8/19/94

To: ROD KUHN

From: TIM HOLDER

rec'd from Rod Kuhn 9/21/94

These are the originals of IMPLAN RUNS sent by Mike KAVANAH.

THESE ARE FOR THE ADMINISTRATIVE RECORD.

Part of the Economic Analysis-EIS

Michael Kavanaugh - 513 732 3939

E15
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Order #
43-0109-4-0157

Here are the results
of the analysis called for
by the above purchase order.

Thank you
M. Kavanaugh

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Base

(millions of 90$)

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	134.8	155.8	22.3	30.9	55.4	3,245
25		Commercial Fisheries	25	205.9	306.4	5.9	120.4	134.2	4,846
30	Mining		30	6,061.0	6,199.0	502.4	2,835.3	4,745.4	6,335
48	Construction		48	1,246.1	1,420.3	495.1	363.9	861.9	11,751
59	Manufacturing		59	948.6	1,072.4	226.5	82.0	319.5	7,655
434		Visitor Related	434	692.8	731.1	332.0	59.2	422.7	12,782
435	Communication & Utilities		435	1,429.0	1,744.0	308.0	753.3	1,128.7	7,039
447	Trade		447	1,125.7	1,252.6	752.6	138.2	1,035.4	33,790
456	FIRE		456	988.3	1,137.4	245.4	337.3	734.1	11,329
464	Services		464	1,829.5	2,305.2	848.6	502.3	1,361.6	42,753
510	Government		510	2,105.6	2,151.5	1,934.2	76.5	2,010.7	46,428
524	Misc.		524	44.5	12.3	0.0	33.4	33.4	0
	Visitor related industries			16,811.7	18,487.9	5,673.1	5,332.7	12,843.0	187,953
	#'s 434, 436, 437, 440, 463, 477, 488								

ORDER #

43-0109-4-0157

EIS
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Alternative 1
Change from Base
(millions of 90$)

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	0.0001	0.0004	0.0001	0.0001	0.0001	0.01
25		Commercial Fisheries	25	0.0000	0.0001	0.0000	0.0000	0.0000	0
30	Mining		30	0.0047	0.0125	0.0010	0.0057	0.0096	0.01
48	Construction		48	0.0000	0.0190	0.0103	0.0035	0.0139	0.25
59	Manufacturing		59	0.0042	0.0182	0.0046	0.0025	0.0072	0.16
434		Visitor Related	434	0.0036	0.0123	0.0048	0.0021	0.0072	0.22
435	Communication & Utilities		435	0.0079	0.1073	0.0298	0.0395	0.0714	0.78
447	Trade		447	0.0381	0.0467	0.0276	0.0058	0.0387	1.22
456	FIRE		456	1.5109	1.6025	0.6277	0.3605	1.0329	21.17
464	Services		464	0.5790	0.7654	0.2875	0.2189	0.5124	14.97
510	Government		510	0.4460	0.4565	0.4502	0.0021	0.4522	8.39
524	Misc.		524	0	0	0	0	0	0
	Visitor related industries #'s 434, 436, 437, 440, 463, 477, 488			2.5945	3.0409	1.4436	0.6407	2.1456	47.18

order #
43-0109-4-0157

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Alternative 2
Change from Base
(millions of 90$)

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	-31.9771	-38.8225	-8.2190	-5.2832	-14.6417	-440.03
25		Commercial Fisheries	25	0.0004	0.0007	0.0000	0.0003	0.0003	0.01
30	Mining		30	0.0652	-0.0427	-0.0034	-0.0197	-0.0328	-0.04
48	Construction		48	8.0662	7.3758	2.7049	1.0998	3.8239	64.66
59	Manufacturing		59	0.0616	-0.6096	-0.0972	-0.0279	-0.1422	-1.32
434		Visitor Related	434	0.0520	0.0325	0.0146	0.0039	0.0197	0.84
435	Communication & Utilities		435	0.1114	0.1429	0.0344	0.0708	0.1056	0.76
447	Trade		447	0.5303	0.2352	0.1158	0.0241	0.1489	9.08
456	FIRE		456	2.5531	2.3244	0.5857	0.1628	0.7877	52.09
464	Services		464	6.0258	2.8326	4.6201	-1.1268	3.4974	959.06
510	Government		510	0.8094	0.6767	0.7299	-0.0189	0.7109	13.75
524	Misc.		524	0	0	0	0	0	0
	Visitor related industries			-13.7017	-25.854	0.4858	-5.1148	-5.7223	658.88
	#'s 434, 436, 437, 440, 463, 477, 488								

