analysis. For species that have established impact realistically interpreting the quantitative impact measures using supportive scientific literature, buffers, the literature used is clearly cited in the methods (see bullet list on pages including discussion of the limitations of such approaches and other factors that have a bearing on the analysis and conclusions. 5-260 and 5-261 of the Draft EIS). The tables in the impact analyses for each 3.4.4 Quantitative Impact Measures alternative provide information on which impact assessment methods apply. In general, we support efforts to provide quantitative measures of impacts and attempts to base 664 The differences in impacts associated with gravel and ice infrastructure are impact predictions on the numbers of animals expected to be affected, but making extrapolations from earlier studies (not necessarily conducted in the Pt. Thomson area) to discussed in the text. The overall impacts were summarized in the tables at the derive density estimates for mammals is problematic if not properly qualified, including variability end of each alternative discussion. The Corps reviewed the impact conclusions in habitat availability, variability in densities among habitats, and variability in animal occurrence and population abundance over time. The result is that these extrapolations can yield impact presented in the Draft EIS and determined that revising the impact summary estimates that may be in error by large margins and that do not accurately reflect the natural tables would not change the overall impact evaluation for the alternatives and the variability that is present. development of the environmentally preferred alternative. Therefore, no changes 3.4.5 Disturbance Buffer-Zone Sites were made to the document as a result of this comment. For caribou the DEIS correctly attempts to distinguish the effects of long term habitat loss (from gravel extraction and placement), and temporary behavioral disturbance; however, the reason 665 This comment summarizes more specific comments related to marine mammals. for applying the distances to specific buffer zones are not always clearly identified (e.g., page 5-See responses to the specific comments below (Comments 666-674). 261, brown bear and fox dens). References to the disturbance studies used to establish the buffer distances are listed together without clear differentiation as to which species, types of disturbances, times of year, etc. were considered. Consequently, it is difficult to determine which distance criteria were applied to which species and which effect(s). It would be helpful to provide more detail on how the analytical criteria were selected to make the impact analyses more 3.4.6 Habitat Loss and Habitat Alteration The broad category of habitat loss as defined in the DEIS includes both habitats that would be long term lost (from gravel fill) and temporarily lost (from ice roads and pads). Subsequently, in the Impact Criteria Summary tables (e.g., Table 5.10-6), the impact duration is listed as longterm for Habitat Loss and Alteration, which confuses long term with temporary habitat loss and effectively treats both categories as long term habitat loss. Permanent and temporary habitat loss should be differentiated in the impact analyses throughout the DEIS. Habitats "lost" from ice roads and ice pads would be better treated as temporarily altered habitats. 3.5 Marine Mammals - Whales and Seals (DEIS Section 5.11) 3.5.1 Introduction and Recommendations We support the conclusion that for all action alternatives the anticipated impacts are described as minor to a small number of individual animals and the conclusion that the project will not have a biologically significant impact on seals and whales. Consistent with our suggestion to add an impact criteria of Negligible, we suggest that the overall impact conclusions for whales and seals should be negligible for all alternatives. In addition we have the following general suggestions ExxonMobil DEIS Comments 33

Comment Response 666 The purpose of an EIS is to disclose the potential impacts of a project. The Draft EIS for this project disclosed the potential impacts to marine mammals and determined that for whales and seals, barging activities would have the following impacts related to barging activities: whale disturbance—minor, temporary, possible, local; whale vessel collision—minor, temporary, possible, limited; seal 1. The experience gained from the 2008-2011 drilling program should be referenced in the disturbance—minor, medium term, possible, limited; and seal vessel collision minor, temporary, unlikely, and limited. Summarizing these conclusions, the 2. The general experience with Beaufort Sea barge traffic and impacts on marine mammals should be referenced. Corps believes that the potential impacts to marine mammals from barging The impacts of behavioral disturbance, barging activities, noise, and collisions on marine mammals do not consider implementation of mitigation measures, particularly the CAA. activities associated with the proposed project would be minimal. 667 The marine mammal section of the EIS recognizes that dredging, screeding, and 4. Habitat alteration should be considered temporary indirect habitat impact due to short term behavioral disturbance. pile driving are scheduled to occur during winter. The marine mammal impact assessment also evaluates additional small amounts of dredging and screeding Following the ban on commercial whaling, the Beaufort Sea Stock of bowhead whales now number over 10,000 individuals, with an approximate 3.5 percent (350 animals per that could occur during the open water season in advance of barging, as this is year) annual rate of increase, and the actual population size is likely higher. The bowhead whale population may be within the range of its pre-commercial exploitation included in the Applicant's proposed project. The EIS states that whales would size and not at risk of extinction. Effects of the Project on marine mammals should be not be present during winter construction activities and that winter construction negligible. We offer the following comments to support this recommendation and to clarify or correct details in the DEIS: activities are unlikely to impact seals. The EIS states that distance and grounded ice would attenuate underwater sound and snow over seal lairs would attenuate 3.5.2 Beaufort Sea Barging Track Record airborne noise. However, there are no studies regarding the attenuation of pile As described above, ExxonMobil conducted a significant barging program during the drilling program with effective mitigation measures in place. During the three open water seasons of driving noise by wind and there are no data proving that drilling noise would barging only one bowhead whale was sighted at a distance and sightings of other marine always be below NMFS thresholds. Overall, the EIS concludes that the impacts mammals such as ringed seals were relatively infrequent. No negative encounters with or adverse effects on whales or seals occurred. to whales and seals from construction activities would be minimal. This experience is consistent with the overall Beaufort Sea track record where vessels and barges supporting oil and gas activities as well as servicing the Native communities have been shown to have no more than a short term, temporary impact on bowhead whales, ringed seals, and bearded seals.9 The oil industry record of successfully operating in the Beaufort Sea for over 40 years with no apparent effect on the health or distribution of whales and seals from these activities is also previously described. 3.5.2.1 Barge Facility Construction and Operation Dredging, screeding, and pile driving are scheduled to occur in the winter as part of construction of both the proposed coastal barge pier and adjacent sealift facility. None of the identified Beaufort Sea whale species are expected to be in the study area during these winter months (see Section 3.11, Marine Mammals). Bowhead and beluga whales occur commonly offshore of the barrier islands only during the spring and fall migrations. Likewise for seals, ringed seal winter habitat requires at least 3 m (ten ft.) of open water between the sea ice and the substrate. Winter dredging, screeding, and pile driving should have no effect on ringed seals, since these activities will occur on grounded ice in waters less than 3 m (10 ft.) deep (Table 5-11-3). Disturbance-inducing sound will not transmit to those areas which are used by ringed seals because of the combination of distance of seals from the activity and the grounded ice attenuating the underwater sound. Snow over lairs has been 9 Richardson et al. 1995. Funk et al. 2009: Kelly et al. 2010: Cameron et al. 2010. Full citations can be found in the Draft Biological Assessment of the Bowhead Whale (Balaena mysticetus), Ringed Seal (Phoca hispida), and Bearded Seal (Erignathus barbatus); included as Appendix M of the DEIS. ExxonMobil DEIS Comments

shown to attenuate airborne noise and eliminate it as a source of disturbance to ringed seals. Transmission of airborne noise from pile driving would also be attenuated by the persistent winter winds. Furthermore, all drilling noise would fall considerably below the noise threshold criteria established by the NMFS to cause a behavioral disturbance.

- Barge operations are by nature likely to have negligible impact on whales or seals because barges travel slowly along a straight line course, producing a continuous propulsion noise which allows whales and seals sufficient time to avoid collisions. While the chances of adverse impacts are very small, ExxonMobil commits that barges supporting the Point Thomson project would operate under the CAA, which would require marine mammal observers to record marine mammal sightings and alert captains to take precautions to avoid disturbing a seal or whale. The CAA would also provide for avoidance guidelines and other mitigation measures where actual hunting is occurring, is anticipated to occur, or in areas in proximity to these. All barging activities, including routings, would be coordinated with the CAA Communications Centers when operational. The nature of barging combined with these additional mitigation measures nearly eliminates the potential for adverse impacts on whales and seals.
- Alternatives C and D will result in additional barge traffic at West Dock and therefore would
 not eliminate all potential impacts that could be associated with barging for Alternatives B
 and E. Several locations in the DEIS, including the Executive Summary, state that only
 Alternates B and E involve barging. This should be corrected because sealift barging of
 modules to Prudhoe Bay West Dock would occur in these alternatives.
- The NMFS has previously concluded that oil and gas exploration, development, and
 production are not a threat to ringed and bearded seals (75 FR 77476, 75 FR 77496). The
 documented impacts to seals from such activities are limited to short-term, localized,
 temporary effects that have no apparent long-term effects on individuals and no detectable
 effect on seal populations (75 FR 77476, 75 FR 77496).

3.5.2.2 Ice Road Construction

The DEIS recognizes that ringed seal winter habitat requires at least 10 ft of open water between the sea ice and the substrate. However, the DEIS should also recognize that areas with unfrozen water over 10 ft. inside the Barrier Islands are commonly not accessible to ringed seals because they are surrounded by grounded ice or ice providing insufficient open water to be ringed seal habitat. By not recognizing this condition in the DEIS, the ice road assessment is misleading. Therefore, ice road construction should not affect ringed seals since it typically occurs in waters less than 3 meters deep and cannot be used by ringed seals in winter. Moreover, naturally grounded ice extends a substantial distance off shore, well beyond the area proposed for ice road construction.

3.5.2.3 Coastal Barging Versus Sealift Barging

The marine mammal section should further distinguish between coastal barges and sea lift barges routes, since the latter will travel outside of the barrier islands during a short few week period while coastal barges will travel inside of barrier islands. Coastal barges should not encounter bowheads because of their inshore routing and noise levels will be below levels defined by the NMFS to cause behavioral disturbance. Bowheads could be exposed to noises from sea lift barges but again, noise levels would fall below the 160 dB threshold defined for behavioral disturbance. Further, sealift barging of large modules to Point Thomson is planned to be completed before the end of August and the start of the fall bowhead whale migration.

ExxonMobil DEIS Comments

- 668 The Draft EIS acknowledged that the Applicant has committed to operating under the Conflict Avoidance Agreement and included this and other mitigative measures in the evaluation of impacts to marine mammals. Summarizing the conclusion in the Draft EIS, the Corps found that the potential impacts to marine mammals from barging activities associated with the proposed project would be minimal.
- 669 The study area for the marine mammal direct and indirect impact analysis did not include West Dock or the marine environment west of West Dock because barging activities currently occur there.
- 670 The conclusions in the EIS agree with NMFS general conclusions about oil and gas activities. The magnitude of impacts for seals was found to be minor, the duration of impacts was found to be temporary to medium term, the probability of impacts was found to be unlikely to possible, and the geographic extent of impacts was found to be limited to local.
- 671 Page 5-329 of the Draft EIS states: "As proposed, none of the Alternative B sea ice road footprint would effect suitable ringed seal lair habitat as ice roads require grounded ice (shorefast ice that freezes to the seafloor due to shallow depths of under 10 feet deep) for stability, and ringed seals do not use grounded ice areas." The overall finding for seal habitat loss (where ice roads were discussed) is minor, medium term, possible, and limited.
- of the Draft EIS) and provides a figure showing the Applicant's proposed routes (see Figure 3-17-4 on page 3-241 of the Draft EIS). In the discussion of potential barging impacts, the EIS states: "However, barging would occur in areas and periods of relatively low marine mammal densities. For example, during July, most bowhead and beluga whales are foraging east or northeast of the study area, and ringed seals tend to occur farther offshore, near the pack ice edge. ... Thus, possible disturbance effects would be limited to a minor number of individuals in a limited area, most likely ringed seals and possibly small numbers of bowhead and beluga whales during the fall migration." The EIS includes discussion of the Applicant's compliance with the Conflict Avoidance Agreement and other proposed mitigation measures associated with barging activities. The overall finding for habitat disturbance from the Applicant's proposed project on whales was minor, temporary, possible, and local.

Comment	Response
Barging should have negligible impact on seals due to the noise levels, low speed, and direct course. Barges move slowly and do not make rapid or sudden course changes which are more typical of individual vessels. For these and other reasons, noise levels and movement patterns of barges would not cause behavioral disturbance of marine mammals based on the NMFS criteria. Also, the marine mammals excitent should make clear that a substantial amount of other barge and vessel traffic occurs in the Seafort Sea during summer with no measurable impact. Finally, the DEIS discussion should more accurately assess project impacts on marine mammals with the implementation of mitigation procedures reflected to avoid such impacts. 3.5.24 Effects from Aircraft Aircraft should have no impact on seals due to the flight path, altitude, and location of airstrip. The Alternative B airstrip will be located approximately three miles south of the coast and will be accessed generally using inland routing, and not along the coast over water or sea ice. Aircraft will be predominantly fixed vining and will operate at altitudes known to not affect marine mammals. Impacts to cetacease or principeds from aircraft should be negligible. • Alternative E will require frequent helicopter transport during the summer season to access the East and West Pads. Because these pads will be near the coast, there would be a greater potential for helicopter noise to disturb seals. 3.5.2.5 Habitat Fragmentation We agree that fragmentation of seal habitat from either barge facility or ice roads from the project would be negligible. The shallow coastal location and small size of the barge offloading facility would not cause habitat fragmentation for seals. Seals are not restricted to nearshore less water depths, would not present an obstacle to seals. Similarly, ice roads would not cause habitat fragmentation for seals. Seals are not restricted to nearshore less water depths, would not present an obstacle to seals. Similarly, ice roads would not cause fr	673 The EIS discloses the potential impacts that could occur to seals by aircraft in general. The paragraph on impacts to seals concludes the following: "Overflights at low altitudes may cause some animals to alter their behavior (i.e., dive or enter water if hauled out), but are very unlikely to have long-lasting or biologically important effects (Richardson et al. 1995)." 674 Table 5.11-3 was edited for the Final EIS to state that habitat fragmentation impacts from the ice road would be unlikely, which is consistent with the impact finding in Table 5.11-4. The impact assessment for marine mammals provides separate evaluations and discussions for whales, seals, and polar bears because project features would affect each of these species groups differently. The summary tables at the end of each alternative discussion clearly separate the species groups. Where appropriate, the EIS states that impacts could or would occur to "small numbers" of animals.

Comment Response 675 This comment summarizes more specific comments related to polar bears. See responses to the specific comments below (Comments 676-680 and 741). 676 The Corps agrees that a discussion of impacts from annual ice road construction in Alternatives D and E is missing from the Draft EIS. These discussions have 3.6 Marine Mammals - Polar Bear (DEIS Section 5.11) been added to Sections 5.11.5, Alternative D: Inland Pads with Seasonal Ice Access Road, and 5.11.6, Alternative E: Coastal Pads with Seasonal Ice Roads 3.6.1 Introduction and Recommendations and Airstrip, in the Final EIS. The DEIS analyses the impacts to polar bears in Section 5.11. The population of polar bears Marine has more than doubled in the last 40 years, reaching approximately 20,000 - 25,000 today during the same period of oil and gas activities occurring in the Beaufort Sea and adjacent northern coast of Alaska. In issuing both intentional take regulations and individual letters of authorization which address short term behavioral disturbances to bears from industry activities, the USFWS has specifically found that the effects of these authorized activities on bears is "negligible." Section 5.11 of the DEIS concludes that for Alternatives B, D, and E the anticipated impacts are minor but are anticipated to be moderate for Alternative C. We agree with the DEIS that annual ice roads under Alternatives D and E have the greatest potential to disturb polar bear dens. In addition, the following comments and recommendations are intended to increase the scientific accuracy of the DEIS. The DEIS postulates a significant loss or "alteration" of polar bear habitat for all action alternatives. This is due to: 1. The application of an inappropriate methodology (see comments below). 2. The text does not separate long term, direct habitat loss (including gravel fill and facilities) from temporary habitat loss (including periodic or single-season ice road construction). Habitat has been listed as "altered", when it should be considered indirectly and temporarily disturbed. 3. Absence of consideration of ExxonMobil's mitigation measures and other mitigation (e.g. USFWS LOA's, NSB permit conditions). ExxonMobil successfully implemented a robust Polar Bear and Wildlife Interaction Plan that describes the various mitigation measures implemented during the recently completed drilling program to successfully protect polar bears. That plan will be revised and updated for the development project. The USFWS through issuance of LOA's provides confirmation and endorsement that the measures detailed in the Polar Bear and Wildlife Interaction Plan are appropriate to protect polar bears. LOA's were issued to ExxonMobil for the drilling program and will be applied for by ExxonMobil for the development project. 3.6.2 Annual Ice Road Impacts on Denning Polar Bears Approximately nine miles of gravel roads would be constructed between the Central Pad and East/West Pads for Alternative B compared to approximately nine miles of winter ice roads that would be constructed annually in Alternative E. Disturbance to polar bears has the potential to be greater under Alternative E because helicopters would be extensively used when the ice roads were not available and the ice roads would have to be constructed during the denning season using heavy construction equipment and heavy water trucks. Decibel levels for transportation and equipment that could cause disturbance would be much higher under Alternative E (Bell 212 helicopter (149-151 dB), heavy trucks (106-116 dB), ice road construction/maintenance equipment, and pickup trucks (70-87 dB), than for Alternative B using pickup trucks on a previously constructed gravel road. Alternative D would require annual construction of approximately 50 miles of tundra ice roads and significant annual truck traffic. In contrast, Alternative B would require an ice road no more ExxonMobil DEIS Comments

Act (ESA), processes f reasonable than every five years during operations. Thus the potential impacts to denning polar bears from construction and use of ice roads associated with Alternative D would be much higher than Alternative B. Act (ESA), processes f reasonable alternative alternative bears from construction and use of ice roads associated with Alternative D would be much higher than Alternative B.	It EIS and the Biological Assessments (BAs) for Endangered Species of listed or candidate species were prepared for different federal review following different federal guidelines. The EIS evaluates a range of alternatives while the BAs focus on the Applicant's proposed (Alternative B in the EIS). Therefore, it is not surprising that the
The DEIS calculates that the four action alternatives will impact between 40,780 and 47,101 acres (over 60 square miles of polar bear habitat. However, this is in sharp contrast to the Biological Assessment prepared for the project (see Appendix M): The Point Thomson Project would result in direct effects are unlikely to result in the adverse modification of the units. A very small percentage of the terrestrial-denning unit of critical habitat, but those localized effects are unlikely to result in the adverse modification of the units. A very small percentage of the terrestrial-denning unit of critical habitat would be directly affected by placement of gravel and construction of ice roads and pads. Portions of the 1.6-km (1-mi) disturbance buffer zone around the barrier-island unit of critical habitat would be affected by consistent human activity on the three pads within the zone during Project construction and operations, but no barrier-island habitat would be lost. These effects are not likely to result in alteration of the primary constituent elements of the terrestrial-denning and barrier-island babitat units to the extent that the survival and recovery of the species would be appreciably reduced. The sea-ice feeding habitat unit of critical habitat is not likely to be affected by the project. Only a very small area would be directly impacted in the long term from construction of the gravel roads and/or project infrastructure. Temporary, direct habitat loss from ice roads should be listed and assessed separately, In addition, for all alternatives the vast majority of the habitat considered lost or disturbed indirectly is listed as Altered Habitat. The habitat has not been altered, but should be shown as indirectly impacted due to behavioral disturbance from buffer zones around roads, facilities, and flight path. Additional concerns related to the polar bear habitat impact methodology include: The method needs to differentiate between long-term habitat loss (from gravel structures or ice roads and pads	o not match precisely. The EIS and BAs serve different purposes mpliance for the EIS, and ESA compliance for the BAs). The analyses for each document are valid for their purposes and the conclusions of the analyses in the EIS and BAs are the same. Different analyses he same conclusions strengthen those conclusions. 1-2, 5.11-5, 5.11-8, and 5.11-11 were revised in the Final EIS to ravel and ice infrastructure separately and to remove the total rows. ows were not used in the impact analysis. The mammal impact analysis in the Draft EIS considered that overflights be eadhorse and Point Thomson would most often fly at an altitude and the path to avoid impacts to polar bears and other marine mammals. Six was conservative, however, evaluating the potential for weather at that would force aircraft to fly low and along the coast. Section 5.12 at EIS was revised to make this point more clear. The summary tables at the end of each alternative in Section 5.11 of the have been expanded to evaluate potential impacts to polar bears as abitat loss (gravel), habitat loss/alteration (ice roads), alteration ce-overflights), alteration (disturbance-permanent facilities), alteration ce-ice roads), habitat fragmentation, land/ice vehicle collision tality, and altered survival/productivity. agrees that the discussion of marine mammal impacts listed under the Habitat Alteration (Disturbance)" may be confusing to the reader. The samples is focused on behavioral disturbance and displacement of changes to marine mammal habitat, the heading has been changed to all Disturbance and Displacement" in the Final EIS.

Comment Response 679 The methods presented in Section 5.11.1.2. Behavioral Disturbance and Displacement, were revised to clarify that analyses include ice road construction and use and gravel road construction and use. The discussion of impacts associated with ice road construction and use and helicopter disturbance were expanded, particularly for Alternatives D and E (Sections 5.11.5 and 5.11.6), more detail since the concept of alteration implies physical changes. Habitat alteration from construction of ice roads and pads would be a negligible impact for polar bears. which rely on annual ice roads during operations. Behavioral disturbance is a different phenomenon distinct from habitat alteration, and is not 680 The Corps agrees that the potential impacts to marine mammals from habitat related to effects on the habitats themselves. Because behavioral disturbance is a temporary effect, the impact assessment needs to distinguish among years and project phases. fragmentation are small. This is reflected in the analysis presented in the EIS. In addition, the analysis in the DEIS does not sufficiently differentiate potential impacts between Marine 681 This comment summarizes more specific comments related to fish. See responses alternatives related to ice roads. This discussion on page 5-325 focuses on aircraft disturbance. to the specific comments below (Comments 682, 683, 684, and 685). but does not sufficiently address potential disturbance to denning polar bears from ice road construction and traffic. Alternatives D and E rely on annual ice roads during project operation, 682 The Corps has considered the commenter's recommendation for improvements to where the potential for disturbance to polar bear is greater than Alternative B, which does not rely on annual ice roads during operation. the impact criteria and has made the decision not to incorporate the recommendations in the Final EIS. The Corps and cooperating agencies 3.6.4 Habitat Fragmentation developed and agreed to the framework and general methodology for impact While the definition of habitat fragmentation is reasonable, none of the proposed project activities is likely to create a barrier to movements of polar bears that would result in actual criteria (see Chapter 4), which provides a solid framework for analyzing impacts habitat fragmentation. The impacts of habitat fragmentation are more appropriately discussed to the environment. The resource-specific impact criteria definitions presented in as subcategories of habitat loss and behavioral disturbance. Chapter 5 are based on scientific literature and the best professional judgment of 3.7 Fish (DEIS Section 5.12) the Corps, cooperating agencies, and third-party EIS contractor subject matter 3.7.1 Introduction and Recommendations experts. The definitions allow for analyses based on quantitative data, where In general, we agree that Alternatives D and E would have long term impacts to overwintering available, and qualitative information and best professional judgment where fish and fish habitat because of the need for annual water withdrawals for ice road construction 681 and maintenance, and that bridges and culverts at stream crossings for the gravel access road quantitative data were unavailable. The Corps also believes that the impact under Alternative C would impact fish habitat and fish movements for resident and anadromous categories of minor, moderate, and major are sufficient and will not be including fish, including EFH. Potential effects associated with the barge bridge are determined to be unlikely. In addition, potential impacts associated with ice road construction are appropriately a category of "negligible" in the Final EIS. qualified based on mitigation measures. However, ExxonMobil has recommendations in the following areas: The impact criteria classifies any measurable or detectable effect short of population level as moderate, and no detectable effect as minor; this should be revisited 2. Speculative effects associated with potential effects of mooring dolphins on fish are unjustified and should be removed. 3. The impacts to fish from barging activity in Alternatives B and E are overstated as Moderate and should described as Minor based on the benign activities and small potential percentage of population and habitat affected. 4. Recognition of fish passage mitigation measures associated with Alternative B project roads should be considered in the analysis of potential effects. The stated impacts to fish relating to pile driving and mine blasting ignore the fact that pile driving will be done in winter on grounded sea ice and there will be no fish in the mine site during mining (also there are ADF&G permit restrictions relating to blasting). 3.7.2 Impact Criteria for Negligible, Minor, and Moderate Impacts As stated above, the impact criteria listed in Table 5.9-1 classifies any measurable or detectable effect short of population level as moderate, and no detectable effect as minor. We suggest that 682 ExxonMobil DEIS Comments

