

4/1/94

Barbara,

Pages IV-76 through IV-81 are on the disk and are from the Walkoff DEIS.

Following that are 6 tables. The first table "The Economy - EVOS Area and Anchorage 1990" is the same table as in the Walkoff stuff on page IV-79. For this table just edit as I have shown in my handwritten edit in red ink. The other tables are new tables with new numbers but have the same format/layout.

2
↑
plus use the
#s in the table
written my handwritten editing.

Thanks.

Tim Holder

Tim

Please review the figures on the tables because I could not read them very well. The tables are in a separate document named: Tabl. bi. Rod said he would incorporate them.

FI

Also there was not enough room on the bottom of the page for source.

PROOFED 4/7/94

OFFICE - WILSON FIELD - 4-11-94

(Impact PLANNING?)
economic model

Economic Impacts

As noted in the Analytical Tools section of Chapter II, the Forest Service's IMPLAN economic computer model was used to perform an economic impact assessment identifying the economic impacts of implementing each of the proposed EVOS Restoration Plan alternatives. Because Alternative 1 is the No Action Alternative, it is reflected in the "baseline" condition against which the impacts of Alternatives 2-5 are compared.

IMPLAN estimates change in income and employment as the product of the demand change (e.g., an alternative) and a multiplier. Estimating multipliers requires data and a description of the regional economy. The data are the national input-output matrices that show the dollar volume of transactions among industries and final demand. The national matrices are stepped-down to the borough level by using borough population and employment data, and ratios of employment to output. The boroughs and census areas included in this assessment are the Municipality of Anchorage, Kenai Peninsula Borough, Kodiak Island Borough, and the Valdez-Cordova Census Area. This area covers the EVOS area and the closest major economic center (Anchorage), which was included to insure that the flow of goods in and out of the oil spill area is adequately accounted for in the IMPLAN economic model. At present, the benchmark national data is for 1990.

The key assumptions in the IMPLAN economic assessment are that each industry has an output and that this output does not experience short-term variation; there is a fixed formula for making commodities and there can be no substitutions; there are only constant returns to scale (i.e., to make twice as much of something all inputs are doubled); adjustments are instantaneous and timeless and technology does not change.

IMPLAN's output classification system is based on systems defined by the Bureau of Economic Analysis (BEA-Department of Commerce) and the Standard Industrial Classification (SIC) used by the Office of Management and Budget. The analysis is conducted using 528 industries and the results are aggregated into 10 sectors. The 10 sectors are as follows:

1. Agriculture, Forestry and Fishing - These businesses engage in agricultural production, forestry, commercial fishing, hunting and trapping and related services. Agricultural production firms produce crops and livestock. Forestry firms operate timber tracts, tree farms, forest nurseries or perform forestry services. Fishing, hunting and trapping covers commercial fishing, fish hatcheries, fish and game preserves and commercial hunting and trapping.
2. Mining - These businesses extract minerals occurring naturally. Mining includes quarries, wells, milling and other preparations commonly done at mine site.
3. Construction - These businesses build new work, additions, alterations and repairs.
4. Manufacturing - These businesses mechanically or chemically transform materials or substances into new products. The materials and substances are produced by other

sectors (e.g., agricultural, forests and fisheries) or other manufacturers.

5. Transportation, communication and utilities - These businesses provide to the public or to other businesses passenger and freight transportation, communication services, electricity, gas, steam, water or sanitary services. The U.S. Postal Service is included here.
6. Trade - These businesses retail merchandise to households or wholesale it to retailers; other wholesalers; to other businesses; or act as agents or brokers in buying or selling goods.
7. Finance, Insurance and Real Estate - These businesses engage in the fields of finance, insurance and real estate.
8. Services - These businesses provide a variety of services for individuals, businesses, governments, and other organizations. Examples include hotels, amusements, health, legal, engineering and other professional services.
9. Government - This sector includes the legislative, judicial, administrative and regulatory activities of Federal, State, local and international governments. Government-owned businesses are classified according to the activity in which they are engaged.
10. Misc. Special Services - These cannot be classified in any other industry.

For each Restoration Plan alternative, the amount of funds allocated for each expenditure is divided among restoration activities and the economic sector participating in those activities, as follows:

Administration and public information - Federal, State and local government

Monitoring and research - Federal, State and local government and universities

~~Endowment~~ - investment

General restoration - State and local government, private fisheries and construction

Habitat protection - Forestry, real estate, households

Respending of Habitat Protection - Securities, social services, construction, households

The ~~last~~ category "Respending of Habitat Protection" does not appear in the Summary. It is part of the modeling exercise. Habitat purchases put dollars in the hands of resource owners. This category specifies a spending pattern for these funds that saves/invests part (securities, construction) and consumes part (social services).

~~In~~ When preparing data for use as input in the IMPLAN economic model, several factors that are unique to the EVOS area have been considered. The first factor involves Section 7(i) of ANCSA

that requires the sharing of proceeds from timber sales by one Native Corporation with the other Native Corporations. Accordingly, spending the proceeds of timber sale monies within the EVOS area would be less than the amount spent from monies received from habitat purchase (i.e., some of the money from the proceeds of timber sales would be distributed and spent by Native Corporations outside the oil spill area). Another factor considered involves an assumption that most habitat purchases are from stocks of commercial timberland. This assumption is based on the criteria used for determining potential parcels available for acquisition under the habitat protection option presented in the Draft Restoration Plan. Timberland purchases reduce economic activity more than purchases of non-commercial land because timberland provides regional employment, non-commercial land does not. On the other hand, proceeds from non-commercial land are not shared and are more likely to remain in the regional economy, thus creating jobs within the region. With regard to the funds received from the sale of timber, the sharing requirements of ANCSA represent a strong leakage from the regional economy, *or as economists describe this phenomena, there is a "strong leakage" from the regional economy as significant expenditures and*

By inputting the various allocation of expenditures into the IMPLAN model, different measures of economic performance (output) are produced. For the purposes of this economic impact analysis, six measures of economic performance are used in the economic analysis. These measures are presented numerically for *alternative 1* baseline conditions in the six columns shown in Table IV-B. *These baseline conditions represent the No Action Alternative.* Final demand represents regional purchases of goods and services. Industry output represents the regional supply of goods and services. The difference between regional supply and demand is accounted for by regional imports and exports. Value added represents the costs added within the region to produce industry output. Employee compensation and property income are its two key components. Employment is the number of *man-year equivalents* to produce industry output.

The dollar value change is determined by: the lump sum amount of the remaining funds; the percent allocation each category receives of the remaining funds; a deflator to turn the settlement's 1993 dollars into IMPLAN's 1990 dollars; and a factor that turns the lump sum amount into an annual amount. For the purpose of this analysis, spending occurs over the ten year period during which restoration funds are being received.

OK - no underline
The results of the IMPLAN economic impact analysis for allocating (spending) the remaining \$630 million of the civil settlement funds in five alternatives spending scenarios were analyzed. The spending represents annual amounts continuing for ten years. The results are given for the six economic indicators described previously, and by sector. Table IV-B depicts the regional economy as it currently exists with no consideration of restoration fund spending. Analysis of the spending scenarios identify absolute change from the baseline.

The analysis considers direct, indirect and induced spending for each alternative. Direct spending is spending for the demand change. Indirect spending is spending in the industries linked to the direct spending. Induced spending is caused by the changes in income that were generated by the direct and indirect spending.

Table IV-B. Baseline economic conditions used for the economic impact assessment of EVOS Restoration Plan alternatives implementation.

Base	Analysis of Alternatives 1990\$ Millions					
Economic Sector	Final Demand \$	Industry Output \$	Employee Comp. \$	Property Income \$	Value Added \$	Employment #
Agriculture, Forest and fisheries	340.7	462.1	28.1	151.3	189.6	8,091
Mining	6,061.0	6,199.0	502.4	2,835.3	4,745.4	6,335
Construction	1,246.1	1,420.3	495.1	363.9	861.9	11,751
Manufacturing	948.6	1,072.4	226.5	82.0	319.5	7,655
Transportation, communication and Utilities	1,933.3	2,265.9	543.7	768.5	1,405.1	13,795
Trade	1,125.7	1,252.6	752.6	138.2	1,035.4	33,790
Finance, insurance, and real estate	988.3	1,137.4	245.4	337.3	734.1	11,329
Services	2,018.0	2,514.4	944.9	546.2	1,507.8	48,779
Government	2,105.6	2,151.5	1,934.2	76.5	2,010.7	46,428
Misc. Special sectors	44.5	12.3	0.0	33.4	33.4	0
Total	16,811.8	18,487.9	5,673.1	5,332.7	12,843.0	187,953

For example, the purchase of commercial timberland for habitat decreases output and employment in the forest product industry (direct effect) and in the industries that supply the forest product industry (indirect effects). These decreases cause regional income and employment to fall and further reduce spending in the economy (induced effects). However, habitat purchases increase the income of landowners. The spending of this income increases demand for the products they buy (direct effects) and for the industries that supply the directly affected industries (indirect effects). The increase in demand increases employment and income and stimulates the economy (induced effects). The impact analysis models these spending flows and reports the results in total and by sector.

Using Alternative 2 (Habitat Acquisition) as an example, the total change in the regional economy is depicted as follows: Final demand, the regional purchases of goods and services is reduced by 0.08%, with the largest drop (0.19%) in the agriculture/forest/fisheries sector, and the largest gains in the construction sector (0.05%); industry output, the regional supply of goods and services, falls by 0.13% with the largest losses (0.20%) in agriculture/forest/fisheries, and the largest gains (0.04%) in construction. Employee compensation increases by (0.009%) with the largest increases occurring in the services sector (0.08%) and the largest decrease in the agriculture/forest/fisheries sector (0.14%). Property income decreases by 0.10%, with no sector reporting more than a 0.02% increase, but the agriculture/forest/fisheries sector declining by 0.09%. Value added, the costs added within the region to produce industry output, drops by 0.04% with the construction and services sectors each experiencing growth exceeding 0.03%, while agriculture/forest/fisheries declines more than 0.11%. And lastly, employment, which is the number of person-year equivalents to produce industry output, increases by slightly more than 0.35% with the largest gains in the services sector (0.51%), and the largest loss of jobs in the agriculture/forest/fisheries sector (0.23%). By far, the largest economic impact from the implementation of Alternative 2 would be the adverse impact experienced by the agriculture/forest/fisheries sector.

IMPLAN's data is from the 1990 U.S. Census, the U.S. Department of Labor and the Bureau of Economic Analysis of the U.S. Department of Commerce. Although the data comes from sampling, the results approximate the characteristics of the population. Probability theory shows that the results of the repeated sampling vary around the population value in a normal distribution. For example, under a normal distribution, 95% of the sampled estimates are within (plus or minus) 1.96 standard deviations of the population characteristic. In other words, a value greater than plus or minus 1.96 standard deviations is not the result of a random event.

These considerations suggest assessing the significance of the modeling results by reference to the standard deviation of the underlying data. The impact procedure: first, samples baseline regional employment; then, spends the civil settlement; then, calculates regional employment. A significant change occurs if, for example, two employment estimates differ by roughly two standard deviations. Alternatively, assume employment changes are assessed by sampling employment before and after the spending of the civil settlement. The two estimates do not differ significantly if they are within two standard deviations. Any change in sampled employment could be attributed to a random factor such as sampling error.

For comparison purposes, the standard deviation for 1990 employment in the boroughs of

Anchorage, Kenai, Kodiak and Valdez-Cordova is 684. A significant change in regional employment is an increase or decrease of 1368. Any change between zero and 1368 could be the result of sampling and not attributable to settlement spending.

For the regional economy as a whole, each alternative leaves the baseline unchanged. The employment changes are not more than twice the standard error for the underlying employment data.