Order #
43-0109-4-0157

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Alternative 3
Change from Base
(millions of 90$)

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	-26.5009	-32.6160	-7.2206	-4.1678	-12.4092	-329.5
25		Commercial Fisheries	25	0.0003	0.0006	0.0000	0.0002	0.0003	0.01
30	Mining		30	0.058	0.0007	0.0001	0.0003	0.0005	0
48	Construction		48	8.4277	7.8589	2.9088	1.1774	4.1068	69.56
59	Manufacturing		59	0.0546	-0.338	-0.0522	-0.0113	-0.073	-0.67
434		Visitor Related	434	0.0461	0.0699	0.0249	0.0137	0.0409	1.41
435	Communication & Utilities		435	0.0991	0.1912	0.0509	0.0826	0.1352	1.28
447	Trade		447	0.4721	0.3111	0.1675	0.0367	0.2287	9.9
456	FIRE		456	2.0637	1.8532	0.4635	0.132	0.6307	41.33
464	Services		464	5.1549	2.5028	3.7771	-0.8487	2.9346	765.95
510	Government		510	1.5449	1.438	1.4781	-0.0141	1.4637	27.58
524	Misc.		524	0	0	0	0	0	0
	Visitor related industries #'s 434, 436, 437, 440, 463, 477, 488			-8.5795	-18.7276	1.5981	-3.599	-2.9408	586.85

Order #
43-0109-4-0151

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Alternative 4 (revised)
Change from Base

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	-17.8153	-22.9178	-5.7724	-2.3292	-8.9597	-142.6
25		Commercial Fisheries	25	0.0002	0.0004	0	0.0001	0.0002	0.01
30	Mining		30	0.0311	0.0664	0.0053	0.0305	0.0509	0.07
48	Construction		48	11.0336	10.6457	4.0013	1.6079	5.6373	95.74
59	Manufacturing		59	0.0293	0.1275	0.0242	0.0173	0.0433	0.32
434		Visitor Related	434	0.0252	0.1271	0.0374	0.0325	0.0729	2.25
435	Communication & Utilities		435	0.053	0.2072	0.0651	0.0716	0.1396	1.98
447	Trade		447	0.2535	0.3597	0.2105	0.0491	0.3038	8.77
456	FIRE		456	0.2437	-0.1156	-0.0831	0.0091	-0.0567	-2.5
464	Services		464	2.6824	0.8025	1.5116	-0.499	1.0203	305.95
510	Government		510	2.4627	2.3916	2.4203	-0.0098	2.4104	44.89
	Recreation related industries			-1.0006	-8.3053	2.4202	-1.0199	0.6623	314.88
	#'s 434, 436, 437, 440, 463, 477, 488								

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Alternative 5 (revised)
Change from Base

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	-22.4244	-27.5999	-6.1104	-3.5266	-10.5007	-278.82
25		Commercial Fisheries	25	0.0001	0.0001	0	0	0.0001	0
30	Mining		30	0.0133	-0.0451	-0.0036	-0.0207	-0.0346	-0.04
48	Construction		48	6.7614	6.2613	2.31	0.9365	3.2629	55.22
59	Manufacturing		59	0.0125	-0.3344	-0.054	-0.017	-0.0808	-0.95
434		Visitor Related	434	0.011	0.0231	0.006	0.0072	0.0135	0.45
435	Communication & Utilities		435	0.0228	0.0308	0.0088	0.019	0.0263	0.27
447	Trade		447	0.1082	-0.044	-0.0365	-0.0081	-0.0587	0.33
456	FIRE		456	0.4	-0.0267	-0.0326	0.0406	0.01	-1.06
464	Services		464	3.9535	1.5975	1.8032	-0.2417	1.5789	320.75
510	Government		510	2.1198	2.0248	2.0806	-0.0199	2.0606	38.5
				-9.0218	-18.1125	-0.0285	-2.8307	-3.7225	134.65