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these criteria be revised to recognize that no measurable or detectable effect be considered negligible, that minor effects address detectable or measurable effect to individuals but with no localized or regional populations levels, and that moderate effects should consider the potential for localized or regional population effects. Using these impact criteria, it is highly unlikely that barging activities would have more than a minor effect on fish and fish habitat. 3.7.3 Speculative Effects Associated with Mooring Dolphins On page 5-366, the analysis indicates that strong current conditions could cause vortices to form in the lee of mooring dolphins, possibly entraining small fish. The analysis should relterate that the area of potential effects is extremely small, and a citation should be provided regarding these potential effects is extremely small, and a citation should be provided regarding these potential effects is extremely small, and a citation should be provided regarding these potential effects. 3.7.4 Effects Associated with Barge Activity are Overstated The concern that noise and prop wash from barges and tugs under Alternatives B and E would insulfish, planktonic invertebrates, and substrate-dwelling invertebrates and mask biologically important sounds has no scientific basis. The conclusion that barge activity associated with Alternatives B and E would 'Moderately' impact fish, invertebrates and habitat is not justified as any potential adverse effects would be unquantifiable or not supported in scientific literature. It should be noted that annual open water barge traffic has been a feature of North Slope oil and gas support activities for 40 years without documented conclusions on moderate effects on marine fish and habitat from this type of activity. This analysis should be revised and properly qualified. 3.7.5 Fish Habitat Tessues Anadramous fish habitat is largely confined to the lower parts of Streams 18B, 22A, 22B and 24 Particular to the proper of the project of the project and stre	683 The Corps agrees that the potential impacts from fish entrainment associate with mooring dolphins would be small. The impacts are disclosed in the Dr EIS because of fish species migrating along the coast that are subject to prevalent winds and currents. The referenced sentence has been revised in the Final EIS to note that the possible entrainment area is small. 684 The Corps reviewed the Draft EIS paragraph referenced in this comment (Section 5.12.3.1, page 5-364 under "Vessel Traffic"), the impact findings relative to this topic (Section 5.12.3.2, Table 5.12-2 on page 5-368), and the impact criteria definitions for impacts to fish and invertebrates (Section 5.1 Table 5.12-1 on page 5-358) and has determined that the text and findings a appropriate. The definition for a moderate impact to fish and invertebrates: "Impact would be measureable but would not affect normal fish/invertebrat movement, or would have the potential to impact individual fish/invertebrat survival or reproductive success, but population-level effects not expected. Invertebrates in or on the substrate could be directly impacted by grounding barges at the sea lift bulkhead and coastal barge service pier. Fish, particular small fish that migrate along the coast, and planktonic invertebrates could a affected by prop wash, particularly associated with tug movement at Point Thomson because these organisms are to varying degrees dependent on cur for their motility. 685 The culvert design presented in this comment for fish streams is presented in Section 5.12, Fish, Essential Fish Habitat, and Invertebrates. The Applicant mitigative measures to accommodate fish passage are presented in Section 5.12.7, Environmental Commitments. The varying impacts of each of the alternatives are evaluated throughout Section 5.12. 686 See response to Comment 618. Regarding: "reach of ANWR onto State land the EIS intent is to disclose impacts, including impacts associated with proof the project to the refuge. This does not mean that refuge management in way e

Comment Response 687 The EIS indicates that the proposed development of Point Thomson would be on state land managed for oil and gas development. It is the purpose of the EIS to disclose impacts of the proposed development. The EIS reflects the intent of the State and the Applicant to develop these lands, and it reflects the impacts that would occur. The occurrence of impacts is not meant to imply that the The following comments are offered to clarify an understanding of land use management under ANILCA and its effect on the neighboring State lands on which the Point Thomson Project is development cannot proceed or that the management intent for such located development is not valid. 3.8.1 ANWR and the Point Thomson Unit Are Equally Valid Land Uses Which Do Not Ownership Conflict 688 The EIS acknowledges that Arctic Refuge management authority does not extend It is fundamental to bear in mind the actual land management purposes and designations of beyond refuge borders. The job of the EIS is to disclose impacts, and impacts ANWR and of the State lands on which the Point Thomson Unit is located. would occur based on the proximity of the project to the refuge. Disclosing that The purposes of ANWR are straightforward: protection of its wildlife resources, subsistence, the project would be seen and heard from the far northwestern corner of the water quality, and international treaty obligations (ANILCA Section 304(g)). These important refuge is not meant to imply that the Arctic Refuge or its management authority purposes are not unique to ANWR but instead very similar to the purposes of other wildlife refuges throughout Alaska established by ANILCA (See ANILCA Sections 302 and 303). would in some way be expanded westward as a result of the project. The purposes of neighboring State land, in particular state oil and gas leasing at Point Thomson, are equally valid. Congress in the Alaska Statehood Act gave Alaska the right to select 103 million acres of land, including mineral deposits to be leased by the State in order to help ensure a financially sound state government and economy. Congress endorsed the Alaska Constitution, which requires maximum use of State resources consistent with the public interest. The Alaska Land Act, under which state oil and gas resources are leased, also establishes the interest of the people of Alaska in "development of the state's oil and gas resources to maximize the economic and physical recovery of the resources." (AS 38.05.180(a)(1)A)). The land now leased at Point Thomson was made available for State selection at the same time ANWR was first established, and for leasing shortly thereafter. The Point Thomson Unit was established, and found to be in the public interest, prior to ANILCA and prior to establishment of wilderness in ANWR. The Point Thomson Unit is zoned for large scale resource development by the North Slope Borough. Congress was aware of development at Point Thomson, and elsewhere on the Slope, when it enacted ANILCA.10 There is no conflict between these purposes. Both are valid. Congress intended both land uses to occur in their respective areas. The "No More" Clauses of ANILCA Reflect Congress' Determination of the Geographical and Jurisdictional Limits of ANWR It is equally plain from the "no more" clauses of ANILCA that Congress expressly struck what it judged to be the "proper balance" between development and conservation in the amount of land available for each. ANILCA Section 101(d) provides. This Act provides sufficient protection for the national interest in the scenic, natural, cultural and environmental values on the public lands in Alaska, and at the same time provides adequate opportunity for satisfaction of the economic and social needs of the State of Alaska and its people; accordingly, the designation and disposition of the public lands in Alaska pursuant to this Act are found to represent a proper balance between the reservation of national conservation system units and those public lands necessary and appropriate for "Recent discoveries by Exxon in the vicinity of Flaxman Island and Point Thompson [sic], 55 miles northeast of Prudhoe Bay, have increased the interest in the possibilities of significant oil and gas production from the Arctic Region." Senate Report No. 96-413, Nov. 14, 1979, at page 105. ExxonMobil DEIS Comments

Comment	Response
access for economic and other purposes to the concerned land" The Wilderness Act of 1964 at Section 4(c) has similar provisions. The USFWS Wilderness Stewardship Policy at Section 2.9.A also acknowledges "we will recognize private rights existing as of the date an area was designated as wilderness." Because the Point Thomson Unit and leases antedate legislative establishment both of the Refuge and wilderness within it, even if it were subject to ANWR regulations, which it is not, it would be protected as an "existing right." These clear jurisdictional demarcations serve important purposes. Among these is making clear that the one hundred million acres of federal conservation zones in Alaska cannot be expanded through "buffer zones." Nor can they manage activities beyond their boundaries or in derogation of existing rights. The restrictions of the "no more" clauses must also be understood in light of the vast areas designated by ANILCA for conservation, including ANWR. In particular, in doubling the size ANWR and establishing 8 million acres of wilderness within it, Congress deliberately set aside an area so vast that it would neither need nor require further additions, expansions, or "buffer zones." ANWR, at 19 million acres, is an almost incomprehensively vast area. At its greatest extent ANWR reaches 210 miles from east to west and 190 miles from north to south (CCP, pg. 58). The 8 million acre Mollie Beattie wilderness area alone is larger than eight states. 3.8.3 The Point Thomson Project Has No Effect on Wilderness in ANWR It is and Wilderness Act by Congress in ANILCA Section 702(31). Unlike the remainder of ANWR it is	Beattie Wilderness area, and (c) known higher use areas for recreation, such as the Sadlerochit Mountains within the Mollie Beattie Wilderness area. The Mollie Beattie Wilderness is not presented in the impact analysis table (Table 5.19-3) and figures only tangentially in the discussion at all (e.g., "Nighttime lighting of pads would create strong contrasts over long distances in an area without manmade lights").

other provisions of ANILCA. These including subsistence use and access,¹³ use of snow machines, motorboats, and airplanes, ¹⁴ preexisting rights including mining claims, ¹⁵ and Title XI provisions for potential transportation and utility corridors, including roads and oil and gas pipelines. ¹⁶

However, the Mollie Beattie Wilderness at its nearest is approximately 30 miles from the Project. No empirical effects have been demonstrated from the Project on this actual wilderness of theorized visibility of the Project in certain light conditions has not been substantiated by actual observation or shown to impact any actual users. There is no empirical basis to demonstrate any impact to any actual congressionally designated wilderness from the Point Thomson Project.

3.8.4 The 1002 Coastal Plain Is Not Wilderness and Is Not Managed As Wilderness

The 1002 area was specifically excluded from wilderness designation by Congress in ANILCA. Instead, Section 1002 itself is the best statement of Congressional intent and statutory purpose for the 1002 coastal plain. Section 1002(a) states that the purpose of the section includes the following: "to authorize exploratory activity within the coastal plain in a manner that avoids significant adverse effects on the fish and wildlife and other resources." To that end, Section 1002(d) required the Secretary to establish initial guidelines governing the carrying out of exploratory activities and Section 1002(h) required a report to Congress on whether to open the area for development. The provisions of 1002, and the "no more" clauses of ANILCA, make clear that potential wilderness designation of 1002 is not a purpose similarly supported by ANILCA isself

The ANWR CCP designates the 1002 coastal plain as a "minimal management area" pending further Congressional action. The full definition of this category is instructive. It does not provide for management of the 1002 coastal plain as wilderness. This would be contrary to ANILCA Section 1317 (c) even if designation of the area as wilderness had been recommended by DOI, which it was not. It does not prohibit oil and gas studies or other activities such as fisheries development:

Management under this category is directed at maintaining the existing conditions of areas that have high fish and wildlife values or other resource values. Minimal management areas are suitable for wilderness designation, although the Service's wilderness proposals do not necessarily include all lands in the minimal management category. Areas proposed for wilderness designation would be placed in minimal management until actually designated by Congress. Opportunities for public use and access would be available for subsistence purposes and for traditional activities such as hunting, fishing, and trapping. Traditional motorized access via floatplanes and motorboats would be permitted. Guiding and outfitting services and related temporary support facilities would be permitted in minimal management areas. Oil and gas studies would be permitted where compatible with refuge purposes. Prescribed burning and minor habitat improvements could be permitted in minimal management areas where

13 ANILCA Section 802.

ExxonMobil DEIS Comments

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690 EIS text has been updated in several sections to more clearly differentiate between federally designated wilderness areas (using "Mollie Beattie Wilderness" or "designated wilderness") and wilderness as defined in the dictionary (using "nondesignated wilderness" or "wilderness qualities and values"). The full text of the "minimal management" paragraph from the 1988 CCP has been added to the EIS, followed by two sentences that explain that certain activities cited in the minimal management category do not currently occur in the portion of the refuge nearest to Point Thomson and that a bird camp is established annually for research. See also the response to State of Alaska Comment 336 in Comment Document 105. The CCP definition of "minimal management" states that management "is directed at maintaining the existing conditions of areas that have high fish and wildlife values or other resource values." "Other resource values" may include wilderness values and associated scenic and recreation values.

ANILCA Section 1110(a)

¹⁵ ANILCA Section 1110(b). According to the ANWR CCP, at the time the wilderness was established there were nine valid mining in holdings.

¹⁶ Like the establishment of wilderness, under ANILCA Section 1106(b) new Title XI uses in wilderness areas would require Congressional approval. New Title XI uses in non-wilderness areas could be approved at the agency level, with appeal of a denial to the President. ANILCA Section 1106(a).

Comment Response 691 See response to Comment 690. 692 Regarding wilderness values versus designated wilderness, see response to Comment 690. Regarding statutory purposes of the refuge, information regarding applicability of the original Range purposes came from Refuge staff. compatible with refuge purposes. Fishery development facilities may be built in This has been clarified and two staff citations added. See also the response to these areas if they are compatible with the purposes of the refuge and it can be State of Alaska Comment 335 in Comment Document 105. Regarding conflict demonstrated that they are necessary to achieve management objectives. The Service would focus its efforts primarily on management studies and between the 1002 Area and oil and gas development at Point Thomson, see the survey/inventory programs to increase the refuge's resource data base, and responses to Comments 686 and 687. examine refuge management techniques. ANWR CCP p. 184 Notably, "minimal management" does not provide for management of "wilderness values." This is in direct contrast to the ANWR CCP management direction for actual designated wilderness, which does address management "to maintain wilderness resources and values." This provides in relevant part as follows: Wilderness Management (V) This category only applies to the Arctic Wilderness. About 41% of Arctic Refuge is designated wilderness. The Service will manage the Arctic Wilderness in accordance with the provisions of the Wilderness Act of 1964, the Alaska Lands Act, and the guidelines of the Service's Refuge Manual (6RM8). In accordance with the Wilderness Act, the Service will manage the area to maintain wilderness resources and values, preserve the wilderness character of the biological and physical features, and provide opportunities for research, subsistence, and wildlife-oriented recreation. ANWR CCP, p. 185. The DEIS not only greatly overstates "wilderness values" as a land management factor, failing and to fully distinguish "minimal management" from "wilderness," but erroneously treats it as an Manage overriding criterion for management of uses on adjacent land. The assumption that activities on adjacent lands necessarily or improperly affect "wilderness values" is contrary to USFWS' own Wilderness Stewardship Policy. This in part provides: We do not disqualify areas from further wilderness study solely on the basis of the "sights and sounds" of civilization located outside the areas. Where human impacts are outside the area being inventoried, we do not normally consider them in assessing naturalness... Human impacts outside the area should not automatically lead us to conclude that an area lacks wilderness characteristics. USFWS Wilderness Stewardship Policy at Section 4.9(E). Nor are "wilderness values" a statutory purpose for the Refuge as a whole. While these were a stated purpose of the original Range when established by public land order in 1960, this purpose was given statutory effect by the designation of 8 million acres of wilderness by Congress, Instead, "wilderness values" is one of the "special values" considered by USFWS in Refuge management in the CCP under Section 304(g) of ANILCA. These values do not rise to the same level as the fundamental statutory purposes for the Refuge. There is once again no inherent conflict between the ANWR 1002 coastal plain and oil and gas development at Point Thomson. No fair reading of Section 1002 is possible that does not give significant weight to its statutory purpose of potential for oil and gas development. While Congress may or may not act on this purpose for the 1002 coastal plain, it would be erroneous to contend that development on State land already designated for this activity is in conflict with ExxonMobil DEIS Comments

the intent of Congress or management of the 1002 area. And as will be seen the empirical effects of Point Thomson Project on the 1002 coastal plain are in fact minor.

3.8.5 "Perception" Inconsistent With Established Land Use Is Not a Valid Criterion of Impacts

It is important to separate these actual land uses from the "perceptions" of those who mistakenly presume, or perhaps prefer, different land management policy than already established under existing law. The DEIS has no authority to revisit the actions of Congress in ANILCA or the State in leasing its lands, and should not give consideration to theorized "perception" which has no foundation in these land uses or reasonable expectations of use consistent with them. It appears that such perception may instead be based on misconception, prejudice, or advocacy.

In addressing "perception," the DEIS relies in part on a 2008 visitor survey by Christiansen and Christiansen of the Aldo Leopold Wilderness Institute to assess attitudes of visitors toward wilderness in ANWR.¹⁷ This study was described as a first effort to understand the area's wilderness and recreational values, what makes them unique, and how to facilitate preservation and availability to the public. The study reflects the wilderness management concerns and values of the authors and the organizations which solicited it, and may be helpful to them. But it is neither statistically valid nor objective. It concededly cannot be relied upon to reflect attitudes of ANWR visitors as a whole, and does not attempt to address land management considerations other than wilderness recreation.¹⁸

More fundamentally, perception should be a matter for public comment. By addressing potential perceptions the DEIS in effect is simply anticipating comments which have not been made. By doing so the DEIS not only risks elevation of perception over reality, but appears to validate such a category of comments in advance.

If comments are received that are inconsistent with existing law and established policy, or based on misconceptions, they should in any event be entitled to little if any weight. This is particularly the case with respect to the concept of "symbolic perception" of ANWR by those who have never been there. The DEIS errs in giving credence to such an approach. As addressed below, it should give weight instead to the interests of the actual residents of ANWR who live in Kaktovik.

¹⁷ Arctic National Wildlife Refuge Visitor Study: The Characteristics, Experiences, and Preferences of Refuge Visitors, Report to The Aldo Leopold Wilderness Research Institute and The Arctic National Wildlife Refuge, Neal Christensen, Lynette Christensen, Christensen Research, Missoula, MT, June 2009.

³⁸ First, the study is unrepresentative of actual users. It excluded residents of the area and was based upon surveys returned only by an estimated one third of the visitors. Id. At 3. The authors acknowledge that as a result and conclusions cannot be attributed to visitors as a whole. "As this study attempted a full census of visitors, rather than drawing a random sample of the population, the apparently low rate of registration raises concern about the representativeness of the study data for statistical analysis. In other words, we cannot attach any probability or precision to how well the statistics actually estimate the population parameters." Id. at 8. Second, no distinction was made between designated wilderness and non-wilderness areas of ANWR, and no attempt was made to consider any other possible purposes or uses of the 1002 area or of ANWR generally. Third, respondents instead were asked to choose "beliefs" about "purposes" of ANWR from a series of supplied answers heavily weighted toward provilderness value judgments. ("A sacred place"; "Just knowing that it is there, whether or not you visit again"; "A place where you have the freedom to go where you want"; "A place to discover unknown or nameless areas and features.") By contrast, there was only one question on subsistence and one question on "the high economic value" of energy development.

ExxonMobil DEIS Comments

Response

- 693 The discussion of "perception" in the EIS is not meant to suggest that "because wilderness is perceived, wilderness exists." The EIS is meant to accurately characterize wilderness qualities and values in the study area on both state land and Arctic Refuge land. Public perception of those who see the Arctic Refuge as a symbolic area does not appear to be at odds with actual current management of those portions of the refuge nearest to the project site. EIS documents typically rely on existing data. A note has been added to qualify the data from this study. The Corps will consider the issue of perception of wilderness qualities and values within the context of land management (e.g., Comment 687);namely, that Arctic Refuge lands and state lands are managed differently, both are valid management approaches, and the project is proposed to occur on state land managed for oil and gas development. The EIS properly discloses impacts for consideration by decision makers and the public. However, because, the impacts disclosed are unlikely to carry substantial weight in a permit decision, a time-and cost-intensive new survey or study does not appear warranted.
- 694 The EIS is meant to respond to comments made in scoping and in response to the draft document, and such comments do indicate that some among the public value the Arctic Refuge and the 1002 Area's wilderness qualities and values. The issue of perception is important because of the remote nature of the refuge from most of the nation's population and its relatively high prominence--meaning that many appear to value it for its existing status and management even if they never expect to visit. This also is an issue of impact to opportunity, and is relevant in cases of impact to wilderness-type recreation opportunity, which is the most common recreation in the study area. This type of recreation is at the far end of the spectrum of recreation types and is easily impacted, e.g., relatively small changes to the environment begin to reduce the ability to have a "wilderness type experience." Because perception of the refuge appears to be aligned reasonably well with actual conditions and actual management, it is appropriate to discuss such impacts in the EIS. See also the response to Comment 693.

45

3.8.6 Another "Perception" of ANWR

It is important to note that there are many other relevant views of ANWR. The ANWR coastal Relugal plain is also the home of the community of Kaktovik and a predominant area for its residents' for traditional subsistence activities. A presumption that wilderness is the paramount issue for ANWR fails to give weight to the economic interests and aspirations of the residents of Kaktovik.

Kaktovik Inupiat Corporation, the ANCSA village corporation for Kaktovik, holds 92,000 acres of surface land in the coastal plain. The Arctic Slope Regional Corporation (ASRC) holds the subsurface rights. Development is currently prohibited "unless and until" Congress acts to open the coastal plain.

On September 21, 2011 Fenton Rexford, testified to Congress on behalf of the Native Village of Kaktovik and City of Kaktovik in support of opening the ANWR coastal plain to oil and gas development.¹⁹ His comments reflect a different perspective than "wilderness perception" of the 1002 coastal plain.

3.9 Recreation (DEIS Section 5.18)

The analysis of the effects of the Project on recreation, whether in ANWR or State land, should focus more clearly on empirical impacts on actual users. ExxonMobil believes these are in fact Minor, both in terms of the number of users and the nature of any impacts.

The conclusion of the DEIS that the impacts are Major does not give proper effect to actual land use designations, is not supported by underlying empirical analysis, and assumes speculative consequences. This appears to be based on unwarranted assumptions that recreational users in the 1002 coastal plain are in an area managed for use as wilderness, and that such use has a legal right to prevail over other land uses at Point Thomson. As set forth above in the discussion of ANWR, these assumptions are erroneous. The conclusion should be reconsidered and revised.

Specifically, the impacts found in the DEIS are based upon unsupported assumptions about "wilderness type recreational experiences." These fail to give proper weight to the extremely small numbers of affected users and overstate actual impacts. The DEIS then speculates about impacts on behavior ("avoidance of recreational experiences," "disappointment in or disruption of a backcountry or wilderness recreation experience," "influence on where or whether recreationists choose to go in the arctic for a wilderness recreation experience.") The impacts found in these categories appear to be a product of the underlying assumptions, not an objective methodology.

Supposed impacts also include perception by non-users. The subjective "perception" of the presumed loss of a "wilderness experience," by non-users of areas outside designated wilderness (which is not the 1002 area, but the Mollie Beattie wilderness 30 miles from the Project) should be left to public comment.

3.9.1 "Wilderness Type Recreation Experience"

The recreational analysis characterizes the principal use of the Project area as "wilderness type error and the primary impact as a change in this character:

Because recreation in the eastern ACP is principally a wilderness type recreation experience, the primary potential impact would be a change in the isolated backcountry (wilderness) environment in which recreation occurs. Such impacts could occur whether inside the Arctic Refuge's designated wilderness area, within the Refuge's 1002 Area, or

¹⁹ http://naturalresources.house.gov/Calendar/EventSingle.aspx?EventID=259446

ExxonMobil DEIS Comments

46

- 695 The EIS in section 3.14.4, The Arctic Refuge's National Values, explains the various national values and views of the 1002 Area. The national interests for oil and gas development, while a high interest, are not what the refuge is currently managed for or how it is actually used today. In Chapter 5, the EIS discloses impacts to the refuge as it currently exists and is managed.
- 696 As stated in 5.18.8, Impacts for Action Alternatives: "this assessment is based on impacts to recreationists regardless of management of the land." The land use/land management section of the EIS does not indicate any impact to management related to recreation on either state or federal land. Land use/land management impacts overall are listed as minor to moderate. The EIS discloses impacts to uses that actually occur and to existing opportunity for such uses. On both state and refuge land, such uses currently do occur and are provided for in state and federal management of the lands.
- 697 The EIS states that a wilderness-type recreation experience is the type that occurs, not that such experience is a prerequisite for possible recreation in the area. The EIS acknowledges other tourists or recreationists who may fly over or land, or traverse the area by boat from Kaktovik or cruise ship farther offshore, for example. The EIS indicates such people would rarely stay in the project area. Because there are no lodgings, trails, roads, or other facilities, including designated camp sites, and because the land is principally in a natural state, the experience is, in fact, a "wilderness-type" recreation experience. The EIS language in the recreation section and Arctic Refuge section has been altered to better distinguish between designated and nondesignated wilderness to help explain that wilderness qualities and values exist outside the Mollie Beattie Wilderness area (and outside the refuge) and that a "wilderness-type" recreation experience does not depend on land being designated as part of the National Wilderness Preservation System.

on state land and waters. As described in Section 3.17, a wilderness type recreation environment is one where little or no human-caused sights, sounds, or smells are evident outside the recreationist's own group and the group's support systems (i.e., the group's own boats, tents, camp stoves, and support aircraft for drop-off and pickup) and where other groups are rarely encountered.

These assumptions are contrary to actual land use determinations, including the distinction between designated wilderness and other areas, and mistakenily presume that a "wilderness type experience" as defined above is a prerequisite for possible recreation in the area.

As set forth in comments in ANWR above, neither the Point Thomson area nor the ANWR Section 1002 coastal plain are wilderness or managed as wilderness. Nor is the Canning River designated a wild and scenic river. The Point Thomson Unit is zoned by the North Slope Borough as part of the Resource Development District. Inconsistently, the DEIS assumes that the many years of exploration activity in the area (including in the ANWR 1002 coastal plain) have not affected the "wilderness type recreational experience" in the area, but concludes that proposed activities would. Moreover, the minimal management area category applicable to Section 1002 in the ANWR CCP could permit non-wilderness activities, including oil and gas studies and fisheries development.

The Beaufort Sea coast is used by communities and industry across the coast and into Canada for motorized boat transport, including barge supply to Kaktovik and other viillages and for oil and gas industry transportation needs in the US and Canada. Some cruise ship traffic is now occurring. The Beaufort Sea was used to supply the exploration and drilling activities over the years in the Point Thomson Unit, recently including 188 barge trips during the recent 2008-11 Point Thomson drilling program.

The DEIS fails to consider that users do not have a reasonable expectation that the Point Thomson Unit, the 1002 coastal plain or the lower Canning River area should meet designated wilderness standards for recreation, and have no objective basis for disappointment if these areas are used for their actual designated land use and zoning purposes. The DEIS overstates impacts to such unfounded expectations, which should at most be considered minor.

In addition, this definition of "wilderness type recreational experience" requires exclusion of all evidence of human impact. This definition is not only inconsistent with area land uses but with reality.

