ALASKA LEGISLATURE COMMITTEE FILES 1987-1988 8672
4988 HRES HB 545 - HCR 38 560

IN THE SENATE/HOUSE BY

SENATE/HOUSE BILL NO. XXX

IN THE LEGISLATURE OF THE STATE OF ALASKA

FOURTEENTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act relating to oil and gas properties production tax and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA

* Section 1. AS 43.55.011 is amended to read:

Sec. 43.55.011. OIL PRODUCTION TAX. (a) There is levied upon the producer of oil a tax for all oil produced from each lease or property in the state, less any oil the ownership or right to which is exempt from taxation. The tax is equal to either the percentage-of-value amount calculated under (b) of this section, multiplied by the economic limit factor determined for the oil production of the lease or property under AS 43.55.013 or the cents-per-barrel amount calculated under (c) of this section, whichever is greater[, MULTIPLIED BY THE ECONOMIC LIMIT FACTOR DETERMINED FOR THE OIL PRODUCTION OF THE LEASE OR PROPERTY UNDER AS 43.55.013]. If the amounts calculated under (b) and (c) of this section are equal, the amount calculated under (b) shall be treated as if it were the greater for purposes of this section.

(b) The percentage-of-value amount equals 12.25 percent of the gross value at the point of production of taxable oil produced on or before June 30, 1981, from the lease or property and 15 percent of the gross value at the point of production of taxable oil produced from the lease or property after June 30, 1981; except that for a lease or property coming into commercial oil production after June 30, 1981, the percentage-of-value amount equals 12.25 percent of the gross value at the point of production of taxable oil produced from the lease or property in the first five years after the start of commercial oil production and equals 15 percent of the gross value at the point of production of taxable oil produced thereafter from the lease or property.

(c) The cents-per-barrel amount equals $0.60 per barrel of taxable old crude oil produced from the lease or property, and $0.80 per barrel for all other taxable oil produced from the lease or property, both as adjusted by AS 43.55.012.

* Sec.2. This Act takes effect immediately in accordance with AS 01.10.070(c).

4/18/86 1416C

LAW OFFICES
PRESTON, THORGRIMSON, ELLIS & HOLMAN
420 L STREET · SUITE 404
ANCHORAGE, ALASKA 99501
(907) 276-1969

MEMORANDUM

TO: Deborah Vogt

FROM: Joseph K. Donohue

DATE: April 28, 1986

RE: **Retroactive Amendments to ELF Factor**

You have requested an opinion concerning the constitutionality of enacting a bill which would retroactively either repeal, or amend the methodology for calculating, the economic limit factor under AS 43.55.013. Specifically, you have asked whether a bill enacted in February 1987 and made retroactive to January 1, 1987 would present any due process problem under the Fifth Amendment to the United States Constitution or under Article I, Section 7 of the Alaska Constitution.

The gross production tax on oil or gas is payable monthly. The tax is due on the 20th day of each month for oil or gas production which occurred during the preceding month. The tax is delinquent if not paid before the end of the month following the month of production. AS 43.55.020(a). Thus, the tax on January production is due on February 20 and is delinquent if not paid on or before February 28.

The economic limit factor is defined in AS 43.55.013 and the Department of Revenue has promulgated a number of regulations which interpret and implement of the provision. See 15 AAC 55.010-.040 and .090. The economic limit factor (ELF) is a concept which is designed to reduce the effective rate of taxation on a producing field as production from that field becomes increasingly marginal. The ELF is multiplied by the percentage-of-value amount set forth in AS 43.55.011(b) or the cents-per-barrel amount calculated under (c) to determine the tax due. AS 43.55.013(b)(2) and (3) provide that during the first 10 years of commercial production from a lease or property, an economic limit factor which is greater than .7 is deemed to be one for purposes of the calculation of tax liability. For example, for the period since 1981 when the .7 threshold was enacted as part of Ch. 116 SLA 1981, the ELF at Prudhoe Bay has been greater than .7 and, therefore, one. This, in turn, means that the ELF does not have any operative effect unless it is found to be less than .7 during the initial 10-year period. For Prudhoe Bay, the 10-year period expires in June 1987.

Attachment 5

3-18-87

The ELF is derived by the use of a rather complicated mathematical formula which in turn is based on certain simplifying assumptions. For oil, the monthly production rate at the economic limit is presumed to be 300 barrels times the number of well days for the lease or property during the month for which the tax is to be paid. AS 43.55.013(d).

The taxpayer may rebut this presumption at a formal hearing by providing clear and convincing evidence of a different monthly production rate. The determination of the monthly production rate at the economic limit is made by dividing the value at the point of production under AS 43.55.013(f) into the average monthly direct operating costs calculated under subsection (e). The hearing must be held before February 15 of a year or within 6 months after commencement of oil production from a lease or property. The results of the hearing "shall be used for all oil production during ...at calendar year from the lease or property." AS 43.55.013(d). Therefore, the statute expressly calls for an annual determination with some retroactive effect on the monthly tax period preceding the hearing on the appropriate monthly production rate. This procedural approach makes administrative sense since it is more efficient to have this potentially difficult issue decided on an annual basis rather than on a monthly basis.

Perhaps the leading case on the question of whether a tax statute can apply retroactively to previous tax periods is Welch v. Henry, 305 U.S. 134 (1938). There, the United States Supreme Court upheld a corporate income tax amendment enacted by Wisconsin in March 1935 which was applicable to receipt of corporate dividends in 1933. The court held that, except for a narrow category of gift taxation cases, the legislature had broad authority to adjust or amend tax liability retrospectively.

The exception to this rule mentioned by the court pertained primarily to instances where voluntary irrevocable actions of taxpayers (e.g., making a bequest) were impacted by the retroactive imposition of a tax. The Supreme Court stated that the critical part of the constitutional test was whether "the nature or amount of the tax could not reasonably have been anticipated by the taxpayer at the time of the particular voluntary act which the statute later made the taxable event." 305 U.S. at 147. The cases cited by the court, e.g. Nichols v. Coollidge, 274 U.S. 531 (1927), and Untermeyer v. Anderson, 276 U.S. 440 (1928), were instances where the donor might well not have acted as he did had he anticipated the tax. The court said that the facts of each case and the nature of the tax would have to be examined to determine if retroactivity gives rise to such harsh and oppressive results that it offends the Constitution. The court stated "there are other forms of taxation whose retroactive imposition cannot be said to be similarly offensive, because their incidence

is not on the voluntary act of the taxpayer." 305 U.S. at 147 The court specifically listed property taxes, income taxes and benefit assessments. 305 U.S. at 147-148. The Supreme Court also noted that it was historically the practice of Congress and the Wisconsin Legislature to enact revenue or tax legislation in a given year and to give it effect to the entire calendar year.

The United States Supreme Court more recently upheld the retroactive increase in the minimum tax on preferences in United States v. Darusmont, 449 U.S. 292 (1981). There, an amendment to the Internal Revenue Code enacted in October 1976 was applied to the entire 1976 tax year. In addition to relying on Welch v. Henry, supra, the Supreme Court cited its earlier decision in Cooper v. United States, 280 U.S. 409, 411 (1930), which upheld the taxation of gains from "prior but recent transactions." The Supreme Court also relied on the analysis of Judge Learned Hand in Cohan v. Commissioners, 39 F.2d 540, 545 (2d Cir. 1930). Judge Hand, in resolving a similar issue involving retroactivity of a tax, held that nobody had a vested right in the rate of taxation. In responding to the question of whether the tax law change was foreseeable, Judge Hand stated that once a system of taxation is already in place, a taxpayer "must be prepared for such possibilities ... ." 39 F.2d at 545.

Other decisions which uphold tax law changes with arguably retroactive impacts in the face of due process challenges include Buttke v. Commissioner, 625 F.2d 262 (8th Cir. 1980) (involving the same minimum tax amendments subsequently upheld by the U.S. Supreme Court in United States v. Darusmont, supra) and Neild v. District of Columbia, 110 F.2d 146, 153 (D.C. Cir. 1940) (involving the constitutionality of the application of a new gross receipts tax measured by the prior year's receipts).

Sometimes retroactive tax laws are challenged under state constitutional provisions barring retrospective laws per se or interference with vested rights. The analytical approach taken by the courts is substantially similar. Under the first line of cases, tax bills which are applied to the entire calendar year in which they are enacted are generally found not to be retrospective in operation. See, e.g., Martin v. Board of Assessment Appeals, 707 P.2d 348 (Colo. 1985). In the Martin case, a law changing the factors to be considered in appraising condominiums which took effect in May 1982 and which was used to assess property values as of January 1, 1982 was upheld. The court held that to find an unconstitutional retrospective effect required a showing of an impairment of a vested right. The court concluded:

> ... [P]roperty owners have no vested right to have their taxable property assessed by particular methods employed in prior years. ... Since the statute only alters the factors which may be considered in determining actual value, it does not impair the taxpayers' vested rights, and therefore is not unconstitutionally retrospective in its operation. 707 P.2d at 352.

A "vested rights" challenge in the context of a severance tax increase led to an identical conclusion. In Belco Petroleum v. State Board of Equalization, 587 P.2d 204 (Wyo. 1978), a 1975 amendment to the state severance tax increased the amount of tax due for the previous year. Under the Wyoming severance tax, a taxpayer paid his 1974 tax in July 1975 computed on the value of gross production for previous year. In upholding the application of the 1975 increase to the July assessment, the court ruled that such an increase was not retrospective but merely called for a tax measured by or computed on the basis of antecedent facts or transactions. The court also found that there was no vested right in a specific tax rate.

On the basis of the foregoing state and federal cases, one can conclude that there is no vested right in a particular tax rate or in a particular method of determining a tax liability. The U.S. Supreme Court cases focus on whether the transaction was taxable during the period of retroactive coverage and whether said period is reasonable, whether the transactions were "prior but recent" in time with respect to the tax law change, whether the change was reasonably foreseeable and whether or not the taxpayer might have voluntarily acted as he did had he but known of the change.