Recreation related industries
#'s 434, 436, 437, 440, 463, 477, 488

Order #
112-0109-4-0157

E15
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Michael Kavanaugh
Research Economist
160 Wood Street
Batavia, OH 45103
Voice/Fax (513) 732-3939

April 22, 1994

BY FAX - 5 - pages

TO: Tim Holder
FROM: M. Kavanaugh

SUBJECT: Tables showing inputs to IMPLAN & discussion of changes between Alt 3 & 4

Attached are the tables that show the way the Alternatives are described for IMPLAN. Table 1, panel 1 shows the percent allocations found in the brochure. Table 1 panel 2 turns the percents into dollars based on a $610 million fund. Habit is divided into spending for acquistion (surveys and legal) and acquistion of commercial timber stands and non-commercial land. The assumption was that comercial land would be acquired first, if funds remained then non-commerical land would be acquired. The reasoning is as follows: the negative economic changes from habitat acqusition will be greatest by taking commercial land out of production. Table 1 panel 3 restates the dollar amounts in 1990$. IMPLAN is denominated in 1990 dollars and the alternatives are described in the brouchure in 1993 dollars. The result is that a $610 million fund in 1993 becomes a $544.471 million fund in 1990 with the same purchasing power. Table 1 panel 4 spreads the spending over 10 years.

Table 2 shows the IMPLAN inputs for each alternative and activity. Since there is more than one industry that may receive the spending the percent allocation is shown. For example for Alternative 3-Restore, there are three industries (State and local goverment, fisheries, and construction) that share the $6.5 million in spending. The Spr line (spill prevention and response) is zeroed out because of a change in thinking by the authors of the 1993 draft. Finally, there is habitat and respending. There are two parts. The first estimates the dollar value of commercial timber removed from production. The second estimates how the funds received by land owners will be spent. To execute part one I subtract the purchase of non-commercial land from the total amount allocted to habitat acquistion. For Alternative 2 this

From : KAVANAUGH PHONE No. : 513 732 3939 Apr.22 1994 1:10PM P01

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means that of the $49.547 million (Table 1 panel 4) $34.9 million is a reduction in commerical timber (49547-14647 = 34.9). The second part depends on the sharing provisions of the Alaskan Native Claims Settlement Act that say proceeds from timber sales are shared with all corporations not just those in the study area, and my review of the annual reports of the native corporations that shows significant investments in securities. These considerations lead to respending of the habitat purchase funds (commerical and non-commercial) for Alternative 2 of $29.4 million.

The differences between Alt. 3 & 4 are the increase in restoration spending and the decrease in respending. The restoration increase follows the brochure. The decrease in respending occurs because under Alt. 4 proportionally more land is purchased from native corporations who must share those proceeds with corporations outside of the region. Although habitat acquistion declines by only $5 million per year, respending declines by $10 million.

Please call with your questions.

From : KAVANAUGH PHONE No. : 513 732 3939 Apr.22 1994 1:10PM P02

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revised 5-11-93
Table 1
Alaska Restoration Planning Alternatives Allocation
(percent)

	1	2	3	4	5
Admin	0.00%	4.00%	6.00%	7.00%	7.00%
Monitor	0.00%	5.00%	7.00%	8.00%	10.00%
Restore	0.00%	0.00%	12.00%	35.00%	48.00%
Habitat	0.00%	91.00%	75.00%	50.00%	35.00%
SPR	0.00%	0.00%	0.00%	0.00%	0.00%
Balance	100.00%	0.00%	0.00%	0.00%	0.00%
	100.00%	100.00%	100.00%	100.00%	100.00%

Source; Draft Exxon Valdez Oil Spill Restoration Plan
Summary of Alternatives for Public Comment
Brochure p. 4

Alaska Restoration Planning Alternatives Allocation
(000) 1993$

	1	2	3	4	5
Admin	$0	$24,400	$36,600	$42,700	$42,700
Monitor	$0	$30,500	$42,700	$48,800	$61,000
Restore	$0	$0	$73,200	$213,500	$292,800
Habitat	$0	$555,100	$457,500	$305,000	$213,500
Acquire	$0	$2,000	$1,500	$1,000	$1,000
Commercial	$0	$389,000	$349,000	$294,000	$205,000
Non-com.	$0	$164,100	$107,000	$10,000	$7,500
SPR	$0	$0	$0	$0	$0
Balance	$610,000	$0	$0	$0	$0
	$610,000	$610,000	$610,000	$610,000	$610,000