For example, ANWR itself does not meet this standard. The USFWS ANWR Public Use Summary stated, "According to the recent Arctic Refuge Visitor Study Summary, respondents encountered an average of two other groups on their trip, saw or heard four airplanes, and saw an average of one site with evidence of previous visitor use." Id., Report Highlights. Air traffic over the Refuge is not regulated or restricted by USFWS, and only flights which land in the Refuge are monitored. Id.at 12. Recreational access is monitored but is unrestricted and does not require a permit. The study reports "perceived crowding" between hunters and recreationists, and "growing tensions... particularly in the northwest portions of the Refuge." In addition, the village of Kaktovik is within the coastal plain of ANWR, and presumably widely visible from other areas of ANWR.

Finally, there is no showing that expectation of such a "wilderness type recreation experience" is in fact a prerequisite for recreation in the area.

ExxonMobil DEIS Comments

47

Response

698 Regarding the first paragraph of this comment, per the USFWS, the areas of the refuge under Minimal Management are managed in part for their wilderness qualities and values. The distinction between past exploration activities and proposed oil and gas production activities is permanence; the past activities created temporary impacts, while the proposed project would be the first production project, a project that would be effectively permanent. In a Minimal Management area, the USFWS could permit oil and gas studies and fisheries development, but such use currently does not occur. The EIS evaluates current circumstances and what actually occurs. Regarding the other paragraphs of this comment, users historically have had a reasonable expectation for encountering very little "non-wilderness" activity in the primary study area, with the possible exception of distant barges or high overflights, because industrial activities have occurred temporarily, in winter, and often with many years between events, and because the State of Alaska limits motorized use of snowmobiles and ATVs. Regarding the prerequisite comment, see the response to Comment 697.

upstream or ocean end of the Canning Delta. ⁿ²¹ Thus the total number of floaters who are counted as going to the delta probably includes both, and even further reduces the numbers of users on the lower Canning nearest the project. According to USFWS, the overall numbers of ANWR use are not increasing and "visitation has generally remained steady since the late 1980's." USFWS ANWR Public Use Summary, April 2010, p. 5. However, USFWS has also stated "the Canning River has shown slightly ir/creasing use since 2001." USFWS ANWR Public Use Summary, April 2010, at 15. This is consistent with Table 2 of the Summary, April 2020 (77 on the Marsh Fork.	Comment	Response
counted as going to the delta probably includes both, and even further reduces the numbers of users on the lower Canning nearest the project. According to USFWS, the overall numbers of ANWR use are not increasing and "visitation has generally remained steady since the late 1980's." USFWS ANWR Public Use Summary, April 2010, p. 5. However, USFWS has also stated "the Canning River has shown slightly increasing use since 2001." USFWS ANWR Public Use Summary, April 2010, at 15. This is		702 See the response to Comments 703 and 704 below.
Even allowing or increase over 2002, and uncertainty about final destinations, this usage of the formal process over 2002, and uncertainty about final destinations, this usage of the immediate of approximately of people per year, and immodicated process over the forest certainty significantly less than 100. 2.3.3. Potential Empirical impacts on Lower Canning River Users Canning River through the vigual and noise studies. However, this assumption is not fully analyzed and is not supportable. 3.3.3.1 Visual In so far as ExconMobil is/aware, there are no reports of visual sighting of the drill rig, the tallest In the last five years, four to six float trips have occurred on the [Canning] River annually. Three of those years, but flat flyings traveled to the debt: the other two years 79% of the trips ended there. These trips averaged style popele and lated an exerce of 11 days, critical and direct cleans usually year time behing nor arranged style popele and lated an exerce of 11 days, critical and direct cleans usually year time behings nor the fields and bover part of the Canning. Shahli Sirnje is a popular destination, and the validys to the easy's Shahlis bland offer good critical biking rotes. They also were numerous commercial biking trates. They also were numerous commercial biking trates. They also were numerous commercial biking trates, and the standard of provider and the very to fact the proper of seven people is 24 to 47 people; one half of this number is 12-24 two thinks is 18-32, one abditional standard proper commercial policy. This green with forther the fact and the control of the committee of the debt and an additional debt and control of the debt and an additional debt and an additional proper. The provider and of a bottom of previous page is the substance of the debt and a strip at either the superrant or occurs in association with refige accoss size. A majority of force of the debt and a strip at either the superrant or occurs in association with refige accoss size. A majority of forthe	conned as going to the delta probably includes both, and even further reduces the numbers of users on the lower Canning nearest the project. According to USFWS, the overall numbers of ANWR use are not increasing and "visitation has generally remained steady since the late 1980's." USFWS ANWR Public Use Summary, April 2010, et 315. This is generally remained steady since the late 1980's." USFWS ANWR Public Use Summary, April 2010, et 15. This is consistent with Table 2 of the Summary, Which shows 129 users in 2002 (77 on the Marsh Fork, 52 on the Canning) and 151 in 2009 (86 on the Marsh Fork, 65 on the Canning). Even allowing for increase over 2002, and uncertainty about final destinations, this usage of the ower Canning River may reasonably be estimated at approximately 50 people per year, and almost certainty significantly less than 100. 3.9.3 Potential Empirical Impacts on Lower Canning River Users The recreational analysis assumes empirical impacts are demonstrated on users on the lower Canning River through the visual and noise studies. 2 However, this assumption is not fully analyzed and is not supportable. 3.9.3.1 Visual In so far as ExxonMobil is aware, there are no reports of visual sighting of the drill rig, the tallest In the last five years, four to six float trips have occurred on the [Canning] River annually. Three of those years, half the trips traveled to the delta; the other two years 70% of the trips ended there. These trips averaged sephe people and lasted an average of 11 days, Guides and their clients usually spent time hiking near the river corridors throughout these river trips, including within the Stubilik and Saflerochit mountains near the priver corridors throughout these river trips, including within the Stubilik and Saflerochit mountains near the priver corridors throughout these river trips, including within the Stubilik and Saflerochit mountains near the priver corridors throughout these river trips, including within the Stubilik and Asaflerochit mountains near the priver cor	

Comment Response 703 Regarding sighting from the Canning River corridor, the corridor is defined as the river itself and land along both sides. Project personnel observed the drill rig in July 2010 from the corridor alongside the river from 20 miles away (barely visible). GIS modeling of visibility from the river itself was based on an observer 3 feet above the existing (modeled) ground/river surface, and and most prominent feature of the proposed Project, or any other feature of the Project from the Canning River during the drilling program. However, the DEIS models potential visual impacts. substantial areas of visibility of the ground surface across the coastal plain to the The DEIS models at most support a finding of minor impacts. For example, Figure 4 in Appendix project site were noted from points throughout the delta. Figure 4 in Appendix N N, page 26 "illustrates a GIS modeling exercise for the Canning River corridor that helps define notes that increases in target height or observer height would be expected to areas that might or might not be visible from the corridor." The map specifically shows the channel of the braided lower Canning identified by USFWS as that which users most often float. rapidly increase the surface area that would be visible; i.e., the figure shows the Notwithstanding assumptions that eliminate obstacles to visibility, the model does not show that minimum surface area that might be visible and does not account for the any feature of the Project would be visible. observer standing on the river bank (effectively doubling observer height) or the A second model is the Brownlow Spit "key observation point," located 8.2 miles from the Central Pad and 5 miles from the East Pad, which illustrates what a simulated clear line of sight over flat height of proposed structures (typically 10 feet to more than 150 feet above the and open water to these Project facilities might look like. Nevertheless, the Central Pad is not a surface). Taken together with indications from the Brownlow Spit key prominent feature at such a distance even with a flat, clear line of sight across open water with no intervening topography. The text confirms this: "The distance is such that the developments observation point, these indicators show a high likelihood for seeing project appear small in a vast environment, but they are not lost because they are the only dark, blocky, facilities at the Central Pad, and at the East Pad, which is located about 3 miles and vertical visual elements on the horizon. closer to the lower end of the Canning River Corridor than the Central Pad. These effects are minor, and a more likely possibility may be that views of the Central Pad would be substantially blocked. 23 Finally, the visual impacts are not only impacts to recreation. For example impacts are anticipated from noise and general activity associated especially 3.9.3.2 Noise Effects on Recreation The DEIS at Section 5.20- Noise concludes that noise from construction and drilling will not with regular air traffic flying close to the refuge boundary. The recreation exceed background levels beyond locations "up to 8 miles away" from the Project such as section addresses all recreation in the area, including use of the coastal corridor, Brownlow Spit. Background noise is higher in summer than in winter. It is highest at the Canning River West Bank site (51db) in summer. Table 5.20-4.24 The calculated levels for where proposed facilities, including the most visually prominent, would be summer noise at Brownlow Spit and Canning River West Bank do not increase as a result of construction and drilling. Table 5.20-4. located within the corridor itself. 704 The noise section (Section 5.20) reports Leq decibel level, or equivalent sound As just seen, the floatable channel of the lower Canning River is farther away from Central Pad than Brownlow Spit. The East Pad is closer, but the significant noise source at the East Pad is pressure levels over time, and reports averages of hourly data--essentially drilling. This is both temporary and will occur in winter when there is no reported recreational averages of averages. Recording equipment and recreation personnel in the field use of the lower Canning. near the exploratory drilling activity in 2010 noted instantaneous sounds from Noise levels for long term operation of the Project are significantly lower. Noise during operations at Brownlow Point and Canning River West Bank "are lower than 2010 ambient the exploratory drilling operation, and USFWS reported researchers at the mouth noise levels" and do not increase as a result of the Project. 5.20.4.2. at page 5-501. of Canning River in a camp hearing the drilling operation. The steady rumble of a generator may be less obvious than the sharp sounds of a backup bell on a In sum, none of this shows a clear noise impact on rafters on the lower Canning River. 3.9.4 Presumed "Disappointment," "Avoidance," and Loss of "Perception" truck or the sound of an aircraft on takeoff. Finally, the recreation analysis is not Because/a "wilderness type recreation experience" is assumed to be the criterion for impacts, focused solely on the Arctic Refuge but on the entire recreation picture, the Regreational section concludes that "Major impacts to recreation are probable and would including the coastal corridor/state land. See also the response to Comment 703. 705 Regarding "reasonable basis," while there have been limited The East Pad is nearer than the Central Pad and slightly more prominent. However, this is only because the industrial/exploratory activities on state and federal land in the study area since filling rig is present. But the rig will only be there for a single drilling season, and even if it were visible from the Canning should be considered a temporary, minor impact. the 1970s, these uses have been short-duration, temporary, and often in winter, and most years there has been no industrial activity, especially during the This chart lists the comparable summer noise level for Brownlow Spit at 43db, but in fact footnote c indicates this s an estimation based on a closer site 2.5 miles from the Central Pad. The measured difference between Canning summer recreation season. Therefore, to date, it has been reasonable to assume a River West and Brownlow Spit in winter is 48db versus 35db. "wilderness type" recreation experience is available based on activity occurring ExxonMobil DEIS Comments in the area, regardless of land management. Considering land management, it is reasonable to assume that such an experience may not always be available in the future. However, future long-term, year-round industrial activity would be a change, with potential impact, and this is what the EIS describes. The EIS acknowledges that the number of recreationists is very small. The EIS describes

Comment	Response
	the loss of recreational opportunity as well as effects to existing recreation. Regarding free public access to the coast, the text has been modified in 5.18.2, Alternative A: No Action and 5.18.4, Alternative B: Applicant's Proposed Action to clarify where facilities would be on the coast. The word "prominent" has been removed in 5.18.3.2, Drilling and Operations. Thickening pipeline walls to protect against bullets is a measure to prevent spills. Thickening pipeline walls would be expected to do little to mitigate the displacement of hunters or their discomfort about firing toward the pipeline. Wording has been clarified on this topic in 5.18.3.2.

last the life of the project. Impacts would likely be felt by recreationists beyond the ACP and the coastal and Canning River recreation corridors." This assumption is misplaced.

As noted in the first instance users do not have a reasonable basis to expect that the lands will be available to them for purposes either inconsistent with, or not designated by, established land management uses. The number of actual users impacted is very small. The recreation section notes this but fails to take it into account. Impacts to a few dozen people are not the same as impacts to hundreds or thousands. Similarly, the empirical noise and visual impacts should be regarded as minor if in fact they occur.

Nevertheless, the recreation section then assumes an astonishing degree of area of loss of this pre-defined recreational "experience." With respect to coastal use, this vast area of impact is based upon overstatement of some of the Project elements.²⁵

The section also assumes that users of the Point Thomson area or the Canning River will be "disappointed," avoid the area. However, this depends upon the attitudes and purposes of the recreationists. The section acknowledges that individual attitudes vary, but essentially gives no weight to any except those expecting a pure "wilderness type recreational experience." This extends to "Some... people nationwide [who] are likely to feel the loss of wilderness recreation opportunity" without need for their physical presence.

Both the assumption of a baseline prerequisite "wilderness type recreation experience" and the assumed reaction of users are empirically unsupported. On the contrary, recreationalists throughout Alaska and many other places continuously use areas which are not solely "wilderness," or which border upon more developed areas.

A compelling example is the Kenai National Wildlife Refuge, where oil and gas activities have occurred since 1957. The Kenai National Wildlife Refuge consists of 1.98 million acres, only 25% larger than the 1002 area of ANWR. Of this area, almost 2/3 (1.32 million acres) has been designated as the Kenai Wilderness by Congress in ANILCA in 1980. Presently there are more than 13,000 acres of active oil and gas leases on the Refuge within three oil and gas units. Surface support facilities at these units include 48 miles of roads; 72 well pads; 25 miles of export pipelines; 4 bridges crossing major rivers; and numerous in-field gathering pipelines and surface production facilities.

These facilities surface impacts are larger than the proposed Point Thomson Project, while located within a much smaller Refuge and much closer to designated wilderness. These oil and gas activities within the Refuge coexist not only with designated wilderness areas and actual wilderness recreation but with the highest public recreational use of any wildlife refuge in Alaska. According to the Kenai National Wildlife Refuge Final Revised Comprehensive Conservation Plan "an estimated 300,000 visitors spend extended periods of time on the Refuge enjoying a variety of outdoor activities, including fishing, camping, hunting, hiking, wildlife viewing and photography, and canoeing." To take but one specific example, the

These include conclusions about the pads blocking coastal access, the visual prominence of the Project for miles of coast, and concerns about bullet strikes to the pipeline. The Project actually has only about 3000 feet of coasts frontage. The East and West pads are set back from the coast, and would not block coastal access. The Central Pad is on the coast, but coastal access would not be improved by building of an additional inland production pad unless the bulkhead was removed. Visual views of the cast and west pads will not be "prominent" unless the drilling rig is present, which for the present project will be only for one drilling season on each pad, and cannot be onner than one pad at a time. The pipeline has been thickened where near the coast to prevent damage from accidental bullet strikes.

ExxonMobil DEIS Comments

Response

The EIS explains that, while other types of recreationists may pass through the area by boat or aircraft, they are "not likely to recreate on the ground in or near the study area" (Draft EIS p. 3-246); the EIS therefore emphasizes the "wilderness type" recreationists who do use the land in the study area and stay overnight. Section 5.18.3.2, Drilling and Operations, in the paragraphs on "Effects to Recreation" have been changed slightly to more accurately describe changes to the recreation experience and eliminate reference to "disappointment." A key difference between the Kenai National Wildlife Refuge and the Arctic Refuge is that the Kenai Refuge lowlands are heavily forested, so that industrial activity is visually and to some extent audibly screened from designated units of the National Wilderness Preservation System and from most areas used for recreation. Also, the Point Thomson EIS is not meant to imply that recreation would not be possible in the future; rather, the EIS is meant to disclose that the recreation experience and opportunity would change once the project was implemented, both on refuge land and on state land.

Comment Response 707 The recreation section of the EIS concerns itself principally with the project study area and changes anticipated within the study area. The type of experience available is not the same as land management. The recreation section addresses primarily the recreation experience available. Swanson River and Swan Lake Canoe System within the Refuge is a popular federally 708 The methods for assessment and the baseline condition for the visual assessment designated wilderness area located nearby oil and gas developments. were the subject of substantial discussion among the agencies and with the The section also fails to consider recreation in Alaska as a whole. Alaska has more than 10,000 Recreation Applicant at the beginning of the project while developing the scope of work for miles of coastline, most of it undeveloped; approximately 365 million acres of land, most of it 707 undeveloped; and more than 100 million acres of federally created conservation system units, the visual assessment. It is acknowledged that the Applicant raised similar issues including national parks, wildlife refuges, wilderness areas, and wild and scenic rivers. Many or at that time. The agencies took those into account in making their decisions, and most of these areas present "wilderness type recreation environments." But if this were in effect treated as a de facto land management criterion, thousands of miles of coast and tens of the visual assessment process followed those decisions. The use of a pre-2009 millions of acres of land would be considered off limits or subject to restriction of other activities. baseline was based on the temporary nature of the 2009-2010 exploratory At the same time, contrary to express limitations of the "no more" clauses of ANILCA, the jurisdictional reach of federally protected lands would be vastly expanded. Instead, what drilling and its status as part of the current project. Under the No Action Congress found was that the vast areas of federally protected lands-- such as the 19 million Alternative, the area is assumed to return to pre-2009 conditions, because no acres of ANWR, including an 8 million acre wilderness-are sufficient for these purposes. ANII CA Section 101(d) other reasonably foreseeable future actions are expected in the area that would permanently alter the visual environment if the Point Thomson Project does not 3.10 Visual Aesthetics (DEIS Section 5.19) go forward. The Visual Assessment is on strongest ground when it takes an empirical approach to 709 The BLM Visual Resources Management system was not applied to the Point assessment of visual impacts. This includes the portion of the section showing simulated views of the Project from key observation points.26 Thomson area for the purpose of creating new management decisions about how the scenery would be managed by the state, the Arctic Refuge, or any other For reasons set forth below, ExxonMobil does not believe that application of the BLM Visual Resource Methodology is necessarily a useful tool for evaluation of impacts. In addition, the entity. Rather, the system was applied to create a "visual resource inventory" application of this theoretical approach is based upon flawed assumptions. (characterizing the affected environment) and to create a "visual resource As BLM explains, the BLM methodology is a tool used for determination of its management contrast rating" (describing consequences or impacts). The inventory notes the objectives for millions of acres of federal land with multiple uses. 27 But the appropriate land Aesthelics management uses for the Point Thomson area have been long since established. Please see existing visual management objectives of the area land managers and has comments on ANWR. Thus, while the BLM VRM may be useful for that agency to compare its nothing to do with BLM management and does not attempt to apply one own Ands in order to determine how to manage them, it is not clear that this approach is useful for an evaluation of impacts of a project on lands where such management has already been agency's management to another agency's land. See also the response to Comment 708. 26 Infortunately, the photographs taken of the Central Pad showing the drilling rig are not reproduced. "Note that in illustrations of "preexisting conditions" at the Central Pad, the existing exploratory drilling equipment and camp were removed from site photographs to simulate the baseline condition," Id. at 33. This section should include actual photographs of the Central Pad during the 2009-10 drilling program showing the most prominent feature of the Project, the drilling rig, as it actually appeared from the KOPs. These would be the best empirical indication of Project visibility. "The Bureau of Land Management (BLM) is entrusted with the care of 264 million acres of public lands containing many outstanding scenic landscapes. By law, BLM is responsible for managing these public lands for multiple uses..." http://www.blm.gov/nstc/VRM/ In order to meet its responsibility to maintain the scenic values of the public lands, BLM has developed a VRM system Different levels of scenic values require different levels of management. For example, management of an area with high scenic value might be focused on preserving the existing character of the landscape, and management of an area with little scenic value might allow for major modifications to the landscape. Determining how an area should be managed first requires an assessment of the area's scenic values." http://www.blm.gov/nstc/VRM/vrmsys.html ExxonMobil DEIS Comments 52

determined. In essence, the BLM VRM seeks to characterize the scenic value of the land, while a NEPA analysis should focus on affected resources and impacts.

In addition, as BLM itself acknowledges, "Assessing scenic values and determining visual impacts can be a subjective process." This is the case here, where value judgments are necessarily made in application of the methodology. For example, the Visual Resource Assessment presumes different levels of sensitivity to different categories of users. The scenic ratings assigned to the Project area in Table 1 are highly subjective and admittedly depart from the BLM category definitions. The result assigns high scenic value to a portion of the Arctic Coastal Plain which is not notably dissimilar to other areas within its 650 mile by 100 mile expanse.

Application of this methodology is also undermined here by faulty assumptions which should be reconsidered. First are repeated mischaracterizations of the effect of ANILCA on ANWR management. While such errors have been corrected elsewhere in the DEIS, they still underlie application of the BLM visual methodology here.²⁹

This misapprehension of ANILCA and ANWR gives rise an erroneous presumption that the 1002 area should "automatically" be given a high sensitivity rating. Appendix N, p 20. The admittedly "virtually identical" state lands are, however, are rated as "medium" sensitivity. This is a presumption, not an empirical approach.

In addition, the basis of a "sensitivity" rating is as "a measure of public concern over scenic quality." But that public concern goes to uses of the land which here were addressed long ago by Congress, the State, and the North Slope Borough.

The characterization of ANWR as of high sensitivity, and of the area as a whole of high scenic quality, is also at odds with the ANWR CCP. While this does not create visual management standards, it does identify areas of "scenic and recreational values." As the Visual Resource Assessment notes, the nearest of these is the Sadlerochit Mountains. Appendix N, p 31. These appear to be 40 miles from the Project, and are beyond the range of any empirically demonstrated visibility. This appears to be inconsistent with a presumed high sensitivity and high scenic quality for the area as a whole.

A technical error characterizes "much of the Project area" as an NSB Conservation District, page 31. It would be more accurate to note that the entire Project is in the Resource Development Districts except for a 4 mile pipeline corridor between Point Thomson and Badami.

Another flawed assumption is the exclusion of the Point Thomson drilling program from the environmental baseline. The stated reason is that "The No Action Alternative would return the

28 http://www.blm.gov/nstc/VRM/vrmsvs.html

²⁹ For example: "ANILCA indicated that, until Congress determined otherwise, the 1002 Area was to be administered "to maintain presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System." Appendix N, page 3. See also similar statements at page 8 ("Effectively, the 1002 Area is managed the same as the Mollie Beattie Wilderness and is considered as such by wilderness advocates"), page 23, page 25 ("the ANWR 1002 Area is a minimal management wilderness study area") and elsewhere. These characterizations are erroneous, for reasons stated at length in the ANWR section above. In fact, Congress ordered the 1002 area opened for oil and gas exploration, and such activities could be conducted under the definition of a "minimal management area" in the ANWR CCP.

ExxonMobil DEIS Comments

- 710 The quoted text from BLM about subjectivity is immediately followed by further text stating, "objectivity and consistency can be greatly increased by using the basic design elements of form, line, color, and texture, which have often been used to describe and evaluate landscapes, to also describe proposed projects." The Corps used these elements in the visual analysis for this purpose. The visual assessment originally was prepared based on information from USFWS regarding applicability of ANILCA Sections 1001 and 1004 to the 1002 Area as a "wilderness study area." The Department of Interior has since clarified its intent and interpretation. The Visual Assessment (Appendix N) and associated text in the EIS has been reviewed, and direct and indirect references to the wilderness study area, ANILCA, and Congressional intent have been changed. In addition, the application of the BLM visual assessment methods and the ultimate conclusions were reviewed. The conclusions remain valid even though the reasoning behind some elements of inventory and assessment has been modified. While the 1002 Area is not a wilderness study area designated by Congress, it is managed in part for its wilderness qualities and values and public interest is different for refuge lands than for state lands, and therefore the impacts discussed are accurate. The 1002 Area has many qualities of a "special area" that would "automatically" qualify the area for a high sensitivity rating. However, as discussed in the preceding sentences, this language has been changed. While the sensitivity rating is no longer "automatic," refuge lands are nonetheless still given a high sensitivity rating because management is different than the state land. It is not a presumption; it is based on the BLM method. See also the response to Comment 708.
- 711 The sensitivity level rating units are described in the EIS in Section 3.19.3.3, Sensitivity Level Analysis, and in Section 3.3 of the visual assessment report (Appendix N) as a function of types of users, level or use, public interest, adjacent land uses, and special areas. Some wording has been changed to clarify intent. The sensitivity level rating units are designated with only partial regard to management. Per BLM methods, the ratings include substantial influence of actual existing human use (as opposed to management) and of public interest. The special areas reference in the EIS has been clarified to match changes in the Appendix N Visual Assessment Report (see also the end of the response to Comment 710). The CCP identifies "scenic/recreation values" as one of four types of "special values" of the refuge as a whole and names examples of site specific areas known for some of these values, including scenic/recreation values. The visual assessment for the project examines a specific area of land against specific criteria and methodology. The two efforts cannot be directly compared. The EIS does describe what the CCP says about scenic/recreation values.
- 712 The Resource Development District has been added to the Visual Assessment in Appendix N, Section 3.5.4.