The question before us involves the proposed repeal or modification of the ELF factor in February 1987, effective January 1, 1987. The retroactive period is at most two months. It would adjust a factor which is determined on an annualized calendar basis under present law. The affected taxpayers are those whose decision to invest and produce oil or gas has already been made and whose production is already subject to taxation. In the State of Alaska, amendments to the oil and gas production tax must certainly be viewed as foreseeable. In fact, the legislature has discussed and debated changes to the ELF factor during the 1986 legislative session. Under these circumstances, I conclude that neither state nor federal due process limitations would be abrogated by the repeal or amendment of the ELF factor under consideration here. Furthermore, under the analyses set forth in Martin and Belco Petroleum above, a change in the tax rate or ELF methodology prior to February 20, 1987 might not even be viewed as having "retrospective" operation.

147.JKD:ls

STATE OF ALASKA 1987 LEGISLATIVE SESSION
FISCAL NOTE

Bill Version: HB 104
REQUEST
Publish Date:

Revision Date: March 16, 1987
Agency Affected: Revenue
Title: Extending imposition of economic limit factor-oil and gas production tax.
BRU: Audit
Sponsor: Governor
Components:
Requestor: Rules

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
OPERATING						
PERSONAL SERVICES	-	-	-	-	-	-
TRAVEL	-	-	-	-	-	-
CONTRACTUAL	-	-	-	-	-	-
SUPPLIES	-	-	-	-	-	-
EQUIPMENT	-	-	-	-	-	-
LANDS & STRUCTURES	-	-	-	-	-	-
GRANTS, CLAIMS	-	-	-	-	-	-
MISCELLANEOUS	-	-	-	-	-	-
TOTAL OPERATING	-	-	-	-	-	-
CAPITAL	-	-	-	-	-	-
REVENUE	-	-	-	-	-	-

FUNDING: (Thousands of Dollars)

GENERAL FUND	-	-	-	-	-	-
FEDERAL FUNDS	-	-	-	-	-	-
OTHER	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-

POSITIONS:

FULL-TIME	-	-	-	-	-	-
PART-TIME	-	-	-	-	-	-
TEMPORARY	-	-	-	-	-	-

ANALYSIS: Attach a separate page if necessary

Prepared By: Steven E. Kettei Steven E. Kettei
Phone: 465-2320
Division: Audit
Date: March 16, 1987

Approved by Commissioner: H MacLean
Date: 3/16/87
Agency:

Distribution (by Agency preparing fiscal note):
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STATE OF ALASKA
THE LEGISLATURE

LEGISLATIVE AFFAIRS AGENCY

POUCH Y STATE CAPITOL
JUNEAU ALASKA 99811
907 465 3800

MEMORANDUM March 17, 1987

SUBJECT: Retroactivity of proposed committee substitute (CSHB 164(Resources)

TO: Representative Sam Cotten
Chair, House Resources Committee

FROM: Theresa L. Bannister TB
Legislative Counsel

This memo accompanies the committee substitute that you have requested for HB 164, a bill relating to the oil and gas properties production tax. That bill includes a provision that would make the bill retroactive to January 1, 1987.

Please be aware that the retroactivity provision may violate federal and state constitutional provisions against enacting ex post facto laws (art. I, sec. 15 of the Constitution of the State of Alaska; art. I, sec. 9, cl. 3 of the U.S. Constitution). In this instance, the tax is incurred and remitted on a monthly schedule. AS 43.55.020. Therefore, the taxpayers under the chapter will have already paid or become obligated to pay an amount certain for the months of January, 1987, through the month before the month of enactment.

You may wish to make the bill retroactive to the beginning of the month in which the bill takes effect. That would not create retroactivity problems since the tax liability would not have become due yet.

If I may be of further assistance, please advise.

TLB:mkr
m10/011

Enclosure

Attachment 4

THE ECONOMIC LIMIT FACTOR FOR OIL

Alaska encourages new production and complete recovery through the application of an economic limit factor to the basic tax rate. The economic limit factor (ELF) decreases the effective rate of the tax as production decreases.

The economic limit factor for oil is:

$$ELF = 1 - \frac{PEL}{TP} \exp \frac{460 \times WD}{PEL}$$

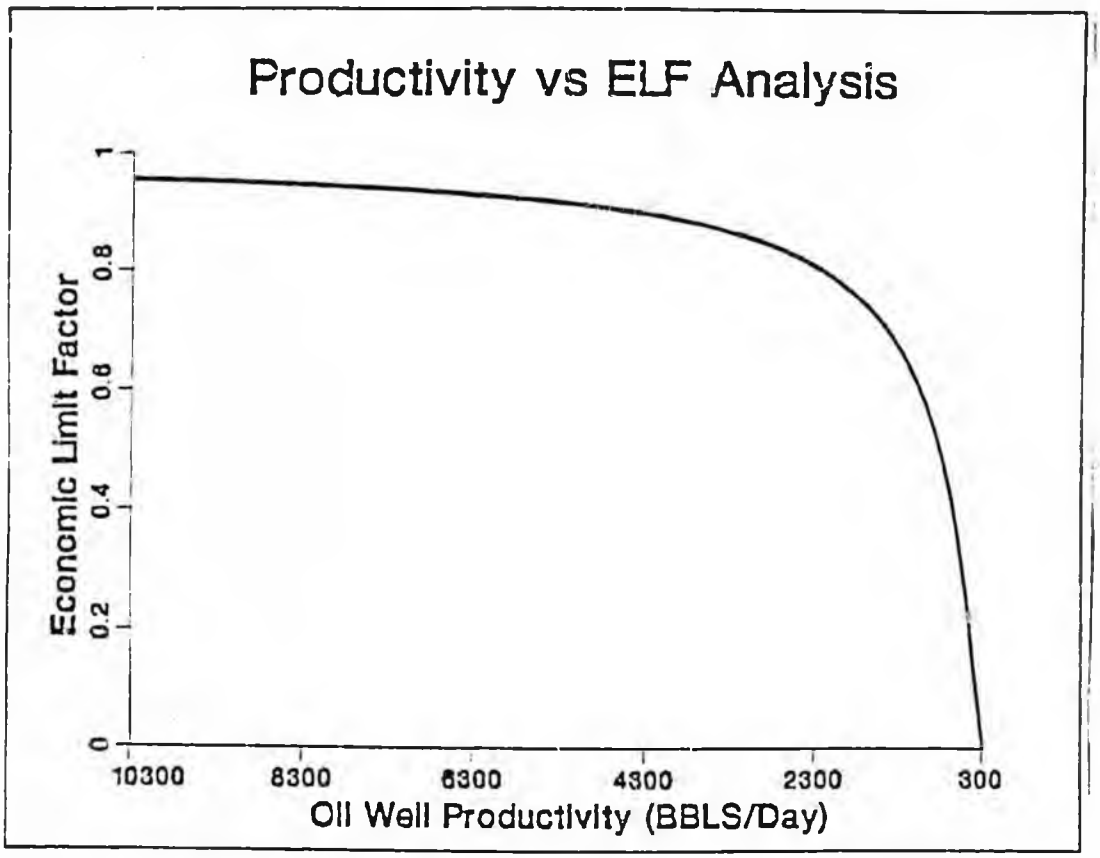
where PEL = monthly production at the economic limit
TP = the total production during the month for which the tax is to be paid
WD = the total number of well days in the month for which the tax is to be paid
and where "exp" indicates that the expression following it is an exponent.

During the first 10 years of oil production if the ELF is computed to be greater than 0.7, the factor used will be one. If the computed ELF is 0.7 or less, the actual computed factor is applied. After the first 10 years the actual computed factor is used in all cases.

The monthly production rate at the economic limit is presumed to be 300 barrels times the number of well days for the lease or property during the month for which the tax is to be paid. The taxpayer may rebut the presumption by offering clear and convincing evidence supporting a different monthly production rate at the economic limit.

A well is producing at the economic limit when the value of production during the month equals the average monthly direct operating cost for oil production. Direct operating costs include only royalty, production supplies, purchased fuel, routine maintenance, and wages and benefits of employees working on the production operations. The average direct operating cost is determined by using a period of at least four consecutive months.

The following is a graph of the ELF showing how the factor decreases as the production of the well declines:



To compute the amount of production (severance) tax due, the tax rate is multiplied by the value of the oil produced with that result multiplied by the ELF.

EXAMPLES USING THE ELF

The following are two examples using the ELF. For both assume: (1) the property went into production in 1974; (2) the applicable nominal tax rate is 15%; (3) the tax is being computed for the month of October, 1981; (4) the properties operated 70 well days (WD); (5) production at the economic limit was 300 bbl/day; (6) 87.5% of the total production is subject to tax.

A. Total barrels produced for the month: 400,000 barrels (TP)
Value of production at well head: $8,750,000
Production at the Economic Limit: 300 bbl/day x 70 well days = 21,000 (PEL)

$$ELF = 1 - \frac{21,000}{400,000} \exp \frac{460 \times 70}{21,000}$$

$$ELF = 0.920636$$

Because the production is in the first 10 years and ELF is greater than 0.7, ELF will be treated as equal to 1.

$$\$8,750,000 \times 87.5\% \times 15\% \times 1 = \$1,148,437.50$$

Value of Production	Taxable Prod.	Tax Rate	ELF	Tax Amount Due State

The effective tax rate on the taxable oil = 15%

B. Total barrels produced for the month: 40,000 barrels (TP)
Value of production at well head: $875,000
Production at the Economic Limit: 300 bbl/day x 70 well days = 21,000 (PEL)

$$ELF = 1 - \frac{21,000}{40,000} \exp \frac{460 \times 70}{21,000}$$

$$ELF = 0.319348$$

$$\$875,000 \times 87.5\% \times 15\% \times 0.319348 = \$36,675.12$$

Value of Production	Taxable Prod.	Tax Rate	ELF	Tax Amount Due State

Effective tax rate on the taxable oil = 4.19%.

As can be seen from the graph of the ELF and the examples above, as production approaches the economic limit, ELF approaches zero.

Because of the application of the ELF, the effective tax rate on taxable production varies between 0 and 15%.

THE ECONOMIC LIMIT FACTOR FOR GAS

Alaska encourages new production and complete recovery through the application of an economic limit factor to the basic tax rate. The economic limit factor (ELF) decreases the effective rate of the tax as production decreases.