Since total employment changes are insignificant and since employment changes are the largest relative changes, then, a first conclusion is that the performance of the regional economy is left unchanged by each of the five spending alternatives.

There are sector changes that may be significant. However, information is unavailable to assess quantitatively the statistical significance of these results. The sectoral changes, however, are larger in relative terms than the total changes. Accordingly, it is likely that the sectoral shifts cannot be attributed to chance. The sectoral changes reflect (1) the purchase of commercial timberland for habitat preservation, (2) the spending of the sale proceeds, and (3) the spending of the remainder of the settlement for other goods and services. Thus, a second conclusion is that the spending alternatives may change the economy's reliance on specific sectors.

A limitation of these results and those from any economic analysis is that only market commodities are included and they are valued at market prices. Non-market activities such as barter, subsistence fishing/hunting, experiences whose price is essentially zero, or the willingness-to-pay for the simple existence of wilderness, are not addressed. The implication of this is simply that economic analysis should be supplemented with other, non-market analyses.

Table —
The Economy - EVOS Area and Anchorage 1996
1996 \$ millions

Base —
~~4th~~ Revision of aggregates

			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	3245.0
25		Commercial Fisheries	25	205.9	306.4	5.9	120.4	134.2	4846.0
30	Mining		30	6051.0	6199.0	502.4	2835.3	4745.4	6335.0
48	Construction		48	1246.1	1420.3	495.1	363.9	861.9	11751.0
59	Manufacturing		59	948.6	1072.4	226.5	82.0	319.5	7655.0
434		Visitor Related	434	692.8	731.1	332.0	59.2	422.7	12782.0
435	Communication & Utilities		435	1429.0	1744.0	308.0	753.3	1123.7	7039.0
447	Trade		447	1125.7	1252.6	752.6	138.2	1035.4	33790.0
456	FIRE		456	966.3	1137.4	245.4	337.3	734.1	11929.0
464	Services		464	1829.5	2305.2	848.6	502.3	1361.6	42753.0
510	Government		510	2105.5	2151.5	1934.2	76.5	2010.7	46426.0
524	Misc.		524	44.5	12.3	0.0	33.4	33.4	0.0
Visitor Recreation related industries				16811.7	18467.9	5673.1	5332.7	12843.0	187953.0
#'s 434, 436, 437, 440, 463, 477, 488				↑	↑	↑	↑	↑	↑

↑ ↑ ↑ ↑ ↑ ↑
These are all periods.

Source: IMPPLAN Economic Model. See text for description of methodology

Check
for
change

Table

The Economy - EVOS Area and Anchorage 1990

Base

4th Revision of aggregates

1990 \$ Millions

		Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment	
<u>Economic Sector</u>								
1	Agriculture Forests & Fisheries	1	134.8	155.8	22.3	30.9	55.4	3245.0
25	Commercial Fisheries	25	205.9	306.4	5.9	120.4	134.2	4846.0
30	Mining	30	6051.0	6199.0	502.4	2835.3	4745.4	6335.0
48	Construction	48	1246.1	1420.3	495.1	363.9	861.9	11751.0
59	Manufacturing	59	948.6	1072.4	226.5	82.0	319.5	7655.0
434	Recreation Related ^b	434	692.8	731.1	332.0	59.2	422.7	12782.0
435	Communication & Utilities	435	1429.0	1744.0	308.0	753.3	1123.7	7039.0
447	Trade	447	1125.7	1252.6	752.6	138.2	1035.4	33790.0
456	FIRE ^c	456	968.3	1137.4	245.4	337.3	734.1	11329.0
464	Services	464	1829.5	2305.2	848.6	502.3	1361.6	42753.0
510	Government	510	2105.5	2151.5	1934.2	76.5	2010.7	46426.0
524	Miscellaneous	524	44.5	12.3	0.0	33.4	33.4	0.0
Recreation related industries #s 434, 436, 437, 440, 463, 477, 488			16811.7	18487.9	5673.1	5332.7	12843.0	187956.0

4

Source: IMPLAN Economic Model. See text for methodology.

a. IMPLAN's title for this line is "Agriculture, Forests & Fisheries". For the geographic region of this table, the values are nearly all "Forests".

b. "Recreation Related" is

7% Administration
8% Monitoring
35% Resurrection
50% Habitat Acquisition

Alternative 4

4th Revision of aggregates

Change from Base

change from 1990

1990 \$ million

Final Demand Industry Output Employee Comp. Property Income Value Added Employment

1 Agriculture Forests & Fisheries
25
30 Mining
43 Construction
59 Manufacturing
434
435 Communication & Utilities
447 Trade
456 FIRE
464 Services
510 Government

Commercial Fisheries

Visitor Related

1	-19.6192	-24.7402	-5.8349	-2.8028	-9.5563	-196.74
25	0	-0.0001	0	0	0	0
30	-0.0049	-0.0071	-0.0006	-0.0033	-0.0055	-0.01
48	9.8829	9.4421	3.5334	1.4229	4.9813	84.53
59	-0.0043	-0.0638	-0.0118	-0.0005	-0.015	-0.35
434	-0.0029	0.0694	0.0177	0.0205	0.0397	1.13
435	-0.0081	0.1092	0.0365	0.041	0.0777	1.17
447	-0.0396	-0.0274	-0.0181	-0.0025	-0.0243	-0.62
456	0.9571	0.6805	0.1185	0.0569	0.1801	17.08
464	0.8212	-1.1679	-0.2919	-0.493	-0.7696	-12.48
510	3.135	3.0814	3.0877	-0.0204	3.0674	57.09
	-4.9043	-12.5309	0.5965	-1.7812	-2.0247	-49.2

Total

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

7% Administrative

8% Manpower

35% Restoration

50% Habitat Purchase ~~for~~

Alternative 4

~~4th Revision of aggregates~~

Change from Base

		Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment	
1 Agriculture Forests & Fisheries		1	-19.6192	-24.7402	-5.6349	-2.8028	-9.5563	-196.74
25	Commercial Fisheries	25	0	-0.0001	0	0	0	0
30 Mining		30	-0.0049	-0.0071	-0.0006	-0.0033	-0.0055	-0.01
43 Construction		43	9.8829	9.4421	3.5334	1.4229	4.9813	84.52
59 Manufacturing		59	-0.0043	-0.0638	-0.0118	-0.0005	-0.015	-0.35
434	Visitor Related	434	-0.0029	0.0694	0.0177	0.0205	0.0397	1.13
435 Communication & Utilities		435	-0.0081	0.1092	0.0365	0.041	0.0777	1.17
447 Trade		447	-0.0396	-0.0274	-0.0181	-0.0025	-0.0242	-0.62
456 FIRE		456	0.9571	0.6605	0.1185	0.0569	0.1801	17.06
464 Services		464	0.8212	-1.1679	-0.2919	-0.493	-0.7696	-12.48
510 Government		510	3.1135	3.0814	3.0877	-0.0204	3.0674	57.09
			-4.9043	-12.5309	0.5865	-1.7812	-2.0247	-49.2

Recreation related industries

#'s 434, 436, 437, 440, 463, 477, 488

Source :

EIS
D

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April 7, 1994

BY FAX - 6 pages

TO: Tim Holder
FROM: M. Kavanaugh

SUBJECT: Tables showing fisheries and visitor-related industries

Attached are the tables that show the regional economy (Base) and the economic changes (Alternatives) from spending the settlement funds. The results are aggregated to show the changes in commercial fishing and visitor-related industries. The tables are in millions of 1990 dollars or number of man-years of employment. The "Alternative" tables represent the changes from the Base.

Please call if you wish to discuss these or other results.

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	3,245
25	Commercial Fisheries	25	205.9	305.4	5.9	120.4	4,646
30 Mining		30	6,061.0	6,199.0	502.4	2,835.3	6,335
48 Construction		48	1,245.1	1,420.3	496.1	363.9	11,751
59 Manufacturing		59	948.6	1,072.4	226.5	82.0	7,655
434	Visitor Related	434	692.8	731.1	332.0	59.2	12,782
435 Communication & Utilities		435	1,429.0	1,744.0	308.0	753.3	7,039
447 Trade		447	1,125.7	1,252.6	752.6	138.2	33,790
456 FIRE		456	988.3	1,137.4	245.4	337.3	11,329
464 Services		464	1,829.5	2,365.2	848.6	502.3	42,753
510 Government		510	2,105.6	2,151.5	1,934.2	76.5	45,428
524 Misc.		524	44.5	12.3	0.0	33.4	0
Visitor related industries			16,811.7	18,487.9	5,573.1	5,332.7	167,953
#'s 434, 436, 437, 440, 463, 477, 488							

		Alternative 1 Change from Base (millions of \$0\$)					
		Final Demand \$	Industry Output \$	Employee Comp. \$	Property Income \$	Value Added \$	Employment #
1	Agriculture Forests & Fisheries	1	0.0031	0.0004	0.0001	0.0001	0.01
25	Commercial Fisheries	25	0.0000	0.0001	0.0000	0.0000	0
30	Mining	30	0.0047	0.0125	0.0010	0.0057	0.01
48	Construction	48	0.0000	0.0190	0.0103	0.0035	0.25
59	Manufacturing	59	0.0042	0.0182	0.0046	0.0025	0.16
434	Visitor Related	434	0.0336	0.0123	0.0048	0.0021	0.22
435	Communication & Utilities	435	0.0079	0.1073	0.0298	0.0395	0.73
447	Trade	447	0.0381	0.0467	0.0276	0.0058	1.22
456	FIRE	456	1.5109	1.6025	0.6277	0.3505	21.17
464	Services	464	0.5790	0.7654	0.2975	0.2189	14.97
510	Government	510	0.4460	0.4565	0.4502	0.0021	8.39
524	Misc	524	0	0	0	0	0
Visitor related industries		2.5945	3.0405	1.4436	0.6407	2.1455	47.18
#'s 434, 435, 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	-31.8771	-38.8225	-8.2190	-5.2352	-14.6417
25	Commercial Fisheries	25	0.0004	0.0007	0.0000	0.0003	0.01
30 Mining		30	0.0352	-0.0427	-0.0034	-0.0197	-0.04
48 Construction		48	8.0362	7.3753	2.7149	1.0998	34.68
59 Manufacturing		59	0.0516	-0.6096	-0.0672	-0.0279	-1.32
434	Visitor Related	434	0.0520	0.0325	0.0146	0.0039	0.0197
435 Communication & Utilities		435	0.1114	0.1429	0.0344	0.0706	0.1056
447 Trade		447	0.5303	0.2352	0.1158	0.0241	0.1489
458 FIRE		458	2.5531	2.3244	0.5857	0.1626	0.7877
464 Services		464	6.0258	2.6326	4.6201	-1.1266	3.4974
510 Government		510	0.8084	0.6767	0.7299	-0.0189	0.7109
524 Misc.		524	0	0	0	0	0
Visitor related industries			-13.7017	-25.854	0.4836	-5.1148	-5.7223
#'s 434, 436, 437, 440, 463, 477, 488							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
25		25	0.0003	0.0006	0.0000	0.0002	0.0003
30	Mining	30	0.0058	0.0007	0.0001	0.0003	0.0005
48	Construction	48	8.4277	7.8589	2.9068	1.1774	4.1068
59	Manufacturing	59	0.0546	-0.338	-0.0522	-0.0113	-0.073
434		434	0.0461	0.0699	0.0249	0.0137	0.0409
435	Communication & Utilities	435	0.0591	0.1912	0.0509	0.0825	0.1352
447	Trade	447	0.4721	0.3111	0.1675	0.0967	0.2287
456	FIRE	456	2.0637	1.8632	0.4635	0.132	0.5307
464	Services	464	5.1549	2.5028	3.7771	-0.8487	2.9346
510	Government	510	1.5449	1.438	1.4781	-0.0141	1.4637
524	Misc.	524	0	0	0	0	0
Visitor related industries			-8.5795	-13.7276	1.5981	-3.599	-2.9408
#'s 434, 436, 437, 440, 463, 477, 488							586.55

			Alternative 4 Change from Base (millions of \$0\$)						
			Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment	
1	Agriculture Forests & Fisheries		1	-9.6192	-24.7402	-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	-0.0006	-0.0033	-0.0055	-0.0
48	Construction		48	9.6829	9.4421	3.5334	1.4229	4.3813	64.5
59	Manufacturing		59	-0.0043	-0.0638	-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	0.957	0.6805	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	-12.6889	0.5865	-1.7312	-2.0247	-49.2
Recreation related industries									
#'s 434, 436, 437, 440, 463, 477, 488									

3/31/91

EIS

D

Question for Mike K.

