

APPENDIX D

Winter radio telemetry data on burbot,
rainbow trout, and Arctic grayling.

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Appendix Table D-1 List of tributaries, sloughs and lakes in the Susitna River drainage that were aerial surveyed to track the movements of radio-tagged Arctic grayling, rainbow trout and burbot. Surveys for the tributaries start at their mouths.

Trib, slough, lake surveyed (distance surveyed (in miles))	# Surveys/by 2 month intervals				Trib, slough, lake surveyed (distance surveyed (in miles))	# Surveys/by 2 month intervals			
	Sep Oct	Nov Dec	Jan Feb	Mar Apr		Sep Oct	Nov Dec	Jan Feb	Mar Apr
Cook Inlet to Devils Canyon					Cook Inlet to Devils Canyon (Cont)				
Alexander Creek (7.0)		2		1	Whiskers Creek (4.0)				1
Yentna River (10.0)		2		1	Slough 6a (complete)				1
Deshka River (6.0)	1	2	1		Gash Creek & Lake (complete)				1
Kroto Slough (complete)		1			Slough 8a (complete)				1
Willow Channel (complete)		4	1	2	Slough 9 (complete)				1
Kashwitna River (5.0)				1	Fourth of July Creek (3.0)	3	1		1
Montana Creek (3.0)		1			Unnamed lake, drains into Fourth of July Creek 4 mi upstream from its mouth (complete)				1
Rabideux Creek (2.5)		2			Indian River (10.0)	3	1		2
Sunshine Slough (complete)		2		1	Miami Lake (complete)				1
Birch Creek Slough (complete)		1			Proposed Impoundment Area:				
Talkeetna River (20.0)			1	1	Tsusena Creek (4.0)	5			
Larson Lake (complete)				1	Deadman Creek (14.0)	5	1		1
Sheep River (5.0)				1	Deadman Lake (complete)	1	1		
Clear Creek (12.0)				1	Watana Creek (E.Fork-8.0)	4	1		
Fish Creek (complete)				1	Kosina Creek (6.0)	4	3	1	2
Chulitna River (20.0)				1	Clarence Lake (complete)				1
Byer Lake (complete)				1	Oshetna River (4.0)	4	3	1	2

Appendix Table D-2 Summary of tagging and tracking data for radio-tagged rainbow trout in the Susitna River between Cook Inlet and Devil Canyon, September 1982 to April 1983.

Capture Data, 1982							Tracking Data: Date tracked, location and rivermile																	
Radio Fre- quency	Length ^{a/}	Age	Date	Date Tagged	River- Mile	Date Released	Sept					OCT			Nov		Dec			Feb	Mar			Apr 19 P
							10 P	14 B	15 B	22 P	25 P	4 P	15 P	30 P	15 P	2 P	14 P	30 P	4 P	4 P	9 P	12 S		
600-.5	410	-	10/13	10/14	77.0	10/15							76.5	72.0	72.0	72.0	72.0	72.0	NS	73.5	NS	NS	NC	NC
601-1	508	7	9/19	9/20	131.0	9/21				131.0	130.5	129.5	129.5	131.0	131.0	131.0	131.5	NC	131.1	131.5	131.5	131.5	NS	
600-3	443	6	10/9	10/10	138.6	10/11							138.0	134.8	131.0	83.5	64.0	62.0	62.0	63.0	63.0	63.0	NC	
620-1	445	6	9/19	9/20	131.1	9/21				130.4	129.1	128.0	128.0	128.4	128.4	128.0	121.5	111.0	112.0	NS	131.5	NC	NS	
640-1	448	-	10/9	10/10	138.6	10/11							138.6	NS	138.2	NS	NS	NS	97.0 ^{b/}	NS	NS	NC	NC	
660-.5	435	6	9/7	9/8	125.3	9/9	125.5	126.1	112.8	113.5	113.5	113.5	111.5	112.5	112.5	112.5	113.4	113.4	113.4	113.1	113.1	113.1	113.1	
660-1	423	-	10/9	10/10	138.6	10/11							138.6	135.5	118.0	117.8	83.0	83.0	83.0	NS	NS	NC	NC	
670-3	440	6	9/18	9/19	131.1	10/20				NS	129.6	128.8	129.0	127.0	127.0	127.0	126.6	NS	NS	NS	NS	NC	NS	
680-1	445	-	9/18	9/19	131.1	9/20				130.9	131.0	131.0	132.5	132.5	132.5	132.5	129.5	130.0	NS	NS	NS	NC	NS	
710-1	440	-	9/18	9/19	131.1	9/20				130.6	127.7	128.0	126.0	124.8	123.2	118.5	NS	104.0	103.5	NS	NS	NC	NS	

^{a/}Fork length in millimeters
^{b/}Talkeetna River, TRM 1.5

Note - P = Tracked by plane or helicopter
 B = Boat survey
 S = Snowmobile survey
 NC = Not checked
 NS = No signal

Appendix Table D-3 Summary of tagging and tracking data for radio-tagged burbot in the Susitna River between Cook Inlet and Devil Canyon, August 1982 to April 1983.