The economic limit factor for gas is:

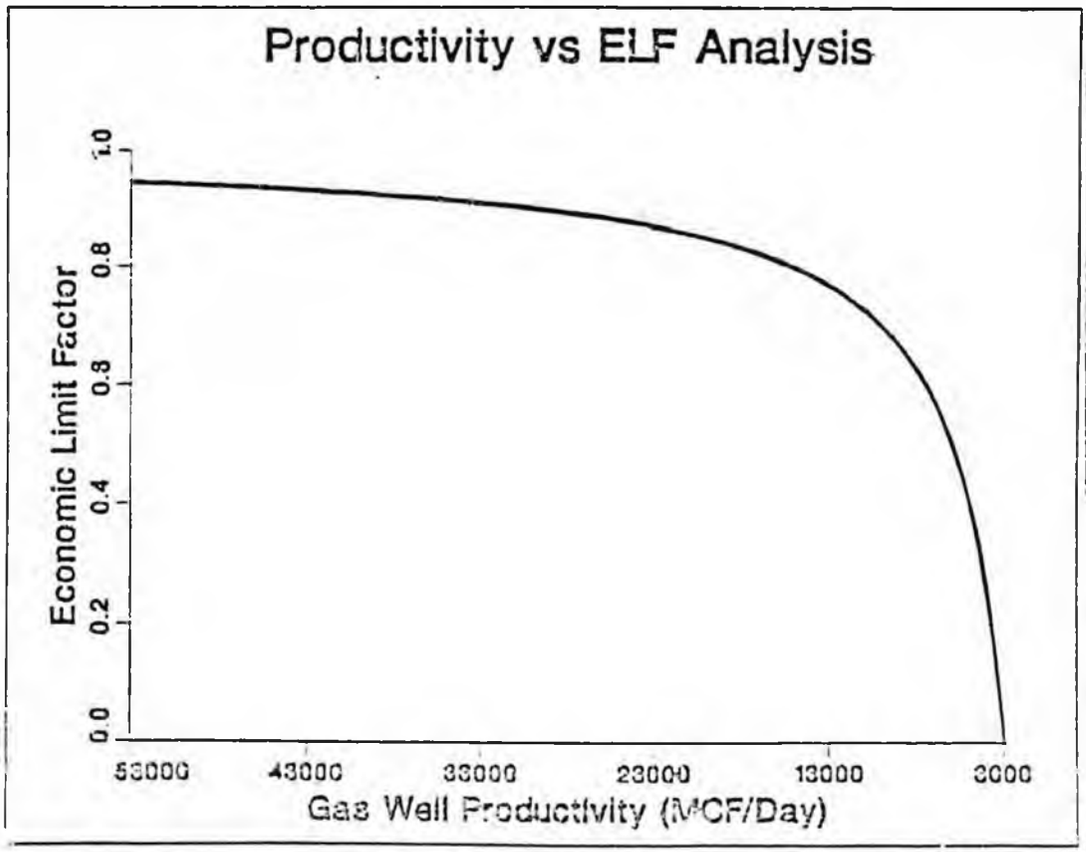
$$ELF = 1 - \frac{PEL}{TP}$$

where PEL = monthly production at the economic limit
TP = the total production during the month for which the tax is to be paid

The monthly production rate at the economic limit is presumed to be 3,000 mcf times the number of well days for the lease or property during the month for which the tax is to be paid. The taxpayer may rebut the presumption by requesting a formal hearing and offering clear and convincing evidence supporting a different monthly production rate at the economic limit.

A well is producing at the economic limit when the value of production during the month equals the average monthly direct operating cost for gas production. Direct operating costs include only royalty actually and currently paid, production supplies, purchased fuel, routine maintenance, and wages and benefits of employees working on the production operations. The average operating cost is determined by using a period of at least four consecutive months.

The following is a graph of the ELF showing how the factor decreases as the production of the well approaches the economic limit:



To compute the amount of production (severance) tax due, the tax rate is multiplied by the value of the oil produced with that result multiplied by the ELF.

EXAMPLES USING THE ELF:

For both examples assume: (1) the applicable nominal tax rate is 10%; (2) the tax is being computed for the month of October, 1981; (3) the properties operated 70 well days; (4) production at the economic limit was 3,000 mcf/day; (5) 1/8 of the gas production is exempt from tax; (6) the well head value of the gas is $.70/mcf.

A. Total Production (TP): 1,050,000 mcf
Total Value of Production: $735,000.00
PEL = 3,000 mcf/day x 70 well days (WD) = 210,000

$$ELF = 1 - \frac{210.000}{1,050,000}$$

$$ELF = 0.800000$$

$$\$735,000 \times 87.5\% \times 10\% \times 0.800000 = \$51,450.00$$

Value of Production	Taxable Prod.	Tax Rate	ELF	Tax Amount Due State

The effective tax rate on the taxable gas is 8%.

The effective tax rate on the total production is 7%.

B. Total Production (TP): 262,500 mcf
Total Value of Production: $183,750.00
PEL = 3,000 mcf/day x 70 well days (WD) = 210,000

$$ELF = 1 - \frac{210.000}{262,500}$$

$$ELF = 0.200000$$

$$\$183,750 \times 87.5\% \times 10\% \times 0.200000 = \$3,215.63$$

Value of Production	Taxable Prod.	Tax Rate	ELF	Tax Amount Due State

The effective tax rate on the taxable gas is 2%.

The effective tax rate on the total production is 1.75%.

Because of the application of the ELF, the effective tax rates on total gas production vary between 0 and 10%.

M E M O R A N D U M

STATE OF ALASKA

Department of Revenue

Petroleum Research Section

February 11, 1987

To: Vincent D. Wright, Chief of Research

From: Charles Logsdon, Petroleum Economist

Subject: New ELF

Per your request, I have examined the revenue and production impacts associated with changing the ELF to consider field size. This modification is similiar to the one outlined in HB 545 and presented in analysis done by myself in papers prepared for presentation to the tax committee.

Briefly, the modification is accomplished by introducing a scaling factor and also the rate of field production into the exponent of the current ELF formula. The value of this scaling factor determines at what level of production the resulting ELF is greater than under the current law. For instance, in HB 545 the factor has a value of 37,000,000 which, given a PEL of 300, translates into a break point of roughly 80,000 bbls/day. The analysis I did for the tax committee last December under the OMB modified alternative ELF used a factor with a value of 45,500,000. This translates into a break point of roughly 100,000 bbls./day. In the analysis contained in this memo I have used a factor value of 55,000,000, which results in a break point of roughly 120,000 bbls./day. A breakpoint of 120,000 bbls./day would increase the effective severance tax rate on Prudhoe Bay and Kuparuk production. It would reduce the effective severance tax rate on all other oil fields now producing or likely to produce in the next two years, including all Cook Inlet fields, Milne Point, Lisburne, and Endicott. This is because none of these fields are projected to produce at or above the 120,000 bbl./day level. I have attached a computer printout which illustrates the sensitivity of the change in effective tax rate on each field of different assumptions for production and well count using the 55 million scaling factor

Sam's Copy

To illustrate the effect of different scaling factors on the ELF calculation I have developed the following tables. The first table illustrates the break point for various values of the scaling factor i.e. the total field production which would result in a lower ELF than that currently calculated.

Factor	Breakpoint
20000000	43479 bbls./day
30000000	65219
40000000	86958
50000000	108698
60000000	130438
70000000	152177
80000000	173917
90000000	195656
100000000	217396
110000000	239136

The following table shows the calculated ELF by North Slope field for various values of the scaling factor.

			Factor/ELF							
Field	Prod.	Prod/Well	30MM	40MM	50MM	60MM	70MM	80MM	90MM	100MM
Prudhoe	1510000	2900	.9928	.9904	.9880	.9856	.9833	.9809	.9785	.9762
Kuparuk	230000	885	.8353	.7866	.7408	.6977	.6571	.6188	.5828	.5488
Milne	20000	900	.1317	.0870	.0341	.0173	.0088	.0045	.0023	.0012
Endicott	70000	900	.5603	.4619	.3808	.3140	.2588	.2134	.1759	.1450
Lisburne	35000	1400	.5021	.3990	.3171	.2521	.2003	.1592	.1266	.1006
West Sak	100000	550	.4545	.3495	.2687	.2066	.1589	.1221	.0939	.0722

The following two tables illustrate the revenue and production impact of modifying the ELF to include field size in the formulas using the 55 millon scaling factor. The results were generated by the PETREV monte carlo simulation model that DOR uses to forecast petroleum production revenues. Interestingly the revenue impacts are not that much different from those contained in the fiscal note prepared last year concerning HB 545. The average expected production impacts are also relatively low. The mildly negative impact on Lisburne production is a result of a slightly higher TAPS tariff, due to slightly lower throughput, more than offsetting the lower severance tax burden. The negative impact on West Sak reflects the probability that should this project become economic, production may exceed 120,000 bbls/day from a large number of low productive wells.

Revenue Impact of Field Size ELF, Field Factor = 55 Million
(Millions $)

Fiscal Year	Delta 30%	Delta Mean
1987	10.45	10.93
1988	88.18	112.29
1989	98.14	136.23
1990	109.61	147.04
1991	96.13	132.35
1992	94.18	127.23
1993	91.30	124.34
1994	81.51	118.59
1995	77.60	112.06
1996	69.74	98.74
1997	62.21	92.73
1998	49.52	82.14
1999	43.91	75.70
2000	33.42	72.90
2001	31.73	72.49
2002	27.43	73.42
2003	28.46	73.09
2004	23.53	62.25
2005	20.23	47.44

Production Impact of Expo55 (Million bbls/yr)

Fiscal Year	Prudhoe Bay	Kuparuk	Milne Point	Endicott	Lisburne	West Sak	Other Onshore	Other Offshore	Total
1987	0	0	.05	[illegible]	-.03	0	0	0	.02
1988	-1.97	-.32	.23	.65	-.05	0	0	0	-1.46
1989	-1.77	-.33	.37	2.16	-.06	0	0	0	.37
1990	-1.59	-.33	.39	2.13	-.07	0	0	0	.53
1991	-1.46	-.29	.39	2.1	-.1	0	0	0	.64
1992	-1.41	-.26	.36	2.01	-.1	0	.28	0	.88
1993	-1.25	-.23	.38	1.94	-.12	0	.51	0	1.23
1994	-2.59	-.38	.32	1.41	-.47	0	.53	0	-1.18
1995	-2.24	-.37	.29	1.69	-.41	-.63	.56	0	-1.11
1996	-2.16	-.3	.18	1.22	-.37	-.77	.48	0	-1.72
1997	-3.12	-.27	.19	.77	-.31	-1.13	.41	0	-3.46
1998	-2.57	-.16	.18	.41	-.28	-1.13	.38	.13	-3.04
1999	-2.18	-.1	.16	.06	-.21	-1.23	.58	.17	-2.75
2000	-1.93	-.07	.03	-.18	-.17	-1.23	.51	.18	-2.86
2001	-1.77	-.02	-.03	-.3	-.11	-1.26	.43	.21	-2.85
2002	-1.46	-.01	-.09	-.36	-.07	-1.32	.34	.23	-2.74
2003	-1.31	0	-.06	-.33	-.02	-1.12	.24	.23	-2.37
2004	-1.27	-.01	.01	-.34	-.02	-1.11	.22	.23	-2.29
2005	-1.13	-.04	-.03	-.26	-.04	-1.08	.18	.28	-2.12
Total	-33.18	-3.49	3.32	14.78	-3.01	-12.01	5.65	1.66	-26.28