✓ 1. Alt's 1-5 - are in 1990 # ? yes

2. Q Alt's 4+5 Table - have lines for ~~TE~~

"Spill prevention" What is this? A: Was used in earlier runs but got washed out.

3. ~~line runs of 4/5/94 - "misc" is deleted -~~

~~Is that correct?~~

4. The tables represent ~~output~~ annual measurements. (A) Is it average annual

measurements for 10 years or measurement in the 10th years?

5. Reflux alt 3.

Base

4th Revision of aggregates

			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	3245.0
25		Commercial Fisheries	25	205.9	306.4	5.9	120.4	134.2	4846.0
30	Mining		30	6061.0	6199.0	502.4	2835.3	4745.4	6335.0
48	Construction		48	1246.1	1420.3	495.1	363.9	861.9	11751.0
59	Manufacturing		59	948.6	1072.4	226.5	82.0	319.5	7655.0
434		Visitor Related	434	692.8	731.1	332.0	59.2	422.7	12782.0
435	Communication & Utilities		435	1429.0	1744.0	308.0	753.3	1123.7	7039.0
447	Trade		447	1125.7	1252.6	752.6	138.2	1035.4	33790.0
456	FIRE		456	966.3	1137.4	245.4	337.3	734.1	11929.0
464	Services		464	1829.5	2305.2	848.6	502.3	1361.6	42753.0
510	Government		510	2105.6	2151.5	1934.2	76.5	2010.7	46426.0
524	Misc.		524	44.5	12.3	0.0	33.4	33.4	0.0
	Recreation related industries			16811.7	18487.9	5673.1	5332.7	12843.0	187953.0
	#'s 434, 436, 437, 440, 463, 477, 488								

Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
--------------	-----------------	----------------	-----------------	-------------	------------

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

Michael Kavanaugh

513-732-3939

3-28-94

TO: TIM Helder

907 - 271 - 6507 - MMS

907 - ~~258~~ - ~~9860~~ - SP11
276 7178

3

pages including cover

From : KAVANAUGH

PHONE No. : 513 732 3939

Apr. 05 1994 4:15PM P01

Table 1
~~Analysis of Alternatives~~
 1990\$ Millions

The Economy - EVOS Area and Anchorage 1990

~~Base~~

Sector	Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
	\$	\$	\$	\$	\$	#
Forestry						
Fisheries						
Tourism						
Agriculture, Forest and fisheries	340.7	462.1	28.1	151.3	189.6	8,091
Mining	6,061.0	6,199.0	502.4	2,835.3	4,745.4	6,335
Construction	1,246.1	1,420.3	495.1	363.9	861.9	11,751
Manufacturing	948.6	1,072.4	226.5	82.0	319.5	7,655
Transportation, communication and Utilities	1,933.3	2,265.9	543.7	768.5	1,405.1	13,795
Trade	1,125.7	1,252.6	752.6	138.2	1,035.4	33,790
Fire	988.3	1,137.4	245.4	337.3	734.1	11,329
Services	2,018.0	2,514.4	944.9	546.2	1,507.8	48,779
Government	2,105.6	2,151.5	1,934.2	76.5	2,010.7	48,428
Misc. Special sectors	44.5	12.3	0.0	33.4	33.4	0

16,811.8 18,487.9 5,673.1 5,332.7 12,843.0 187,953

↑ these are periods

↑ These are commas

make room for
3 lines of #'s to be
plugged in here

Source: IMPLAN Economic Model. See text for definition of terms and methodology

Table

Alternative 1 - "No Action" 1990

Change from Base² for direct, indirect and induced effects from 10 yrs of
 Administration
 Monitoring
 Balance in endowment

Forestry
 Fisheries
 Tourism

~~Agriculture, Forest and fisheries~~

Mining

Construction

Manufacturing

Transportation, communication and Utilities

Trade

Fire

Services

Government

Misc. Special sectors

Final Demand \$	Industry Output \$	Employee Comp. \$	Property Income \$	Value Added \$	Employment #
0.0001	0.0005	0.0001	0.0001	0.0001	0.01
0.0047	0.0125	0.001	0.0057	0.0056	0.01
0	0.019	0.0103	0.0035	0.0159	0.25
0.0042	0.0182	0.0046	0.0025	0.0072	0.16
0.0108	0.115	0.0355	0.04	0.0759	0.9
0.0381	0.0467	0.0276	0.0058	0.0387	1.22
1.5109	1.6025	0.6277	0.3606	1.0329	21.17
0.5797	0.77	0.2886	0.2205	0.5151	15.07
0.446	0.4565	0.4502	0.0021	0.4522	8.39
0	0	0	0	0	0
2.5945	3.0409	1.4436	0.6407	2.1456	47.18

Source:

Table

Alternative 2

Change from Base for direct, indirect and induced effects from 10 yrs of

4% Administration

5% Monitoring

91% Habitat Purchase w/ respending

Forestry
Fisheries
Tourism

Agriculture, Forest and fisheries

Mining

Construction

Manufacturing

Transportation, communication and Utilities

Trade

Fire

Services

Government

Misc. Special sectors

Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
\$	\$	\$	\$	\$	#
-31.9767	-38.8218	-8.219	-5.2829	-14.6414	-440.02
0.0652	-0.0427	-0.0034	-0.0197	-0.0326	-0.04
8.0662	7.3758	2.7049	1.0998	3.8239	64.66
0.0616	-0.6096	-0.0972	-0.0279	-0.1422	-1.22
0.1525	0.1721	0.0474	0.0728	0.1219	1.24
0.5903	0.2352	0.1158	0.0241	0.1489	9.08
2.5581	2.3244	0.5857	0.1628	0.7877	52.09
6.0867	2.8359	4.6217	-1.1249	3.5008	959.44
0.8094	0.6767	0.7299	-0.0189	0.7109	13.75
0	0	0	0	0	0
-13.7017	-25.854	0.4858	-5.1148	-5.7223	658.88

← each # on this line
+ scattered through
this table are
minus signs (-).

Source:

Alternative 3

Table 4 (continued)

Change from Base for direct, indirect and induced effects from 10 yrs of

- 6% Administration
- 7% Monitoring
- 12% Restoration
- 75% Habitat purchase w/respending

Forestry,
Fisheries
Tourism

Agriculture, Forest and fisheries

Mining

Construction

Manufacturing

Transportation, communication and Utilities

Trade

Fire

Services

Government

Misc. Special sectors

Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
\$	\$	\$	\$	\$	#
-26.5006	-32.6154	-7.2206	-4.1676	-12.4089	-329.49
0.058	0.0007	0.0001	0.0003	0.0005	0
8.4277	7.8589	2.9088	1.1774	4.1068	69.56
0.0546	-0.358	-0.0522	-0.0113	-0.073	-0.67
0.1355	0.2274	0.0674	0.0847	0.1555	1.85
0.4721	0.3111	0.1675	0.0367	0.2287	9.9
2.0637	1.8632	0.4635	0.132	0.6307	41.33
5.1646	2.5365	3.7855	-0.8371	2.9552	766.79
1.5449	1.438	1.4781	-0.0141	1.4637	27.58
0	0	0	0	0	0
-8.5795	-18.7276	1.5981	-3.599	-2.9408	586.85

Source:

Table

Alternative 4

Change from Base for direct, indirect and induced effects from 10 yrs of

- 7%* Administration
- 8%* Monitoring
- 35%* Restoration
- Spill Prevention
- 50%* Habitat purchase w/responding

*Forestry
Fisheries
Tourism*

~~Agriculture, Forest and fisheries~~

Mining

Construction

Manufacturing

Transportation, communication and Utilities

Trade

Fire

Services

Government

Misc. Special sectors

Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
\$	\$	\$	\$	\$	#
-19.6192	-24.7403	-5.8949	-2.8028	-9.5563	-196.74
-0.0049	-0.0071	-0.0006	-0.0033	-0.0055	-0.01
9.8829	9.4421	3.5334	1.4229	4.9813	84.53
-0.0043	-0.0638	-0.0118	-0.0005	-0.015	-0.35
-0.0111	0.1149	0.0395	0.0411	0.0812	1.24
-0.0396	-0.0274	-0.0181	-0.0025	-0.0249	-0.62
0.9571	0.6805	0.1185	0.0569	0.1801	17.08
0.8213	-1.1042	-0.2672	-0.4726	-0.7336	-11.42
3.1155	3.0314	3.0877	-0.0204	3.0674	57.09
0	0	0	0	0	0
-4.9043	-12.6939	0.5865	-1.7812	-2.0247	-49.2

Source:

Table

Alternative 5

Change from Base for direct, indirect and induced effects from 10 yrs of
 Administration
 Monitoring
 Restoration
 Spill prevention
 Habitat purchase w/responding

~~Forestry~~ Forestry
 Fisheries
 Tourism

Agriculture, Forest and fisheries

Mining

Construction

Manufacturing

Transportation, communication and Utilities

Trade

Fire

Services

Government

Misc. Special sectors

Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment #
\$	\$	\$	\$	\$	#
-10.8969	-14.4444	-3.9257	-1.221	-5.7457	-53.27
0.0141	0.0792	0.0063	0.0363	0.0606	0.08
9.5556	9.3257	3.5227	1.4124	4.9598	84.31
0.0131	0.2471	0.045	0.0238	0.0739	0.69
0.0328	0.2939	0.0952	0.0925	0.1937	2.79
0.1147	0.292	0.1763	0.0411	0.2579	6.39
0.7365	0.6119	0.1365	0.0486	0.1999	13.82
1.2018	0.3652	0.2312	-0.0244	0.2187	13.31
4.041	4.0056	4.0223	-0.0059	4.0162	74.46
0	0	0	0	0	0
4.8127	0.7762	4.3098	0.4034	4.2344	142.58

Hold off plugging
these #'s in.

Source.

4/5/94

EIS

D

To: Mike KAUNWAUHA - 513-732-3939

From: Tim HELDER

I HAVE REVIEWED THE "BASE" + ALT. 4

YOU FAXED TODAY. THEY LOOK FINE.

PROCEED TO DO ALTERNATIVES 1, 2, + 3 AND

THEN FAX TO ME WHEN COMPLETED.