Comment Response 713 The primary difference between all past exploratory drilling/activity and the current Point Thomson Project is that past efforts were short in duration and temporary, while the proposed project would consist of infrastructure that would be present year-round and effectively permanent. See also response to Comment 708. area to approximately the pre-2009 condition, without structures, and is thus the appropriate baseline for visual resource assessment." But the DEIS should not presume that the No Action 714 The Corps, in coordination with USFWS, selected NPS methods to characterize Alternative provides the basis for the future. the ambient soundscape and assess potential project-related effects inside Moreover, past development activities at Point Thomson are part of the historic visual character of the land, including drilling of 21 wells over the course of time. It is inappropriate to dismiss ANWR. The reasoning behind this decision is discussed in Section 3.20.4, visual effects which are still present or have occurred in the recent past. This is particularly the Acoustic Monitoring Objectives. As stated, "Due to the unique natural case because the drilling rig is the most visually prominent feature of both the drilling program and the proposed Project. Visual effects of the drilling rig for the Project must be considered in soundscapes in the Arctic Refuge and concerns over noise-related disturbances the context of previous wells drilled. If effects in the past are not considered noteworthy, or to refuge wildlife, the USFWS accepted the NPS recommendation and requested dismissed as temporary, the same standard should be applied to future drilling in the Project. that the NPS Natural Sounds Program, 'Acoustics and Soundscape Studies in 3.11 Noise (DEIS Section 5.20) National Parks,' be used for soundscape monitoring (NPS 2005). This The noise analysis properly applies empirical modeling to estimate Project impacts at various observation points during construction and drilling, and during operations. However, at the methodology was subsequently adopted by the Corps for the project noise request of USFWS30, the noise analysis then considers application of a National Park Service assessment within the Arctic Refuge." noise methodology used for NPS for its own management and archival purposes. This involves construction of an artificial metric from which actual natural noise and all human created noise is 715 See the response to Comment 714. removed.31 The result is a theoretical construct which bears no clear relation to empirical conditions or actual impacts. ExxonMobil does not believe this is an appropriate approach in a project DEIS or outside the NPS' own specialized parameters. While it may be of use to NPS or other land managers, it does not address empirical impacts and does not assist in informing the public. Instead, it may confuse and potentially mislead readers who will not be aware that it does not address actual conditions **NPS Noise Purposes and Metrics** 1. NPS Standards NPS noise methodology is an NPS parks management tool. The NPS standards are based on statutory authorizations and administrative policies unique to NPS which do not apply to refuges generally or specifically to ANWR.32 Chapter 3 - Affected Environment - Section 3.20.4, second paragraph. ppendix O, Section 2.1, page 7, second paragraph states: 'Another acoustical metric, the natural ambient sound level or Lnat, is used primarily by the NPS's Natural Sound Program as a metric to describe ambient noise levels in very remote natural settings. The Lnat is defined as the median noise level excluding anthropogenic noise, and also in the absence of noise from wind when wind speeds exceed 5 m/s. By screening out the influence of anthropogenic noise, and removing the influence of noise from winds greater than 5 meters per second (m/s), the Lnat is somewhat of an artificially determined average noise level that is intended to represent the naturally occurring quiet ambient noise levels (in the absence of anthropogenic and wind noise). By virtue of its nature, the Lnat is often a very quiet noise level. USFWS required HDR to use this metric as a baseline by which to compare project-related noise levels and assess the potential increase over existing conditions within the Arctic The NPS "Natural Sounds Program" states: (Footnote continues a bottom of next page ExxonMobil DEIS Comments

omment	Response
	716 See the response to Comment 714.
No noise standards have been adopted in the ANWR CCP. By adopting an artificial standard of "L natural" sounds, the DEIS excludes not only natural sounds occurring in the area but activities authorized by ANILCA, including aircraft, motorized boats, and snowmachines. This raises a concern that DEIS might appear to suggest to the public that such NPS standards are or should be applicable to ANWR. 2. Lnatural (Lnat) Noise Metric The Lnat is defined as a noise level metric "intended to represent the naturally occurring quiet ambient noise levels (in the absence of anthropogenic and wind noise)," and is accurately described as an "artificially determined average noise level." Noise impacts should be measured against "what is", not against "what be if" Sometimes anthropogenic and wind noise cannot be removed from the existing environment. Reviewing the wind data measured at the noise measurement sites, the wind speeds are consistently measured above 5 m/s, so to remove this data is to take away noise that is actually part of the existing natural conditions. These natural conditions should be included as part of the existing ambient level as they are a part of the existing natural soundscape. Lnat is a theoretical level not an actual level, as in order to calculate it, existing natural sounds have to be removed. The metric is good for discussions as to what may exist in a pristine environment under the very best of circumstances, but should not be used as an actual standard as it cannot be directly measured in the field. Therefore it is not an appropriate noise metric for this analysis. Section 3.20.5, second paragraph states: "The Leq metric, measured using NPS methods, was used as a baseline by which to compare project-related noise levels and assess increases over existing conditions for areas outside of the Arctic Refuge." The Leq metric is the appropriate noise metric to be used for this analysis, however using this metric as modified according to NPS methods makes the numbers artificially low. One of	
As a part of the Natural Resource Stewardship and Science Directorate, the program helps provide national park managers with specialized resource management and policy expertise. The NSP addresses sound related matters raised by Congress, NPS Management Policies, and NPS Directors Orders. The primary goal of the NSP is to provide assistance, coordination, guidance and a consistent approach to addressing sound related activities with respect to park resources and visitor use. An important element of addressing this goal is working with the Federal Aviation Administration (FAA) to implement the National Parks Air Tour Management Act (NPATMA) of 2000 wherein Congress mandated that FAA and NPS jointly develop Air Tour Management Plans (ATMP's) for more than 130 parks where commercial air tours operate. The program also provides technical assistance to parks in the form of acoustical monitoring, data collection and analysis, and in developing acoustical baselines for planning and reporting purposes.	
ExxonMobil DEIS Comments 55	
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impacts due to noise, it opens the door for any future project to be subjected to artificially low and unrealistic natural ambient noise levels standards.

3.12 Subsistence and Traditional Land Use Patterns (DEIS Section 5.22)

3.12.1 Introduction and Recommendations

ExxonMobil appreciates the effort associated with the analysis of potential impacts on subsistence in Section 5.22, and agrees with the summary conclusions that impacts to subsistence would be minor for all action Alternatives, generally localized to the study area and limited in geographic extent. In general, we are suggesting changes in following areas:

- Modifications to the discussion of differentiators between alternatives, that account for impacts associated with tradeoffs between transportation access modes and logistical implications.
- More consistent presentation of the limits in the methodology used to assess potential impacts, specifically segregating empirical effects from theoretical effects.
- Revisiting the impact evaluation criteria that concludes that any impacts lasting longer than 1 year are long-term; this does not differentiate between alternatives since all have construction durations greater than 1 year.
- Providing more consistency with the conclusions of the biological impact analysis for species used for subsistence (see our comments on Terrestrial Mammals).
- Providing more consistency in the discussion of applicant design and mitigation measures, and implications for mitigating potential impacts.

3.12.2 Key Findings and Differentiators

ExxonMobil agrees with the Key Findings section on page 5-551 that identifies the most substantial subsistence impacts as minor impacts to Kaktovik's caribou harvest amounts from all alternatives and minor impacts to Nuiqsut's Bowhead whale harvests from Alternatives B and E. Impacts to fish and other resources are the same for all action alternatives. However, on page 5-555-6 the stated assumption that CAA and other mitigation measures would ensure no loss of bowhead whale harvest should be included in the summary conclusions for marine subsistence in the key findings for alternatives B and E.

These summary conclusions are sound, but at times could be better described in the body of the analysis... In addition, the analysis of alternatives does not fully capture differences and tradeoffs between alternatives on potential subsistence impacts. As an example, the effects of incremental aircraft transportation under Alternatives C, D, and E have not been captured in the impact section.

3.12.3 Limitations in Impact Assessment Methodology

ExxonMobil agrees with several of the notes of clarification and qualification about the limitations of data sources and methods for the subsistence impact analysis. However, in the detailed analysis of subsistence impacts by alternative, the organization and sequencing of the subsistence impact analysis, and the context of key subsistence factors such as uses areas and contribution to harvest, do not always provide a clear justification for the summary conclusions. In addition, the discussion of potential and theoretical effects on subsistence is not consistently justified nor clearly qualified when empirical data is not available.

Cautionary notes and qualifications are included regarding the overlapping use area methodology (page 5-563) and the differences between the Alpine Satellite developments in the Nuigsut case as contrasted with the Point Thomson development in relation to Kaktovik (p. 5-578). The limitations on application and generalizations from traditional knowledge interviews in

ExxonMobil DEIS Comments

- 717 1. Modifications to the discussion: The discussion of differentiators between alternatives acknowledges that transportation access modes for each alternative (e.g., gravel road under Alternative C, heavier air transport under Alternative E) are major differentiators for impacts on subsistence and provides a discussion of transportation effects by alternative. However, it is not appropriate for the subsistence impact discussion to discuss the logistical implications of different transportation access modes. This is addressed in Chapter 2, Alternatives, and Section 5.17, Transportation.
 - 2. The Corps has considered the commenter's recommendation for improvements to the impact criteria and has made the decision not to incorporate the recommendations in the Final EIS. The Corps and cooperating agencies developed and agreed to the framework and general methodology for impact criteria (see Chapter 4), which provides a solid framework for analyzing impacts to the environment. The resource-specific impact criteria definitions presented in Chapter 5 are based on scientific literature and the best professional judgment of the Corps, cooperating agencies, and third-party EIS contractor subject matter experts. The definitions allow for analyses based on quantitative data, where available, and qualitative information and best professional judgment where quantitative data were unavailable.
 - 3. The duration levels were based on subsistence impact analyses provided in recent U.S. Department of Interior EIS documents (USDOI MMS 2003, 2007).
 - 4. Biological impact analysis: The Corps has determined that the findings of the subsistence section are consistent with the biological impact analyses. As stated in Section 5.22.1.8, Subsistence Impact Summary, "...while impacts to subsistence resources may be identified as minimal from a biological standpoint, localized changes in resource access and availability, including perceived changes in resource health due to development, can have larger effects on subsistence uses."
 - 5. Applicant design and mitigation measures: Additional discussion of mitigation measures is included in Section 4.4, Impact Avoidance, Minimization, and Mitigation.
- 718 The following text was added to the key findings summary for Alternatives B and E: "Applicant-proposed mitigation (e.g., conflict avoidance agreements between the Applicant and the AEWC restricting barge activities during the bowhead whale hunting season and employing marine mammal observers) would reduce potential impacts on bowhead whales adequately to ensure no loss of bowhead whale harvests for the community of Nuiqsut."
- 719 The Corps believes that the differences between the alternatives in Section 5.22, Subsistence and Traditional Land Use, are captured both in the individual alternative discussions, where primary differences between alternatives are pointed out, and in the Summary and Comparison of Alternatives discussion. Regarding the second comment, the impact differences for Alternatives C, D, and E related to air transportation were addressed under each of these

Comment	Response
Comment	Response alternatives. 720 Subsistence impacts are not easily quantified and are often based on the resource specialist's best professional judgment. The impact analysis for subsistence (like the impact analyses for other resources) relies in part on drawing parallels to previous developments and their documented effects. The subsistence analysis presents such parallels and previously documented impacts and then discusses
	how or if the Point Thomson Project may also cause related impacts. The analysis also draws on available data (e.g., use area and harvest amount data) to determine to what extent such impacts may occur. This approach of assessing subsistence effects was discussed at agency meetings, the Corps reviewed the methodology, and the Corps concurred with the use of this methodology. The purpose of the Subsistence Impact Summary is to summarize potential impacts of the development with qualified parallels to previous development projects. The individual alternative discussions draw on the Subsistence Impact Summary
	without always restating the qualifications, parallels, or justifications presented in the summary. The changes suggested by the commenter would not change the overall conclusions of the subsistence impact analysis. The Corps believes that, in general, the impact discussion includes adequate justifications to support the conclusions.

Comment	Response
Kaktovik in March 2003, in regarding to an earlier configuration of the Point Thomson project are acknowledged on page 5-587. However, other potential impacts are initially identified along with generalizations from the development impact literature, presented in a manner that implies substantive impacts and concerns. Qualifications on the applicability of this information or the nature of impacts are not consistently presented. The analysis of the Point Thomson case comes at the end of the sequence, often concludes that some of the potential impacts from the literature are not likely to occur in the Point Thomson case, but remains speculative as indicated in the discussion on pages 5-7580 "Avoidance of Brownlow Point would be less likely unless disturbance related traffic and or other activities extend beyond the immediate vicinity of project components. With regard to Evaluation Criteria – Duration we suggest revision of the criteria for temporary, medium and long term. The shortest construction season is three years, and potential impacts of Alternatives with longer term construction seasons may not be differentiated when they can result in substantial increases in aircraft traffic and disturbance to subsistence activities, such as with Alternatives of the Point Thomson Care to the size of the Impact Analysis. The extensive presentation of comparative cases and the discussion of potential impacts drawn from the larger literature do not lend themselves to an analysis applicable to the specific circumstances of the Point Thomson Project. While the applicability of the literature is qualified in the text, it could be better organized to clarify that not all the effects discussed necessarily apply to Point Thomson. Are axmeple is found in the discussion of User Access starting on page 5-577. The literature on North Slope development and access problems, including hunter avoidance at Nuiqust, is reviewed. The privarian pactou proteins and avoidance at Nuiqust, is reviewed. The privarian pactou proteins are com	721 The Corps has considered the commenter's recommendation for improvements to the impact criteria and has made the decision not to incorporate the recommendations in the Final EIS. The Corps and cooperating agencies developed and agreed to the framework and general methodology for impact criteria (see Chapter 4), which provides a solid framework for analyzing impacts to the environment. The resource-specific impact criteria definitions presented in Chapter 5 are based on scientific literature and the best professional judgment of the Corps, cooperating agencies, and third-party EIS contractor subject matter experts. The definitions allow for analyses based on quantitative data, where available, and qualitative information and best professional judgment where quantitative data were unavailable. 722 The Corps believes that the presentation of comparative cases, as well as the application of the knowledge and experience of the authors regarding impacts of development on subsistence, is necessary for discussing the potential impacts of any development, despite the fact that all development projects are different in terms of project design and geographic situation. Quantitative data (available subsistence data such as use areas and harvest amounts as well as project footprint and design information) allow for discussion of how a specific development project may result in certain types of impacts. 723 The Corps believes that the impact discussion presents comparative cases while also discussing the potential impacts of the Point Thomson Project on subsistence uses by using project specific use area, harvest amount, project design, and other data. It is explicit in the discussion of comparative cases that not all impacts would occur at the same level (or at any level) in the case of the Point Thomson Project. In addition, the current discussion provides qualifications and cautionary notes regarding the applicability of comparative cases to the Point Thomson Project; however, the presentation of these comparative c

Comment		Response
		724 The text in question has been deleted for the Final EIS so that the sentence reads "the location of the pipeline within 1 to 2 miles of the coast could result in user avoidance of previously highly used areas along the coast between the East Pad and Bullen Point."
Given the differing circumstances, there are limits to which any such effects at Nuiqsut can be extrapolated to Kaktovik and Point Thomson. There simply is no available methodology to show whether, or under what circumstances, or if at all, Kaktovik hunters might avoid the Point Thomson area as a result of the Project. Absent such a greater understanding of what might contribute to or cause "avoidance" in the different circumstances presented by the Point Thomson Project with respect to Kaktovik, it is speculative to assume that moving facilities a short distance inland would result in less "avoidance" compared to facilities along the coast.		725 The Draft EIS presented only the Applicant design measures, which are listed in Chapter 4 and also discussed in each resource section. Additional mitigation measures as developed by the Corps and cooperating agencies are included in the Final EIS in Chapter 4 and each resource section.
In addition, on page 5-589 2nd paragraph, it is stated that "the location of the pipeline within 1 to 2 miles of the coast could block caribou from passage to coastal subsistence use areas". However, pipeline height would be a minimum of 7 feet above ground, and the biological analysis does not support the conclusion that the pipeline would likely "block" caribou movement along the coast. The Terrestrial Mammals section (5-273) notes that "pipeline heights (minimum of 7 feet) are greater than the minimum 5-foot height that has been recommended to prevent blockage of caribou movements"	Subsistence 724	
3.12.6 Applicant Design and Mitigation Applicant design measures and other mitigation measures are not consistently presented and discussed in the section. The previously referenced EMR documents the extensive mitigation commitments. Many of these are directly aimed at reducing impacts to subsistence while others, e.g., wildlife protection, indirectly mitigate subsistence impacts.	Subsistence 725	
ExxonMobil DEIS Comments 58		

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nt Themson/Exxon		Shoreline			3- Central Pad (5% sores) and 2 softelite pads (16	Airstrip, Storage F. Pad, Water	22 export. 10		Bulkhead, Pler, Dolphins	Best			Multi-Model including air, seasonal ice roads	
Mali	Mainly offshere	and inland	10,000	5	and 18 ocne)	Access Pad	infield	10	Ramp, berging	265	40	2012-2015	and barging	ps
											(Con	dinustion of com	ment from page 2	
		Offshore							Adding 23 acres of grave to existing Englicht offe	(pad			Connected to	
Liberty@P	Offshore (OCS)	(Endoot) Drilling	79.009	2 to 6	1 (separal existing island)	Inter-island pipelines	Use of axisting pipelines	None	Island; Boot launch; Si protection; Dack Face; sheet pile wall	oe :	63	2006-Present	existing Pruthoe Bay mad system and barging	EA
					2: Certral Pad (10 acres)	Arsen (4,500° 75° X 9),	E 26 mile						Multi-Model including oil	
adam/SP/Sovert	Marry of shere	Shoreline and inland	18,000	30	subtritte ped (5. acres)	Storage/grovel stockgale Pad.		4.5	1,000 gravel dock (106 yd3 gravel)	132	49	1995-1997	sessional ice roads and barging	EA
						Onshore:	8 mile infield and export to KRU; on- 8 share						Multi-Modal including sir.	
Эгодилж Реплет	Offshore	Offshere	29,000	40	1-6 acre gravel inlend ped	Profuction Support Facility	bunded	None	6 acre gravel drilling list	and a	Existing 10kU Mine	2006-2008	seasonal ice roads and barging	EA
					2- One offshore drilling pad (11		14 mile						Connected to existing Produce	
		Offshore Intend and shorefree	28.000		onshare drilling, production and gathering pad (10 acres)		KRU; on- shore budled pipuline 3.5 miles.		11 auro graval diffing is	iard 26	Existing KNU Mine	e 2008-2011	and harging	EA
oogunik/Penser	Offshore	Othinore Intered and		40	2- One offichery drilling ped (11 acres) and one onshore drilling, production and pathering pad (10	Profession Support Facility	and export to KRU; on- showe banded utility pipeline 14 mile export line to KRU; on- showe by diese	None	6 acre gravel drilling lid		Ecotra	* 2006-2008	equiding et , seasonal ice toach and berging . Connected to existing Profitoe Bay road system.	EA EA

ment	Response
Public Use of the Canning River - Arctic National Wildlife Refuge Tom Edgerton (Outdoor Recreation Planner) and Bev Reitz (Park Ranger) U.S. Fish and Wildlife Service, Arctic National Wildlife Refuge October 2002	Response 726 The document mentioned is not a document collected during preparation of the EIS. The document provides some additional specific details but does not contradict the EIS's characterization of low recreational use or type of use.
With beautiful scenery and good headwaters access, the Canning River, along with it's major tributary the Marsh Fork, is the longest north flowing river on the Arctic Refuge. The river's delta area, which begins about 15 miles from the coast, becomes extensively braided and wide before it empties into the Beaufort Sea.	
Recreational use in the Canning and Marsh Fork river area occurs in association with refuge access sites. A majority of floaters begin in the Wilderness area at upper reaches of the Marsh Fork, then take out at a site upstream of Shublik Island or airstrips at either the upstream or ocean end of the Canning delta. Other floaters start on the Canning at an airstrip several miles upstream of Franklin Creek, then float to the take-out at the upper end of the delta.	
Since 1988, the Canning, including the Marsh Fork, has been the Refuge's fourth most used river by commercial guides and their clients. In the last five years, four to six float trips have occurred on the River annually. Three of those years, half the trips traveled to the delta; the other two years 70% of the trips ended there. These trips averaged seven people and lasted an average of 11 days. Guides and their clients usually spent time hiking near the river corridors throughout theoret river trips, including within the Shublik and Sadlerochit mountains near the middle and lower part of the Canning. Shublik Spings is a popular destination, and the valleys to the east of Shublik Island offer good circular hiking routes.	
There also were numerous commercial hiking trips that began and/or ended along the Canning. A majority of these groups stayed in the mountains of the Marsh Fork and upper Canning, or ended their trips near the middle Canning. Records show that occasionally, but not every year, a hiking group traveled all the way to the delta area. They also show that groups commonly hiked from the landing strip at Sunset Pass in and around the Sadlerochit Mountains and the Ignek Valley. Visitors hiked around the mountains, between Sunset Pass and the Katakturuk Valley, or north of the mountains as far east as Carter Creek to an access site along Camden Bay.	
According to the last five years worth of public use data collected from recreational guides and air taxi operators on the refuge, a majority of the recreational use (hiking and floating) in the area takes place between late May and the middle of September. During the last five years, visitors hiked the river corridor and surrounding mountains from May 30 to September 20, with a peak in early to mid June. The boating season on the Canning River generally starts a couple of weeks later (June 10) depending upon icing conditions, and ends several weeks earlier (August 16). The average peak use period for boaters on the Canning is the last two weeks of June.	
Refuge staff does not specifically track private recreational use due to the size of the Refuge and the myriad opportunities for access. Anecdotal information indicates that the use is only a small percentage (probably 5-15%) of the commercial activity, with some users hiking and occasionally camping north/northwest of the Sadlerochit Mountains to see the coast and wildlife including caribou, bears and muskoxen.	

Comment	Response
NORTHERN ALASKA ENVIRONMENTAL CENTER ALASKA WILDERNESS LEAGUE GWICH'IN STEERING COMMITTEE SIERRA CLUB * DEFENDERS OF WILDLIFE THE WILDERNESS SOCIETY NATURAL RESOURCES DEFENSE COUNCIL FRIENDS OF ALASKA NATIONAL WILDLIFE REFUGES RESISTING ENVIRONMENTAL DESTRUCTION	547 The EIS includes a separate section on the Arctic Refuge due to its proximity to the project and the Thomson Sand Reservoir. The analysis of impacts to the refuge and mitigation measures are presented in Section 5.14, Arctic National Wildlife Refuge, of the EIS.
ON INDIGENOUS LANDS	
January 18, 2012 Mr. Harry Baij Jr Department of the Army, U.S. Army Engineer District Alaska Regulatory Division P.O. Box 6898 JBER, AK 99506-0898 E-mail: harry.a.baij@usace.army.mil Re: Public Comments on Point Thomson Project Draft EIS, and Permit Application POA-2001-1082-M1	
Dear Mr. Baij,	
We provide public comment on ExxonMobil's Point Thomson Project Draft Environmental Impact Statement and U.S. Army Corps of Engineers permit on behalf of the following non-profit conservation and Alaska Native organizations and our members Northern Alaska Environmental Center, Alaska Wilderness League, Gwich'in Steering Committee, Sierra Club, Natural Resources Defense Council, Friends of Alaska National Wildlife Refuges, The Wilderness Society, Defenders of Wildlife, and Resisting Environmental Destruction on Indigenous Lands (REDOIL).	
Please consider these public comments in response to 1) your public notice on the availability of the draft Environmental Impact Statement for the Proposed Point Thomson Project (hereafter "DEIS") (76 FR 70979-70980 - November 16, 2011); and 2) the Public Notice of Application for Permit (POA-2001-1082-M1; November 18, 2011) for the proposed dredge, excavation and fill work in the waters and navigable waters of the United States including streams, wetlands, and Beaufort Sea marine waters.	
ExxonMobil's proposed Point Thomson gas condensate development on State of Alaska lands includes three production well sites next to the Beaufort Sea coast, including one drill site within two miles of the Arctic National Wildlife Refuge. The adjacent Arctic Refuge boundary comprises the Canning River delta, an area rich in migratory birds, fish, and polar bear denning, as well as a popular recreational floated river, and a key subsistence resource	

Comment	Response
	548 The EIS includes a separate section on the Arctic Refuge due to its proximity to the project and the Thomson Sand Reservoir. The analysis of impacts to the refuge and mitigation measures are presented in Section 5.14, Arctic National Wildlife Refuge, of the EIS. 549 Comment noted; no action required. 550 At this time the Corps has not determined if the barge facility would be part of the permitted action. Only after that determination is made would more exact information on frequency and duration of use be available. 551 The EIS acknowledges that there are other oil and gas leases in the area and that development of the Point Thomson Project could make development of other leases easier in the future. However, under the EIS definition of "reasonably foreseeable future action" there are no reasonably foreseeable future action" there are no reasonably foreseeable future actions associated with the other leases, except for the Shell Oil offshore exploratory drilling program. There is no way to clearly quantify or describe activities or infrastructure that have not been proposed on these other leases. If other activities do occur in the future, they likely would be subject to their own EIS, which would disclose any expected impacts to the Arctic Refuge and other resources.

Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development January 18, 2012

This proposed project is extremely close to the Arctic National Wildlife Refuge, a national treasure and globally significant circumpolar protected area. The Arctic Refuge encompasses the only area of wetlands, rivers, deltas, bays, lagoons, and other aquatic resources across the entire North Slope that area protected by law from oil and gas exploration, development and production. In order to adequately protect this unique area, we urge the Corps to do more to reduce and minimize adverse environmental impact to the Refuge and its resources. As outlined below, we request that the Corps consider a new alternative that would accomplish this by eliminating the East Pad, or moving it farther from the Refuge. Secondly, this new alternative should move the permanent drilling and processing facilities away from the croding Beaufort Sea coastline and farther from the rich ecological zone where land meets sea that is so important to fish, wildlife, and people. Notably, the project area includes polar bear critical habitat designated by the U.S. Fish and Wildlife Service under the Endangered Species Act.

Because of the high reservoir pressures at Point Thomson, the DEIS states that a blowout or uncontrolled spill from production may result in a greater discharge rate than might be experienced elsewhere on the North Slope. The probability of small or medium sized spills is relatively high, based on historic North Slope spill data and "while highly unlikely, a very large spill event would be catastrophic and could be exacerbated by environmental conditions that could enhance the spread of spilled materials or interfere with response and cleanup" (DEIS ES-61 and 2-119). Drill pads and processing facilities need to be moved farther away from the shoreline to reduce risks of environmental damage to the nearshore and marine ecosystem from major spills.

Summary of Concerns on the Permit Application: This public comment timeframe is premature and inappropriate with respect to the Public Notice of the permit application for public review and comment on the Corps' authorizations under Section 10 of the Rivers and Harbors Act, and Section 404 of the Clean Water Act, including review of whether this project complies with the Section 404(b)(1) Guidelines, the Public Interest Review, and compliance with other laws and regulations. Public comments on the permit should not be undertaken until the Final EIS is completed.

At this time, the public does not have before it the refined project, including additional mitigation measures or modifications that will be necessary to address the public interest and other requirements. It is essential that the public have before it the Corps' analysis and selection of the environmentally preferred alternative before commenting on the project's permit. The menu approach to alternatives presented in the DEIS (see p. ES-63) does not identify or provide the environmentally least damaging alternative, nor the environmentally preferred alternative. Our analysis of ExxonMobil's proposed project, analyzed as DEIS Alternative B, indicates that it would not meet the criteria for such an alternative. The public needs to have adequate information on which to provide comment on the permit.

We formally request that the public comment period on the permit application be suspended until the FEIS is completed or, at a minimum, that it be re-opened for another 30 days to public comment once the FEIS is completed. This is a complex project proposal for a unique

Response

- 552 The Arctic Refuge is a protected area; however, the area outside the refuge is state land, which is leased for the purpose of oil and gas development. Through the NEPA process, public interest review, and the 404(b)(1) Guidelines analysis, the Corps will take many factors into consideration, including minimizing impacts, before making a final decision on the location of the East Pad.
 - The Corps is not considering an alternative that does not include an East Pad. This alternative (Concept 6) was eliminated from detailed consideration for not meeting the purpose and need of the project. The language in Section 2.2.4.2 has been supplemented to make this decision clearer. Without the ability to drill wells from the vicinity of the proposed East Pad, that Applicant would not be able to access eastern resources that have already been identified in approximately one-third of the Thomson Sand Reservoir. A well from the Central Pad would have to reach more than 30,000 feet, which is technologically infeasible. Reduced access to the eastern portion of the reservoir would limit the Applicant's ability to continue evaluation and delineation activities, including fully delineating the eastern edge of the reservoir, testing connectivity with the central portion of the reservoir, and fully evaluating the Thomson Sand oil rim and Brookian Group sandstones hydrocarbons.
- 553 A blowout would typically occur while drilling through the producing zones of the reservoir. For the two wells drilled in 2009-2010, seasonal restrictions were placed so that drilling could not occur during breakup or open water. The same restrictions would presumably be imposed on the proposed wells. Therefore, the location of the pads at the coast versus inland would not make a difference relative to impacts on the shoreline and marine waters. The difference in location could make a difference if a large to very large spill during production occurred during breakup or when the sea ice is absent. However, as stated in the EIS, the likelihood of such a spill is very low. Further, there are two wells already completed on the PTU-3 Pad that could not be moved. The Corps is taking these factors into consideration, along with other issues relevant to pad location, in assessing the alternatives to determine the environmentally preferred alternative.

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Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development January 18, 2012

field due to its extremely high pressure, facility locations 250-500 feet from the Beaufort Sea coast in a sensitive zone of wildlife and subsistence habitats, its close proximity to the Arctic Refuge, and the fact that it will contribute to major industrialization of the Eastern North Slope which thus poses significant cumulative effects.

Summary of Concerns on the Point Thomson Draft EIS: We are concerned about negative environmental and human impacts of the proposed project on the adjacent Arctic Refuge wilderness, wildlife, and subsistence values due to the project's proximity to this protected area, as well as to the subsistence resources and activities in the project area along the sensitive Beaufort Sea coastline. None of the DEIS alternatives combine the best mitigative features in a way that adequately reduces negative impacts to Beaufort Sea nearshore resources and to the Arctic Refuge.

We appreciate that the impacts to the Arctic Refuge were addressed as one of the major issues of the DEIS, and particularly that the Corps commissioned the Visual Resource Assessment and Noise Technical Report (Appendices N and O, respectively).

This proposed project is so close to the Arctic Refuge that we believe that the Corps can do more to reduce and minimize adverse environmental impacts to its wilderness quality wetlands, rivers, streams, and marine waters and their associated functions and values. While ExxonMobil and its allies assert that the proposed project (Alt. B) is the most "environmentally responsible solution" for Point Thomson development, we disagree, and find that there are a number of meaningful and feasible ways to reduce impacts to aquatic resources and to the nearby Arctic Refuge including to visual resources and from noise, as well as the Beaufort Sea nearshore waters.

Therefore, we recommend that the Corps consider a New Alternative with a greater buffer—such as 5 miles away—from the Refuge (eliminating East Satellite Pad) and fully evaluate "Concept 6: Limit Activity Near the Arctic Refuge," which was prematurely dropped from consideration in the DEIS without sufficient economic or technical information or independent analysis of feasibility (DEIS at 2-9). The public and agencies had identified the need for such an alternative in scoping comments (see DEIS at 2-3). In order to provide the best overall mitigating features, this alternative should also consider moving the remaining drilling and production processing pads away from the coastline and other ways of minimizing cumulative impacts. This alternative should also eliminate permanent gravel roads or drilling pads for the exploration/delineation phase drilling for the East (and West) Pad that is proposed; as per standard North Slope practice, such drilling can be done from winter ice pads and ice road access. Furthermore, the environmentally preferred alternative should also move the Central Facility pad, as well as any other permanent facilities, away from the coast to reduce impacts to wildlife and subsistence resources.

Cumulative impacts from offshore drilling and development in the federal OCS waters need to be addressed in the FEIS, particularly from Shell Oil's proposed Sivulliq and Torpedo

² However, as we describe later in the comments, the buried subsea pipeline which the Corps considered within Concept #6 should not be included due to spill risk issues.

Response

- 554 The Corps will consider multiple factors, such as impacts to the environment identified during the NEPA process, the project purpose, practicability (as part of the 404[b][1] Guidelines analysis), public interest determination, and mitigation options, when making its final permit decision. See also the responses to Comments 561, 562, and 563.
- 555 The Draft EIS acknowledged the presence of offshore development, identified OCS activity as a reasonably foreseeable future action (see Table 4.2-2; Category, Oil/Gas Exploration; Unit or Area, Beaufort Sea [OCS]; Participating Area, Camden Bay [Sivulliq/Hammerhead]), described potential activities of the other projects based on best available information, and discussed the cumulative impacts within each of the resource sections as appropriate. Because of the location of the Point Thomson Project (onshore with associated coastal and marine activity) the project was found to have minimal impacts to the marine environment, and thus minimal cumulative impacts associated with reasonably foreseeable future OCS projects. During the Draft EIS comment period, Shell provided the Corps with additional general information regarding their anticipated OCS exploration activities. The additional information provided by Shell has been incorporated into the Chapter 4 description of potential OCS activity. The Corps reviewed the cumulative impact sections of Chapter 5 and believes that, even with this additional general information, the cumulative impact discussions in the individual resource sections of the EIS are sufficient, based on best available information of reasonably foreseeable future actions in the Beaufort Sea OCS. Where appropriate, clarifying statements have been added in the Final EIS.

nd Screening

Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development January 18, 2012

drilling operations on their federal leases located off the coast from the Point Thomson project. The DEIS gives contradictory information about whether such federal OCS exploration and development will occur and will be a reasonably foreseeable activity. While neither Sivulliq {aka Hammerhead prospect} nor Kuvlum prospects are listed on Table 4.2-2, DEIS at 4-9, the text states that for OCS leases approximately 15 miles offshore, development of the Point Thomson area would "improve their development feasibility." However, the adverse cumulative impacts to coastal and marine habitats, subsistence, marine mammals, birds, fish and other wildlife from the combination of these impacts were not addressed in the DEIS. This is a major deficiency of the DEIS, as the Corps cannot consider the benefits of an aspect of this development without also considering the costs associated with it as well.

The FEIS needs to address how direct and cumulative impacts to subsistence resources including the Porcupine Caribou Herd could affect the Gwich'in villages and Canadian First Nations, in addition to North Slope residents.

Cumulativ Impacts 556

Detailed Comments

Purpose and Need for the Project. The purpose and need for this project is not clearly provided to the public. What is the total gas condensate, oil, and natural gas is proposed to be produced from this proposed project and over what timeframe? This is not provided in the DEIS. 4

Droject

Information about the geologic uniqueness of the Point Thomson field and its differences from existing, producing North Slope fields, such as its greater depth, extreme and abnormally high pressures, and existence as a retrograde gas condensate reservoir, that entail greater challenges and special hazards should be described in the DEIS. ⁵ It is also appropriate to describe another technique described by AOGCC (2007) that has been used elsewhere for developing retrograde condensate fields by substituting nitrogen or carbon dioxide to replace the produced gas in order to maintain pressures.

3 "Development of the Point Thomson Project could facilitate development of other oil and gas resources in the immediate area... There are also hydrocarbon resources currently planned for exploration and development within OCS leases approximately 15 miles offshore of the Point Thomson Area. Construction of Point Thomson have facilities, aristrip, and export pipeline could be used to support future development of these prospects and improve their development feasibility by reducing costs through shared facilities. For the purpose of this analysis, it is assumed that the infrastructure of the proposed Point Thomson Project could support development of other actions in proximity to Point Thomson, once any necessary contractual agreements and regulatory requirements were met." DEIS at 4-10.

Estimated oil, gas, or gas condensate reserves are not described in the existing environment section on geology (DEIS at 3-5 to 3-11). In the cumulative impacts section for geology, a figure for Point Thomson is based on Alaska Department of Revenue is provided (ADNR 2010b), but how much of this would be from the gas cycling production and Point Thomson sand potential is unclear (DEIS at 5-7 and 5-8).

Project Description

AOGCC, 2007. http://www.arcticgas.gov/sites/default/files/documents/role-aogcc-approving-pool-rules-point-thomson-field-gdf. Bill White, June 13, 2011, Why Point Thomson natural as field struggles to produce. Alaska Dispatch. http://www.alaskadispatch.com/article/why-point-thomson-natural-eas-field-traugles-point-proaper-full

Response

- 556 As noted in Section 5.10, Terrestrial Mammals, impacts to caribou, regardless of the herd, were determined to be minor to moderate in magnitude and ranged from less than 1 percent of caribou potentially disturbed under Alternatives B and E to 14 percent under Alternative C due to the gravel access road. The impacts under Alternative C would primarily occur in the western portion of the study area and would mainly affect the Central Arctic and Teshekpuk Herds. The Porcupine Herd is defined as calving east of the Canning River and their overall range typically overlaps with a very small portion of the eastern part of the study area (see Figure 3.10-6). Therefore, impacts to the Porcupine Herd would likely be even less than 1 percent of the herd disturbed. The subsistence impact analysis considered the conclusions of the biological analysis that the project would not result in large scale changes in migration and that impacts would primarily be limited to local in geographic extent. Therefore, the majority of impacts for subsistence users would occur for residents who travel to the project area for caribou hunting and could experience reduced success in that area. According to available data, Kaktovik is the primary community that uses the project area for caribou harvesting activities. The conclusions of the terrestrial mammals impact analysis (Section 5.10) does not indicate that the project would result in changes to the migration of the Porcupine Herd or Central Arctic Herd, and therefore impacts for subsistence users outside the project area, such as those from Nuiqsut, Anaktuvuk Pass, or Arctic Village, would not occur.
- 557 Estimates of how much gas condensate, oil, or natural gas are not available for public release partly because the information is proprietary and partly because the intent of the proposed project is to further delineate and determine connectivity within the reservoir to estimate what quantities may be accessible for recovery.
- 558 The Corps believes that the EIS sufficiently discussed the geologic uniqueness of the Point Thomson reservoir. The Corps also does not see the need to describe the use of nitrogen or carbon dioxide to maintain pressure in the reservoir when the proposal is to cycle the natural gas back into the reservoir, not to extract it.

 The description of full field development is based on the best available information. Part of the Applicant's stated purpose for the proposed project is to further delineate the reservoir so that the Applicant can better understand, and thus define, a full field gas development project. Moreover, at this time, there is no gas pipeline to transport gas to market. Therefore, full field development is appropriately considered a reasonably foreseeable future action, as described in Section 4.2.3.3, Relevant Past, Present, and Reasonably Foreseeable Actions

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	Considered in Cumulative Impacts Analysis.
large natural gas field or its associated sales gas pipeline, and the nexus between this project	559 The description of full field development is based on the best availal information. Part of the Applicant's stated purpose for the proposed project is to further delineate the reservoir so that the Applicant can better understand, and thus define, a full field gas development project Moreover, at this time, there is no gas pipeline to transport gas to market. Therefore, full field development is appropriately considered reasonably foreseeable future action, as described in Section 4.2.3.3, Relevant Past, Present, and Reasonably Foreseeable Actions Considered in Cumulative Impacts Analysis. 560 The overall purpose of this project is to produce liquid hydrocarbons from the Thomson Sand Reservoir and further evaluate and delineate the reservoir and evaluate the Brookian Group sandstones. As far as this NEPA process and the Corps is concerned, the question at hand whether or not to issue a permit allowing the filling of wetlands and other waters of the U.S. The Corps' requirements regarding permit application decisions does not require a permittee to hold title to the land (or by extension, have valid leases) for the Corps to make a decision to either approve or deny a permit. The State of Alaska and the Applicant have reached a settlement agreement since the Draft E was released. 561 Mitigation: Each of the resource sections in the EIS outlines environmental commitments proposed by the Applicant and mitigati measures required by the regulatory agencies that are designed to
Impacts to the Arctic Refuge. Industrial facilities — a drill pad, pipeline, and road — are planned just 2-miles west of the Arctic National Wildlife Refuge along its Canning River boundary. The central processing facility would only be 5.5 miles west of the border and located right along the coast. The East Pad and its in-field road is located in polar bear denning habitat (see DEIS, Figure 5.10-4). The new industrial facilities like drill rigs, towers, flare stacks, support facilities, air traffic and lighted facilities will be seen across a long viewshed. From ridges and peaks in the Brooks Range, maximum visibility could exceed 100 miles. ⁷ (continued on noxt page)	reduce and minimize impacts. Mitigation measures are also discussed in Chapter 4. Visual Study Area: The Visual Assessment in Appendix N include primary study area of 20-mile radius and a secondary study area that all areas from which the project lights or plumes theoretically could seen in good conditions. Both areas are addressed, including impact
⁶ The referenced citation, RFI #52, Appendix D, was not included in the DEIS.	to the Mollie Beattie Wilderness within the secondary area. See
Visual Resource Assessment, Appendix N, DEIS, p. 94. The primary study radius was only 20 miles. Further evaluation of impacts to visitors to the Mollie Beatie Wilderness is warranted, especially in the Sadderochit Mountains where many visitors climb from areas like the Canning River during raffing trips or Sunset Pass hiking trips to gain remarkable vistas to the Canning River delta and Beaufort Sea. Furthermore, the combined visual and noise impacts black smoke and flaring buildings, and frequent arrivals and departures of aircraft traffic should be better assessed and how these impacts could be reduced within the Refuge should be addressed in the evaluation of the new alternative. The visual impacts analysis also failed to address impacts from Fata morgana, a complex illusion that is common on the Beaufort Sea coast and which makes sea ice appear much taller – the same thing happens with perception of coastal buildings, towers, drilling rigs. The number of Refuge visitors who may be affected was underestimated by the statement that "little more than 100 recreationists are known to use the Canning River corridor cach year," (DEIS p. 54-63) because there are other visitors using additional Refuge areas who would see the Point Thomson project. Furthermore, daily air traffic carries roughly an annual total of 10,000 passengers (not hundreds) over this site, many of whom are Refuge visitors or local subsistence users.	Sections 4.9 and 4.10 of Appendix N. Combined Effects: Regarding combined effects of noise and visua impacts, the Recreation and Arctic National Wildlife Refuge section in the EIS address combined effects and are more appropriate for combined effects than the Visual Resource Assessment, which focu solely on the visual environment. Fata Morgana/Mirage: A sentence has been added to reference Fa Morgana in Section 3.2.2.9, Atmospheric Effects/ Mirage, of Appendix N. New text in Section 4.1.3 acknowledges the potential various atmospheric effects could alter the visual contrast ratings at any given time: "The rating also is done without regard to Arctic

Comment	Response
	Mirages have the potential to make project components appear larger/taller than they normally would or that have the potential to visually lift objects from below the horizon to above the horizon. Low cloud, fog, and ice fog have the potential on one hand to obscure project components and on the other to highlight project light sources or project them skyward. Blowing snow also would limit views. The contrast ratings assume unobscured views, generally a worst-case scenario for impact assessment." Numbers of Users: Regarding the number of people who might be affected, the EIS makes a general estimate based on the best data available, which is limited data. Users of more distant areas of the Arctic Refuge are acknowledged in the text, as are the near daily commercial overflights to and from Kaktovik. Other commenters felt the estimated numbers were too high. No change has been made to the user numbers stated in the EIS.
	743 RFI #52 has been included in Appendix D of the Final EIS.

Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development January 18, 2012

(continued from previous page)

The DEIS reports that increased noise levels could be heard 21 miles away and into the Arctic Refuge (ES-57). The DEIS appropriately describes resources such as caribou, polar bears, and birds which are shared by the Refuge and the project area. These factors demonstrate real and potential impacts on Arctic Refuge resources.

We thank the Corps of Engineers for commissioning the noise and visual resources studies to assess potential impacts to the Arctic Refuge. This important research documented negative impacts from all proposed alternatives to the Refuge's wilderness values in its Coastal Plain as well as within designated Wilderness.

The DEIS predicts that noise, visual effects, and other industrial activities would pose negative impacts to wildlife and other Refuge resources from all alternatives considered due to its close proximity. The project's primary impacts on subsistence uses include impacts on subsistence use areas, resource availability, and user access for caribou (DEIS ES-59). The DEIS predicts moderate impacts to subsistence and traditional land use, moderate effects to wilderness values that would be essentially irreversible, and major effects to wilderness-quality recreation particularly along Canning River.

In light of this information regarding major issues of concern to the public, the Corps should require that the project should do more to avoid and minimize adverse environmental impacts to fish and wildlife, wetlands, the aquatic ecosystem, coastal waters, subsistence, noise impacts and visual resources, recreation, and Arctic Refuge wildlife and wilderness values.

A New Alternative to reduce impacts to the Arctic Refuge is necessary. The Corps needs to consider an alternative with a greater buffer—such as 5 miles—from the Refuge (eliminating East Satellite Pad) and fully evaluate the concept of limiting activity near the Arctic Refuge. This had been addressed in Concept 6: Limit activity near the Arctic Refuge, which was inappropriately dropped from analysis without adequate independent review of its practicability and merit in minimizing environmental impact. However, the aspect of Concept 6, buried subsea pipeline for gas condensate export (DEIS at 2-3), should not be considered in the new alternative, due to the lack of a long-term proven track record of such technology, difficulties of spill detection and response, and the fact that the longest distance built to date in the Beaufort Sea is 6 miles for the Northstar field compared with the dozens of miles that would be required in this case.

In this New Alternative, the Corps should also set back drilling and processing pads farther from the eroding and melting Beaufort Sea shoreline to avoid uncertain impacts in a rapidly warming climate and to reduce spill risks to nearshore waters, consider further reductions in

⁸ We greatly appreciate that the soundscape study which acknowledges natural quiet as a resource was done. Some of its limitations as baseline data for the Arctic Refuge region should be noted. Due to equipment failure, audio recordings at the Canning River takeout site were unavailable. Furthermore, the maximum distance within the Refuge that noise from the project could be heard was not determined due to the limitations in number of study locations.

Response

562 The Corps has no jurisdiction and there is no precedence to impose a "buffer" on state land around the Arctic Refuge. Language has been added to Section 2.2.4.2, Concept 6: Limit Activity Near the Arctic Refuge, to help the reader understand why Concept 6 would not meet the purpose and need of the project and has therefore been eliminated from detailed consideration. The State of Alaska verified that a reach of more than 30,000 feet, which would be needed in order to access the eastern portion of the reservoir from the Central Pad, is technologically infeasible. Without the ability to drill wells from the vicinity of the proposed East Pad, the Applicant would not be able to access resources that have already been identified in approximately one-third of the Thomson Sand Reservoir. This conclusion is based on the general aerial extent of the reservoir, which has been determined through delineation data gathered from the 16 exploration wells drilled since hydrocarbons were first discovered in the Point Thomson area in 1975 (Appendix D, RFI 63; Hartz et.al. 2008). Reduced access to the eastern portion of the reservoir would limit the Applicant's ability to continue evaluation and delineation activities, including fully delineating the eastern edge of the reservoir, testing connectivity with the central portion of the reservoir, and fully evaluating the Thomson Sand oil rim and Brookian Group sandstones. Finally, reduced access and the inability to delineate, evaluate, and ultimately recover hydrocarbons from the eastern portion of the reservoir would hamper the collection of data needed to develop a strategy for full field development. All-season access to the East and West Pads is preferred because delineation would occur year-round. "Delineation" for the Point Thomson Project would consist of evaluating the connectivity of the reservoir. To determine connectivity, gathering lines would need to be built and production and cycling occur. Condensate production would occur during non-ice road seasons and therefore there would need to be other access to the east and west pads. The coastal location of the pads presents a trade-off of impacts and the purpose of the project. The Applicant's Technical Brief #1 stated that a "Pad location further inland from the coast will increase the throw on all wells and potentially preclude the ability to reach portions of the reservoir necessary for full field development. This may lead to additional pads being needed in the future to reach bottomhole targets that cannot be reached from a pad that has been located further inland." In other words, a trade-off of moving pads inland would be the potential future need for additional pads closer to the reservoir (i.e., along the coast) in order to reach bottomhole targets, given the present 13,000foot limit of extended-reach drilling, which has been independently verified by the State of Alaska.

Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development January 18, 2012

permanent in-field roads and provide for further pad consolidation, and exclude construction of permanent roads to the satellite pads at least during the exploratory/delineation phase.

Based on the information contained in the DEIS including its Appendices, better economic and technical information is necessary in order to evaluate the lack of feasibility and practicability of an alternative of removing the East Pad to achieve the goals of limiting activity and permanent infrastructure near the Arctic Refuge.

Alternatives Development and Screening 563 Response

hydrocarbons.

The technical information upon which Concept 6 was dropped from consideration as a DEIS alternative, particularly the elimination of East Pad, is insufficient for this purpose. An independent analysis of this information, instead of information provided by the applicant is appropriate. The DEIS stated, "current directional drilling technology in reservoir conditions similar to those found in the Thomson Sands only has a proven reach of approximately 13,000 feet (Appendix D, RFI 63)." O(DEIS at 2-8). While elsewhere in the DEIS it acknowledges the limitations of its knowledge of the Point Thomson reservoir conditions, the assertion of a maximum "proven reach" needs further explanation from an objective source.

In the discussion of minimization of coastal infrastructure as part of the Draft Section 404(b)(1) Evaluation, the Corps further notes that ExxonMobil's information regarding the limits of horizontal reach remains proprietary and was not made available to the Corps:

"Based on currently available public information, however, it is not possible to determine how far inland the drilling pads may be moved while still allowing sufficient access to the reservoir to fully delineate and develop the hydrocarbon resources of the Thomson Sands. The proposed project, is, in part, intended to provide additional reservoir information in support of a more comprehensive development plan. Current IRD drilling technology in reservoir conditions similar to those found in the Thomson Sands reservoir has a proven horizontal reach of approximately 10,000 to 13,000 feet (Appendix D, RFI 63 of the Draft ELS. Based on proprietary information not currently available to the Corps, the Applicant has determined that the drilling reach from the proposed pads in Alternatives B and E would provide adequate access to drilling targets and would be sufficient to fully delineate and develop the Thomson Sands reservoir (Appendix D, Technical Brief I of the Draft ELS.)

The Corps notes that additional economic information upon which to evaluate practicability of the various alternatives is still needed. (Appendix C at 20). Exxon's confidential information regarding the limits of horizontal reach should be made available to the Corps so it can fully assess this alternative.