THE EFFECT OF THE FIELD SIZE ELF ON THE PRUDHOE BAY SEVERANCE TAX RATE

	Producing Wells	Production (Bbl/day)	Current Lif	New ELF Field Size Factor = 55000000	Current Effective Tax Rate FY 1989	New Effective Tax Rate FY 1989	Increased Effective Tax Rate FY 1988
December DOR 1988 Mean	520	1510000	.8460	.9833	.1269	.1475	.0206
			Sensitivity Table				
	500	1450000	.8458	.9863	.1269	.1479	.0211
		1500000	.8508	.9872	.1276	.1481	.0205
		1525000	.8532	.9876	.1280	.1481	.0202
		1550000	.8555	.9880	.1283	.1482	.0199
		1575000	.8577	.9884	.1287	.1483	.0196
	520	1450000	.8399	.9857	.1260	.1479	.0219
		1500000	.8450	.9867	.1268	.1480	.0212
		1525000	.8475	.9871	.1271	.1481	.0209
		1550000	.8499	.9875	.1275	.1481	.0206
		1575000	.8522	.9879	.1278	.1482	.0204
	540	1450000	.8339	.9851	.1251	.1478	.0227
		1500000	.8393	.9861	.1259	.1479	.0220
		1525000	.8419	.9866	.1263	.1480	.0217
		1550000	.8443	.9870	.1266	.1481	.0214
		1575000	.8467	.9874	.1270	.1481	.0211
	550	200000	.0691	.2024	.0104	.0304	.0200
		225000	.1318	.3406	.0198	.0511	.0313
		250000	.1913	.4533	.0287	.0680	.0393
		275000	.2454	.5429	.0368	.0814	.0446
		300000	.2939	.6139	.0441	.0921	.0480

THE EFFECT OF THE FIELD SIZE ELF ON THE KUPARUK SEVERANCE TAX RATE

	Producing Wells	Production (Bbl/day)	Current ELF	New ELF Field Size Factor = 55000000	Current Effective Tax Rate FY 1988	New Effective Tax Rate FY 1988	Increased Effective Tax Rate FY 1988
December DOR 1988 Mean	260	250000	.5299	.6569	.0795	.0985	.0191
		Sensitivity Table					
	250	200000	.4864	.6500	.0730	.0975	.0245
		225000	.5370	.7187	.0806	.1078	.0272
		250000	.5797	.7698	.0868	.1155	.0287
		275000	.6137	.8087	.0921	.1213	.0293
		300000	.6433	.8388	.0965	.1258	.0293
	260	200000	.4686	.6357	.0703	.0953	.0251
		225000	.5206	.7069	.0781	.1060	.0279
		250000	.5636	.7601	.0845	.1140	.0295
		275000	.5996	.8006	.0899	.1201	.0301
		300000	.6302	.8319	.0945	.1248	.0303
	270	200000	.4511	.6213	.0677	.0932	.0255
		225000	.5044	.6951	.0757	.1043	.0286
		250000	.5486	.7504	.0823	.1126	.0303
		275000	.5857	.7925	.0879	.1189	.0310
		300000	.6172	.8250	.0926	.1238	.0312
	280	200000	.4338	.6069	.0651	.0910	.0260
		225000	.4884	.6833	.0733	.1025	.0292
		250000	.5337	.7406	.0801	.1111	.0310
		275000	.5718	.7843	.0858	.1176	.0319
		300000	.6043	.8181	.0906	.1227	.0321

THE EFFECT OF THE FIELD SIZE ELF ON THE MILNE SEVERANCE TAX RATE

	Producing Wells	Production (Bbl/day)	Current ELF	New ELF Field Size Factor = 55000000	Current Effective Tax Rate FY 1988	New Effective Tax Rate FY 1988	Decreased Effective Tax Rate FY 1988
December DOR 1988 Mean	22	20000	.5111	.0074	.0663	.0011	-.0651
		Sensitivity Table					
	15	10000	.3928	0	.0430	0	-.0429
		15000	.5787	.0128	.0702	.0016	-.0685
		20000	.6765	.0967	.0922	.0118	-.0710
		25000	.7376	.2333	.0901	.0286	-.0618
		30000	.7794	.3701	.0955	.0454	-.0501
	20	10000	.2454	0	.0301	0	-.0301
		15000	.4569	.0019	.0560	.0002	-.0557
		20000	.5787	.0380	.0702	.0047	-.0662
		25000	.6565	.1336	.0801	.0164	-.0641
		30000	.7102	.2557	.0870	.0313	-.0557
	10	10000	0	0	0	0	0
		15000	.0818	0	.0101	0	-.0104
		20000	.2454	.0002	.0301	0	-.0300
		25000	.3662	.0083	.0449	.0010	-.0439
		30000	.4569	.0441	.0560	.0054	-.0506
	60	10000	0	0	0	0	0
		15000	0	0	0	0	0
		20000	.0295	0	.0036	0	-.0036
		25000	.1420	.0001	.0174	0	-.0174
		30000	.2454	.0037	.0301	.0005	-.0296

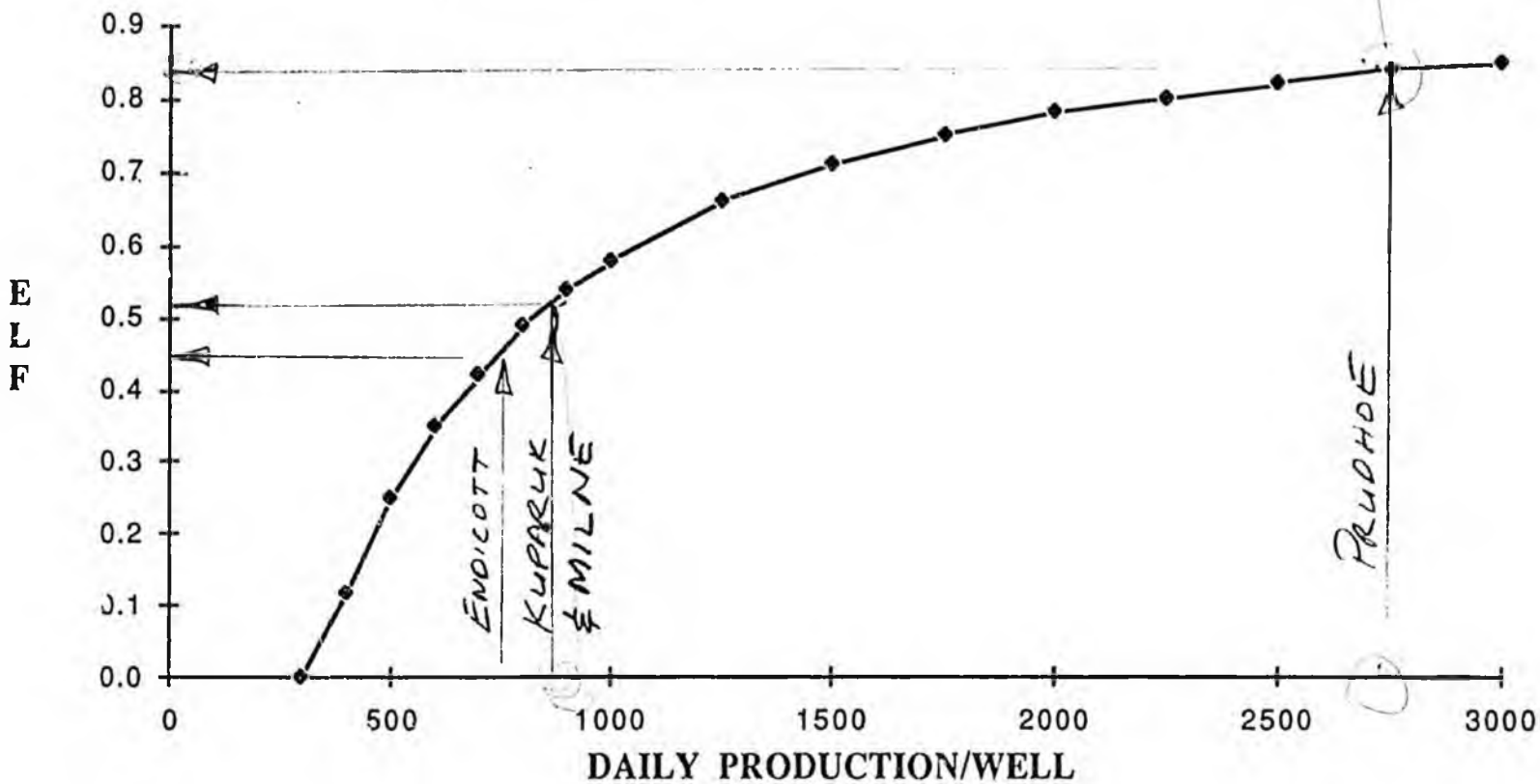
THE EFFECT OF THE FIELD SIZE ELF ON THE ENDICOTT SEVERANCE TAX RATE

	Producing Wells	Production (Bbl/day)	Current ELF	New ELF Field Size Factor = $5000000	Current Effective Tax Rate FY 1988	New Effective Tax Rate FY 1988	Decreased Effective Tax Rate FY 1988
December 1988 Mean	69	62500	.5397	.2227	.0661	.0273	-.0388
		Sensitivity Table					
	50	40000	.4864	.1160	.0596	.0142	-.0454
		60000	.6433	.4152	.0789	.0509	-.0279
		80000	.7273	.6214	.0891	.0761	-.0130
		100000	.7794	.7423	.0955	.0909	-.0045
		120000	.8149	.8155	.0998	.0999	.0001
	75	40000	.2915	.0226	.0345	.0028	-.0317
		60000	.4864	.2378	.0596	.0291	-.0305
		80000	.6027	.4692	.0738	.0575	-.0164
		100000	.6765	.6267	.0829	.0768	-.0061
		120000	.7273	.7202	.0891	.0882	.0001
	90	40000	.1785	.0058	.0219	.0007	-.0212
		60000	.3298	.1609	.0404	.0197	-.0207
		80000	.5619	.3892	.0652	.0477	-.0175
		100000	.6172	.5616	.0756	.0688	-.0068
		120000	.6765	.6775	.0829	.0830	.0001
	110	40000	.0691	.0003	.0085	0	-.0084
		60000	.2939	.0872	.0360	.0107	-.0253
		80000	.4424	.2956	.0542	.0362	-.0180
		100000	.5411	.4799	.0663	.0588	-.0075
		120000	.6107	.6118	.0748	.0749	.0001