4/4/94

Alternative 4
3rd Revision of aggregates

Add 25 com. fish - which = '0's

combine

1	Agriculture Forests & Fisheries	
24	Forest Products	
26	Forestry & Fishery Services	
30	Mining	
48	Construction	
59	Manufacturing	
434		* Local Transit
435	Communication & Utilities	
436		Water Trans.
437		Air Trans.
440		Trans. NEC
447	Trade	
453	FIRE	
463		Hotels
464	Services	
477		Auto. Rental
488		Rec. Services NEC
510	Government	

Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
-0.0077	-0.0429	-0.007	-0.0067	-0.0139	-0.82
-24.1195	-24.1211	-5.6492	-2.346	-9.3536	-178.73
4.508	-0.5763	-0.0387	-0.1501	-0.1888	-17.19
-0.0046	-0.0071	-0.0006	-0.0033	-0.0055	-0.01
9.8829	9.4421	3.5334	1.4229	4.9813	84.53
-0.0043	-0.0838	-0.0118	-0.0005	-0.015	-0.35
-0.0006	-0.0006	-0.0003	-0.0001	-0.0004	-0.02
-0.0081	0.1092	0.0355	0.041	0.0777	1.17
-0.0004	-0.0013	-0.0004	0	-0.0004	-0.01
-0.0019	0.0052	0.0028	0.0002	0.0034	0.07
-0.0001	0.0014	0.0009	0	0.0009	0.03
-0.0396	-0.0274	-0.0181	-0.0025	-0.0243	-0.62
0.9571	0.6805	0.1185	0.0569	0.1801	17.08
0.0008	0.0008	0.0004	0.0001	0.0006	0.02
0.8212	-1.1679	-0.2819	-0.493	-0.7698	-12.48
-0.0001	0.0635	0.0145	0.0206	0.0361	1.07
-0.0006	-0.0006	-0.0002	-0.0003	-0.0005	-0.03
3.1135	3.0314	2.0877	-0.0204	3.0674	57.09
-4.9043	-12.5939	0.5865	-1.7812	-2.0247	-49.2
-0.0029	0.0694	0.0177	0.0205	0.0397	1.13

TOTAL.

Change in recreation related industries
#s 434, 436, 437, 440, 463, 477, 488

Combine 434, 436, 437, 440, 463, 477, 488 into "Visitor Related Industries."
on table

513

EIS

D

let

Mike K. Know

New fox 276-7178

Done

Mike rec'd "contract" 4/1/94

4/4/94

Alternative 4
3rd Revision of aggregates

		Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
1 Agriculture Forests & Fisheries		-0.0077	-0.0429	-0.007	-0.0067	-0.0139	-0.82
24	Forest Products	-24.1195	-24.1211	-5.8492	-2.546	-9.3536	-178.73
26	Forestry & Fishery Services	4.508	-0.5763	-0.0387	-0.1501	-0.1888	-17.19
30 Mining		-0.0049	-0.0071	-0.0006	-0.0033	-0.0055	-0.01
48 Construction		9.8829	9.4421	3.5334	1.4229	4.9813	84.53
59 Manufacturing		-0.0043	-0.0838	-0.0118	-0.0005	-0.015	-0.35
434	* Local Transit	-0.0006	-0.0006	-0.0003	-0.0001	-0.0004	-0.02
435 Communication & Utilities		-0.0081	0.1092	0.0365	0.041	0.0777	1.17
436	Water Trans.	-0.0004	-0.0013	-0.0004	0	-0.0004	-0.01
437	Air Trans.	-0.0019	0.0052	0.0028	0.0002	0.0034	0.07
440	Trans. NEC	-0.0001	0.0014	0.0009	0	0.0009	0.03
447 Trade		-0.0396	-0.0274	-0.0181	-0.0025	-0.0243	-0.62
453 FIRE		0.9571	0.6805	0.1185	0.0569	0.1801	17.08
463	Hotels	0.0008	0.0008	0.0004	0.0001	0.0006	0.02
464 Services		0.8212	-1.1679	-0.2819	-0.493	-0.7698	-12.48
477	Auto. Rental	-0.0001	0.0635	0.0145	0.0206	0.0361	1.07
488	Rec. Services NEC	-0.0006	-0.0006	-0.0002	-0.0003	-0.0005	-0.03
510 Government		3.1135	3.0314	3.0877	-0.0204	3.0674	57.09
TOTAL		-4.9043	-12.6939	0.5865	-1.7812	-2.0247	-49.2
Change in recreation related industries #s 434, 436, 437, 440, 463, 477, 488		-0.0029	0.0694	0.0177	0.0205	0.0397	1.13

D
SLB

Michael Kavanaugh

513-732-3939

3-28-94

TO: TIM Holder

907 - 271 - 6507 - MMS

907 - 258 - 9860 - SP. 11

2 pages including cover

3/31/94

From : KHAUNRUGH

PHONE No. : 513 732 3939

Mar. 31 1994 6:45PM P03

Alternative 4

Revised Industry aggregates

		Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
Agriculture, Forests & Fisheries	1	4.5003	-0.6191	-0.0457	-0.1563	-0.2027	-18.01
Forest Products	24	-24.1195	-24.1211	-5.8492	-2.646	-9.3536	-178.73
Commercial Fisheries	25	0	-0.0001	0	0	0	0
Mining	30	-0.0049	-0.0071	-0.0006	-0.0033	-0.0055	-0.01
Construction	48	9.8829	9.4421	3.5334	1.4229	4.9813	84.53
Manufacturing	59	-0.0043	-0.0638	-0.0118	-0.0005	-0.015	-0.35
Transportation, communication and Utilities	434	-0.0111	0.1149	0.0395	0.0411	0.0812	1.24
Trade	447	-0.0396	-0.0274	-0.0181	-0.0025	-0.0243	-0.62
FIRE	456	0.9571	0.5905	0.1185	0.0569	0.1801	17.08
Hotels	463	0.0008	0.0008	0.0004	0.0001	0.0006	0.02
Services	464	0.8214	-1.1679	-0.2819	-0.483	-0.7898	-12.48
Automobile Rental	477	-0.0001	0.0635	0.0145	0.0206	0.0361	1.07
Recreation Services, NEC	488	-0.0006	-0.0006	-0.0002	-0.0003	-0.0005	-0.03
Membership recreation clubs	489	-0.0002	0	0	0	0	0
Government	510	3.1135	3.0314	3.0877	-0.0204	3.0674	57.09
Misc.	524	0	0	0	0	0	0
		-4.9043	-12.6839	0.5865	-1.7812	-2.0247	-49.2

0
315

Tim

1st part at revised aggregates

Doesn't look like Recreation
is changing, but all changes
are small. This is a \$4.9 million
change in a 16.8 billion economy.

Reo'd your tourism FAX. Will
review later

LK

Michael Kavanaugh 513-732-3939

3-28-94

TO: TIM Holder

907 -271 - 6507 - MMS

907 -258 - 9860 - SP.11

3 pages including cover

Table 1

Analysis of Alternatives

1990\$ Millions

Base

The Economy - EVOS Area and Anchorage 1990

Sector	Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
	\$	\$	\$	\$	\$	#
Forestry						
Fisheries						
Tourism						
Agriculture, Forest and fisheries	340.7	462.1	28.1	151.3	189.6	8,091
Mining	6,061.0	6,199.0	502.4	2,855.3	4,745.4	6,335
Construction	1,246.1	1,420.3	495.1	363.9	861.9	11,751
Manufacturing	948.6	1,072.4	226.5	82.0	319.5	7,665
Transportation, communication and Utilities	1,933.3	2,265.9	543.7	788.5	1,405.1	13,796
Trade	1,125.7	1,252.6	752.6	138.2	1,035.4	33,790
Fire	988.3	1,137.4	245.4	337.3	734.1	11,329
Services	2,018.0	2,514.4	944.9	546.2	1,507.8	48,779
Government	2,105.6	2,151.5	1,934.2	76.5	2,010.7	46,428
Misc. Special sectors	44.5	12.3	0.0	33.4	33.4	0

make room for 3 times at 10% to be plugged in here

16,811.8 18,487.9 5,673.1 5,332.7 12,843.0 187,959

these are periods

these are commas

Sources: IMPLAN Economic Model. See text for definition of terms and methodology

2-JUNE 1994 1:51:33 PM 2:00PM P03
Mar. 30 1994
From: KAVRINAGH

Table —

Alternative 1 - "No Action" 1990

Change from Base for direct, indirect and induced effects from 10 yrs of
Administration
Monitoring
Balance in endowment

	Final Demand \$	Industry Output \$	Employee Comp. \$	Property Income \$	Value Added \$	Employment #
Forestry Fisheries Tourism Agriculture, Forest and fisheries	0.0001	0.0005	0.0001	0.0001	0.0001	0.01
Mining	0.0047	0.0125	0.001	0.0057	0.0056	0.01
Construction	0	0.019	0.0103	0.0035	0.0139	0.25
Manufacturing	0.0042	0.0182	0.0046	0.0025	0.0072	0.16
Transportation, communication and Utilities	0.0108	0.115	0.0335	0.04	0.0759	0.9
Trade	0.0381	0.0467	0.0276	0.0058	0.0387	1.22
Fire	1.5109	1.6025	0.6277	0.3606	1.0329	21.17
Services	0.5797	0.77	0.2806	0.2206	0.5151	15.07
Government	0.446	0.4565	0.4502	0.0021	0.4522	8.39
Misc. Special sectors	0	0	0	0	0	0
	2.5945	3.0409	1.4436	0.6407	2.1456	47.18

Source:

D
513

Table —

Alternative 2

Change from Base for direct, indirect and induced effects from 10 yrs of

4 % Administration

5 % Monitoring

41 % Habitat Purchase w/ respending

Forestry
Fisheries
Tourism

Agriculture, Forest and fisheries-

Mining

Construction

Manufacturing

Transportation, communication and Utilities

Trade

Fire

Services

Government

Misc. Special sectors

Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
\$	\$	\$	\$	\$	#
-31.9767	-38.8218	-8.219	-5.2829	-14.6414	-440.02
0.0652	-0.0427	-0.0034	-0.0197	-0.0328	-0.04
8.0662	7.3758	2.7049	1.0998	3.8239	64.66
0.0616	-0.6096	-0.0972	-0.0279	-0.1422	-1.22
0.1525	0.1721	0.0474	0.0728	0.1219	1.24
0.5303	0.2352	0.1158	0.0241	0.1489	9.08
2.5531	2.3244	0.5857	0.1628	0.7877	52.09
6.0367	2.8359	4.6217	-1.1249	3.5008	959.44
0.8094	0.6767	0.7299	-0.0189	0.7109	13.75
0	0	0	0	0	0
-13.7017	-25.864	0.4858	-5.1148	-6.7223	658.88

← each # on New-
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minus signs (-)

Source:

Alternative 3

Table 4 (continued)

Change from Base for direct, indirect and induced effects from 10 yrs of

- 6% Administration
- 7% Monitoring
- 12% Restoration
- 75% Habitat purchase wire spending

Forestry
Fisheries
Tourism

Agriculture, Forest and fisheries

Mining

Construction

Manufacturing

Transportation, communication and Utilities

Trade

Fire

Services

Government

Misc. Special sectors

Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
\$	\$	\$	\$	\$	#
-26.5008	-32.6154	-7.2206	-4.1676	-12.4089	-329.49
0.058	0.0007	0.0001	0.0003	0.0005	0
8.4277	7.8589	2.9088	1.1774	4.1068	69.56
0.0546	-0.358	-0.0522	-0.0113	-0.073	-0.67
0.1356	0.2274	0.0674	0.0847	0.1555	1.85
0.4721	0.3111	0.1675	0.0367	0.2287	9.9
2.0637	1.6532	0.4635	0.132	0.6307	41.33
5.1646	2.5365	3.7855	-0.2571	2.9552	766.79
1.5449	1.438	1.4781	-0.0141	1.4637	27.58
0	0	0	0	0	0
-8.5796	-18.7276	1.5981	-3.599	-2.9408	586.85

Source:

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Table

Alternative 4

Change from Base for direct, indirect and induced effects from 10 yrs of

- 7% Administration
- 29% Monitoring
- 35% Restoration
- Spill Prevention
- 50% Habitat purchase w/responding