It appears that the Viability decision was based on ExxonMobil's assertion that without East Pad it could not achieve its purpose of "fully delineating and developing the reservoir" because it would not access "one-third of the known gas resource" (Appendix C, p. 9). This muddles the stated need for further delineation wells (i.e. exploratory phase work proposed to be done from the East Pad) by combining it with development of the reservoir. It is also unclear whether this refers to the gas condensate, or the "full-field development" of the

563 The Corps is not looking at an alternative that eliminates or moves the East Pad to the west. This alternative (Concept 6) was eliminated from detailed consideration for not meeting the purpose and need of the project. The language in Section 2.2.4.2, Concept 6: Limit Activity Near the Arctic Refuge, has been supplemented to make this decision clearer. Without the ability to drill wells from the vicinity of the proposed East Pad, the Applicant would not be able to access eastern resources that have already been identified in approximately one-third of the Thomson Sand Reservoir. A well from the Central Pad would have to reach more than 30,000 feet, which is technologically infeasible. The State of Alaska verified that the horizontal reach limit of long reach directional drilling in high pressure and depth reservoirs such as the Thomson Sand Reservoir is approximately 13,000 feet. Reduced access to the eastern portion of the reservoir would limit the Applicant's ability to continue evaluation and delineation activities,

including fully delineating the eastern edge of the reservoir, testing

connectivity with the central portion of the reservoir, and fully evaluating the Thomson Sand oil rim and Brookian Group sandstones

^{9 13,000} feet = 2.46 miles

¹⁰ DEIS, Appendix C, p. 24.

Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development January 18, 2012

natural gas field for which not all future infrastructure needs are mapped and environmental impacts not comprehensively addressed here. "The wells on the East and West Pads would be used initially to delineate and evaluate the reservoir, and to determine whether the rim of oil surrounding the gas reservoir is viable for production." (Appendix C, p. 12).

The DEIS documents that the actual hydrocarbon production from this project (gas condensate) would be viable and technically feasible without the East Pad and with drill sites placed further inland, (see DEIS, Table 2.2.2). For this project, ExxonMobil has not yet fully delineated the oil and gas condensate resources. ExxonMobil plans to produce the gas condensate, with "initial production targeted at 10,000 bpd from a central well, while maintaining the ability to produce natural gas in the future should the required infrastructure be put in place to transport natural gas to market." (DEIS at 1-10).

The Corps should not approve new construction for the East Pad nearest the Arctic Refuge, nor its connecting road, at least until its need as a production site is definitively established. The detailed documentation in Appendix D provided by ExxonMobil indicates that there is not a confirmed need for this drill site. Therefore, construction of gravel pads and roads at this phase is unnecessary—the project calls for drilling more exploratory/delineation wells to evaluate the commercial viability for producing crude oil and natural gas.

In consideration of the alternative which is least damaging to the environment, including its services, the simple factor of direct gravel fill "footprint" quantity is an insufficient measure of the full effects to wetlands and other aquatic resources at stake here. Although there are existing gravel pads from earlier exploratory drilling placed decades ago, these may not be the most favorable location to minimize adverse impacts for the long-term Point Thomson project—including full-field natural gas exploitation—given their location next to the eroding sea coast as well as the fact that they are in the zone of highest wildlife uses including caribou insect relief, and high subsistence use. Furthermore, the zone of impacts is larger than the direct "footprint" and the proposed pad shoreline locations risk higher impacts to the nearshore waters resources including bird, marine mammal, and fish migrations.

Other Alternative Considerations. In the DEIS, all project alternatives consider permanent gravel drill sites for the East and West Pads. However, the DEIS describes that the satellite drill sites (i.e. East Pad and West Pad) are proposed as delineation wells at this time, ¹¹ and the justification of proven need for future development has not been provided in the DEIS. Similarly, the need for the infield gathering lines to the East and West Pads has not yet been documented based on proven production needs at this time. ¹² Therefore consideration of an alternative without those 2 permanent gravel fill pads, along with the connecting permanent gravel roads and gathering lines, is appropriate.

Response

The State of Alaska has verified that the well proposed on the East Pad would be needed for production. It is referred to as an exploratory/delineation well; however, it would not be a traditional one season exploratory well. The testing needed for commercial viability is long-term testing, which would be done during production of gas condensate. Production would occur year-round and therefore the East (and West) Pad would need to be gravel with gathering lines connecting them to the central processing unit. Long-term testing during production would determine connectivity of the reservoir. Through this testing the applicant would be able to determine, with greater accuracy, the commercial and development potential of the reservoir. Delaying the construction of the East Pad would not be reasonable because it is needed to conduct further testing of the

The coastal location of the pads presents a trade-off of impacts and the purpose of the project. The Applicant's Technical Brief #1 stated that a "Pad location further inland from the coast will increase the throw on all wells and potentially preclude the ability to reach portions of the reservoir necessary for full field development. This may lead to additional pads being needed in the future to reach bottomhole targets that cannot be reached from a pad that has been located further inland." In other words, a trade-off of moving pads inland would be the potential future need for additional pads closer to the reservoir (i.e., along the coast) in order to reach bottomhole targets, given the present 13,000-foot limits of extended-reach drilling, which has been independently verified by the State of Alaska.

565 The Draft EIS referred to the wells as delineation wells, but in order to determine the connectivity of the reservoir, these wells would need to be put into production. Production would occur year-round; therefore, the East and West Pads would need to be gravel with gathering lines connecting them to the central processing unit. Long-term testing during production would determine connectivity of the reservoir. Through this testing the applicant would be able to determine, with greater accuracy, the commercial and development potential of the reservoir.

^{11 &}quot;The wells on the East and West Pads would be used initially to delineate and evaluate the reservoir, and to determine whether the rim of oil surrounding the gas reservoir would be viable for production." DEIS at 2-18.

¹² See DEIS at 2-19

Comment Response 566 Alternative D also has the pads moved inland and does not have the large gravel roads. The Corps was able to evaluate differences in pad location using both Alternatives C and D in comparison to Alternatives Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development B and E. January 18, 2012 567 The Applicant's practicability of alternatives report has been included Alternative C's impact analysis masks the environmental benefits of moving the East and as Appendix W of the Final EIS. West Pads inland (it hardly moves the Central Pad inland and assumes barging is not 568 As noted in the EIS, Section 5.10, Terrestrial Mammals, impacts to possible) because it adds construction of a new 44-mile gravel road back to Endicott, and adds an additional 28 miles of new export pipeline with tie in at Endicott instead of Badami. caribou, regardless of the herd, were determined to be minor to Therefore, that alternative is inadequate to evaluate the mitigative effect of moving the gravel moderate in magnitude and ranged from less than 1 percent of caribou pads inland. potentially disturbed under Alternatives B and E to 14 percent under We note that the sole reference provided in the data adequacy tables for the Alternatives is Alternative C due to the gravel access road. The impacts under ExxonMobil 2011a (Practicability of Alternatives Report. Anchorage, AK). This reference Alternative C would primarily occur in the western portion of the should be provided as an Appendix so that the public can evaluate its adequacy and appropriateness as a DEIS information source. Independent, objective evaluation of this study area and would mainly affect the Central Arctic and Teshekpuk report is necessary if it is to be considered an important data information source. herds. The Porcupine Herd is defined as calving east of the Canning Impacts to Caribou. It should be noted in the DEIS that migratory caribou are an important River and their overall range typically overlaps with a very small resource for indigenous peoples in Alaska (see DEIS 3-119) and also in Canada, including portion of the eastern part of the study area (see Figure 3.10-6). the Inupiat, Inuvialuit, and Gwich'in with respect to the Porcupine Caribou herd. Therefore, impacts to the Porcupine Herd would likely be even less The caribou map (Fig. 3.10-6) should also include post-calving and movement areas for than 1 percent of the herd disturbed. females, and their importance described in the Affected Environment section of the DEIS at The subsistence impact analysis considered the conclusions of the 3-120. These are sensitive habitats used at a time period that is critically important to lactating females with the highest energetic demands. The significance of sensitive calving biological analysis that the project would not result in large scale and post-calving and movement areas for females was described and mapped in the changes in migration and that impacts would primarily be limited to International Porcupine Caribou Board's landmark report, Sensitive Habitats of the local in geographic extent. Therefore, the majority of impacts for Porcupine Caribou Herd (1993). subsistence users would occur for residents who travel to the project The summary of consequences to caribou downplays impacts, by only highlighting the area for caribou hunting and could experience reduced success in that "footprint" of direct caribou habitat loss (e.g. for Alternative B, 880 acres directly covered by gravel infrastructure causing habitat loss, alternation and disturbance; see Table ES-2), and area. According to available data, Kaktovik is the primary community this misleads the reader as to the total potential effects on caribou. The methodology used to that uses the project area for caribou harvesting activities. The determine caribou habitat alteration which relies on a 165-foot buffer distance (DEIS at 5-260) fails to combine the direct loss with this degradation factor along with the other conclusions of the terrestrial mammals impact analysis (Section 5.10) negative impacts to caribou habitat from potential displacement from roads and pipelines at does not indicate that the project would result in changes to the the distance of 2.5 miles (Cameron et al 1992). migration of the Porcupine Herd or Central Arctic Herd, and therefore It is important that the Executive Summary as well as the detailed analysis address this impacts for subsistence users outside the project area, such as those broader habitat area loss and degradation, including where caribou behavior and migratory from Nuiqsut, Anaktuvuk Pass, or Arctic Village, would not occur. movements would be affected due to habitat fragmentation and disruption. For example, for Alternative B, the total area where habitat and forage is potentially disturbed (within 2.5 569 Figures 3.10-8 and 3.10-9 identify caribou group size and location and miles) was estimated at 38,505 acres, compared to the 880 acres shown in Table ES-2). movement density during the post-calving time period. Additionally, However, this estimate fails to acknowledge any potential loss or disruption from the pipeline corridors and only considers a buffer around the infield roads (see Figures 5.10-1 and 5.10-Figures 5.10-3, 5.10-6, 5.10-9, and 5.10-12 identify locations of 2), even though pipelines may also alter movement patterns and additional disturbance Central Arctic Herd caribou movement densities in June, July, and sources such as helicopter and other surveillance of the pipelines would be present. August. The Corps re-evaluated these figures and other available postcalving data and determined that the data presented in the Draft EIS are adequate for evaluating post-calving caribou movements. Data showing movement areas specifically for female caribou is inferred in Figures 3.10-8 and 3.10-9. A discussion of the importance of caribou post-calving areas has been added to Section 3.10.3.2, Caribou, of the Final EIS.

Comment	Response
	570 Table 5.10-2 identifies direct habitat loss (footprint and buffer) and indirect habitat loss up to 2.5 miles away from available habitat and foraging areas that would potentially be disturbed. The 2.5 mile distance is broad enough to include behavioral response buffers that cover a range of possible disturbances, including noise and visual. The buffers used are based on known displacement distances evaluated in multiple studies of caribou behavioral responses to disturbance (Dau and Cameron 1986; Cameron et al. 1992, 1995; Wolfe 2000; Noel et al. 2004; Haskell et al. 2006; Haskell and Ballard 2008). Potential impacts from pipeline corridors are discussed for each alternative under Habitat Fragmentation. The EIS notes that the pipeline heights (minimum of 7 feet) are greater than the minimum 5-foot height that has been recommended to prevent blockage of caribou movements during summer or winter (Cronin et al. 1994, Lawhead et al. 2006). Therefore, it is not expected that pipelines would alter movement patterns of caribou when they are not placed in close proximity to roads. Section 5.10, Terrestrial Mammals, of the Final EIS was updated to note that aircraft could disturb caribou during routine maintenance and surveillance of pipelines.

Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development January 18, 2012

The analysis of potential disturbance to caribou from project construction and operation (see Table 5.10-4, p. 5-271) also contains flawed estimates of impacts to calving and post-calving because it appears to be based on point counts and fails to address the entire habitats needed by females and their calves as they move around during their entire calving and post-calving periods. The map shows a concentration of 1001-5000 caribou out in the Beaufort Sea north of Flaxman Island; the significance of this caribou use (if this is correct information) and the obstacles the new infrastructure might pose to such use in the future should be assessed.

The Point Thomson region comprises the least impacted area of Central Arctic Herd caribou calving habitat except for that located within the Arctic Refuge on the North Slope today. This context regarding potential long-term effects on the habitat for this herd should be addressed, particularly cumulative impacts of oil and gas development and climate change.

Impacts to Polar Bears. The quantitative data and analysis approach used to estimate loss of polar bear critical habitat may underestimate long-term effects on the bears and their habitats. As permanent, year-round infrastructure and activities take place in the area, the reactions of bears may not be similar to past years when remediation activities were occurring (see DEIS at 5-325). The Point Thomson area has higher concentrations of known denning bears than at existing oil field areas, and interactions between humans and bears could prove increasingly deadly, but plans incorporating this factor do not seem to have been taken into account. Specific evaluation of the bear interaction plan should be addressed by the DEIS to consider project features or alternatives that could reduce lethal risks to bears and humans.

By using only the number of recorded polar bear dens within 1 mile of proposed project features (Sec. 5.11.1.2, #5, DEIS at 5-325), instead of evaluating all known polar bear denning critical habitat (including barrier islands) within 1 mile of project features, is a method that will underestimate the potential displacement of denning polar bears or den abandonment from the project over its life. This is due to the fact that the actual locations of most denning bears are unknown and it is a method that underestimates the denning habitat loss resulting from the project as shown in Table 5.11-2 (DEIS at 5-328).

Impacts to Beaufort Sea Resources. We greatly appreciate the noise study that was done, but insufficient information is provided for evaluation of changes to sound levels in the marine environment. \(^{13}\) A specific study to provide baseline assessment of underwater noise levels in the marine environment should be done to address potential project-related noise to bowhead whales and other marine life, as well as the cumulative effects. For example, the sound of directional drilling under the ocean needs to be analyzed. Northstar monitoring found a significant sound attributed to drilling, as the Noise Technical Report notes (see Appendix O at 157). All of the onshore, as well as below ocean sounds, need to be considered in an full evaluation of the cumulative impacts of drilling that would affect the marine environment, including from activities on nearly OCS leases.

Response

- 571 The analysis of potential disturbance to caribou from project construction and operation used ADF&G and other data made available to the Corps. The purpose of Table 5.10 4 is to identify the average number of caribou potentially occurring within 2.5 miles of Alternative B that could be disturbed and displaced. The intent of this table is not to identify important habitat for females and calves outside of the 2.5 miles. Impacts to habitat outside of the 2.5-mile buffer are not included in the analysis based on literature that has evaluated displacement distances in studies of caribou behavioral responses to disturbance (Dau and Cameron 1986; Cameron et al. 1992, 1995; Wolfe 2000; Noel et al. 2004; Haskell et al. 2006; Haskell and Ballard 2008). The photocensus data used to show caribou herd sizes was provided to the Corps by ADF&G. An explanation of the point location of 1,001 to 5,000 caribou north of Point Thomson (not north of Flaxman Island as suggested in this comment) was not provided by ADF&G and the Corps cannot speculate on the accuracy of the location or the behavior of the caribou in the group. The potential for project infrastructure to affect the movements of caribou was analyzed by using the data showing the density of caribou movements shown on the same figures.
- 572 The EIS notes that the Point Thomson Project is located in a region of the North Slope that currently has a minimal amount of oil and gas activity compared to the existing oil production areas to the west. The potential cumulative impacts to caribou from Point Thomson in conjunction with past, present, and reasonably foreseeable future oil and gas projects is discussed in Section 5.10.8.2, Cumulative Effects.
- 573 The impact assessment for polar bears does evaluate potential long-term effects from year-round infrastructure and activities. As suggested in the comment, the Corps conducted a more thorough review of the Applicant's Wildlife Interaction Plan and added additional text to the Final EIS in Section 5.11.3.1, Alternative B: Construction. The Polar Bear and Wildlife Interaction Plan for the Point Thomson Project is an appendix to the Biological Assessment for the Polar Bear, Spectacled Eider, Steller's Eider, and Yellow-billed Loon (Appendix M).
- 574 The analysis of locating known polar bear dens within 1 mile of proposed project infrastructure listed in the Draft EIS on page 5-325 in Section 5.11.1.2, Habitat Alteration (Disturbance), was not conducted in the Draft EIS. This analysis was erroneously left in the document. Reference to this analysis has been removed from the Final EIS. The analyses that were conducted to evaluate potential impacts to polar bears from the proposed project are appropriate and were based on designated polar bear critical habitat.

^{1) "Existing available marine noise data from similar North Slope oil and gas development projects was used to assess potential project-related noise in the marine environment and therefore, underwater noise levels were not measured as part of the baseline acoustic data collection." Noise Technical Report, Appendix O, DEIS at 3.}

Comment	Response
	8575 A review of published reports was conducted to determine the availability of baseline underwater ambient noise measurements for the nearshore waters of Point Thomson. While ambient noise data specifically for Point Thomson do not exist, various acoustic monitoring efforts off the North Slope were identified. As stated in Section 3.20.2, Review and Adequacy of Information Sources for Noise, discussions with acousticians involved in acoustic monitoring in the Beaufort Sea confirmed that the best available data for shallow water ambient noise measurements near Point Thomson are associated with acoustic monitoring of industrial sounds for BPXA's Northstar development project. The Liberty development project was also considered to be a suitable candidate for comparison because, like Northstar and Point Thomson, Liberty occurs in shallow waters (less than 66 feet in bottom depth). Point Thomson shares similar characteristics with Northstar and Liberty, specifically shallow water and topographical characteristics. The Corps determined that the available data from Northstar and Liberty were accurate, timely, and sufficiently similar to warrant direct comparison to the Point Thomson project area and concluded that these data should be used for assessing the potential impacts of the Point Thomson project on the marine soundscape. Drilling within the hydrocarbon zone at Point Thomson would occur during the winter months when most marine mammals are not in the area (see Sections 3.11 and 5.11, Marine Mammals, for details). Because the Point Thomson area is a shallow water environment with islands, sound transmission is limited. The Northstar EIS found that industrial sounds are unlikely to be detectable far enough offshore to be heard by spring-migrating whales, but if so, the received levels would be weak and very unlikely to elicit behavioral reactions. Bowhead and Beluga whales would not be affected by drilling noises because of the topography of the area, and noise from vessels would still be the predominant anth

Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development January 18, 2012

The marine mammal effects analysis considers a study area that extends 25-miles seaward (DEIS at 5-324) but fails to conduct a detailed cumulative impacts analysis that also combines impacts from OCS exploration and development operations in this zone. In particular, impacts to marine mammals and their habitats from noise and the impacts of major spills, in the event that they occur, should be addressed with a robust analysis.

The page and a half analysis of cumulative effects to marine mammals is insufficient given the importance of these species (DEIS at 5-353 to 5-354). In particular, it must incorporate climate change impacts in a robust analysis that takes into account both western science and traditional ecological and local knowledge.

The cumulative effects conclusions are also flawed, for example, "cumulatively... spills would have little impact on marine mammals (see Section 5.24, Spill Risk and Impact Assessment)" (DEIS at 5-354). Yet, this contradicts the actual findings in that section which state, "in the very unlikely event that a large or very large spill were to occur, it could result in major to catastrophic impacts to wetlands and vegetation, birds, and marine mammals. Other resources could be impacted to lesser degrees and subsistence impacts could be magnified by perception." (DEIS at 5-633). The Spill chapter also states, "though highly unlikely, a large to very large spill in the nearshore marine habitat during breakup or freeze-up could result in long-term, extensive, and possibly major to catastrophic impact to marine resources due to the difficulty of containing and cleaning up spilled oil in those conditions." (DEIS at 5-663). We are concerned that in the event a major spill enters the Beaufort Sea, such as from a production well blowout during broken ice such as late fall, the impacts could be devastating to marine mammals; these impacts should be fully evaluated in the marine mammal section, including through use of a trajectory analysis for marine waters.

Spill Risk and Impact Analysis. This section opens with a sweeping statement that over the past 40 years there has been a "reduction of the likelihood of spills on the North Slope," without any supporting data (DEIS at 5-634).

Exxon still needs to provide a new Oil Discharge and Prevention Contingency Plan for this project (DEIS at 5-634), ¹⁴ and therefore the consideration of prevention and response measures cannot yet be completed.

It is not a reasonable assumption that less than 63,000 gallons of a 1,134,000 gallons per day spill would be released into the environment over a 15-day period, by using ExxonMobil's prior spill plan assumption that voluntary ignition of the gas condensate at the well head (burning up the well) as its response tactic would reduce the spill volume (DEIS at 5-638). The DEIS assumes that a gas condensate well blowout could be ignited in 2 hours (DEIS at 5-641) but the DEIS should evaluate the full impacts of a blowout spill that continues without control.

¹⁴ Appendix U, is misleading in its title, Oil Discharge Prevention and Contingency Plan, as it is not the new, complete plan for this project.

Response

- 576 The cumulative impacts analysis does include an evaluation of OCS activities based on the past, present, and reasonably foreseeable future actions presented in Chapter 4. The marine mammals section does not evaluate the potential impacts of spills because spills impacts are addressed in Section 5.24, Spill Risk and Impact Assessment. The Corps has determined that the likelihood of cumulative impacts associated with very large spills is extremely small, and no cumulative impacts from very small to large spills are expected (see Section 5.24.13.2, Cumulative Impacts). Cumulative noise impacts were addressed by using the best available information regarding the type of activities anticipated for OCS exploration and development; specific data and types of activities that may occur simultaneously during OCS exploration and development are currently unknown and given the minor impacts of noise on marine mammals anticipated as a result of this project, the level of analysis is appropriate. Climate change impacts to marine mammals were discussed in the context of cumulative impacts (Sections 5.11.8.1 and 5.11.8.2) because of the potential for climate change impacts to affect marine mammals cumulatively with other anthropogenic impacts. The EIS presents a meaningful analysis of climate and cumulative impacts on marine species, given the climate change information currently available and the extent of information available on reasonably foreseeable future actions. Traditional ecological and local knowledge is incorporated into Section 5.22, Subsistence and Traditional Land Use Patterns.
- 577 As the commenter points out, the Corps has presented the potential consequences of an extremely unlikely event of a large to very large spill. The conclusions of the cumulative impacts from spills, however, are not flawed, based on the extremely small likelihood of a very large spill occurring. The Corps has taken into consideration the likelihood of a spill in determining the cumulative impacts associated with spills and has concluded that the project would not add or interact with potential spill impacts (which would likely also be extremely unlikely) from other actions. Section 5.24.11.8, Marine Mammals, addresses impacts of spills on marine mammals.
- 578 The statement at the beginning of Section 5.24, Spill Risk and Impact Assessment, "Over the past 40 years, the combination of stricter agency regulations, improving industry operating practices, and advancements in spill control technology have resulted in a reduction of the likelihood of spills on the North Slope," is a professional judgment based on the following: improved technology, including advances in the ability to use long-reach directional drilling to access offshore reservoirs from land-based facilities, better engineering design, greater stress on clean operations, and greater awareness of

ites and Spills

Sites and Spills

Comment	Response
	spill prevention, reporting and cleanup on the part of all the oil field personnel. We have modified this statement in the Final EIS (introduction to Chapter 5.24, Spill Risk and Impact Assessment) by adding "likely" before "resulted." See Section 3.24.3, Overview of North Slope Spill History, for a more detailed assessment of North Slope spill data. 579 The amended ODPCP that would be prepared for the proposed project, as required by 18 AAC 75.415, would be reviewed and approved, if deemed appropriate, by the ADEC. The Corps does not have the authority to determine the adequacy or suitability of the spill prevention and response measures for the Point Thomson Project. The approved ODPCP for the existing wells at the Point Thomson site was included in the EIS as background information for assessing potential impacts due to spills. However, an amended ODPCP is not required
	for the EIS. 580 The spill scenario presented in Section 5.24.2.3, Phases of Oil Field
	Development, is taken from the ODPCP for the existing wells at the Point Thomson site, which are similar to those proposed for the project. The ODPCP was approved by the ADEC, and therefore, it is appropriate to use for assessing impacts in the EIS.

Northern Alaska Environmental Center et al. Draft EIS Point Thomson Oil and Gas Development January 18, 2012

The DEIS fails to provide a trajectory analysis in the event that a large or very large oil or condensate spill enters the Beaufort Sea marine environment.

The conclusion that "most of the toxic components would evaporate rapidly or be diluted and dispersed below toxic levels," is likely wrong. It does not consider the higher persistence of spills occurring in broken ice or below sea ice, nor the slower weathering and longer persistence of spilled oil in Arctic regions in general. 15

Environmental Justice Findings. We find the Environmental Justice analysis and conclusions to be fundamentally flawed. It states, "potential impacts to subsistence resources, subsistence user access, and human health would not be disproportionately high and adverse impacts on the minority and low-income communities of Kaktovik and Nuiqsut." This confusing summary defies common sense given the public hearings' testimony on this project on the DEIS, the scoping process for the Corps' EIS, the EPA's scoping hearings back in 2002, and the factual analysis provided by the National Research Council (2003).

The short evaluation of environmental justice (Section 5.16, DEIS at 5-425 to 5-431) acknowledges the minority and low-income qualities but fails to give the proper context to this project's adverse environmental and human health impacts – including to the subsistence, traditional activities, Inupiat culture, and human health – for the low-income, minority Inupiat communities of Kaktovik and Nuiqsut as compared to the broader society of Alaska and the United States. Incomplete and piecemeal analysis of impacts to subsistence and traditional land uses in Section 5.22, as well as insufficiently evaluating and downplaying the cumulative impacts, underestimates the impacts of this major eastward explanation of industrial infrastructure and activities on the local communities in the long-term.