THE EFFECT OF THE FIELD SIZE ELF ON THE LISBURNE SEVERANCE TAX RATE

	Producing Wells	Production (Bbl/day)	Current Elf	New ELF Field Size Factor = 55000000	Current Effective Tax Rate FY 1988	New Effective Tax Rate FY 1988	Decreased Effective Tax Rate FY 1988
December DOR 1988 Mean	20	35000	.7495	.2055	.1124	.0428	-.0696
		Sensitivity Table					
	20	25000	.6565	.1336	.0985	.0200	-.0784
		35000	.7495	.3734	.1124	.0560	-.0564
		50000	.8220	.6258	.1233	.0939	-.0294
		75000	.8890	.8156	.1320	.1223	-.0097
		100000	.9095	.8920	.1364	.1339	-.0025
	35	25000	.4338	.0101	.0651	.0020	-.0623
		35000	.5787	.1544	.0868	.0232	-.0637
		50000	.6967	.4213	.1045	.0632	-.0413
		75000	.7935	.6916	.1190	.1037	-.0153
		100000	.8436	.8160	.1265	.1224	-.0041
	50	25000	.2454	.0012	.0368	.0002	-.0366
		35000	.4240	.0533	.0636	.0080	-.0556
		50000	.5787	.2704	.0868	.0406	-.0462
		75000	.7102	.5796	.1065	.0869	-.0196
		100000	.7794	.7423	.1169	.1114	-.0056
	80	25000	.0072	0	.0011	0	-.0011
		35000	.1695	.0023	.0254	.0003	-.0251
		50000	.3669	.0909	.0550	.0136	-.0414
		75000	.5536	.3096	.0830	.0584	-.0246
		100000	.6565	.6046	.0985	.0907	-.0078

CURRENT LAW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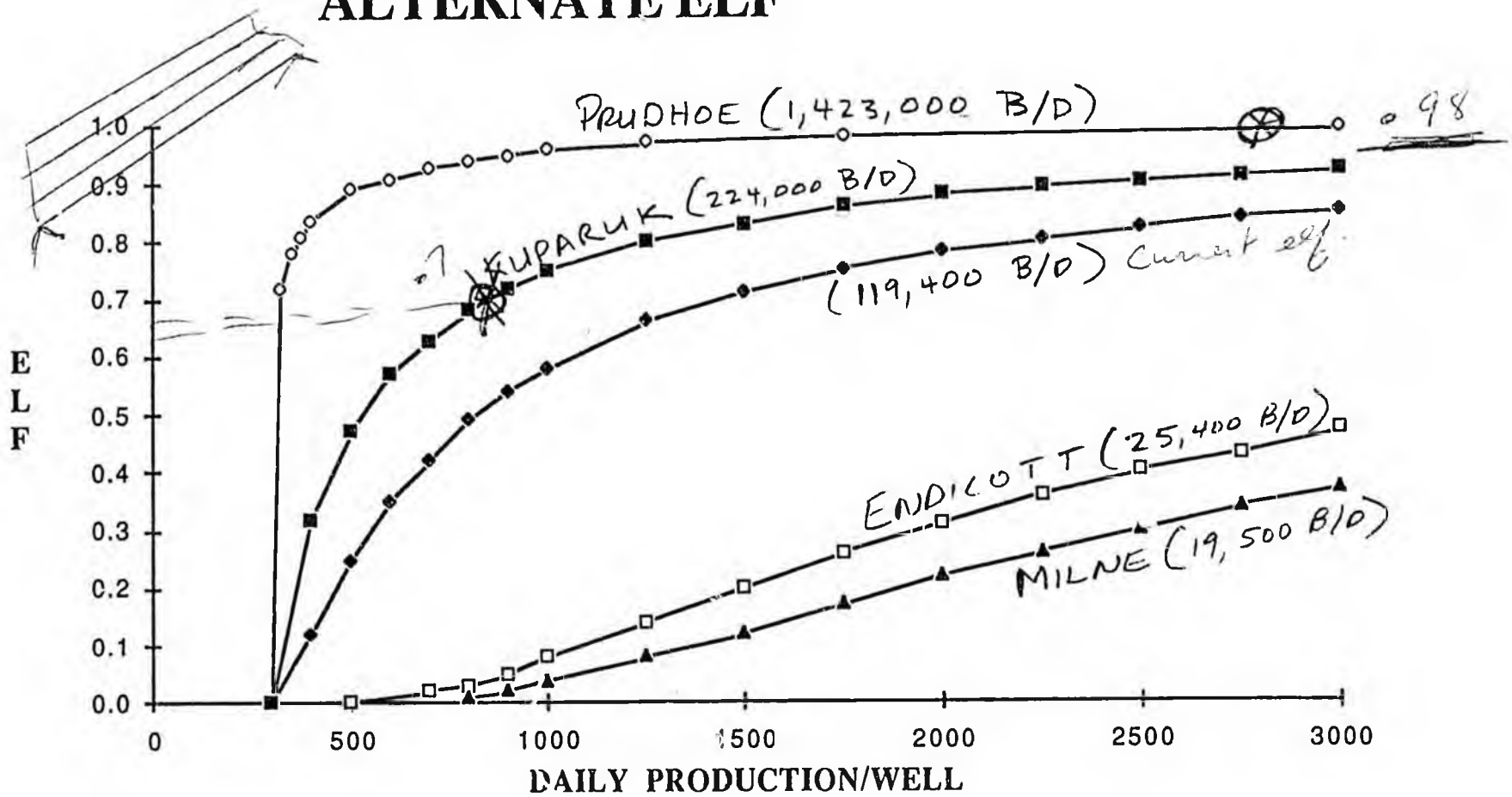
DAILY PRODUCTION/WELL
ENDICOTT
KUPARUK
& MILNE
PRUDHOE

ALTERNATE ELF



STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

STEVE COWPER, GOVERNOR

OFFICE OF THE COMMISSIONER
P.O. BOX O, JUNEAU, ALASKA 99811-1800 (907) 465-2600

POSITION PAPER HB 548

Title

An Act Relating to Oil Discharge Contingency Plans

Effect of the Bill

The bill would require that holders of oil discharge contingency plans maintain the capability to carry out their approved plans. The bill would also establish penalties for failure to maintain this capability.

Department Position

The Department supports the bill.

Fiscal Effect

The Department has provided a zero fiscal note on the bill.

Dennis D. Kelso
Commissioner

March 25, 1988
Date

HB 548 file
Anr Cr member

UNITED COOK INLET DRIFT ASSOCIATION

BOX 4649 - KENAI, ALASKA 99611

March 15, 1988

Alex Shadura
505 N. Franklin St.
Juneau, AK 99801

Dear Alex:

HB 548

Thank you for your continued efforts on behalf of Alaskan fishermen. We appreciate the work you have done for our organization in the past and look forward to your assistance in the future.

Recently, I mentioned two pieces of legislation that we are very concerned about, S.B. 327 "Oil Discharge Liability" and H.B. 459 "Hazardous Waste Disposal." ~~In view~~ of our fishing operations in Cook Inlet, these bills are critical to our future. Hopefully, you will keep us appraised of the progress of this legislation and continue to insist that there is sufficient language included to protect us from a similar situation as the "Glacier Bay" spill that occurred in July, 1987.

The proposed oil lease sale planned for Bristol Bay certainly adds to the urgency that environmental protection and financial responsibility be established during this legislative session. Hopefully, the State of Alaska will be successful in their attempt to have this area withdrawn from the March 1988 lease sale.

Sincerely,

Forrest Tressler
President U.C.I.D.A.

IN THE HOUSE BY THE RESOURCES COMMITTEE

HOUSE BILL NO. 548

IN THE LEGISLATURE OF THE STATE OF ALASKA

FIFTEENTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act relating to oil discharge contingency plans."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 46.04.030(e) is amended to read:

(e) The department may attach reasonable terms and conditions to its approval of an oil discharge contingency plan which it determines are necessary to insure that the applicant for an oil discharge contingency plan has access to sufficient resources to protect environmentally sensitive areas and to contain, clean up, and mitigate potential oil discharges from the facility or vessel within the shortest feasible time. The oil discharge contingency plan must provide for the use of the best available technology by the applicant. The department may require an applicant or holder of an approved contingency plan to demonstrate its ability to carry out the contingency plan through

(1) periodic training;

(2) discharge exercises;

(3) inventories of available equipment, supplies, and personnel; and

(4) other measures [TO UNDERTAKE DISCHARGE EXERCISES].

* Sec. 2. AS 46.04.030 is amended by adding a new subsection to read:

(g) Failure of a holder of an approved oil discharge contingency plan to have access to the quality or quantity of resources identified in the plan, and to respond immediately with those resources in the event of a spill, is a violation of this chapter for purposes of

AS 46.03.760(a), 46.03.765, 46.03.790, and any other applicable law.

Original sponsor: Resources Committee

IN THE HOUSE BY THE RESOURCES COMMITTEE

CS FOR HOUSE BILL NO. 548 (Resources)

IN THE LEGISLATURE OF THE STATE OF ALASKA

FIFTEENTH LEGISLATURE - SECOND SESSION

A BILL

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(1) periodic training;

(2) response team exercises;

(3) verifying access to inventories of available equipment, supplies, and personnel; and

(4) other measures [TO UNDERTAKE DISCHARGE EXERCISES].