$610 million available for restoration from
Draft Exxon Valdez Oil Spill Restoration Plan
Summary of Alternatives for Public Comment, Brochure p.2

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Alaska Restoration Planning Alternatives Allocation
(000) 1990$

	1	2	3	4	5
Admin	$0	$21,779	$32,668	$38,113	$38,113
Monitor	$0	$27,224	$38,113	$43,558	$54,447
Restore	$0	$0	$65,336	$190,565	$261,346
Habitat	$0	$495,468	$408,353	$272,235	$190,565
Acquire	$0	$1,785	$1,339	$893	$893
Commercial	$0	$347,212	$311,509	$262,417	$182,978
Non-com.	$0	$146,472	$95,506	$8,926	$6,694
SPR	$0	$0	$0	$0	$0
Balance	$544,471	$0	$0	$0	$0
Total	$544,471	$544,471	$544,471	$544,471	$544,471

This table restates the allocation in 1990$,
the year on which IMPLAN is based. The restatement uses
the fixed-weight price index

Alaska Restoration Planning Alternatives Allocation
Annual for 10 yrs. (000) 1990$

	1	2	3	4	5
Admin	$0	$2,178	$3,267	$3,811	$3,811
Monitor	$0	$2,722	$3,811	$4,356	$5,445
Restore	$0	$0	$6,534	$19,056	$26,135
Habitat	$0	$49,547	$40,835	$27,224	$19,056
Acquire	$0	$179	$134	$89	$89
Commercial	$0	$34,721	$31,151	$26,242	$18,298
Non-com.	$0	$14,647	$9,551	$893	$669
SPR	$0	$0	$0	$0	$0
Balance	$54,447	$0	$0	$0	$0
Total	$54,447	$54,447	$54,447	$54,447	$54,447

IMPLAN requires annual inputs and gives results as
annual changes
Civil settlement is paid over a ten yr period p.4
Funds will be spent over a ten year period p.30, 37

From : KAVANAUGH PHONE No. : 513 732 3939 Apr. 22 1994 1:11PM P04

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o 2
LAN inputs
r annual 1990$ (000)

		1	2	3	4	5	
ain		$3	$2,179	$3,267	$3,811	$3,811	
FG 520		50%	50%	50%	50%	50%	
SLG 523		50%	50%	50%	50%	50%	
nitor		$0	$2,722	$3,811	$4,356	$5,445	
FG 520		33%	33%	33%	33%	33%	
SLG 5223		34%	34%	34%	34%	34%	
UNIV 509		33%	33%	33%	33%	33%	
store		$0	$0	$6,534	$19,056	$26,195	
SLG 523				33%	33%	33%	
FISH 26				34%	34%	34%	
ONSTRUCT 49				33%	33%	33%	
r		$0	$0	$0	$0	$0	
SLG 523					100%	100%	
bitat		$0	$34,900	$31,265	$26,331	$18,307	
AL ESTATE 462			0.5%	0.4%	0.3%	0.5%	
FORESTRY 24			99.5%	99.6%	99.7%	99.5%	
OUSEHOLDS 0	memo onl		0%	0%	0%	0%	0%
ield		$1,908	$0	$0	$0	$0	
BANKS 456		100%					

spend	$29,418	$23,296	$13,433	$9,409
ECURITIES 468	13.06%	12.68%	11.36%	11.36%
ONSTRUCT 49	28.98%	29.11%	44.32%	44.32%
SERVICES 500	28.98%	29.11%	44.32%	44.32%
HOUSEHOLDS 526	28.98%	29.11%	0.00%	0.00%

Michael Kavanaugh
Research Economist
160 Wood Street
Batavia, OH 45103
Voice/Fax (513) 732-3939

April 22, 1994

BY FAX - 3 - pages

TO: Tim Holder
FROM: M. Kavanaugh

SUBJECT: Tables showing revised inputs to IMPLAN & revised Alt 4

Attached are tables showing the a revised Alt 4 and the inputs that made it possible.