The project is proposing permanent industrial facilities in a traditional use area that will be in place for many decades – not impacts that will be temporary in duration as stated by the DEIS at 5-426.

The environmental justice analysis finds that Point Thomson's noise and visual resource impacts will not result in direct impacts within the two communities, but the Environmental Justice impact criteria (DEIS at 5-426) fail to consider that noise, visual intrusions, and other fundamental changes to traditional hunting grounds and subsistence use areas are relevant and significant to people from the communities. The National Research Council (2003) said, "the committee heard repeatedly from North Slope Inupiat residents that the imposition of a huge industrial complex on the Arctic landscape was offensive to the people and an affront to the spirit of the land." (p.138) The NRC also noted, "Even where access is possible, hunters are often reluctant to enter oil fields for personal, aesthetic, or safety reasons. There is thus a

¹⁵ EPPR, 1998. Field Guide for oil spill response in Arctic Waters. <u>http://eppr.arctic-council.org/content/fldguide.pdf.p.</u> 2-4.

Response

- 581 Weathering is described in Section 5.24.4.1, Weathering. As indicated in this section, weathering depends on environmental conditions. Weathering may be generally slower in the Arctic, but that does not mean these processes do not occur. The quoted text was taken from a discussion of impacts on marine water quality (Section 5.24.11.4, Water Quality) and is accurate. The EIS does consider Arctic conditions and, relative to sea ice, states in Section 5.24.5.2. Fresh or Marine Water: "Weathering processes in fresh or marine water are generally similar and mainly impacted by seasonal ice cover, which could greatly slow weathering in both systems (BLM 2004)." An aerial trajectory analysis for both oil and condensate well blowout events was included in the ODPCP (Appendix U) for the two wells drilled in 2009-2010. These wells are representative of the type of wells that would be drilled for the proposed project, and it is assumed that there would be similar seasonal drilling requirements to reduce the risk of a discharge to open water. The Applicant's amended ODPCP, required for the proposed project, would further address spill scenarios and mitigation and would be reviewed for consistency with 18 AAC 75 by the ADEC.
- 582 As discussed in Section 3.16, Environmental Justice, the Corps' evaluation of the potential for a disproportionately high and adverse effect on minority and low-income populations was based on the CEQ guidance on environmental justice under NEPA (Environment Justice: Guidance Under the National Environmental Policy Act. Referenced as CEQ 1997a). The findings of the environmental justice analysis incorporated the impact evaluations for subsistence and traditional land use, socioeconomics (including community cohesion and culture), and human health (Section 5.22, Section 5.15, and Section 5.23, respectively). The environmental justice analysis also included consideration of qualitative information gathered through the tribal consultation and public participation process. Impacts to these resources were thoroughly evaluated in the EIS within each of the respective sections and findings were referenced and summarized within the context of environmental justice in Section 5.16. Based on the comment received, the Corps re-evaluated the environmental justice section and its conclusions, and maintains that the impacts identified within the subsistence and traditional land use, socioeconomics, and human health sections, individually or additively, do not support a finding of a disproportionately high and adverse effect. This finding is consistent with the CEQ guidance on environmental justice on which the Corps' analysis was based (CEQ 1997a). See also the response to Comment 585.

¹⁶ Table ES-2, Comparison of Impacts, DEIS Executive Summary at ES-77.

evaluations for subsistence, sociocomomics (including community cohesion and culture), and human health (Section 5.22, Section 5.15, and Section 5.26, respectively). Impacts to these resources are thoroughly evaluated in the EIS within each of the respective sections and findings are referenced and summarized within the context of environmental justice in Section 5.26. The environmental justice section also indirectly includes findings from the visual aesthetics and noise impact assessments, because impacts to these resources were considered in the subsistence and traditional land use analysis. The subsistence and traditional land use analysis. The subsistence and traditional land use analysis of the Section 5.26. The environmental pulsar of the practice analysis of area user data, and thorough analysis of qualitative data based on other development areas on the North Slope. The subsistence analysis of the EIS recognizes that development of the project under any action alternative could lead to future expansion of the Point Thomos Project, which could result in increased impacts on subsistence users, and increased constant in increased impacts on subsistence users, and increased costs and time associated with harvesting active analysis of reasonably foresceable future actions that could add to these impacts by there expanding industrial facilities into existing subsistence user areas. The analysis of cumulative impacts to subsistence user areas. The analysis of commutative impacts to subsistence and traditional land use analyses or pace 5-426 of the Draft EIS was intended to convey the methodology by which impacts identified were used to evaluate the potential for disproportionated by high and adverse impacts by the minority and low-income communities. Text in the environmental justice analysis was modified to clarify the impact critical and adverse impacts on the minority and low-in

Comment	Response
	585 The environmental justice analysis used findings from the subsistence
	and traditional land use impact analysis, which used information, data,
	and observations of North Slope subsistence users. Within the
	subsistence and traditional land use impact analysis, noise and visual
	intrusions were considered for their effect on user access, avoidance,
	and resource availability. The Corps disclosed potential impacts to
	user access by harvesters and that subsistence activities could be
	impacted by any of the alternatives because residents may avoid the
	project area due to noise and human presence.
	The analysis of cumulative impacts to subsistence and traditional land
	use notes that hunters are often reluctant to enter oil fields. The
	findings of the NRC report were incorporated into the cumulative
	impacts analysis of many resource impact analyses in the EIS,
	including the socioeconomic and subsistence and traditional land use
	analyses, and have been fully considered by the Corps.

Comment Response 586 The discussion of potential impacts to resident employment within the environmental justice analysis is based on the employment analysis in Section 5.15, Socioeconomics. Within Section 5.15, the analysis of Northern Alaska Environmental Center et al. impacts to employment clearly states that "The past history of NSB Draft EIS Point Thomson Oil and Gas Development January 18, 2012 resident employment in the oil industry on the North Slope suggest that despite efforts to encourage local employment, increased resident net reduction in the available area, and this reduction continues as the oil fields spread." employment would likely be a minor and temporary positive impact on the NSB population." While not repeated in the environmental justice The Environmental Justice analysis exaggerates local hire benefits, especially over the longrun (DEIS at 5-426) and fails to provide the factual context with respect to actual, minor, analysis, this same conclusion of minor and temporary benefits to local Inupiat hiring numbers, as noted earlier in the socioeconomic section (DEIS at 5-411; resident employment was considered as one component of the note that this does not break it down by village). The National Research Council (2003) said, "that few who live in the North Slope Borough are directly employed by the oil and gas environmental justice analysis. Text in the environmental justice industry has been noted for almost two decades (Kruse et al. 1983 and is supported by analysis was revised to reflect this finding, but this revision does not findings of both the NSB survey (NSB 1999) and the Alaska Department of Labor (Alaska change the overall conclusions of the environmental justice analysis. Department of Labor and Workforce Development 2001)." (p.146) The Applicant's efforts to contract with local companies and to The Environmental Justice analysis fails to adequately address cumulative impacts with any encourage local hire are likely to increase employment in the NSB and thorough analysis for the effects on the Inupiat people from Nuiqsut and Kaktovik. in the communities of Kaktovik and Nuiqsut, where these efforts are Additionally, noise, air pollution, and other negative impacts from this project on subsistence resources and human health should be considered in combination with the impacts from primarily being targeted. However, as stated in the EIS, these impacts nearby drilling and other exploration and development activities on OCS leases. Because the are dependent on a wide range of factors and likely to be temporary direct, indirect, and cumulative impacts to subsistence and traditional land-use patterns, marine mammals, and other aspects of the marine and coastal environment have not been and minor. Future employment at the village level cannot be predicted adequately analyzed in the respective underlying sections on environmental consequences, at this time. the Environmental Justice analysis reliant upon that information is insufficient and flawed. 587 See the response to Comment 583. Cumulative Impacts. For the natural gas development of the Point Thomson reservoir, "additional infrastructure anticipated for full-field development" with a "conceptual general 588 The description of full field development is based on the best available description of potentially necessary additional facilities," was provided by ExxonMobil and information. Part of the Applicant's stated purpose for the proposed RFI 52 was cited (DEIS at 4-11 to 4-12) - but RFI # 52 was not included in Appendix D. project is to further delineate the reservoir so that the Applicant can Another description of this issue is found at DEIS p. 1-1. Maps are a fundamental way of addressing potential scenarios, but none were provided to assess this additional infrastructure better understand, and thus define, a full field gas development project. that would be added later. The vague conceptual description fails to identify or quantify all Maps at this stage would be speculative and would suggest a greater additional facilities needed, including an expanded Central Pad to accommodate additional level of understanding of a future project that is not presently production facilities, additional wells on the proposed Central, East, and West Pads, a gas export line, a new or expanded gravel mine, additional in-field pipelines, a gas treatment designed. plant and export pipeline from the North Slope, and additional water sources and quantity, waste quantities and disposal, air pollution quantities. Given that ExxonMobil is a project 589 The Alaska Pipeline Project is included in the reasonably foreseeable proponent for the Alaska Pipeline Project 17 which shows the pipeline leg east to Point future actions and the impacts are discussed within the cumulative Thomson, the combined environmental impacts of these projects need to be fully addressed in the cumulative impacts analysis. While the project is described in the DEIS at 4-10 to 4impact sections. The Corps agrees that it is uncertain whether or when 11, its project features are not mapped nor its environmental effects fully addressed in this an export gas line would be built. It is still to be seen where the line environmental analysis. would be located and by whom. Because of these unknowns, the Will an Alaskan natural gas pipeline ever get built from the North Slope? No one knows for discussion of the export gas line remains in the reasonably foreseeable sure, but the ongoing related projects for transportation of the Point Thomson conventional future actions section of the EIS. The building of the gas line is a large gas need to be analyzed in the EIS. This document needs to provide more integration of undertaking that stands alone. The Point Thomson Project is proposed http://gasline.alaska.gov/ to extract condensate and oil. The proposed export pipeline would connect to TAPS. If a gas pipeline were to be built and resources from Point Thomson connected to it, then a gas line would have to be built from Point Thomson to tie in. That intermediary gas pipeline is shown as part of the Alaska Pipeline Project because the Applicant is a

proponent of the project and therefore would want to connect Point

Thomson to it.

Comment Response 590 The overall purpose of this project is to produce liquid hydrocarbons from the Thomson Sand Reservoir and further evaluate and delineate the reservoir and evaluate the Brookian Group sandstones. As far as Northern Alaska Environmental Center et al. this NEPA process and the Corps is concerned, the question at hand is Draft EIS Point Thomson Oil and Gas Development January 18, 2012 whether or not to issue a permit allowing the filling of wetlands and other waters of the U.S. The Corps' requirements regarding permit existing information regarding simultaneous processes underway on the Alaska North Slope pipeline, including consideration of permit applications for pipeline rights-of-ways, etc. application decisions does not require a permittee to hold title to the land (or by extension, have valid leases) for the Corps to make a We note that the Federal Energy Regulatory Commission (FERC) announced on December 9, 2011, that it would hold scoping meetings and accept public comment for its decision to either approve or deny a permit. The State of Alaska and environmental review process until February 27, 2012, on the Alaska Pipeline Project being the Applicant have reached a settlement agreement since the release of advanced by TransCanada Alaska Company, LLC and ExxonMobil Alaska Midstream Gas Investments, LLC. 18 This project shows the Point Thomson to Prudhoe Bay pipeline as part the Draft EIS. of the Proposed Alaska Pipeline Project. 19 On January 13, 2012, the Alaska Pipeline Project 591 The Executive Summary section in question has been rewritten as filed draft Resource Reports in support of its application to the Federal Energy Regulatory Commission.20 This DEIS should carefully evaluate the inter-relationship of these projects follows: with a fact-based analysis and rationale to help the public understand the nexus of these "Key Impacts/Issues projects and consider their combined impacts to the human and natural environment. • Potentially adverse cumulative effects were identified for coastal The DEIS dodges the necessity to consider the additive, synergistic, and comprehensive waters, hydrology, caribou, Arctic Refuge, environmental justice, environmental impacts from the project, and cannot evaluate them in a separate and segmented fashion to avoid the full picture. On the one hand, ExxonMobil is involved with visual aesthetics, cultural resources, and subsistence and permitting and right-of-way review processes for the major Alaska Pipeline Project. On the traditional land use. other hand, it is divorcing this current Point Thomson project from that effort by not showing its full plans here, at the same time it is saying that this project must accommodate significant Potentially beneficial cumulative effects were identified to the future development (see Table 2.2-2, DEIS at 2-7). If significant, future development is a economy." necessary feature of this project, then it needs to be better and comprehensively analyzed in Looking at the cumulative effects sphere of influence also harkens back to the poorly articulated and unsubstantiated "need" for the Point Thomson Project. While full-field development has not been included "as part of the Point Thomson Project because of the number of uncertainties surrounding gas production at Point Thomson," there are other uncertainties such as outstanding legal issues. These issues include "resolution of the dispute over the Point Thomson Unit" (DEIS at 4-12), are important considerations with respect to the need for this proposed Point Thomson project and public interest evaluation. Finally, the EIS summary of cumulative effects (ES-62 to 63) provides a biased picture of its results. It lumps the negative adverse impacts for 10 categories of resources in one short paragraph, and gives a longer explanation for the category of beneficial economic impacts. It describes the adverse cumulative effects as "potentially adverse," while the "beneficial" http://gasline.alaska.gov/newsroom/Media%20Releases/FERC%20Notice%20of%20Public%20Scoping%20Meetings 12 9 11.pdf. http://gasline.alaska.gov/newsroom/Media%20Releases/APP_Notice%20of%20Cancellation%20of%20the%201-18-2012%20Scoping%20Meeting.pdf. The Anchorage meeting on January 18, 2012 was postponed; it is unclear if the public comment period will be extended http://thealaskapipelineproject.com/docs/alaska_pipeline_project_map.pdf (accessed January 18, 2012). http://gaslinc.alaska.gov/ http://thealaskapinelineproject.com/document_library (accessed January 18, 2012). http://elibrary.ferc.gov/iidmws/File_list.asp?document_id=13987572.

Comment		Response	
Northern Alaska Environmental Center et Draft EIS Point Thomson Oil and Gas Deve January 18, 2012 cumulative effects do not have the appropria that quantify "a potentially substantial perce petroleum resources within the area of know basis for determining the significance of cor production or how condensate would contril	ate qualifier. No data in the DEIS could be found intage of total economically recoverable in reserves," which adequately provides a factual adensate production in slowing the decline in oil bute a positive impact to the NSB's or State of is that "these beneficial economic effects would	Response	
flawed conclusions of the DEIS.			
Pamela A. Miller Arctic Program Director Northern Alaska Environmental Center pam@northern.org	Julie Kates Refuge Associate, Federal Lands Program Defenders of Wildlife JKates@defenders.org		
Kristen Miller Government Affairs Director Alaska Wilderness League Kristen@alaskawild.org Bob Childers Executive Director Gwich'in Steering Committee bobchilders@mac.com	Lois Epstein Arctic Program Director The Wilderness Society lois_epstein@tws.org Charles M. Clusen		
Dan Ritzman Alaska Program Director Sierra Club Dan.ritzman@sierraclub.org David C. Raskin Board of Directors Friends of Alaska National Wildlife	Director, Alaska Project Natural Resources Defense Council cclusen@nrdc.org Faith Gemmill Executive Director Resisting Environmental Destruction on Indigenous Lands (REDOIL) Redoil (@alaska.net		
Refuges davidraskin@yahoo.com	ASSOCIA (M. BIBANA, INC.)		

omment		Response
		508 Comment noted; no action required.
Davis, Cecile	0232_Bob.Barndt_IND	
Sent: Wednesday, Januar To: comments@pointthe Cc: extraski@gmail.com Subject: Online form submiss	y 18, 2012 10:03 AM prisonprojecteis.com i sion	
Name: Bob Barndt Email: bbarndt@mtaonline.net Address: 18006 Teklanika Dr City: Eagle River State: AK Zip: 99577 Contact Phone: 907-684-4887 Comments: I support the Alternative B and do it in a safe, economic and env	Statement of Support for Alternative B 508 to further encourage the development of Pt. Thompson ironmentally friendly manner.	
	1	

mment		Response
		509 Comment noted; no action required.
Davis, Cecile	0233_Matthew.Cronin_IND	
Sent:	Wednesday, January 18, 2012 12:38 PM	
To: Cc:	comments@pointthomsonprojecteis.com extraski@gmail.com	
Subject:	Online form submission	
Name: Matthew A.	Cronin	
Email: croninm@a		
Contact me throu Address: 8415 Ju		
City: Anchorage	pacer of arc	
State: AK		
Zip: 99507 Contact Phone:		
Add me to mailin	g list: Yes	
Comments: Dear A	urmy Corps of Engineers, Statement of Support for Alternative B 509	
I support approv	ral for ExxonMobil's Point Thomson Development Project. I think Alternative B	
	rnative. Please consider the points below in support of the project.	
Sincerely,		
Matthew A. Croni	n, Ph.D.	
•The proposed pr	oject is important to the state of Alaska and to Alaskans.	
	lternatives considered, Alternative B provides the safest, most responsible solution for developing Point Thomson's resources.	
summer coastal b	ensures a minimal environmental footprint by incorporating a combination of larging, winter ice roads, aviation, and in-field roads. These features are a project's safe and efficient operations.	
	tive B, ExxonMobil will implement comprehensive mitigation measures to on tundra, wildlife, aquatic resources, and subsistence activities.	
ensure polar bea	s closely with the U.S. Fish and Wildlife Service and state agencies to irs and other wildlife are fully protected. Coastal barge route is outside the ion corridor of bowhead whales.	
	on project will provide wide-ranging benefits to Alaska in the form of new nities, jobs, and revenues.	
	Point Thomson project, as proposed in Alternative B, is vital to the his world-class resource and North Slope gas commercialization.	
Alaskans, new re	to the State of Alaska from Point Thomson include training and jobs for evenues to the state and local governments, increased throughput for the pipeline, and increased business activity and revenue for the private	
	1	

Comment	Response
	Comment Document 233 continued.
 Point Thomson is a highly-technical project with high costs. Unnecessary requirements that provide very little, if any, incremental environmental benefits, should be avoided as to not compromise the economic viability of the project. 	
 The in-field roads included in Alternative B have been carefully routed to minimize the gravel footprint and for the efficient pass through of water. 	
 Moving roads inland as proposed in Alternative C and D would increase the gravel footprint and be less effective in maintaining natural drainage patterns of the project area. 	
 Alternatives C and D would move project components inland and eliminate barging, which is an established and safe means of supply for North Slope communities, including Prudhoe Bay. ExxonMobil has conducted safe barging operations in accordance with the Alaska Eskimo Whaling Commission Conflict Avoidance Agreement and in direct consultation with local whaling communities. 188 barging trips in support of Point Thomson have occurred with no impacts to marine mammals or subsistence. 	
 Alternatives C and D both result in inefficient logistical support and adds unnecessary challenges. Eliminating summer barging would result in increased costs, schedule delays, and increased tundra traffic. 	
•The 44-mile gravel road from Endicott to Point Thomson as proposed under Alternative C would create a much larger tundra footprint. Current North Slope experience at Alpine and Badami demonstrates that a gravel road is not necessary to support Point Thomson. However, not having a road connecting to Prudhoe Bay does make the combination of barging, ice roads, air access and in-field gravel roads essential.	
•Alternative E would eliminate in-field gravel roads and shorten the airstrip. This alternative relies solely on helicopters and seasonally limited off-road vehicles for transportation to East and West pads for nine months of the year. There is no North Slope precedent for a production facility with such limitations. Moreover, inability to fly in poor weather introduces unnecessary safety risks for personnel, as well as emergency response limitations and operational inefficiencies.	
 The longer runway in Alternative B provides better access in bad weather, reduces the number of flights by allowing larger aircraft for routine cargo shipments and allows for aircraft to transport larger equipment capabilities in the event of an emergency. 	
2	

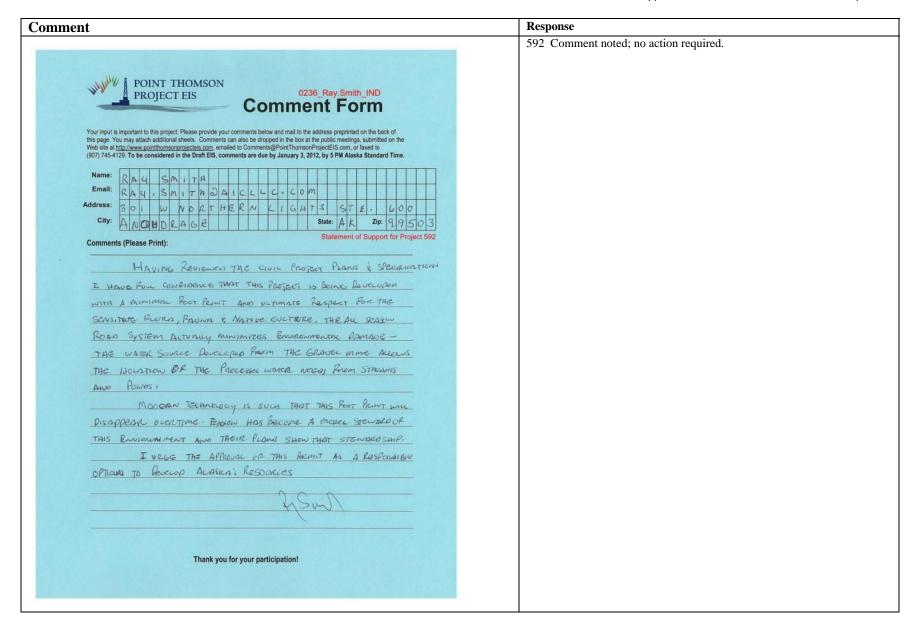
mment		Response	
		510 Comment noted; no action required.	
Davis, Cecile	0234_Ron.Kahlenbeck_IND		
Sent: Wednesday, January 18, 2012 To: comments@pointthomsonproje Cc: extraski@gmail.com Online form submission	2:46 PM ctels.com		
Name: Ron Kahlenbeck Email: orka@eci.net Address: 4371 Rendezvous Circle City: Anchorage State: AK Zip: 99504 Contact Phone:			
Comments: I support alternative B.	Statement of Support for Alternative B 510		
	1		

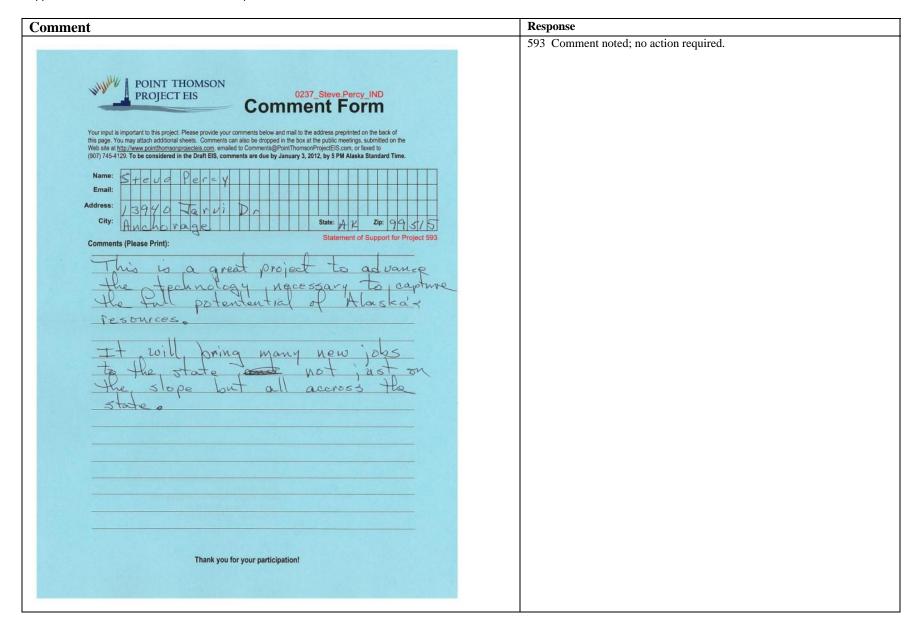
Comment Response 511 Comment noted; no action required. 0235_Charlotte.Brower_LGOV North Slope Borough OFFICE OF THE MAYOR P.O. Box 69 Barrow, Alaska 99723 Phone: 907 852-2611 or 0200 Fax: 907 852-0337 Charlotte E. Brower, Mayor January 18, 2012 Harry A. Baij, Jr. Project Manager Department of the Army U.S. Army Engineer District, Alaska Regulatory Division P.O. Box 6898 Elmendorf AFB, Alaska 99506-0898 harry.a.baij@usace.army.mil Submitted by Email Re: Point Thompson Project Draft Environmental Impact Statement Dear Mr. Baij: Thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Point Thompson Project. This proposed project will be a substantial new development of hydrocarbon resources, gas condensate and possibly oil, on the North Slope of Alaska. The project seeks to access the Thomson Sand Reservoir, which extends offshore under state coastal waters. The project is located 60 miles east of Deadhorse and Prudhoe Bay and 60 miles west of Kaktovik. The various alternatives would place pads various distances from the coast, but as close as 500 feet. The footprint of this project is relatively substantial, with the central processing pad alone being over 50 acres. The DEIS acknowledges that there may be future development in the area as well. The North Slope Borough (NSB) is the regional municipal government for Northern Alaska and encompasses the area within which the proposed project will take place. Generally, NSB supports on 511 land development provided such development occurs in a responsible and environmentally sound manner. There are a number of positive aspects to this project. First, we believe that onshore development is safer and preferable to offshore; therefore we see this project, an onshore facility designed to access offshore oil and gas resources, as a sensible and responsible approach. Second, this

ment	Response	
project, if properly managed and mitigated, will contribute to the economic well-being of the North Slope and the State of Alaska. Further, we hope that the regulatory agencies can work with the applicants to minimize adverse impacts, especially to subsistence resources and public health, while still ensuring that the project can go forward. Subsistence resources, including fish, marine mammals and caribou populations that may be affected by this project, are critical for the physical and cultural health of our residents. It is essential that subsistence resources are protected and that any impacts to subsistence resources are mitigated in a manner that ensures those resources ramin available for residents to harvest. It is important that residents continue to have access to the resources in the area. We support the applicants' proposals to mitigate potential adverse effects to subsistence resources and hunting by increasing pipeline wall thickness and making the pipeline less reflective. We also encourage the regulatory authorities to require additional measures to protect both subsistence resources and residents' access. NSB has long promoted the use of Health Impact Assessments (HIA) in the NEPA review process. Generally speaking, there have been substantial improvements within the United States in analyzing public health impacts from proposed projects, programs and other proposals. This has been done within Alaska by incorporating an HIA within an environmental impact statement (HIS). The NSB continues to collaborate with state and federal agencies to provide the framework for which HIAs can be integrated within the NEPA process, most recently within the EIS process (BLM Northeast NPRA Integrated Activity Plan DEIS; MMS Chukchi Lease Sale 193 DEIS). The NSB supports the State of Alaska's efforts in promoting the use of HIAs by developing their own HIA Program, and looks forward to collaborating with the State on future HIAs to ensure stakeholders are involved and health concerns are addressed for projects	512 Mitigation measures in addition to the Applicant's Design Measure noted in Table 4.4-1 of the Draft EIS are identified in the Final EIS 513 The Health Impact Assessment for the Point Thomson project was prepared by the Alaska Department of Health and Social Services not by the Corps. The Corps reviewed the HIA and included it as supplemental information in Appendix R of the EIS. The HIA's findings were summarized and included in Section 5.23, Human Health. The comment has been forwarded to the State for its consideration; however, updating that document is outside the purv of the Corps and this EIS.	