<u>Capture Data, 1982</u>						<u>Tracking Data: Date tracked, location and rivermile</u>									
Radio Fre- quency	Length ^{a/}	Date	Date Tagged	River- Mile	Date Released	AUG			SEPT						
						22 P	26 P	28 B	2 B	5 B	9 P	15 B	18 B	22 B	25 P
600-2	660	9/14	9/15	139.5	9/16								139.6	139.6	139.6
610-2	584	8/18	8/19	101.2	8/20	101.2	101.2	100.0	99.5	98.7	91.0	NC	NC	NC	NS
630-2	865	9/10	9/11	103.0	9/13							103.0	101.0	96.7	92.7
640-2	570	8/19	8/20	137.3	9/21	137.3	137.3	136.9	136.9	136.9	136.9	136.9	136.9	NS	101.0
660-2	715	9/19	9/20	139.5	9/21									NC	139.6
660-3	607	9/19	9/20	135.7	9/21									135.7	135.7
670-1	580	10/13	10/13	83.7	10/15										
670-2	565	10/13	10/13	83.7	10/15										
680-2	535	10/13	10/13	83.7	10/15										
710-3	615	10/13	10/13	83.7	10/15										
740-3	667	9/19	9/20	129.2	9/21									128.1	128.0

^{a/}Total length in millimeters

Note - P = Tracked by plane or helicopter
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Appendix Table D-3 Continued

<u>Capture Data, 1982</u>						<u>Tracking Data: Date tracked, location and rivermile</u>											
Radio Fre- quency	Length ^{a/}	Date	Date Tagged	River- Mile	Date Released	OCT			NOV		DEC			FEB	MAR		APR
						4 P	15 P	30 P	15 P	2 P	14 P	19 S	30 P	4 P	4 P	12 S	19 P
600-2	660	9/14	9/15	139.5	9/16	139.6	139.6	NS	139.6	139.6	139.6	NC	NC	139.6	NS	NC	NS
610-2	584	8/18	8/19	101.2	8/20	5.0	NS	NS	- Presumed dead, out to Cook Inlet -								
630-2	865	9/10	9/11	103.0	9/13	80.0	50.0	NS	NS	NS	NS	NS - Presumed dead, out to Cook Inlet -					
640-2	570	8/19	8/20	137.3	9/21	100.0	100.0	NS	100.0	100.0	100.0	NC	100.0	100.0	NS	NS	NS
660-2	715	9/19	9/20	139.5	9/21	136.0	135.3	NS	26.0	26.0	26.0	NC	26.0	27.0	NS	NC	NC
660-3	607	9/19	9/20	135.7	9/21	135.7	135.3	135.3	135.3	135.3	135.3	135.3 - Dead, located in 2" of water-					
670-1	580	10/13	10/13	83.7	10/15		83.5	83.6	83.0	83.0	82.5	NC	83.0	83.0	82.5	82.5	NC
670-2	565	10/13	10/13	83.7	10/15		83.5	NS	NS	NS	NS	NS - Presumed tag failure -					
680-2	535	10/13	10/13	83.7	10/15		83.0	77.5	77.5	77.5	77.0	NC	76.0	75.0	72.0	72.0	NC
710-3	615	10/13	10/13	83.7	10/15		83.2	80.0	80.0	NS	79.5	NC	79.0	76.0	76.1	76.1	NC
740-3	667	9/19	9/20	129.2	9/21	128.0	NS	NS	NS	NS	NS	NS - Presumed tag failure -					

^{a/}Total length in millimeters

Note - P = Tracked by plane or helicopter
 B = Boat survey
 S = Snowmobile survey
 NC = Not checked
 NS = No signal

Appendix Table D-4 Summary of tagging and tracking data for radio-tagged Arctic grayling in the proposed impoundment area of the Susitna River drainage above Devil Canyon, August 1982 - April 1983. All fish were captured by hook and line.