* Sec. 2. AS 46.04.030 is amended by adding a new subsection to read:

(g) Failure of a holder of an approved oil discharge contingency plan to have access to the quality or quantity of resources identified in the plan, and to respond immediately with those resources in the event of a spill, is a violation of this chapter for purposes of

AS 46.03.760(a), 46.03.765, 46.03.790, and any other applicable law.

STATE OF ALASKA
1988 LEGISLATIVE SESSION

BILL VERSION : HB 548
PUBLISH DATE : _____

FISCAL NOTE

REQUEST: _____

Revision Date: _____
Title : An act relating to Oil Discharge Contingency Plans
Sponsor : House Resources
Requestor : Rep. Cotten

Agency Affected : Environmental Conservation
BRU : Environmental Quality
Components : All

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

Prepared by : Amy D. Kyle adkyl
Division : Commissioner's Office
Phone : 465-2600
Date : 3/25/88

Approved by Commissioner : _____
Agency : Environmental Conservation
Date : 3/25/88

Distribution (by preparer) :
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

STANDARD ALASKA PRODUCTION CO.

30 March 1988

House Resources Committee

House Bill 548 - Oil Discharge Contingency Plans

Standard Alaska Production Company supports House Bill 548, with the following amendments:

Line 21, delete [DISCHARGE] and insert response team

Line 22, add: verifying access to inventories ...

STANDARD ALASKA PRODUCTION CO.

30 March 1988

House Resources Committee

House Bill 548 - Oil Discharge Contingency Plans

Standard Alaska Production Company supports House Bill 548, with the following amendments:

✓ Line 21, delete [DISCHARGE] and insert response team

✓ Line 22, add: verifying access to inventories ...

3-30
Need -
Copy for you

HOUSE COMMITTEE REPORT

(9)

Date referred: 3/23/88 FURTHER REFERRALS:

DATE: 3-30-88

The Resources Committee has considered HB 548

"An Act relating to oil discharge contingency plans."

RECOMMENDS:

[X] replace with C.S. HB 548 (Res) [X] the same title
[ ] attached amendment(s) [ ] a new title

- [X] do pass
- [ ] do not pass
- [ ] no recommendation
- [ ] individual recommendations
- [ ] additional referral to the _____ Committee

ADOPTS: [ ] _____ letter of intent

ATTACHES NEW FISCAL NOTE(s):

- [ ] fiscal impact
- [X] zero fiscal note
- [ ] zero with analysis
- [ ] same as previous fiscal note published _____
- [ ] same as previous zero fiscal note published _____

SIGNING DO PASS:

Sen Con
Adelheid Herrmann
Dick Stutt
Mike Hayden

SIGNING OTHER RECOMMENDATIONS:

Sen Con
Chairman's signature

STATE OF ALASKA
1988 LEGISLATIVE SESSION

BILL VERSION: HB 548
PUBLISH DATE: _____

FISCAL NOTE

REQUEST:

Revision Date: _____
Title: An act relating to Oil Discharge Contingency Plans
Sponsor: House Resources
Requestor: Rep. Cotten

Agency Affected: Environmental Conservation
BRU: Environmental Quality
Components: ATT

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

Prepared by: Amy D. Kyle
Division: Commissioner's Office
Phone: 465-2600
Date: 3/25/88

Approved by Commissioner: _____
Agency: Environmental Conservation
Date: 3/25/88

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

Original sponsor: Resources Committee

IN THE HOUSE BY THE RESOURCES COMMITTEE

CS FOR HOUSE BILL NO. 548 (Resources)

IN THE LEGISLATURE OF THE STATE OF ALASKA

FIFTEENTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act relating to oil discharge contingency plans."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 46.04.030(e) is amended to read:

(e) The department may attach reasonable terms and conditions to its approval of an oil discharge contingency plan which it determines are necessary to insure that the applicant for an oil discharge contingency plan has access to sufficient resources to protect environmentally sensitive areas and to contain, clean up, and mitigate potential oil discharges from the facility or vessel within the shortest feasible time. The oil discharge contingency plan must provide for the use of the best available technology by the applicant. The department may require an applicant or holder of an approved contingency plan to demonstrate its ability to carry out the contingency plan through

(1) periodic training;

(2) response team exercises;

(3) verifying access to inventories of available equipment, supplies, and personnel; and

(4) other measures [TO UNDERTAKE DISCHARGE EXERCISES].

* Sec. 2. AS 46.04.030 is amended by adding a new subsection to read:

(g) Failure of a holder of an approved oil discharge contingency plan to have access to the quality or quantity of resources identified in the plan, and to respond immediately with those resources in the event of a spill, is a violation of this chapter for purposes of

AS 46.03.760(a), 46.03.765, 46.03.790, and any other applicable law.

HB

560

ESTIMATED STATE REVENUE IMPACTS OF SB 510

Year	Coal Produced (tons)	Producer	Revenue At 5% AGU	Revenue via DNR 4/8/88 Decision	Maximum Revenue Under SB 510	Projected Revenue Loss with SB 510
FY 89	1,500,000	UCM	$1,440,000	$900,000	$450,000	$450,000
FY 90	1,500,000	UCM	$1,440,000	$1,350,000	$450,000	$900,000
FY 91	2,000,000	UCM/Wishbone*	$1,920,000	N/A	$600,000	$1,320,000
FY 92	2,500,000	UCM/Wishbone	$2,400,000	N/A	$750,000	$1,650,000
FY 93	2,500,000	UCM/Wishbone	$2,400,000	N/A	$750,000	$1,650,000

*Assume 6 months production at Wishbone Hill

Prepared: 4/27/88, DNR

April 8, 1988

Mr. Joseph Usibelli, Jr.
Usibelli Coal Mine, Inc.
P.O. Box 1000
Healy, Alaska 99743

Dear Mr. Usibelli:

The Department of Natural Resources has carefully reviewed Usibelli Coal Mine, Inc.'s (UCM), request for royalty relief for coal leases ADL 20633 and 51545.

The Commissioner of the Department of Natural Resources has the discretion to waive, suspend, refund, or reduce the royalty under two circumstances:

(1) if she finds that such a reduction is necessary to promote development; or

(2) if she finds the lease cannot be successfully operated at the royalty level.

Usibelli Coal Mine based its request for royalty relief on the "necessary to promote development" provision and did not assert that the operation cannot be successfully operated with the increased royalty. Therefore, our analysis was limited to the consideration of whether a royalty reduction is necessary to promote development.

Generally, requests for royalty reduction in order to promote development are granted as an incentive to extract resources not recoverable under current operating practices. In this instance, the argument has been made that an increase in royalty, as required by regulations adopted by the Department in 1982 (see 11 AAC 85.220) will adversely affect future development.

UCM has been paying a coal royalty of 5¢ per ton on one lease and 10¢ per ton on a second lease, for an average royalty of 7.5¢ per ton. This rate equals less than one-half of one percent of adjusted gross value.

Under the 1982 regulations, all coal leases issued or renewed by the State of Alaska must include a minimum royalty of 5 percent of adjusted gross value (5 percent AGV).

UCM requested a royalty rate equivalent to 1.5 percent adjusted gross value (1.5 percent AGV).

The issue becomes whether the 5 percent AGV royalty rate is reasonable in terms of both a fair return to the state and in terms of promoting development. In this regard, it is helpful to note that coal royalty in New Mexico is 12.5 percent of all revenues; Montana's rate is 12.5 percent of gross value; and Wyoming's coal royalty is 12.5 percent of the selling price. The current royalty for federal coal leases is 12.5 percent AGV.

In comparison, the Department finds that Alaska's lower royalty of 5 percent AGV provides both a fair return to the state, while recognizing the competitive advantage necessary for our emerging coal export industry.

Therefore, the Department cannot grant the full permanent reduction in royalty relief as requested by UCM. The information provided did not demonstrate that such a reduction for leases ADL 20633 and 51545 is necessary to promote development. However, our analysis indicates that an immediate increase in royalty as set out in regulation will put an unreasonable burden on UCM and your customers. Therefore, we find that a phased increase to the full royalty is warranted.

Under the authority granted by AS 38.05.140(d), the Department will phase in the 5 percent AGV royalty over a period of three years, as outlined in the schedule below:

LEASE	FOR THE PERIOD	ROYALTY
ADL 20633	Nov. 1, 1987 - April 30, 1988	$0.29/ton
	May 1, 1988 - April 30, 1989	$0.60/ton
	May 1, 1989 - April 30, 1990	$0.90/ton
	After May 1, 1990	5% AGV
ADL 51545	May 1, 1987 - April 30, 1988	$0.29/ton
	May 1, 1988 - April 30, 1989	$0.60/ton
	May 1, 1989 - April 30, 1990	$0.90/ton
	After May 1, 1990	5% AGV

Further, the Department will grant your request for a partial refund of royalties paid at the 5 percent AGV rate during the priod from May 1, 1987, for ADL 51545 and from November 1, 1987, in order to be consistent with the phased payment shcedule.. Such refund will be taken as credit against furture royalty payments. The Division of Mining will contact you soon to outline this procedures.

Sincerely,

Judith M. Brady
Commissioner

cc: Gerald Gallagher, Director
Division of Mining

Alaska State Legislature

Representative Mike Davis District 19

P.O. Box V
Juneau, Alaska 99811
(907) 456-4930/4941

Interim Office:
P.O. Box 81435
Fairbanks, Alaska 99708
(907) 456-8161

February 17, 1988

Jerry Gallagher, Director
Division of Mining
Department of Natural Resources
P.O. Box 107016
Anchorage, AK 99510-7016

Dear Mr. Gallagher:

I join with the other Interior Delegation members in concern about the increase in Usibelli Coal Mine, Inc.'s royalty for its two producing leases in Healy.

As Alaska's only operating coal mine, Usibelli has contributed significantly to economic development and employment in the Interior. Usibelli has also distinguished itself as a responsible corporate citizen and concerned member of the community.

Current regulations require all new and renewed leases to have a royalty of 5% of the adjusted gross value of the coal. However, Alaska statute allows the Commissioner of the Department of Natural Resources to waive, suspend, refund, or reduce the royalty to promote development or if the lease cannot be successfully operated under its terms.