Forestry
Fisheries
Tourism

Agriculture, Forest and fisheries

Mining

Construction

Manufacturing

Transportation, communication and Utilities

Trade

Fire

Services

Government

Misc. Special sectors

Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
\$	\$	\$	\$	\$	#
-19.6192	-24.7403	-5.8949	-2.8028	-9.5563	-196.74
-0.0049	-0.0071	-0.0006	-0.0033	-0.0055	-0.01
9.8829	9.4421	3.5334	1.4229	4.9813	84.53
-0.0043	-0.0038	-0.0118	-0.0006	-0.015	-0.35
-0.0111	0.1149	0.0355	0.0411	0.0812	1.24
-0.0396	-0.0274	-0.0181	-0.0025	-0.0249	-0.62
0.9571	0.6805	0.1185	0.0569	0.1801	17.08
0.8213	-1.1042	-0.2672	-0.4726	-0.7336	-11.42
3.1135	3.0314	3.0877	-0.0204	3.0674	57.09
0	0	0	0	0	0
-4.9043	-12.6939	0.5865	-1.7812	-2.0247	-49.2

Source:

Alternative 5

Change from Base for direct, indirect and induced effects from 10 yrs of
 Administration
 Monitoring
 Restoration
 Spill prevention
 Habitat purchase w/respending

	Final Demand \$	Industry Output \$	Employee Comp. \$	Property Income \$	Value Added \$	Employment #
Forestry Forestry						
Fisheries Fisheries						
Tourism Tourism						
Agriculture, Forest and fisheries	-10.8969	-14.4444	-3.9257	-1.221	-5.7457	-53.27
Mining	0.0141	0.0792	0.0063	0.0363	0.0806	0.08
Construction	9.5556	9.3257	3.5227	1.4124	4.9598	84.31
Manufacturing	0.0131	0.2471	0.045	0.0238	0.0739	0.69
Transportation, communication and Utilities	0.0328	0.2939	0.0952	0.0425	0.1997	2.79
Trade	0.1147	0.292	0.1783	0.0411	0.2579	6.89
Finance	0.7385	0.6119	0.1385	0.0488	0.1293	13.82
Services	1.2018	0.3052	0.2612	-0.0244	0.0187	13.31
Government	4.041	4.0058	4.0223	-0.0039	4.0162	74.46
Misc. Special sectors	0	0	0	0	0	0
	4.8127	0.7762	6.5939	1.4004	0.0944	142.51

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TOTAL INCOME MULTIPLIERS

PAGE 1

SECTOR	DIRECT	INDIRECT	INDUCED	TOTAL	TYPE I	TYPE III
1 DAIRY FARM PRODUCTS	.2234	.0498	.0778	.3509	1.2229	1.5711
2 POULTRY AND EGGS	.0853	.0833	.0685	.2371	1.9764	2.7800
3 RANCH FED CATTLE	.0914	.0949	.5593	.7456	2.0384	8.1590
4 RANGE FED CATTLE	.0914	.0820	.0562	.2296	1.8979	2.5135
5 CATTLE FEEDLOTS	.0914	.0388	.0662	.1963	1.4242	2.1485
6 SHEEP, LAMBS AND GOATS	.0914	.1031	.2285	.4229	2.1280	4.6287
7 HOGS, PIGS AND SWINE	.0914	.0794	.0605	.2313	1.8694	2.5318
8 OTHER MEAT ANIMAL PRODUCTS	.0914	.0359	.1654	.2927	1.3932	3.2031
9 MISCELLANEOUS LIVESTOCK	.1421	.0562	.1046	.3028	1.3958	2.1319
12 FEED GRAINS	.3304	.0892	.0618	.4814	1.2698	1.4568
14 GRASS SEEDS	.4418	.0758	.2761	.7937	1.1716	1.7966
16 FRUITS	.5095	.0749	.4243	1.0087	1.1471	1.9798
18 VEGETABLES	.6293	.0530	.1462	.8285	1.0843	1.3166
20 MISCELLANEOUS CROPS	.4442	.0837	.5557	1.0836	1.1884	2.4392
22 FOREST PRODUCTS	.7360	.0466	.0983	.8809	1.0633	1.1969
23 GREENHOUSE AND NURSERY PRODUCTS	.4728	.1081	.4149	.9958	1.2286	2.1062
24 FORESTRY PRODUCTS	.4491	.1177	9.2957	9.8626	1.2621	21.9586
25 COMMERCIAL FISHING	.5821	.0470	.0092	.6383	1.0807	1.0965
26 AGRICULTURAL, FORESTRY, FISHERY SERV	.4131	.0778	.0565	.5475	1.1884	1.3253
27 LANDSCAPE AND HORTICULTURAL SERVICES	.7105	.0513	.0725	.8343	1.0723	1.1743
32 GOLD ORES	.3471	.0794	.0806	.5072	1.2289	1.4610
35 METAL MINING SERVICES	.3470	.0754	.0771	.4995	1.2173	1.4395
38 METAL ORES, NOT ELSEWHERE CLASSIFIED	.3472	.0765	.0782	.5019	1.2202	1.4455
40 BITUMINOUS AND LIGNITE MINING, SERVI	.4586	.0971	.0523	.6081	1.2117	1.3258
41 NATURAL GAS	.5090	.1432	.0127	.6649	1.2814	1.3064
42 CRUDE PETROLEUM	.5090	.0400	.0123	.5612	1.0786	1.1027
48 CONSTRUCTION SAND AND GRAVEL	.4913	.0880	.0676	.6469	1.1792	1.3168
55 NONMETALLIC MINERALS (EXCEPT FUELS)	.4684	.0711	.0635	.6030	1.1519	1.2874
58 MISC. NONMETALLIC MINERALS, N.E.C.	.4684	.0749	.0659	.6091	1.1599	1.3005
66 NEW RESIDENTIAL STRUCTURES	.2993	.1092	.0362	.4447	1.3648	1.4856
67 NEW INDUSTRIAL AND COMMERCIAL BUILDING	.3633	.0911	.0518	.5062	1.2506	1.3933
68 NEW UTILITY STRUCTURES	.3872	.1182	.0421	.5475	1.3052	1.4139
69 NEW HIGHWAYS AND STREETS	.3098	.1679	.0342	.5119	1.5421	1.6526
70 NEW FARM STRUCTURES	.3552	.1147	.0747	.5446	1.3229	1.5332
71 NEW MINERAL EXTRACTION FACILITIES	.3523	.0970	.0414	.4907	1.2753	1.3928
72 NEW GOVERNMENT FACILITIES	.3741	.1640	.0663	.6044	1.4385	1.6158
73 MAINTENANCE AND REPAIR, RESIDENTIAL	.3521	.0797	.0813	.5131	1.2263	1.4573
74 MAINTENANCE AND REPAIR OTHER FACILITIES	.4788	.0692	.0953	.6433	1.1444	1.3436
75 MAINTENANCE AND REPAIR OIL AND GAS W	.5588	.0528	.0536	.6652	1.0945	1.1904
82 MEAT PACKING PLANTS	.0992	.0254	.0335	.1581	1.2558	1.5941
83 SAUSAGES AND OTHER PREPARED MEATS	.1916	.0348	.0176	.2440	1.1815	1.2732
89 ICE CREAM AND FROZEN DESSERTS	.2531	.0798	.0255	.3584	1.3154	1.4160
90 FLUID MILK	.2361	.0556	.0161	.3078	1.2354	1.3034
91 CANNED AND CURED SEA FOODS	.2436	.0374	.0852	.3662	1.1535	1.5033
93 CANNED FRUITS AND VEGETABLES	.2514	.0733	.0523	.3770	1.2916	1.4998
96 FRESH OR FROZEN PACKAGED FISH	.1741	.0401	.0287	.2429	1.2303	1.3950
99 FLOUR AND OTHER GRAIN MILL PRODUCTS	.1928	.0534	.0318	.2781	1.2772	1.4422
102 DOG, CAT, AND OTHER PET FOOD	.3816	.0907	.0388	.5111	1.2378	1.3395
103 PREPARED FEEDS, N.E.C	.1640	.0733	.0142	.2515	1.4469	1.5335

Table 1
Analysis of Alternatives
1990\$ Millions

Base

Sector	Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
	\$	\$	\$	\$	\$	#
Agriculture, Forest and fisheries	340.7	482.1	28.1	151.3	188.8	8,091
Mining	8,081.0	8,188.0	502.4	2,838.3	4,745.4	8,335
Construction	1,248.1	1,430.0	405.1	882.9	881.0	11,751
Manufacturing	848.0	1,072.4	228.8	82.0	319.5	7,035
Transportation, communication and Utilities	1,033.3	2,205.9	543.7	788.8	1,405.1	18,785
Trade	1,125.7	1,258.9	752.9	186.2	1,035.4	33,790
Fire	888.3	1,107.4	245.4	337.3	734.1	11,329
Services	2,018.0	2,814.4	944.8	548.2	1,507.8	48,778
Government	2,105.8	2,181.5	1,804.2	78.8	2,010.7	48,498
Misc. Special sectors	44.5	12.3	0.0	83.4	33.4	0
	18,811.0	18,487.0	8,873.1	5,332.7	12,843.0	187,853

Alternative 1

Change from Base for direct, indirect and induced effects from 10 yrs of
Administration
Monitoring
Balance in endowment

	Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
	\$	\$	\$	\$	\$	#
Agriculture, Forest and fisheries	0.0001	0.0005	0.0001	0.0001	0.0001	0.01
Mining	0.0047	0.0135	0.001	0.0057	0.0098	0.01
Construction	0	0.019	0.0103	0.0035	0.0139	0.25
Manufacturing	0.0048	0.0188	0.0048	0.0028	0.0072	0.18
Transportation, communication and Utilities	0.0168	0.115	0.0338	0.04	0.0789	0.8
Trade	0.0381	0.0487	0.0278	0.0058	0.0387	1.22
Fire	1.8189	1.8025	0.8277	0.8885	1.0320	21.17
Services	0.8797	0.77	0.7888	0.2205	0.8151	15.07
Government	0.448	0.1585	0.4802	0.0021	0.4522	8.39
Misc. Special sectors	0	0	0	0	0	0
	2.5945	3.0409	1.4438	0.8407	2.1458	47.18

Alternative 2

Change from Base for direct, indirect and induced effects from 10 yrs of
Administration
Monitoring
Habitat Purchase w/ responding

	Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
	\$	\$	\$	\$	\$	#
Agriculture, Forest and fisheries	-31.8767	-38.8218	-8.218	-5.2829	-14.8414	-440.02
Mining	0.0852	-0.0427	-0.0034	-0.0187	-0.0328	-0.04
Construction	8.0882	7.3758	2.7046	1.0098	3.8239	84.68
Manufacturing	0.0816	-0.8088	-0.0972	-0.0279	0.1423	-1.32
Transportation, communication and Utilities	0.1528	0.1721	0.0474	0.0728	0.1219	1.24
Trade	0.5303	0.2352	0.1168	0.0241	0.1489	8.08
Fire	2.5531	2.3244	0.8857	0.1828	0.7877	52.00
Services	8.0307	12.0050	4.8217	-1.1249	3.8008	858.44
Government	0.8084	0.6767	0.7299	-0.0180	0.7109	13.75
Misc. Special sectors	0	0	0	0	0	0
	-13.7017	-25.854	0.4058	-5.1148	-5.7223	858.60

Table 1 (continued)

Alternative 3

Change from Base for direct, indirect and induced effects from 10 yrs of

Administration
Monitoring
Restoration
Habitat purchase w/responding

	Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment #
	\$	\$	\$	\$	\$	#
Agriculture, Forest and fisheries	-28.5008	-22.8154	-7.2208	-4.1878	-12.4088	-329.49
Mining	0.088	0.0007	0.0001	0.0003	0.0005	0
Construction	8.4277	7.8555	2.0088	1.1774	4.1088	88.58
Manufacturing	0.0548	-0.238	-0.0522	-0.0113	-0.073	-0.87
Transportation, communication and Utilities	0.1988	0.2274	0.0874	0.0847	0.1555	1.85
Trade	0.4721	0.3111	0.1876	0.0387	0.2287	9.9
Fire	2.0837	1.9592	0.4835	0.132	0.6307	41.33
Services	5.1648	2.5385	3.7855	-0.8371	2.8552	788.79
Government	1.5449	1.438	1.4781	-0.0141	1.4837	27.58
Misc. Special sectors	0	0	0	0	0	0
	-8.5725	-18.7278	1.5081	-3.599	-2.9408	588.85