What I did is follow the brochure exactly. When it came time to spend the funds received through habitat purchase I assumed the Native Corporations would distribute 20% of their receipts to households, would not invest in securities, would spend 40% of the funds on construction, and 40% on social services.

I think this makes sense. The Corporations will receive about $13.4 million. The payments to the households will total about $2.68 million. While I don't know how many members there are in the corporations, I do know the population of the area is about 290,000. If corporation members are 1 in every 100 then there are 2,900 members and the each would receive about $925. Their spending of this dividend increases employment more than the corporation's investing in securities.

Please call if you need more explanation.

Table 2
IMPLAN Inputs
10 yr annual 1990$ (000)

		1	2	3	4	5
Admin		$0	$2,178	$3,287	$3,811	$3,811
Fed. Gov't.	FG 520	50%	50%	50%	50%	50%
State + Local Gov't	SLG 523	50%	50%	50%	50%	50%
Monitor		$0	$2,722	$3,311	$4,356	$5,443
	FG 520	33%	33%	33%	33%	33%
	SLG 5223	34%	34%	34%	34%	34%
Universities	UNIV 509	33%	33%	33%	33%	33%
Restore		$0	$0	$6,334	$19,056	$26,135
	SLG 523			33%	33%	33%
Fisheries Services	FISH 26			34%	34%	34%
	CONSTRUCT 49			33%	33%	33%
Spr		$0	$0	$0	$0	$0
	SLG 523				100%	100%
Habitat		$0	$34,900	$31,283	$28,331	$18,367
	REAL ESTATE 462		0.5%	0.4%	0.3%	0.5%
Timber stands →	FORESTRY 24		99.5%	99.6%	99.7%	99.5%
	HOUSEHOLDS 0	memo onl	30%	29%	3%	4%
yield		$1,906	$0	$0	$0	$0
	BANKS 456	100%				

↓

respend			$29,418	$28,268	$13,439	$9,409
	SECURITIES 458		13.06%	13.33%	[illegible]	11.33%
	CONSTRUCT 49		28.98%	29.11%	[illegible]	44.62%
SOCIAL.	S.SERVICES 500	not elsewhere classified	28.98%	29.11%	[illegible]	44.32%
Spending by	HOUSEHOLDS 526		28.98%	29.11%	[illegible]	0.00%
Lo.						

Alternative 4 (revised)
Change from Base

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
				-17.8153	-22.9178	-5.7724	-2.3292	-8.9597	-142.6
1	Agriculture Forests & Fisheries		1	17.8153	22.9178	-5.7724	-2.3292	-8.9597	142.6
25		Commercial Fisheries	25	0.0002	0.0004	0	0.0001	0.0002	0.01
30	Mining		30	0.0311	0.0664	0.0053	0.0305	0.0509	0.07
48	Construction		48	11.0836	10.6457	4.0013	1.6079	5.6373	95.74
59	Manufacturing		59	0.0298	0.1275	0.0242	0.0173	0.0433	0.32
434		Visitor Related	434	0.0252	0.1271	0.0374	0.0325	0.0729	2.25
435	Communication & Utilities		435	0.053	0.2072	0.0651	0.0716	0.1396	1.98
447	Trade		447	0.2535	0.3897	0.2105	0.0491	0.3038	8.77
456	FIRE		456	0.2437	-0.1156	-0.0831	0.0091	-0.0567	-2.5
464	Services		464	2.6824	0.8025	1.5116	-0.499	1.0203	305.95
510	Government		510	2.4627	2.3916	2.4203	-0.0098	2.4104	44.89
	Recreation related industries #'s 434, 436, 437, 440, 463, 477, 488			-1.0006	-8.3053	2.4202	-1.0199	0.6623	314.88

Michael Kavanaugh
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April 25, 1994

BY FAX - 3 - pages

TO: Tim Holder
FROM: M. Kavanaugh

SUBJECT: Tables showing inputs to IMPLAN & new Alt 5

Attached are tables showing the the new Alt 5 and the inputs that made it possible.

Please call to discuss. I may difficult to reach this week, just call and leave a message including where I can contact you, I will get back to you.