The imposition of the 5% royalty could have a detrimental effect on Usibelli. I urge the Division to carefully consider the documentation provided by Usibelli Coal Mine Inc. regarding the impact of the royality increase on their domestic and overseas markets. The final royalty rate should allow for profitable production, fair competition among lease holders, and just payment to the state for the public resource.

Please make my comments part of the hearing records. Thank you for the opportunity to participate in this important decision.

Sincerely,

Rep. Mike Davis

cc: Interior Delegation
Usibelli Coal Mine, Inc.

Alaska State Legislature

Official Business

P.O. BOX V
State Capitol
Juneau, Alaska 99811

February 17, 1988

Jerry Gallagher, Director
Division of Mining
Department of Natural Resources
P.O. Box 107016
Anchorage, AK 99510-7016

Dear Mr. Gallagher:

We are writing in support of Usibelli Coal Mine, Inc.'s (UCM) request for a reduction in royalty for their two producing leases in Healy. After reviewing their request, we believe it has merit.

Current royalty regulations may well have a detrimental short and long term effect on UCM. Its export contract could be jeopardized and further development could decrease. Alaska statute allows the Commissioner of the Department of Natural Resources to waive, suspend, refund, or reduce the royalty to promote development or if the lease cannot be successfully operated under its terms. The "best interest" of Alaska is to keep our one existing coal mine producing.

The royalty rate should not be at a level that makes the product noncompetitive, especially considering the growth potential for the business in export markets. At the level requested by Usibelli, $.29/ton, the product would be competitively priced in the current marketplace. Continued development, foreign and domestic, can take place and a steady, secure supply of coal for the Interior would be assured. A reduction means retaining jobs at the mine, the loading facility, and in the support industry and it means the potential for additional employment in the coal mining and related industries.

Please make our comments part of the hearing records. Thank you for the opportunity to participate in this important decision.

Sincerely,

Senator Jack Coghill

Rep. Mark Boyer

Senator Bettye Fahrenkamp

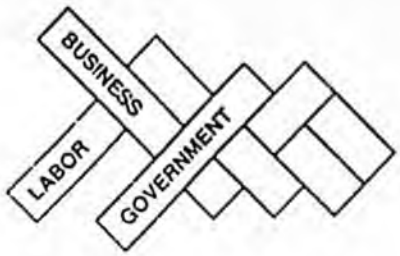
Senator Ken Fanning

Rep. Steve Frank

Rep. Niilo Koponen

Rep. Mike Miller

Rep. Dick Shultz



MAR 3 1988

UNIFIED FAIRBANKS

UNIFIED FAIRBANKS
RESOLUTION URGING RESTRAINT IN LEVYING
INCREASED ROYALTIES ON COAL

WHEREAS, the State of Alaska is proposing to collect royalties on coal produced by the Usibelli Coal Mine which represents an increase from approximately .08 per ton (current average) to 0.98 per ton (an increase of approximately 12%); and,

WHEREAS, such an increase could be passed along to the Alaska Railbelt consumer in the form of higher electricity and heating rates; and,

WHEREAS, an increase of this magnitude could price Usibelli coal out of the export markets which have earned for Alaska a total of $78 milion dollars since exports to South Korea commenced in 1985; and which are critical to the financial well being of the ARR; and

WHEREAS, the royalty increases are in addition to rental on acreage, mining license taxes and corporate taxes are paid by Usibelli Coal Mine to the State of Alaska.

NOW THEREFORE BE IT RESOLVED, that UNIFIED FAIRBANKS urges restraint in levying royalties on coal produced by Usibelli Coal Mine at Healy. Royalty rates should be maintained at present levels, especially in view of the difficult international market conditions.

This resolution was passed at the meeting of Unified Fairbanks on Tuesday, February 23, 1988.

Sincerely,

UNIFIED FAIRBANKS

Charles P. Rees, President

CPR:slg:resolution 2-25-88:UFMN2

P.O. Box 60389 Fairbanks, Alaska 99706 • (907) 456-7986

HCR

5

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

STEVE COWPER, GOVERNOR

400 WILLOUGHBY AVE.
JUNEAU, ALASKA 99801-1796
PHONE: (907) 465-2400

February 19, 1987

The Honorable Adelheid Herrmann, Co-Chair
The Honorable Sam Cotten, Co-Chair
House Resources Committee
Alaska State Legislature
P.O. Box V
Juneau, AK 99811

Dear Representatives Herrmann and Cotten:

Subject: House Bill 69, relating to the management of sand and gravel resources.

Position: The Department of natural Resources supports the establishment of a systematic program to identify and inventory sand and gravel resources as described in HB 69.

Recommendation: Because the meaning of "reserve" in line 12 of the bill is unclear, the department recommends that a definition or clarifying language be added.

There may be cases in which the land containing the sand and gravel deposit is better suited for purposes other than sand and gravel extraction. Also, the term "reserve" could be interpreted to mean that sand and gravel deposits could not be included in land exchanges or even sold to private parties.

If you would like additional information or have any questions, please contact my office.

Sincerely,

Judith M. Brady
Commissioner

cc: Members of the Committee
Sponsor
Governor's Legislative Liaison

10-J9LH

STATE OF ALASKA 1987 LEGISLATIVE SESSION
FISCAL NOTE

Bill Version : HB 69

REQUEST:

Publish Date :

Revision Date: 2/19/87

Agency Affected : Natural Resources

Title : Management of Sand and Gravel

BRU: Geology, Energy and Mining

Sponsor : Rules Committee (LBGA)

Components :

Requestor : House Resources

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES		61.2	63.5	65.5	67.8	70.2
TRAVEL		10.0	8.0	8.0	8.0	8.0
CONTRACTUAL		30.0	73.7	72.5	72.2	69.8
SUPPLIES		10.0	5.0	1.0	2.0	2.0
EQUIPMENT		20.0	0	0	0	0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		131.2	150.0	150.0	150.0	150.0
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND		131.2	150.0	150.0	150.0	150.0
FEDERAL FUNDS						
OTHER						
TOTAL		131.2	150.0	150.0	150.0	150.0

POSITIONS:

FULL-TIME		1	1	1	1	1
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

See attatched explanation

Prepared by: Randall Updike

Phone : 688-3555

Division : Mining and Geological Surveys

Date : 2/19/87

Approved by Commissioner : Mona D Smith

Date : 2/19/87

Agency : Natural Resources

Distribution (by preparer):

Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)
Senate Secretary

This would be an ongoing project to be administered by the Division of Mining and Geological and Geophysical Surveys.

	FY 88	FY 89	FY 90	FY 91	FY 92
100 - Civil Engineer, PFT	61.2	63.3	65.5	67.8	70.2

Costs for existing PCN 2040

200 travel to various communities to ascertain needs, currently used sources, methods of acquisition, and management issues. Travel to Fairbanks, Anchorage, and Juneau to administer project and interface with other agencies.

10.0 8.0 8.0 8.0 8.0

300 map and air photo production, printing costs; helicopter and fixed wing aircraft reconnaissance; drilling and excavation contracts.

30.0 73.7 72.5 72.2 69.8

400 laboratory and field supplies (sample bags, samplers, etc.)

10.0 5.0 4.0 2.0 2.0

500 equipment: resistivity meter with dial recorder (15.0); office furniture (5.0)

20.0 0 0 0 0

STATE OF ALASKA

THE LEGISLATURE

BUDGET AND AUDIT COMMITTEE

FINANCE DIVISION
POUCH WF–STATE CAPITOL
JUNEAU, ALASKA 99811
PHONE: (907) 465-3795

MEMORANDUM

Date: November 28, 1986

TO: Senator Jay Kerttula, Chairman
Legislative Budget and Audit Committee

FROM: W. Tom Maher, Fiscal Analyst
Division of Legislative Finance

The attached report, prepared at your request, provides an assessment of the management of State owned sand and gravel resources. Your concern that additional efforts need to be applied towards the management of sand and gravel resources is well founded. The need for improving the overall management of these resources has been recognized by members of the Legislature, the Department of Natural Resources, and Governor Sheffield. Nevertheless, at this date no significant improvements can be noted.

Employees of the Department of Natural Resources and the Department of Transportation and Public Facilities were very helpful during the preparation of this report. These are the people who deal with the problems of sand and gravel management on a daily basis, but lack the direction, high-level priority and funding commitment necessary to make improvements.

The report offers recommendations for the consideration of the Legislative Budget and Audit Committee. There are no doubt other options available that can be considered. If I can be of further assistance in drafting items called for in the recommendations, or you wish to discuss this report in general, please let me know.

Attachments

31-Q1LH

A REPORT ON THE MANAGEMENT OF STATE OWNED SAND AND GRAVEL RESOURCES

This report, prepared at the request of the Chairman of the Legislative Budget and Audit Committee, provides a brief assessment of the management of state owned sand and gravel resources. The prudent management of sand and gravel requires the state to actively pursue the process of identifying and setting aside the long-term reserves needed for transportation systems, urban areas, and potential large-scale developments. These sand and gravel reserves, necessary for construction as well as maintenance, must be identified prior to the commitment of land for other uses. In many areas of the state, lands have been classified, developed, or simply traded without the adequate appraisal of sand and gravel potential. As a result, sand and gravel must be shipped longer distances with increased costs for both state and private users. In some instances, potential state revenue can be lost and certain development projects may be made less feasible.

BACKGROUND

Concern over the state's management of sand and gravel resources is not new. SCR 44, introduced in 1984, identified numerous shortcomings in the management of these resources and generated a fiscal note which requested a three year project for sand and gravel resource management. This resolution failed to pass the Senate Finance Committee and first year funding of $140,000 was not provided. In 1983, Governor Sheffield's statement of goals provided that "increasing demand for sand and gravel resources compel adequate inventory and active management of those materials", however these priorities have failed to be addressed at the departmental level.

By statute, the Department of Natural Resources (DNR) is charged with all matters affecting the exploration and development of sand and gravel resources. Within the DNR, the Division of Geology and Mining (formerly the Divisions of Mining and Geological and Geophysical Surveys) is empowered to determine the potential of these resources. The Division of Land and Water

Management is responsible for the actual permitting and sale. The Department of Transportation and Public Facilities (DOTPF) is the primary state agency using sand and gravel, while the Alaska Railroad depends mostly on deposits obtained through transfer from the Federal government.