Alternative 4

Change from Base for direct, indirect and induced effects from 10 yrs of

Administration
Monitoring
Restoration
Spill Prevention
Habitat purchase w/responding

	Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment #
	\$	\$	\$	\$	\$	#
Agriculture, Forest and fisheries	-18.8182	-24.7403	-5.0949	-2.8028	-9.0303	-199.74
Mining	-0.0040	-0.0071	-0.0008	-0.0033	-0.0055	-0.01
Construction	8.8828	8.4481	3.5334	1.4229	4.9019	84.53
Manufacturing	-0.0049	-0.0938	-0.0118	-0.0005	-0.015	-0.35
Transportation, communication and Utilities	-0.0111	0.1149	0.0305	0.0411	0.0812	1.24
Trade	-0.0398	-0.0274	-0.0181	-0.0025	-0.0243	-0.82
Fire	0.9571	0.8808	0.1185	0.0589	0.1801	17.08
Services	8.8213	-1.1042	-0.2872	-0.4728	-0.7338	-11.42
Government	2.1125	2.0314	2.0877	-0.0204	3.0874	57.09
Misc. Special sectors	0	0	0	0	0	0
	-4.9043	-12.8838	0.5685	-1.7812	-2.0247	-49.2

Alternative 5

Change from Base for direct, indirect and induced effects from 10 yrs of

Administration
Monitoring
Restoration
Spill prevention
Habitat purchase w/responding

	Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment #
	\$	\$	\$	\$	\$	#
Agriculture, Forest and fisheries	-10.8888	-14.4444	-3.9857	-1.221	-5.7457	-53.27
Mining	0.0141	0.0792	0.0063	0.0363	0.0908	0.08
Construction	8.5556	8.3257	3.5227	1.4124	4.8588	84.31
Manufacturing	0.0131	0.2471	0.045	0.0238	0.0780	0.80
Transportation, communication and Utilities	0.0328	0.2939	0.0852	0.0825	0.1937	2.79
Trade	0.1147	0.282	0.1783	0.0411	0.2578	8.39
Fire	0.7905	0.0119	0.1388	0.0488	0.1888	18.88
Services	1.2019	0.3582	0.2312	-0.0244	0.2187	12.31
Government	4.041	4.0056	4.0223	-0.0058	4.0182	74.26
Misc. Special sectors	0	0	0	0	0	0
	4.8127	0.7702	4.0098	0.4021	4.2344	122.88

Table 2
Alternatives compared to base - percent change

Overall change in regional economy

	1	2	3	4	5
Final Demand	0.02%	-0.08%	-0.05%	-0.03%	0.05%
Industry Output	0.02%	-0.14%	-0.10%	-0.07%	0.01%
Employee Comp.	0.03%	0.01%	0.02%	0.01%	0.02%
Property Income	0.01%	-0.10%	-0.07%	-0.02%	0.01%
Value Added	0.02%	-0.04%	-0.02%	-0.02%	0.03%
Employment	0.03%	0.05%	0.31%	-0.03%	0.01%

Final demand change by sector

	1	2	3	4	5
Agriculture, Forest and fisheries	0.00%	-0.39%	-7.78%	-5.78%	-3.20%
Mining	0.00%	0.00%	0.00%	0.00%	0.00%
Construction	0.00%	0.65%	0.82%	0.79%	0.77%
Manufacturing	0.00%	0.01%	0.01%	-0.00%	0.00%
Transportation, communication and Utilities	0.00%	0.01%	0.01%	0.00%	0.00%
Trade	0.00%	0.00%	0.04%	-0.00%	0.01%
Fire	0.15%	0.28%	0.21%	0.10%	0.07%
Services	0.03%	0.00%	0.28%	0.04%	0.08%
Government	0.02%	0.04%	0.07%	0.15%	0.19%
Misc. Special sectors	0.00%	0.00%	0.00%	0.00%	0.00%

Industry output change by sector

	1	2	3	4	5
Agriculture, Forest and fisheries	0.00%	-8.40%	-7.08%	-5.35%	-3.13%
Mining	0.00%	-0.00%	0.00%	-0.00%	0.00%
Construction	0.00%	0.82%	0.65%	0.68%	0.66%
Manufacturing	0.00%	-0.08%	-0.03%	-0.01%	0.02%
Transportation, communication and Utilities	0.01%	0.01%	0.01%	0.01%	0.01%
Trade	0.00%	0.02%	0.02%	0.00%	0.02%
Fire	0.15%	0.20%	0.16%	0.08%	0.05%
Services	0.03%	0.11%	0.10%	-0.04%	0.01%
Government	0.02%	0.03%	0.07%	0.14%	0.19%
Misc. Special sectors	0.00%	0.00%	0.00%	0.00%	0.00%

Employee comp. change by sector

	1	2	3	4	5
Agriculture, Forest and fisheries	0.00%	-28.20%	-25.86%	-20.04%	-13.85%
Mining	0.00%	-0.00%	0.00%	-0.00%	0.00%
Construction	0.00%	0.55%	0.58%	0.71%	0.71%
Manufacturing	0.00%	-0.04%	-0.02%	-0.01%	0.02%
Transportation, communication and Utilities	0.01%	0.01%	0.01%	0.01%	0.02%
Trade	0.00%	0.02%	0.02%	-0.00%	0.02%
Fire	0.20%	0.24%	0.18%	0.08%	0.08%
Services	0.03%	0.40%	0.40%	-0.03%	0.02%
Government	0.02%	0.04%	0.08%	0.18%	0.21%
Misc. Special sectors	0.00%	0.00%	0.00%	0.00%	0.00%

Property Income change by sector

	1	2	3	4	5
Agriculture, Forest and fisheries	0.00%	-3.60%	-2.75%	-1.85%	-0.81%
Mining	0.00%	-0.00%	0.00%	-0.00%	0.00%
Construction	0.00%	0.30%	0.32%	0.00%	0.30%
Manufacturing	0.00%	-0.03%	-0.01%	-0.00%	0.03%
Transportation, communication and Utilities	0.03%	0.01%	0.01%	0.01%	0.01%
Trade	0.00%	0.02%	0.03%	-0.00%	0.03%
Fire	0.24%	0.05%	0.04%	0.02%	0.01%
Services	0.15%	-0.21%	-0.18%	-0.09%	-0.00%
Government	0.00%	-0.02%	-0.02%	-0.03%	-0.01%
Misc. Special sectors	0.00%	0.00%	0.00%	0.00%	0.00%

Value-added change by sector

	1	2	3	4	5
Agriculture, Forest and fisheries	0.00%	-7.72%	-0.58%	-5.04%	-3.03%
Mining	0.00%	-0.00%	0.00%	-0.00%	0.00%
Construction	0.00%	0.44%	0.48%	0.58%	0.58%
Manufacturing	0.00%	-0.04%	-0.02%	-0.00%	0.02%
Transportation, communication and Utilities	0.01%	0.01%	0.01%	0.01%	0.01%
Trade	0.00%	0.01%	0.02%	-0.00%	0.02%
Fire	0.14%	0.11%	0.09%	0.02%	0.03%
Services	0.03%	0.23%	0.20%	-0.05%	0.01%
Government	0.02%	0.04%	0.07%	0.16%	0.20%
Misc. Special sectors	0.00%	0.00%	0.00%	0.00%	0.00%

Employment change by sector

	1	2	3	4	5
Agriculture, Forest and fisheries	0.00%	-5.44%	-1.97%	-2.43%	-0.80%
Mining	0.00%	-0.00%	0.00%	-0.00%	0.00%
Construction	0.00%	0.55%	0.50%	0.74%	0.72%
Manufacturing	0.00%	-0.02%	-0.01%	-0.00%	0.01%
Transportation, communication and Utilities	0.01%	0.01%	0.01%	0.01%	0.02%
Trade	0.00%	0.03%	0.03%	-0.00%	0.02%
Fire	0.18%	0.40%	0.36%	0.15%	0.12%
Services	0.03%	1.87%	1.97%	-0.02%	0.03%
Government	0.02%	0.03%	0.06%	0.12%	0.16%
Misc. Special sectors	0.00%	0.00%	0.00%	0.00%	0.00%

Mike Roanmyle

QUATRO PRO

OK

ASCII - no decoder

→ get Alt 5 revised from Rod - for Mike

Tues 3/29 → review^{edited} Ch. III for any changes ~~to isolated Ch. III~~
→ think about map needs.

public meetings - ^{after} June 17

mid July - start responding to comments.

Mike used \$610 for ~~investments~~ each table as starting pt
based on tabloid. He used alternatives (40%)
from tabloid as inputs. Deflated to
\$544 to 1990\$. and per yr. \$54+ million.

3/30/94

D

Review of matrices for Alt's 1-5 + Base

Negative #'s presumably because of

net loss

What assumptions were used to show
 effect on fisheries + other sectors of econ
 (incl. parts of Tourism) - what factors
 would show improvements in comp fish,
 econ + tourism? - Loss of revenue ^{+ jobs} for

but not cut - make sense - but what
 factors were used to show improvements
 to comp fish / econ + Tourism?

Distn: \$610 over

Alternative 1 No Action

Economic Sector	Industry output*	Employee compensation*	Employment (# of employees)
Forestry			
Fisheries			
Recreation			
Agriculture			
Mining			
Construction			
Manufacturing			
Transportation, communication utilities			
Trade			
Finance, insurance, real estate Services			
Government			
Misceallaneous			

* 1990 millions of dolllars.

Alternative 1 No Action

Economic Sector	Industry output*	Employee compensation*	Employment (# of employees)
Forestry			
Fisheries			
Recreation			
Agriculture			
Mining			
Construction			
Manufacturing			
Transportation, communication utilities			
Trade			
Finance, insurance, real estate Services			
Government			
Misceallaneous			

* 1990 millions of dolllars.

Mike K
3/30/94

EIS

D

2a. Revis alt 5 - can be done - very doable.

TH will fox. should have by FRI.
Mike can use only mid pt of range. otherwise it would be 2 runs
[96 for alt 1-5 were what he used - used tabloid.
in his alt
base 1-5]

Picking alts 1-5 - 2a - OK

a

Picking alt 1-5 - - Revere - Kirk.

2c - OK

2d. - if time left. over.

~~4~~ smallest area answer - Area.

3a -

3b \$610 was used not \$630 as implied in write up.

Tim → Revised alt 5.

Explain the limitations.

Mike will fox 8x2x11 sheet per meter today.

Contract - by FRI.