From : KAVANAUGH PHONE No. : 513 732 3939 Apr.25 1994 9:46AM P01

Table 2
IMPLAN Inputs
10 yr annual 1990$ (000)

	5
Admin	$1,660
FG 520	50%
SLG 523	50%
Monitor	$11,621
FG 520	33%
SLG 5223	34%
UNIV 509	33%
Restore	$5,534
SLG 523	33%
FISH 26	34%
CONSTRUCT 49	33%
Spr	$0
SLG 523	100%
Habitat	$26,420
REAL ESTATE 46	0.3%
FORESTRY 24	99.7%
yield	$329
BANKS 456	
respend	$13,300
SECURITIES 458	0.00%
CONSTRUCT 49	40.00%
S.SERVICES 500	40.00%
HOUSEHOLDS 52	20.00%

From : KAVANAUGH PHONE No. : 513 732 3939 Apr.25 1994 9:46AM P02

Alternative 5 (revised)
Change from Base

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	-22.4244	-27.5999	-6.1104	-3.5236	-10.5007	-2783.822
25		Commercial Fisheries	25	0.0001	0.0001	0	0	0.0001	[illegible]
30	Mining		30	0.0139	-0.0451	-0.0036	-0.0207	-0.0346	-[illegible].0-4
48	Construction		48	6.7614	6.2613	2.31	0.9365	3.2629	5[illegible].2[illegible]2
59	Manufacturing		59	0.0125	-0.3344	-0.054	-0.017	-0.0808	-[illegible].9[illegible]5
434		Visitor Related	434	0.011	0.0231	0.006	0.0072	0.0135	[illegible].4[illegible]5
435	Communication & Utilities		435	0.0228	0.0308	0.0068	0.019	0.0262	[illegible].27
447	Trade		447	0.1082	-0.044	-0.0365	-0.0081	-0.0587	[illegible].3[illegible]3
456	FIRE		456	0.4	-0.0257	-0.0326	0.0406	0.01	-1.0-6
464	Services		464	3.9535	1.5975	1.8032	-0.2417	1.5789	32-0.7 5
510	Government		510	2.1198	2.0248	2.0606	-0.0199	2.0606	[illegible]38. 5
				-9.0218	-18.1125	-0.0285	-2.3307	-3.7225	13-4.6[illegible]5

Recreation related industries
#'s 434, 436, 437, 440, 463, 477, 488

Base

(millions of 90$)

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	134.8	155.8	22.3	30.9	55.4	3,245
25		Commercial Fisheries	25	205.9	305.4	5.9	129.4	134.2	4,646
30	Mining		30	6,061.0	6,199.0	502.4	2,835.3	4,745.4	6,335
48	Construction		48	1,246.1	1,420.3	496.1	363.9	661.9	11,751
59	Manufacturing		59	948.6	1,072.4	226.5	82.0	319.5	7,655
434		Visitor Related	434	692.8	731.1	332.0	59.2	422.7	12,782
435	Communication & Utilities		435	1,429.0	1,744.0	308.0	753.3	1,123.7	7,039
447	Trade		447	1,125.7	1,252.6	752.6	138.2	1,085.4	33,790
456	FIRE		456	988.3	1,137.4	245.4	337.3	734.1	11,329
464	Services		464	1,829.5	2,305.2	548.6	502.3	1,361.6	42,753
510	Government		510	2,105.6	2,151.5	1,934.2	76.5	2,010.7	46,428
524	Misc.		524	44.5	12.3	0.0	33.4	33.4	0
	Visitor related industries			16,811.7	18,487.9	5,673.1	5,332.7	12,843.0	187,953
	#'s 434, 436, 437, 440, 463,. 477, 488								

3/5

D

Alternative 1
Change from Base
(millions of 90$)