mitigation options along with impacts to the environment identifi
737 See the response to Comment 513 above. 514 During the 404(b)(1) Guidelines analysis, the Corps will consider mitigation options along with impacts to the environment identification during the NEPA process before making its final permit decision.
mitigation options along with impacts to the environment identifi

ment	Response
Beyond just addressing subsistence and health concerns during the life of facility operations, the Processes project ought to be designed and mitigated in a manner that reflects the longevity of the facility and the Processes project ought to be designed and mitigated in a manner that reflects the longevity of the facility and the Processes project ought to be designed and mitigated proposes to build, while protected to some extent by barrier islands, is subject to coastal erosion. With climate change bringing more intense fall storms and greater fetch, it is possible that the erosion rates will increase. The anticipated environmental conditions, such as the rate of coastal erosion, should play a role in the project design. Whichever Alternative is selected, long-term coastal erosion forecasts must to be addressed. The North Slope Borough will also work with the applicants as the re-zone application is processed and spill plan is reviewed to ensure that the project is well-designed. Thank you for considering our comments and concerns. Sincerely, Whather Mayor Sincerely, Andy Mack, Advisor to NSB Mayor Andy Mack, Advisor to NSB Mayor Ian Young, Advisor to NSB Mayor Ian Young, Advisor to NSB Mayor Iang Hakotak, North Slope Borough Attorney Taquilik Hepa, Director, NSB Wildlife Management Rhoda Almanogak, Director, NSB Health & Social Services Doreen Leavitt, Director, NSB Health & Social Services	515 The Applicant conducted a coastal engineering assessment (Draft Metocean Design Criteria Study; PND 2009a), which addresses long-term coastal erosion forecasts relative to the project design. Additional information from this report has been added to Section 5.5.3.1, Alternative B: Construction and Operation, under a new subsection titled "Pads," and information has also been added regarding the plug and abandonment process for hydrocarbon wells under a new subsection titled "Wells" to address longer-term coastal erosion concerns. Coastal erosion rates are also discussed in Section 3.5.5, Coastal Processes.
NSB comments to ACE regarding Point Thompson Draft Environmental Impact Statement January 18, 2012 Page 4	





Comment		Response
	UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668 January 18, 2012	
U. P.G Eli Ati	olonel Reinhard W. Koenig S. Army Corps of Engineers, Alaska District O. Box 6898 Emendorf AFB, Alaska 99506-0898 ttn: Harry A. Baij Jr. ear Colonel Koenig: Re: POA-2001-1082-M1, Beaufort Sea and Point Thomson Project Draft Environmental Impact Statement	
Th (C Po 20 pro coi	the National Marine Fisheries Service (NMFS) has reviewed the US Army Corps of Engineers' Corps) Public Notice of Application for Permit, POA-2001-1082-Ml, Beaufort Sea, and the point Thomson Project Draft Environmental Impact Statement (Draft EIS) dated November 111. NMFS has also reviewed several prior documents regarding the proposed project, and ovided scoping comments to the Corps on February 25, 2010. NMFS offers the following mements under the Fish and Wildlife Coordination Act, Endangered Species Act (ESA), arine Mammal Protection Act (MMPA), and the Essential Fish Habitat (EFH) provisions of the agnuson-Stevens Fishery Conservation and Management Act (MSA).	
Pro	roject and Alternative Descriptions	
cor Als the of (Co lar Els fur gre	exon Mobil Corporation and PTE Pipeline LLC (the applicants) are proposing to initiate mmercial hydrocarbon production of the Thomson Sand Reservoir on the North Slope of aska by the winter season of 2015-16, and to delineate and evaluate hydrocarbon resources in a Point Thomson area. Proposed work includes the construction and operation of a minimum five wells, to be drilled utilizing long-reach directional drilling from three onshore pads entral Pad, East Pad and West Pad) to offshore portions of the reservoir. Point Thomson is the gest discovered undeveloped natural gas field in Alaska. The Executive Summary of the Draft S notes that the requirements for full field development cannot be accurately defined until of the resources within the reservoir. Future development could include eater volumes of gas condensate and crude oil production from the reservoir's oil rim and jacent reservoirs in the Brookian Group Sandstones.	
the mil and pro gra offi	Central Processing Facility (CPF) at the Central Pad would separate hydrocarbon liquids from a natural gas, and the residual gas would be re-injected into the reservoir. A new twenty- two lee elevated pipeline would be constructed for transporting hydrocarbon liquids (condensate d possibly oil) west to connect with the Trans Alaska Pipeline System (TAPS). The proposed oject would also include the following: a disposal well at the CPF; support facilities; infield avel roads; pipelines; an airstrip; a gravel mine site; ice roads; a temporary "barge bridge" for floading large gas field modules; and minor dredging of the sea floor at the barge bridge site to commodate the barges.	
	ALASKA REGION - WWW.fakr.noaa.gov	

Comment	Response
As defined in the Draft EIS the project area extends eastward from Deadhorse to the Canning/ Staines River, and from the lagoon side of Flaxman Island and the Maguire Islands along the Beaufort Sea coast to approximately eight miles south of the coastline. Most of the Thomson Sand Reservoir is offshore, under state coastal waters; however, most of the proposed facilities would be located on land. There are five possible alternatives for the project. Under Alternative A (No Action), the Corps would not issue a permit, and the applicants would suspend all project planning and engineering. Only monitoring of the two existing (capped) wells would occur. Under Alternative B (Applicants Proposed Action), the applicants would utilize seasonal and infield ice roads, marine transport by coastal and oceangoing (sealift) barges, air transport by helicopters and fixed-wing aircraft, and gravel roads. Alternative B would also include construction of a sealift facility and a service pier on the coast at the Central Pad to facilitate docking of sealift and coastal barges. Minor dredging and screeding would occur to allow barge landings.	516 Marine mammals protected under MMPA and ESA are discussed in the EIS and impacts to these species are evaluated. The final Biological Assessment for bowhead whales and ringed and bearded seals was submitted to the NMFS in January 2012 as part of the ESA consultation process. Regulatory consultation required by the Applicant under MMPA is presented in Chapter 1 and discussed in Appendix F, Compliance with Related Law.
Under Alternative C (Inland Pads with Gravel Access Road), some project components would be located inland and there would be four gravel pads, along with a gravel access road for year round access between Point Thomson and the Endicott Spur Road. This road would eliminate the need to construct a coastal barge facility at Point Thomson. This alternative is intended to minimize impacts to coastal resources. However a fifty-one mile export pipeline would be constructed from the Central Pad to connect to the existing Endicott common carrier pipeline. This pipeline would cross larger, braided rivers that provide EFH for salmon. Additionally, the Draft EIS notes that it may be necessary to utilize more coastal facilities in the future as the resources are further identified and if needed for the long-range directional drilling. Alternative D (Inland Pads with Seasonal Ice Access Road) is also intended to minimize impacts to coastal resources by locating project components inland from the coastline. As in Alternative C, no barging facilities would be built and the same four gravel pads would be used. Under Alternative D, there would be construction of a sea or tundra ice road between the Endicott Spur Road and the Point Thomson site annually for the life of the project. Alternative E (Coastal Pads with Seasonal Ice Roads) is intended to reduce impacts to wetlands and surrounding water resources by minimizing the development footprint through the use of less gravel fill. Multiyear ice pads would be used to expand the gravel well pad footprints during drilling. Also, seasonal ice roads would be used for much of the infield road system. Alternative	
E would include the same barging facilities as in Alternative B. Threatened and Endangered Species / Marine Mammals	
NMFS has management responsibility for all marine mammals in Alaska except sea otter, walrus, and polar bear, and for several species listed as threatened or endangered under the ESA. Section 7(a)(2) of the ESA directs federal interagency cooperation "to insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species" or result in the destruction or adverse modification of critical habitat.	
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Comment	Response
The Public Notice states that "Preliminarily, a determination of "not likely to adversely affect" the Bowhead whale, Ringed seal, and Bearded Seal has been made in the draft Biological Assessment (BA)." The Corps determined in the draft BA that "the project is not likely to adversely affect these species or their populations." The Corps will be sending a final BA to NMFS shortly. We look forward to reviewing the BA and completing consultation with the Corps under section 7 of the ESA. Please visit our web site http://www.nmfs.noaa.gov/pr/species/esaspecies.htm , for additional information. The MMPA Act of 1972 prohibits, with few exceptions, injury, harm or harassment of marine mammals. Under the 1994 Amendments to the MMPA, harassment is defined as any act of pursuit, torment, or annoyance which has the potential to injure or disturb a marine mammal causing disruption of behavioral patterns including migration, breathing, nursing, breeding, feeding or sheltering. Any unintentional and incidental take of marine mammals by U.S. citizens may be authorized under section 101 (a)(5) of the MMPA. Further information on this program may be found at our web site http://www.nmfs.noaa.gov/pr/permits/incidental.htm . Essential Fish Habitat	517 The Corps initiated EFH consultation with NMFS in January 2012 with submittal of the EFH Assessment. Section 5.12 of the Final EIS and EFH Assessment have been revised to clarify that adverse impacts to EFH are unlikely from the Point Thomson Project, except possibly under Alternative C. 518 Comment noted; no action required.
Section 305(b)(2) of the MSA requires federal agencies to consult with NMFS on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH. Please see our website for more information: http://www.alaskafisheries.noaa.gov/habitat/efh.htm. The Public Notice states that "a preliminary determination with respect to potential Project impacts on fish and EFH is included in the Point Thomson Project Draft EIS." Section 5.12 of the Draft EIS, Fish, Essential Fish Habitat, and Inverberates, contains the statement "Overall, impacts to EFH would be minor, temporary, possible, and local" for several of the alternatives. The conclusion in the draft EFH assessment contains statements such as the following: "could have long-term impacts on EFH"; "Alternate C has the most potential for impacting EFH," and "adverse impacts to EFH are unlikely." This language is not clear. The Final EIS and EFH assessment should contain a clear statement as to whether the action may adversely affect EFH. The draft EFH assessment also does not assess effects of possible spills and invasive species. If these are not included in the final EFH assessment, the assessment should reference where this information is located in the Final EIS. The Corps informed NMFS that a final version of the EFH assessment will be completed and mailed shortly. NMFS looks forward to reviewing it and completing consultation with the Corps under section 305(b)(2) of the MSA. General Comments and Recommendations	Fish 517
NMFS appreciates the applicants' efforts to minimize offshore structures through the use of long-reach directional drilling and the use of a temporary (lasting approximately two to four weeks) "barge bridge" (consisting of barges that would take on ballast water to ground and	Fish 518
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Response Comment 519 The Corps will evaluate the feasibility of a pile-supported boat ramp with the Applicant during the permitting process. 520 Section 5.12.3.1, Alternative B: Construction, has been revised to clarify that although the harsh marine environment of the arctic is subsequently releasing this to refloat and leave the area). NMFS also appreciates the use of generally inhospitable to invasive species, some species, such as the winter dredging through the ice to minimize impacts to marine life. Chinese mitten crab, could persist if introduced. With regard to other living marine resources including EFH, NMFS supports the use of piles to 750 Marine shale would be drilled through in order to reach the sandstone allow for fish passage in the design for the emergency response boat ramp if feasible. reservoir. The Corps is not aware of special spill concerns associated Section 5.12 in the Draft EIS, Fish, Essential Fish Habitat, and Invertebrates, concludes that the with drilling through marine shale. extremely harsh environment of the study area would likely not allow the substantial Additional discussion of the drilling muds to be used for the Point proliferation of invasive invertebrates. Cold temperatures are not necessarily a limiting factor to the proliferation of invasive species. In 2010, the Chinese mitten crab, an invasive species, was Thomson Project has been added to Section 5.24.2.2, Types of found in a cold water environment in the White Sea in the Russian Arctic. Material Spilled: "Two different types of drilling mud would be used for the Point Thomson wells. The surface interval would be drilled The Corps acknowledges some of the unique features of the project. The target reservoir for the Point Thomson Project is several thousand feet deeper and under much higher pressure than the with a high viscosity, water-based mud consisting of a freshwater, other North Slope hydrocarbon reservoirs. The project will require specialized high-pressure bentonite, and polymer mixture. Nonaqueous fluid (NAF) drilling drilling and recovery techniques that have not been used on the North Slope. Also, instead of producing primarily crude oil with smaller and varying proportions of saltwater and natural gas muds would be used for drilling below the surface casing (Appendix like other operations on the North Slope, the majority of the anticipated produced fluids from D, RFI 112)." Point Thomson would be gas condensates (similar to kerosene) and natural gas with some Text regarding long-reach directional drilling relative to spills has been added to the introductory text for Section 5.24: "Long-reach The Draft EIS denotes that current information on North Slope spills is based on crude oil and hazardous materials associated with crude oil exploration, production, and transportation and that directional drilling would be used for the Point Thomson Project to where practical the distinctions between potential impacts of crude oil and condensate spills are access the offshore reservoir without the impacts to offshore and indicated. The Final EIS should contain a more thorough description of the specific risks coastal environments that would be posed by using offshore well pads. associated with this project (such as any possible concerns of drilling through the marine shale, any unique drilling fluids, etc.). A comparison to similar projects utilizing long-reach directional Long-reach directional drilling requires specialized drilling rigs and drilling (even outside the Arctic) and some general background on this technology would be computer technology to steer the borehole to the desired location in the helpful for the public. hydrocarbon reservoir. Directional drilling, while a safe and proven Section 5.24.11.9 of the Draft EIS, Fish and Invertebrates, states that "marine fish do not usually technology, introduces the risk of friction and increases the complexity suffer mortality as a result of oil spills unless they are trapped in bays or similar areas." This statement should include a supporting reference. Arctic cod, a keystone species in the region's of drilling in terms of controlling the pressure of the well. Increases in food webs, move inshore to spawn during the winter. If Arctic cod were present and affected, the horizontal drilling distance increase the complexity of well the effects of a spill would likely propagate through the food web. development and the level of concern about safety. Consequently, Should you have any questions, please contact LT Amy Cox by email at amy.b.cox@noaa.gov, even in a directional drilling scenario the technically preferable or by telephone at (907) 271-5006. approach is to be as close to the resource as possible to pursue the safest and most efficient drilling program possible." We are not aware of specific differences in this technology compared to standard wells relative to spills. Finally, we have added further discussion of blowout prevention technology to Section 3.24.5.4,Blowouts and Uncontrolled Releases prior to the last paragraph: "Three types of protection are used to address blowouts—drilling mud, blowout preventers, and diverters. Drilling mud exerts downward pressure to control the formation pressure. If the formation pressure exceeds the drilling mud pressure, a

blowout preventer shuts off the well hole and prevents the escape of underground fluids. A blowout preventer consists of high-pressure safety valves and associated equipment installed on top of the casing

Comment	Response
	head. Blowout preventers cannot be installed until the well is cased. Therefore, in the early stages of drilling a well, a pipe system called a diverter is used to route gas from a blowout away from the rig to reduce the risk of explosion."
	521 The quoted statement from the Draft EIS Section 5.24.11.9, Fish and Invertebrates, does not have a specific reference but is supported by the discussion that follows. To that end, the following text has been inserted after, "Also, marine fish do not usually suffer mortality as a result of oil spills unless they are trapped in bays or similar areas": "Arctic cod, a keystone species in the region's food webs, move inshore to spawn during the winter (Morrow 1980). However, spills would be unlikely to reach marine waters during the winter due to the presence of sea ice. Further, due to the presence of bottom-fast ice to a depth of about 7 feet, the fish would not be able to access the nearshore areas in the vicinity of the pads."

Comment	Response
	Comment Document 238 continued.
cc: brad.smith@noaa.gov jeanne.hanson@noaa.gov	
steven.k.davis@noaa.gov timothy.mccune@noaa.gov steve.kokkinakis@noaa.gov louise_smitheffws.gov rockwell.theodore@epa.gov harry.a.baij@usace.army.mil	
References	
BarrentsObserver.Com Cross Boarder News. (2010, July 21). "New Invasive Crab Found in Russian Arctic." http://www.barentsobserver.com/new-invasive-crab-found-in-russian-arctic.4801732-16176.html (include with Invertebrates comment on page 4)	
G-COE Paint Thomas POA 2003 1002 Mt. A. G. TIE	
G:COE Point Thomson POA 2001-1082-M1 draft EIS ac 1-18-12	
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mment			Response	
Davis, Cecile		0239_Chris.Storhok_LGOV	522 Comment noted; no action required.	
Sent: To: Cc: Subject:	Thursday, January 19, 2012 11:40 AM comments@pointthomsonprojecteis.com extraski@gmail.com Online form submission			
Name: Chris Stor Email: cstorhoké Contact me throu Address: 809 Pic City: Fairbanks State: AK Zip: 99707 Contact Phone: 9 Add me to mailir	ufnsb.us gh email: Yes neer Rd 07-459-1351	f Support for Alternative B 522 supports Alternative B.		
Comments: The Fr	SB Economic Development Specialist Strongly			
Davis, Cecile	SS ECONOMIC Development Specialist Strongly	0240_Luke.Hopkins_LGOV	523 Comment noted; no action required.	
10 Miles 100 Mil	Thursday, January 19, 2012 11:43 AM comments@pointhomsonprojectels.com extraski@gmail.com Online form submission		523 Comment noted; no action required.	

Coded Comment



Shell Exploration & Production

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RECEIVED

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Shell

Mr. Harry Baij Jr. Project Manager Department of the Army U.S. Army Engineer District, Alaska Regulatory Division P.O. Box 6898 JBER. Alaska 99506-0898

January 9, 2012

Re: Comments on Point Thomson Project Draft Environmental Impact Statement (Draft EIS) for the proposed development by Exxon Mobil Corporation and PTE Pipeline LLC (project applicant)

Dear Mr. Baij:

Shell Exploration and Production Company (Shell) hereby provides the following three comments on the Point Thomson Draft EIS for the proposed development by the project applicant.

Comment 1:

The Pt. Thomson EIS should give greater consideration to other potential future development projects in the vicinity of Pt. Thomson in the development options and scenarios for the proposed project. Shell Offshore Inc. (SOI), an affiliate of Shell, owns numerous Outer Continental Shelf (OCS) leases located approximately 15 to 30 miles offshore Point Thomson in the Beaufort Sea. Shell intends to conduct exploration drilling programs on several of its Beaufort Sea OCS leases during the summer of 2012 and in subsequent years. Any discovery of commercial hydrocarbons at Shell's Beaufort Sea leases will require installation of a subsea pipeline from its Beaufort Sea leases, a sea-to-shore transition location in the vicinity of Point Thomson, and an onshore pipeline from Point Thomson to pump station number one of the Trans-Alaska Pipeline System (TAPS).

If access to the onshore infrastructure proposed by ExxonMobil at Point Thomson is not available due to capacity constraints, or in the event ExxonMobil and Shell are not able to negotiate commercial terms to access that infrastructure, then Shell would need to construct additional onshore infrastructure including but not limited to one or more of the following: a gravel pad and a subsequent pump station, barge landing facilities, a helipad, an airstrip, a gravel pad for living quarters (for construction and later for operations), and a gravel road infrastructure to connect all the above elements. This construction would require access to a local Point Thomson gravel source and water for ice roads.

Response

738 The Point Thomson EIS identifies Shell's offshore activities within the reasonably foreseeable future actions and cumulative impacts discussion. The Shell activities have not reached a sufficient level of development certainty to elevate them out of the reasonably foreseeable future actions discussion. As identified in the comment, there are a number of business agreements as well as the discovery of commercial hydrocarbons offshore that would need to come to fruition before any interrelation between Shell activities and the Applicant's activities would affect the Point Thomson Project design and/or environmental impacts in the vicinity of Point Thomson.

Coded Comment Response 739 The Final EIS contains mitigation under consideration by the Corps. The Corps will further consider mitigation options before making its final permit decision. The Record of Decision (ROD) and accompanying documentation will identify adopted mitigation measures. The ROD is followed by a 30-day If access to the onshore pipeline from Point Thomson to Badami proposed by ExxonMobil is not no action period. The Corps does not normally accept comments during that available due to capacity constraints, or in the event ExxonMobil and Shell are not able to negotiate commercial terms, then Shell would also need to build a separate pipeline, including vertical support members (VSMs) and river crossings from Pt. Thomson to Badami or all the 740 The Corps is neither a proponent or opponent of proposed project, and way to pump station number one of the Trans-Alaska Pipeline System (TAPS). therefore cannot identify an agency-preferred alternative. The Corps considers Comment 2: identifying a preferred alternative in a NEPA document predecisional and therefore does not identify the Least Environmentally Damaging Practicable The Draft EIS notes that mitigation measures in addition to and/or different than those contained in the current project description/evaluation may be imposed during the agency's development of Alternative, the only alternative that the Corps is able to permit, until the the final EIS. In the event the agency develops additional and/or different mitigation measures following the initial public comment period and in the course of developing its final EIS, the Record of Decision. agency should provide an additional period for public comment on those new and/or revised mitigation measures, given the potential impact of those mitigation measures on future development projects in the vicinity of Pt. Thomson. Comment 3: The Draft EIS states that the U.S. Army Corps of Engineers will avoid making a decision on the agency preferred alternative until issuance of the Record of Decision. Given the likelihood of additional development projects in the vicinity of Pt. Thomson, the agency should identify its preferred alternative early in the review process, and allow for public comment on that preferred alternative, so that other interested parties might better understand the agency's rationale for its proposed decision and provide comments specific to that preferred alternative and the possible impacts to other future development activities in the vicinity of Pt. Thomson. If you have any questions regarding this submission, please contact me at (907) 646-7112 or at Susan.Childs@Shell.com, or Mark Newell at (832) 337-1898 or at Mark.Newell@Shell.com. Thank you, Sua Child AK Venture Support Integrator, Manager

Coded Comment	Response
	755 Comment noted; no action required.
0247_Jimmy.Parrish_IND	
Point Thomson EIS – Public Testimony Jimmy Parrish Wednesday, December 7th, 6:30-8pm	
Good Evening; 755 Statement of Support for Alternative B	
My name is Jimmy Parrish. I am a Fairbanks Account Manager for Carlile Transportation Systems.	
I encourage you to approve Alternative B of the draft EIS for the Point Thomson project. Alternative B	
provides a safe and environmentally responsible solution for the development of this critical resource.	
Especially critical to the Interior of Alaska and the energy security for all of Alaska, the development of	
Alaska's natural gas depends on this project moving forward. By approving Alternative B of the draft EIS	
for Point Thompson and moving this project forward, the creation of secure long-term high paying jobs	
will be available for Alaskans.	
Please approve the draft EIS alternative B as it is a win-win situation. Our nation is currently stuck in an	
economic crisis. While we are constantly seeking to ease our dependence on foreign sources of energy,	
we also have a population that is thirsty to get back to work. This project is exactly the kind of economic	
development that our society yearns.	
With stringent mitigation measures in place for wildlife, protecting subsistence activities in the area, as	
well as increased jobs and revenue for Alaskans and the state of Alaska – this is clearly a great path for	
moving forward. Thank you for your time.	