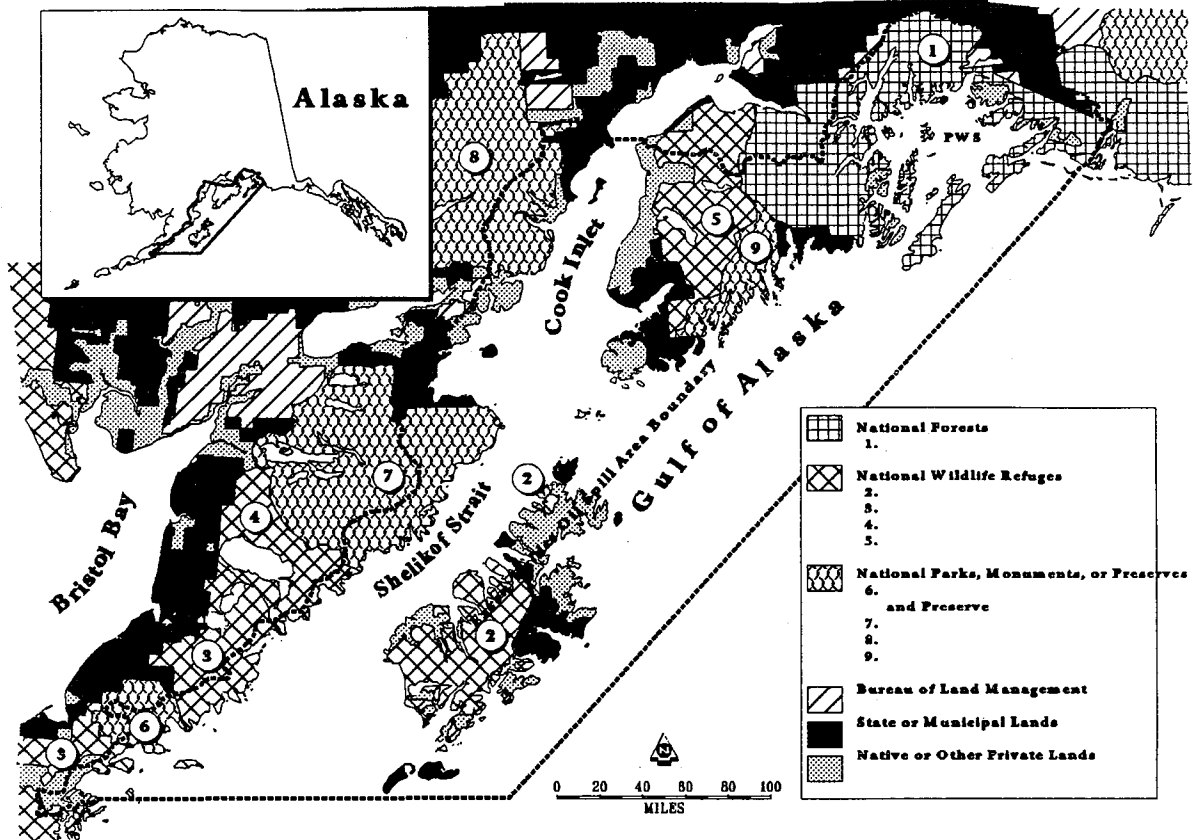


Fig 3-2

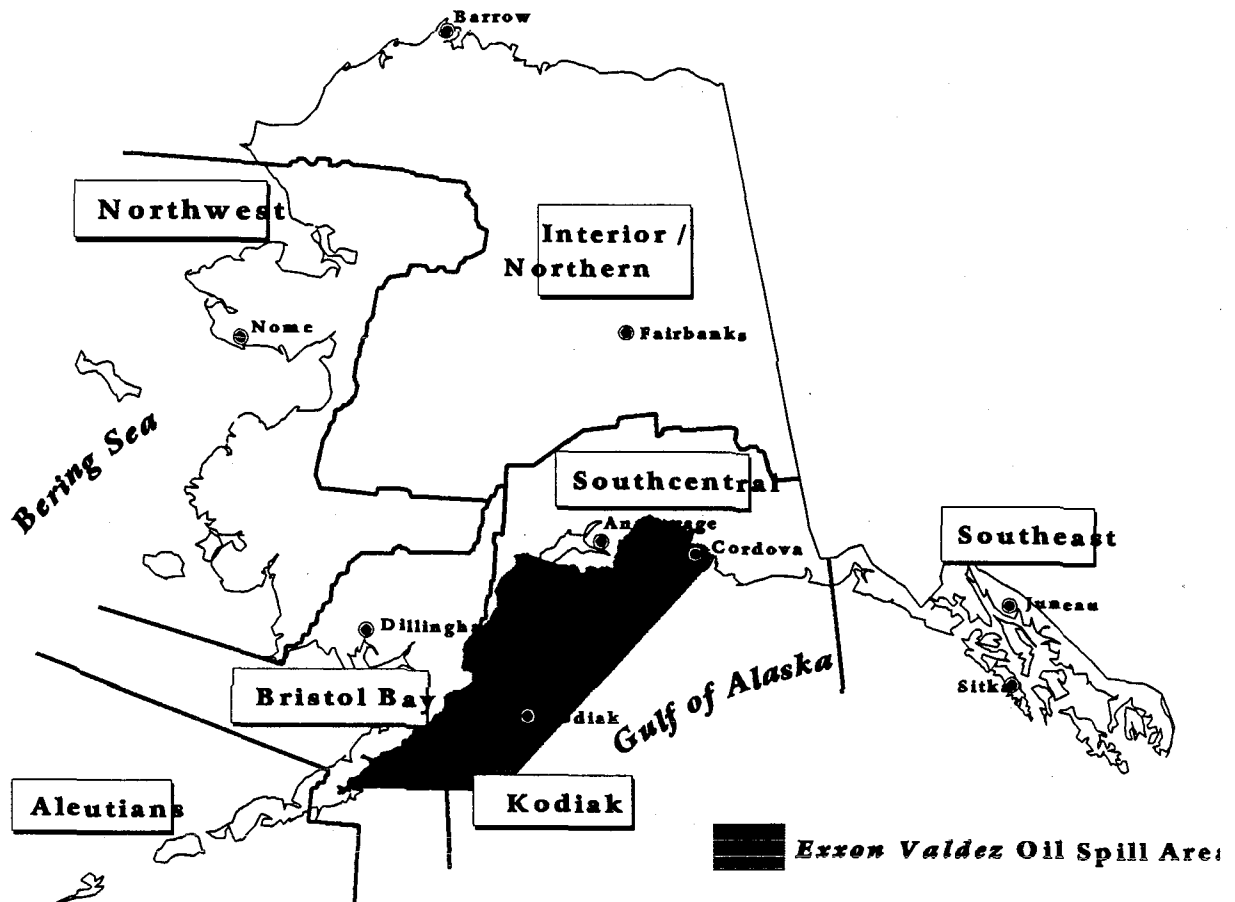
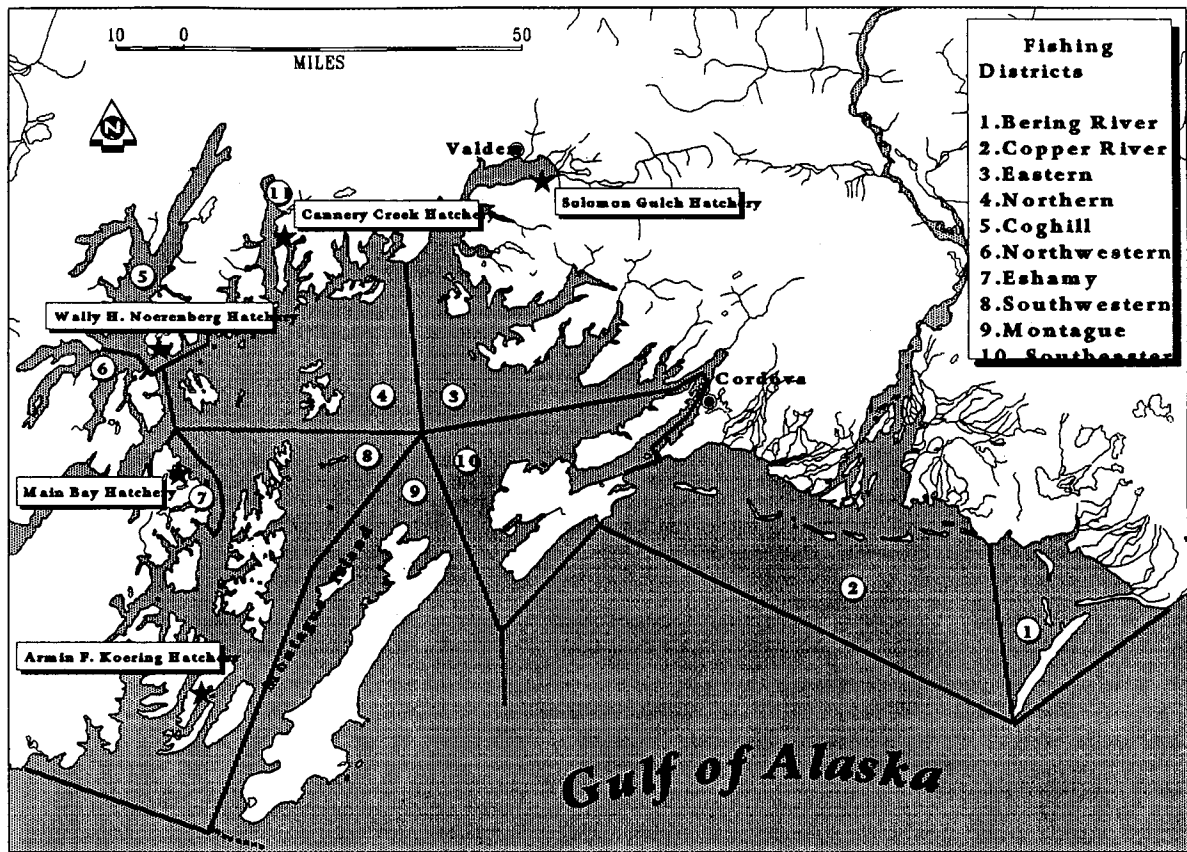