Capture Data, 1982						Tracking Data: Date tracked, location and river mile; Susitna River mile/Tributary River mile											
Radio Frequency	Length (mm) ^{a/}	Date Captured	Location (tributary river mile)	Date Tagged	Date Released	Sept			OCT			Nov	Dec		Feb	Mar	Apr
						16 P	18 P	27 P	2 P	15 P	30 P	15 P	2 P	14 P	4 P	3-4 G	19 P
600-1	375	8/18	Oshetna(1.7)	8/19	8/20	NC	233.4 /1.2	0 /1.2	233.4 /1.2	NS	NS	233.4 /0.2	233.4 /0.2	233.4 /0.2	NS	NS	NS
620-.6	375	9/10	Tsusena(1.5)	9/11	9/12	181.3 /1.5	181.3 /1.5	181.3 /1.5	177.5	154.0	154.5	154.5	154.5	NS	NS	NS	NS
630-.5	395	8/24	Watana (East Fork 8.0)	8/25	8/26	194.1 /8.0	194.1 /8.0	194.1 /8.0	194.1 /8.0	194.1 0.0	193.5	193.5	193.0	192.0	192.0	191.8	NS
650-.5	375	9/30	Kosina(1.6)	10/1	10/2	-	-	-	-	206.1	205.0	187.5	NS	186.7	186.7	187.0	187.0
650-.6	380	9/10	Tsusena(1.5)	9/11	9/12	T/1.5	T/0.7	NS	153.0	153.0	154.0	153.8	153.8	153.6	153.1	153.1	NS
660-.6	375	9/8	Tsusena(1.5)	9/9	9/10	T/1.5	T/0.7	T/0.1	T/0.0	T/0.0	174.5	174.5	NS	NS	NS	NS	NS
670-1	395	9/7	Oshetna(0.7)	9/8	9/9	NC	232.5	227.5	206.3	NS	NS	192.5	191.5	191.5	191.5	190.9	NS
710-.5	375	9/28	Kosina(1.6)	9/29	9/30	-	-	-	206.4 /1.0	206.4 /0.8	206.4 /0.8	206.4 /0.5	206.4 /0.5	206.4 /0.5	206.4 /0.5	NS	NS
710-1	385	8/22	Kosina(4.0)	8/23	8/24	NC	156.0	NC	153.0	156.0	156.0	156.0	NS	NS	NS	NS	NS
720-.5	380	9/15	Kosina(1.6)	9/16	9/17	-	206.4 /1.6	NS	NS	NS	197.0	198.0	198.5	198.5	198.5	198.0	198.0
720-.6	390	9/10	Tsusena(1.5)	9/11	9/12	T/1.5	172.5	174.0	NS	NS	179.5	176.6	NS	NS	175.0	NS	NS
720-1	395	8/18	Oshetna(1.7)	8/19	8/20	NC	233.4 /1.7	233.4 /1.7	220.0	201.8	205.5	206.0	206.0	206.0	NS	NS	NS
730-.5	370	9/15	Kosina(1.6)	9/16	9/17		206.4 /1.6	206.4 /1.4	206.4 /1.4	202.0	196.5	197.0	197.0	197.0	198.0	197.5	197.5
740-.5	390	9/30	Kosina(1.6)	10/1	10/2	-	-	-	T/1.6	NS	NS	206.8	NS	NS	NS	NS	NS
740-.6	390	9/7	Oshetna(0.7)	9/8	9/9	NC	233.4 /1.0	233.4 /1.0	233.4 /1.0	233.4 /0.0	233.4	228.0	226.7	226.7	226.7	NS	NS

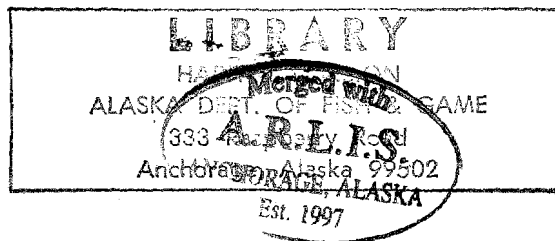
^{a/} Fork length

Note - P = Tracked by plane or helicopter
G = Ground survey
NC = Not checked
NS = No signal

Appendix D: Winter radio telemetry data on burbot,
rainbow trout, and Arctic grayling.

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SUSITNA HYDRO AQUATIC STUDIES
PHASE II DATA REPORT

Winter Aquatic Studies
(October, 1982 - May, 1983)

by

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