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Addded $	Employment #
1	Agriculture Forests & Fisheries		1	0.0001	0.0004	0.0001	0.0001	0.0001	0.01
25		Commercial Fisheries	25	0.0000	0.0001	0.0000	0.0000	0.0000	0
30	Mining		30	0.0047	0.0125	0.0010	0.0057	0.0096	0.01
48	Construction		48	0.0000	0.0190	0.0103	0.0035	0.0139	0.25
59	Manufacturing		59	0.0042	0.0182	0.0046	0.0025	0.0072	0.16
434		Visitor Related	434	0.0036	0.0123	0.0048	0.0021	0.0072	0.22
435	Communication & Utilities		435	0.0079	0.1073	0.0298	0.0396	0.0714	0.73
447	Trade		447	0.0381	0.0467	0.0276	0.0058	0.0337	1.22
456	FIRE		456	1.5109	1.6025	0.6277	0.3505	1.0329	21.17
464	Services		464	0.5790	0.7664	0.2975	0.2189	0.5124	14.97
510	Government		510	0.4460	0.4565	0.4502	0.0021	0.4522	8.39
524	Misc.		524	0	0	0	0	0	0
	Visitor related industries			2.5945	3.0409	1.4436	0.6407	2.1456	47.18
	#'s 434, 436, 437, 440, 463, 477, 483								

Alternative 2
Change from Base
(millions of 90$)

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	-31.9771	-38.6225	-8.2190	-5.2352	-14.6417	440.03
25		Commercial Fisheries	25	0.0004	0.0007	0.0000	0.0003	0.0003	0.01
30	Mining		30	0.0552	-0.0427	-0.0034	-0.0197	-0.0328	-0.04
48	Construction		48	8.0362	7.3758	2.7049	1.0998	3.8239	54.66
59	Manufacturing		59	0.0516	-0.6096	-0.0972	-0.0279	-0.1422	-1.32
434		Visitor Related	434	0.0520	0.0325	0.0146	0.0039	0.0137	0.84
435	Communication & Utilities		435	0.1114	0.1429	0.0544	0.0706	0.1056	0.76
447	Trade		447	0.5303	0.2352	0.1158	0.0241	0.1489	9.08
456	FIRE		456	2.5531	2.3244	0.5857	0.1626	0.7877	52.09
464	Services		464	6.0258	2.6326	4.6201	-1.1256	3.4974	959.08
510	Government		510	0.8094	0.6767	0.7229	-0.0139	0.7109	13.75
524	Misc.		524	0	0	0	0	0	0
	Visitor related industries #'s 434, 436, 437, 440, 463, 477, 488			-13.7017	-25.854	0.4856	-5.1148	-5.7223	658.88

Alternative 3
Change from Base
(millions of 90$)

				Final Demand $	Industry Output $	Employee Comp. $	Property Income $	Value Added $	Employment #
1	Agriculture Forests & Fisheries		1	-26.5009	-32.5160	-7.2206	-4.1673	-12.4092	-329.5
25		Commercial Fisheries	25	0.0003	0.0006	0.0000	0.0002	0.0003	0.01
30	Mining		30	0.0068	0.0007	0.0001	0.0009	0.0005	0
48	Construction		48	8.4277	7.8589	2.9068	1.1774	4.1068	69.56
59	Manufacturing		59	0.0546	-0.338	-0.0522	-0.0113	-0.073	-0.67
434		Visitor Related	434	0.0461	0.0699	0.0249	0.0137	0.0409	1.41
435	Communication & Utilities		435	0.0991	0.1972	0.0509	0.0825	0.1352	1.28
447	Trade		447	0.4721	0.3111	0.1675	0.0967	0.2287	9.9
456	FIRE		456	2.0637	1.8532	0.4635	0.132	0.5307	41.33
464	Services		464	5.1549	2.5028	3.7771	-0.9467	2.9346	765.85
510	Government		510	1.5449	1.438	1.4781	-0.0141	1.4637	27.58
524	Misc.		524	0	0	0	0	0	0
	Visitor related industries #'s 434, 436, 437, 440, 463, 477, 488			-8.5795	-13.7276	1.5981	-3.599	-2.9408	586.55

Alternative 4
Change from Base
(millions of 90$)

				Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
1	Agriculture Forests & Fisheries		1	-19.6182	-224.7402	-5.8549	-2.8023	-9.5563	-196.7
25		Commercial Fisheries	25	0	-0.0001	0	0	0	0.0
30	Mining		30	-0.0049	-0.0071	-0.0005	-0.0033	-0.0055	-0.0
48	Construction		48	9.8829	9.4421	3.5534	1.4229	4.3813	64.5
59	Manufacturing		59	-0.0043	-0.3638	-0.0118	-0.0005	-0.015	-0.4
434		Visitor Related	434	-0.0029	0.0694	0.0177	0.0205	0.0397	1.1
435	Communication & Utilities		435	-0.0081	0.1092	0.0365	0.041	0.0777	1.2
447	Trade		447	-0.0386	-0.0274	-0.0181	-0.0025	-0.0243	-0.6
456	FIRE		456	0.9577	0.5805	0.1185	0.0569	0.1801	17.1
464	Services		464	0.8212	-1.1679	-0.2819	-0.453	-0.7696	-12.5
510	Government		510	3.1135	3.0314	3.0877	-0.0204	3.0674	57.1
				-4.9043	-112.6969	0.5365	-1.7912	-2.0247	-49.2