FIG 3-1



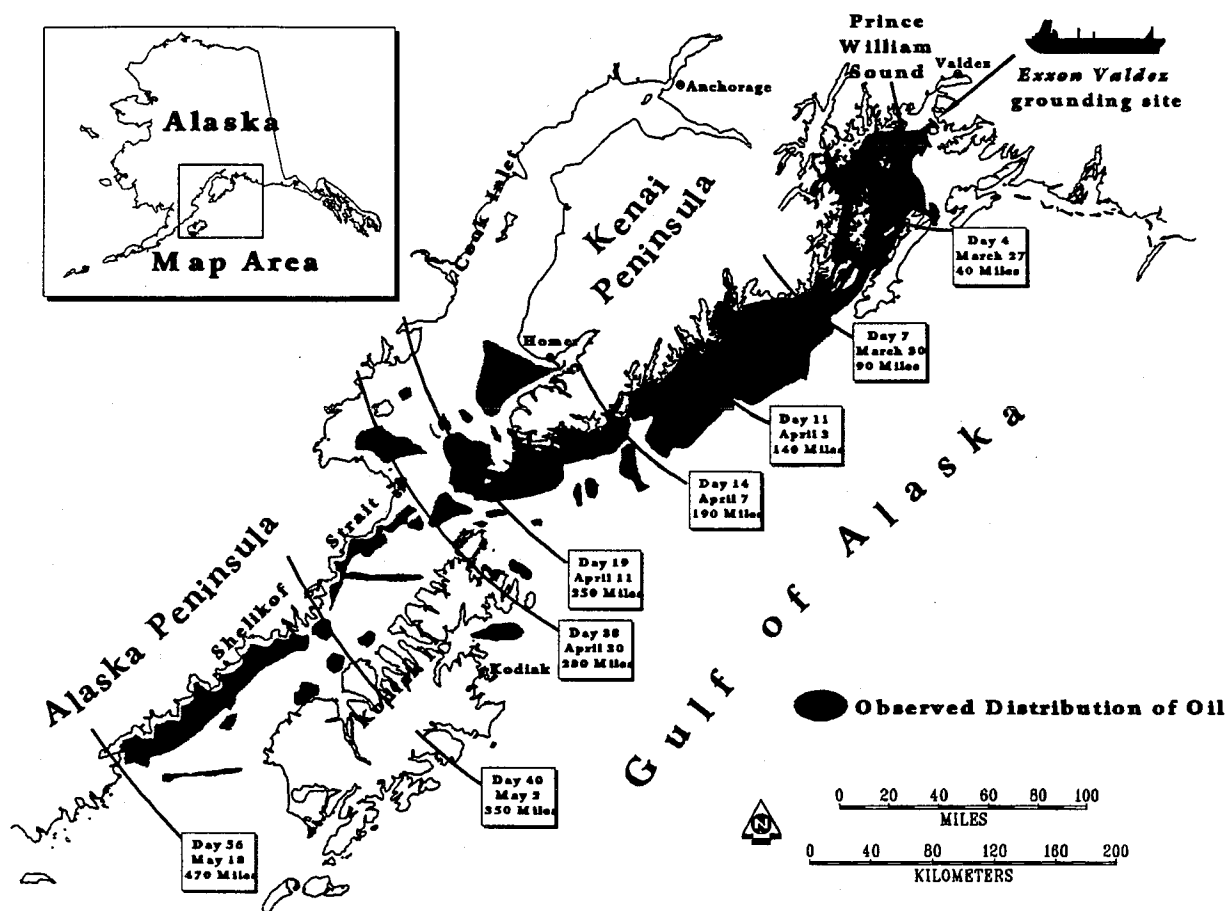


Fig 1-1

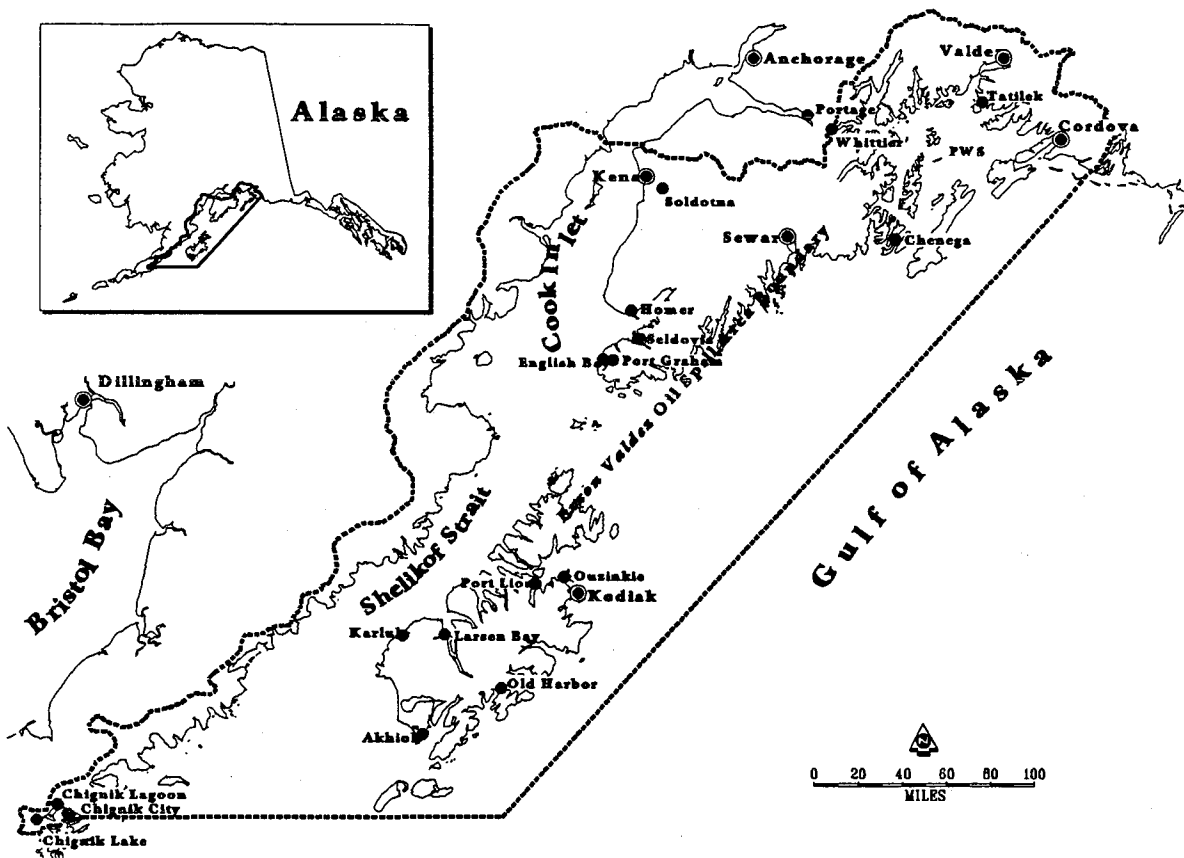
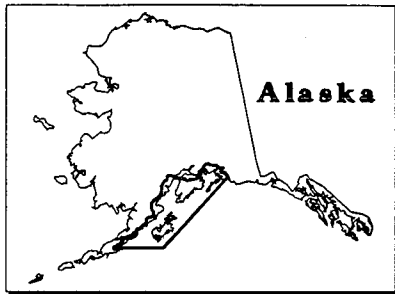


Table 1
Analysis of Alternatives
1990\$ Millions

Base

Sector	Final Demand \$	Industry Output \$	Employee Comp. \$	Property Income \$	Value Added \$	Employment #
Agriculture, Forest and fisheries	340.7	462.1	28.1	151.3	189.6	8,091
Mining	6,061.0	6,199.0	502.4	2,835.3	4,745.4	6,335
Construction	1,246.1	1,420.3	495.1	363.9	861.9	11,751
Manufacturing	948.6	1,072.4	226.5	82.0	319.5	7,655
Transportation, communication and Utilities	1,933.3	2,265.9	543.7	768.5	1,405.1	13,795
Trade	1,125.7	1,252.6	752.6	138.2	1,035.4	33,790
Fire	988.3	1,137.4	245.4	337.3	734.1	11,329
Services	2,018.0	2,514.4	944.9	546.2	1,507.8	48,779
Government	2,105.6	2,151.5	1,934.2	76.5	2,010.7	46,428
Misc. Special sectors	44.5	12.3	0.0	33.4	33.4	0
	16,811.8	18,487.9	5,673.1	5,332.7	12,843.0	187,953

D
513

Alternative 1

Change from Base for direct, indirect and induced effects from 10 yrs of
Administration
Monitoring
Balance in endowment

	Final Demand \$	Industry Output \$	Employee Comp. \$	Property Income \$	Value Added \$	Employment #
Agriculture, Forest and fisheries	0.0001	0.0005	0.0001	0.0001	0.0001	0.01
Mining	0.0047	0.0125	0.001	0.0057	0.0056	0.01
Construction	0	0.019	0.0103	0.0035	0.0139	0.25
Manufacturing	0.0042	0.0182	0.0046	0.0025	0.0072	0.16
Transportation, communication and Utilities	0.0108	0.115	0.0335	0.04	0.0759	0.9
Trade	0.0381	0.0467	0.0276	0.0058	0.0387	1.22
Fire	1.5109	1.6025	0.6277	0.3605	1.0329	21.17
Services	0.5797	0.77	0.2886	0.2205	0.5151	15.07
Government	0.446	0.4565	0.4502	0.0021	0.4522	8.39
Misc. Special sectors	0	0	0	0	0	0
	2.5945	3.0409	1.4436	0.6407	2.1456	47.18

Alternative 2

Change from Base for direct, indirect and induced effects from 10 yrs of
 Administration
 Monitoring
 Habitat Purchase w/ respending

	Final Demand	Industry Output	Employee Comp.	Property Income	Value Addec	Employment
	\$	\$	\$	\$	\$	#
Agriculture, Forest and fisheries	-31.9767	-38.8218	-8.219	-5.2829	-14.6414	-440.02
Mining	0.0662	-0.0427	-0.0034	-0.0197	-0.0326	-0.04
Construction	8.0662	7.3758	2.7049	1.0998	3.8239	64.66
Manufacturing	0.0616	-0.6096	-0.0972	-0.0279	-0.1422	-1.22
Transportation, communication and Utilities	0.1525	0.1721	0.0474	0.0728	0.1219	1.24
Trade	0.5903	0.2352	0.1158	0.0241	0.1489	9.08
Fire	2.5531	2.3244	0.5857	0.1628	0.7877	52.09
Services	6.0367	2.8359	4.6217	-1.1249	3.5008	959.44
Government	0.8094	0.6767	0.7299	-0.0189	0.7109	13.75
Misc. Special sectors	0	0	0	0	0	0
	-13.7017	-25.864	0.4858	-5.1148	-5.7223	658.88

Table 1 (continued)

Alternative 3

Change from Base for direct, indirect and induced effects from 10 yrs of

Administration

Monitoring

Restoration

Habitat purchase w/respending

	Final Demand \$	Industry Output \$	Employee Comp. \$	Property Income \$	Value Added \$	Employment #
Agriculture, Forest and fisheries	-26.5006	-32.6154	-7.2206	-4.1676	-12.4089	-329.49
Mining	0.058	0.0007	0.0001	0.0003	0.0005	0
Construction	8.4277	7.8589	2.9088	1.1774	4.1068	69.56
Manufacturing	0.0546	-0.338	-0.0522	-0.0113	-0.073	-0.67
Transportation, communication and Utilities	0.1355	0.2274	0.0674	0.0847	0.1555	1.85
Trade	0.4721	0.3111	0.1675	0.0367	0.2287	9.9
Fire	2.0637	1.8532	0.4635	0.132	0.6307	41.33
Services	5.1646	2.5365	3.7855	-0.8371	2.9552	766.79
Government	1.5449	1.438	1.4781	-0.0141	1.4637	27.58
Misc. Special sectors	0	0	0	0	0	0
	-8.5796	-18.7276	1.5981	-3.599	-2.9408	586.85

Alternative 4

Change from Base for direct, indirect and induced effects from 10 yrs of

Administration

Monitoring

Restoration

Spill Prevention

Habitat purchase w/responding

	Final Demand \$	Industry Output \$	Employee Comp. \$	Property Income \$	Value Added \$	Employment #
Agriculture, Forest and fisheries	-19.6192	-24.7403	-5.8949	-2.8028	-9.5563	-196.74
Mining	-0.0049	-0.0071	-0.0006	-0.0033	-0.0055	-0.01
Construction	9.8829	9.4421	3.5334	1.4229	4.9813	84.53
Manufacturing	-0.0043	-0.0838	-0.0118	-0.0005	-0.015	-0.35
Transportation, communication and Utilities	-0.0111	0.1149	0.0395	0.0411	0.0812	1.24
Trade	-0.0396	-0.0274	-0.0181	-0.0025	-0.0249	-0.62
Fire	0.9571	0.6805	0.1185	0.0569	0.1801	17.08
Services	0.8213	-1.1042	-0.2672	-0.4726	-0.7336	-11.42
Government	3.1135	3.0314	3.0877	-0.0204	3.0674	57.09
Misc. Special sectors	0	0	0	0	0	0
	-4.9043	-12.6939	0.5865	-1.7812	-2.0247	-49.2

Alternative 5

Change from Base for direct, indirect and induced effects from 10 yrs of

Administration

Monitoring

Restoration

Spill prevention

Habitat purchase w/responding

	Final Demand	Industry Output	Employee Comp.	Property Income	Value Added	Employment
	\$	\$	\$	\$	\$	#
Agriculture, Forest and fisheries	-10.8929	-14.4444	-3.9257	-1.221	-5.7457	-53.27
Mining	0.0141	0.0792	0.0063	0.0363	0.0606	0.08
Construction	9.5556	9.3257	3.5227	1.4124	4.9598	84.31
Manufacturing	0.0131	0.2471	0.045	0.0238	0.0739	0.69
Transportation, communication and Utilities	0.0326	0.2939	0.0952	0.0925	0.1937	2.79
Trade	0.1147	0.292	0.1763	0.0411	0.2579	6.39
Fire	0.7365	0.6119	0.1365	0.0486	0.1999	13.82
Services	1.2018	0.3652	0.2312	-0.0244	0.2187	13.31
Government	4.041	4.0056	4.0223	-0.0059	4.0162	74.46
Misc. Special sectors	0	0	0	0	0	0
	4.8127	0.7762	4.3098	0.4034	4.2344	142.58