Recreation related industries
#'s 434, 436, 437, 440, 463, 477, 488

EIS
D

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

# of pages ▸ 9

To Mike Kavanaugh | From Tim Holder

Dept./Agency | Phone #

Fax # | Fax #

GENERAL SERVICES ADMINISTRATION

March 29, 1994
Telephone conversation with Mike Kavanaugh by Tim Holder

1. Contract by purchase order for $2,500.

2. Work will be for
a. 1 run of a revised Alternative 5.
Revised Alternative 5 will have a change in the %
for habitat/restoration/research & monitoring

b. If possible rerunning of Alternatives 1-5 with a detailed break out as follows:
Forestry
Fisheries (commercial)
Recreation which would include:
commercial recreation (tourism)
non-commercial recreation (e.g. kayaking but this involves expenditure of money such as for transportation to the site)
Plus the other sectors of agriculture, mining, etc.

Possibly use the multipliers for categories

24	forestry products
25	commercial fishing
460	recreational related wholesale trade
462	recreational related retail trade
471	hotels and lodging places
491	eating and drinking places

c. Provide a written description of methodology beyond that given in the Walkoff text for economics. That is, what manipulations and assumptions, and so forth were done to IMPLAN to adapt it to this situation.

d. Is it possible to run a "typical" forecast for each of the local areas of Cordova, Seward, Kodiak, and Homer, if $10 million were spent in each year on monitoring and research in each of those places. What if $10 million was spent in one year on construction of a facility such a marine science facility.

3. Technical questions:

a. In the Walkoff DEIS of July 93, Alternative 1 = No action and
Alternatives 2-5 are different combinations of % spent on habitat acquisition/general restoration/monitoring-research-admin-public information.
However in tables you faxed yesterday there is a "base" plus alternatives 1-5.

b. What input figures was used for the tables you faxed me yesterday, $630 million? $610

c. What is the "present" 1990 economic picture? The "no action" is the future without spending any $ which should be different than the "present 1990" picture.

4. Products can be faxed to me at the Oil Spill office:
fax: 907-258-9860 and phone 907-278-8012.

Send the tables with one array per page for better legibility by fax.

Send a disk with the tables to my MMS address.

Notes from phone coversation on 3/29:

Forestry/fisheries breakout possible but recreation is problematic. It may be possible to use an approximation. Problem is a category such as "eating establishment" does not differentiate between a tourist and non-tourist. Itmay be pssible to use a surrogate for "pure recreation". Also "recreation transportation" is diffiult to separate from all transportation. IMPLAN takes the SIC to the 4 digit level.

In repsonse to 2. c : Mike modified IMPLAN only to a small degree in its application to the restoration DEIS. He was the first to use 1990 Census data for Alaska and ran into several problems that he got ironed out. A certain amount of quality control is necessary when doing the runs. The previous data in IMPLAN was for 1985. The "keepers" of IMPLAN as of last year were in Colorado so Mike worked with them. There are some assumptions about cashing out the Native corporations. Mike looked at the annual reports of the Native corporations to get some idea about how they have invested thier funds and based his assumptions about how the cash would flow on those reports.

In response to 2.d: It is possible t do these kinds of runs. However, he problem is tha the economies are very small andthe "rest of the economy" sectors would dominate.

In answer to 3a: Mike thinks that the Alternative 1 in the tables he produced was investing the $600 some million on the logic that there could not be a literal "no action" since the money is committed and something would have to happen to the $600 million.

In general, Mike will look over these ideas and then advise on how feasible each idea is, what kind of results are likely to come out (reasonable and useable or too wacky to consider) , the cost given the limited budget, priorities, and when he can get things done.