Revenue from the sale of sand and gravel fluctuates largely in response to the development needs of the oil industry. DNR reports the following net revenues (less the 5% to public schools) for sand and gravel sales:

FY 83	$3,614,130
FY 84	$2,477,417
FY 85	$2,587,722
FY 86	$2,222,294
FY 87 to date	$4,830,638 *(1)*

(1) Revenue for FY 87 to date reflects the accounting spread of FY 86 revenue from Kuparuk.

In addition, it is estimated that DOTPF uses between three to six million dollars a year of sand and gravel for construction and maintenance obtained by permit or interagency land management agreement from the Division of Land and Water Management.

THE STATUS OF SAND AND GRAVEL RESOURCE MANAGEMENT.

The state has inadequate knowledge of the actual location or quantity of sand and gravel available for use on state lands. Further, there is no coordinated, long-term analysis of the future availability of sand and gravel resources needed for transportation systems, urban areas, or large-scale development.

Through large-scale mapping projects, the Division of Geology and Mining has identified areas that may contain the potential for sand and gravel resource development. The amount of funding actually spent in earlier fiscal years on sand and gravel development is difficult to determine because this funding is budgeted within other projects. The Division of Geology and Mining has been requested to provide a summary of these past expenditures. For FY 87, $1,180,700 was appropriated for state-wide Mineral and Material Development, including sand and gravel resources. However, there are many other priorities competing for this funding and therefore the division does not plan to spend any funding directly on sand and gravel development. DNR's approach has been to provide a detailed analysis of sand and gravel potential only when an actual need for the material occurs. A program has never been implemented for a long-term needs assessment. According to department officials, much of the baseline data has not been collected that is essential for future management of sand and gravel resources. Early in the FY 88 budget process, the Division of Mining and Geology proposed a new, three-year project to fill

these data voids. However, this project, requiring first year funding of $131,200 was not brought forward when rated with other divisional priorities.

For FY 87, the Division of Land and Water Management was appropriated $354,400 for Material Sales, which is the project under which sand and gravel sales are conducted and the public need for these resources is addressed.

Not enough effort is directed towards sand and gravel programs and coordination between state agencies is poor.

The Division Land and Water Management, due to lack of funding, is unable to adequately monitor the private sale of sand and gravel in order to assure that the state is getting paid for all resources extracted. Additionally, the Division of Land and Water Management does not have the staffing to provide DOTPF with the level of service necessary to provide a reasonable turn-around time for permit processing, yet DOTPF uses an estimated six million dollars of these resources a year (FY 86 estimate).

In 1981 DOTPF received a capital appropriation of $1,665,000 for the development of a Material Information System (MINS). On a statewide basis, MINS supplies all available and pertinent data on over 1200 of DOTPF's existing sand and gravel sites and provides easy access to this information on the state's mainframe computer. This system, developed independently from DNR, was tailored to fit DOTPF's operational needs. It is not presently designed to anticipate the long-term needs for sand and gravel. However, MINS represents a major achievement in DOTPF's ability to manage sand and gravel resources which have become increasingly difficult to obtain within project time frames. MINS is also capable of assimilating data for material sites under private ownership, including sites managed by other local, state, or federal agencies. The capabilities of this system to improve DNR's management of sand and gravel resources appear to have been unexplored. It is possible that MINS could be redesigned to provide the DNR with a computerized base to begin the inventory of current sand and gravel reserves. Unfortunately, the MINS system is now being shut down because the balance of this project's funding was reappropriated during the 1986 legislative session. For DOTPF'S needs, this system could be continued for a one-time cost of approximately $100,000 with $75,000 per year thereafter in maintenance/support.

RECOMMENDATIONS

Necessary improvements in the management of Alaska's sand and gravel resources will require a reassessment of budgetary priorities by both the Governor and the Legislature. Additional funding within DNR may not be needed. If increased funding is necessary, the use of program receipts could be considered. Cooperation and communication between DNR, DOTPF, and the Alaska Railroad will be essential.

Alaska Statute 24.20.201 (6) empowers the Legislative Budget and Audit Committee to "make recommendations concerning appropriations, their expenditure and the fiscal policies and procedures of state government to the governor when appropriate, and to the legislature".

Specific options available to the Legislative Budget and Audit Committee follow:

(1.) prepare a letter to the Governor expressing the concerns of the Committee on the management of sand and gravel resources and requesting the development of a long-term plan to identify, inventory, and set aside the resources necessary for transportation systems, urban areas, and large-scale developments. A draft motion for Committee use has been prepared and is attached to this report.

(2.) prepare a resolution/joint resolution for introduction to the Fifteenth Legislature. A copy of the resolution introduced in 1984 is attached.

(3.) draft legislation amending A.S. 44.37.020., *Duties of the Department of Natural Resources*, to specifically address the department's responsibilities for the management of sand and gravel resources.

DRAFT

Fourteenth Legislature - Second Session
Legislative Budget and Audit Committee

Motion #____

Alaska Statute 24.20.201 (6) empowers the Legislative Budget and Audit Committee to "make recommendations concerning appropriations, their expenditure and the fiscal policies and procedures of state government to the governor when appropriate, and to the legislature".

The Legislative Budget and Audit Committee therefore finds:

the state has inadequate knowledge of the actual location or quantity of sand and gravel resources available for use on state lands;

there is no coordinated, long-term analysis of the future availability of sand and gravel resources needed for transportation systems, urban areas, or potential large-scale developments;

not enough effort is directed towards sand and gravel programs and coordination between state agencies is poor;

for Fiscal Year 1986, revenues generated from the sell of state sand and gravel resources contributed over two million dollars to the general fund and for Fiscal Year 1987, revenues are estimated at over five million dollars. In addition, for Fiscal Year 1986, the estimated value of these materials used by the Department of Transportation and Public Facilities was more than six million dollars;

sand and gravel represent critical resources needed for the development of the state.

The Legislative Budget and Audit Committee requests the Governor to address the concerns of the Committee relating to current and future status of sand and gravel resource management. Further, the Legislative Budget and Audit Committee requests the Governor and the Commissioner of the Department of Natural Resources to prepare for submittal to the Legislature, a plan for Fiscal Year 1988, including costs, which provides for the systematic identification, inventory and reserve of sand and gravel resources with particular emphasis on the needs of transportation systems, urban areas and large-scale developments. This plan, is intended to include the administration of sand and gravel resources used by the Department of Transportation and Public Facilities and the Alaska Railroad.

HCR

38

(9)

HOUSE COMMITTEE REPORT

Date referred: 1/27/88 FURTHER REFERRALS:

DATE: 2-9-88

The Resources Committee has considered HCR 38

Requesting the Pacific Salmon Commission to increase Alaska's chinook salmon quota.

RECOMMENDS:

[X] replace with CS HCR 38 (Res) [X] the same title
[ ] attached amendment(s) [ ] a new title

- [X] do pass
- [ ] do not pass
- [ ] no recommendation
- [ ] individual recommendations
- [ ] additional referral to the _____ Committee

ADOPTS: [ ] _____ letter of intent

ATTACHES NEW FISCAL NOTE(s):

- [ ] fiscal impact
- [X] zero fiscal note
- [ ] zero with analysis
- [ ] same as previous fiscal note published _____
- [ ] same as previous zero fiscal note published _____

SIGNING DO PASS:

Jan Carter
Adelheid Herrmann
Dave Donley
Cliff Davidson
Dave Szabo
Al Lee
Mike Navarre

SIGNING OTHER RECOMMENDATIONS:

Jan Carter
Chairman's signature

Original sponsors: Sund, Grussendorf, Goll, et al.

IN THE HOUSE BY THE RESOURCES COMMITTEE

CS FOR HOUSE CONCURRENT RESOLUTION NO. 38 (Resources)

IN THE LEGISLATURE OF THE STATE OF ALASKA

FIFTEENTH LEGISLATURE - SECOND SESSION

Requesting the Pacific Salmon Commission to increase Alaska's chinook salmon quota.

BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

WHEREAS the abundance of chinook salmon in southeast Alaska waters has significantly exceeded the population-rebuilding projections of the United States-Canada Salmon Treaty; and

WHEREAS the southeast Alaska chinook salmon quota is based on these 1984 projections, which do not reflect the current abundance of chinook salmon; and

WHEREAS southeast Alaska has suffered substantial economic losses under treaty harvest quotas; and

WHEREAS area closures for chinook salmon have had disastrous economic effects on many southeast Alaska communities; and

WHEREAS each chinook salmon is worth $60 to $150 to a fisherman; and

WHEREAS staying within the quota imposes an unfair amount of social and economic loss to Alaska not experienced by other parties involved in the United States-Canada Salmon Treaty; and

WHEREAS the harvests of far-north migrating chinook salmon stocks in some Washington and Oregon fisheries has increased substantially, many above treaty levels; and

WHEREAS these Washington and Oregon stocks, which contribute to Alaska's salmon fisheries, are considerably above the treaty escapement goals, some by as much as 300 percent; and

WHEREAS the southeast Alaska summer chinook salmon troll season has

been reduced from 169 days in 1979 to only 23 days in 1987; and

WHEREAS reductions in the Southeast Alaska summer chinook salmon troll season first occurred in 1980 as part of the chinook salmon rebuilding program; and

WHEREAS treaty agreements have shortened the southeast Alaska troll season so much that Alaskan hatchery fish cannot be harvested to the level promised; and

WHEREAS longer seasons benefit the southeast Alaska fishing industry by ensuring higher quality fish products and higher market prices; and

WHEREAS a fair increase in the southeast Alaska chinook salmon harvest quota will not jeopardize the natural stock rebuilding program;

BE IT RESOLVED that the Alaska State Legislature respectfully requests the United States section of the Northern Panel of the Pacific Salmon Commission to work to substantially increase the chinook quota for Alaska.

COPIES of this resolution shall be sent to the Honorable Steve Cowper, Governor of the State of Alaska; and to Don Collinsworth, Alaska Commissioner, Pacific Salmon Commission.

STATE OF ALASKA
1988 LEGISLATIVE SESSION

BILL VERSION: HCR 38
PUBLISH DATE: 1/27/88

FISCAL NOTE

REQUEST:

Revision Date: January 27, 1988
Title: Requesting the Pacific Salmon to increase AK's chinook quota
Sponsor: Sund, et al
Requestor: House Resources Comm.

Agency Affected: Fish and Game
BRU: Commissioner's Office
Components:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

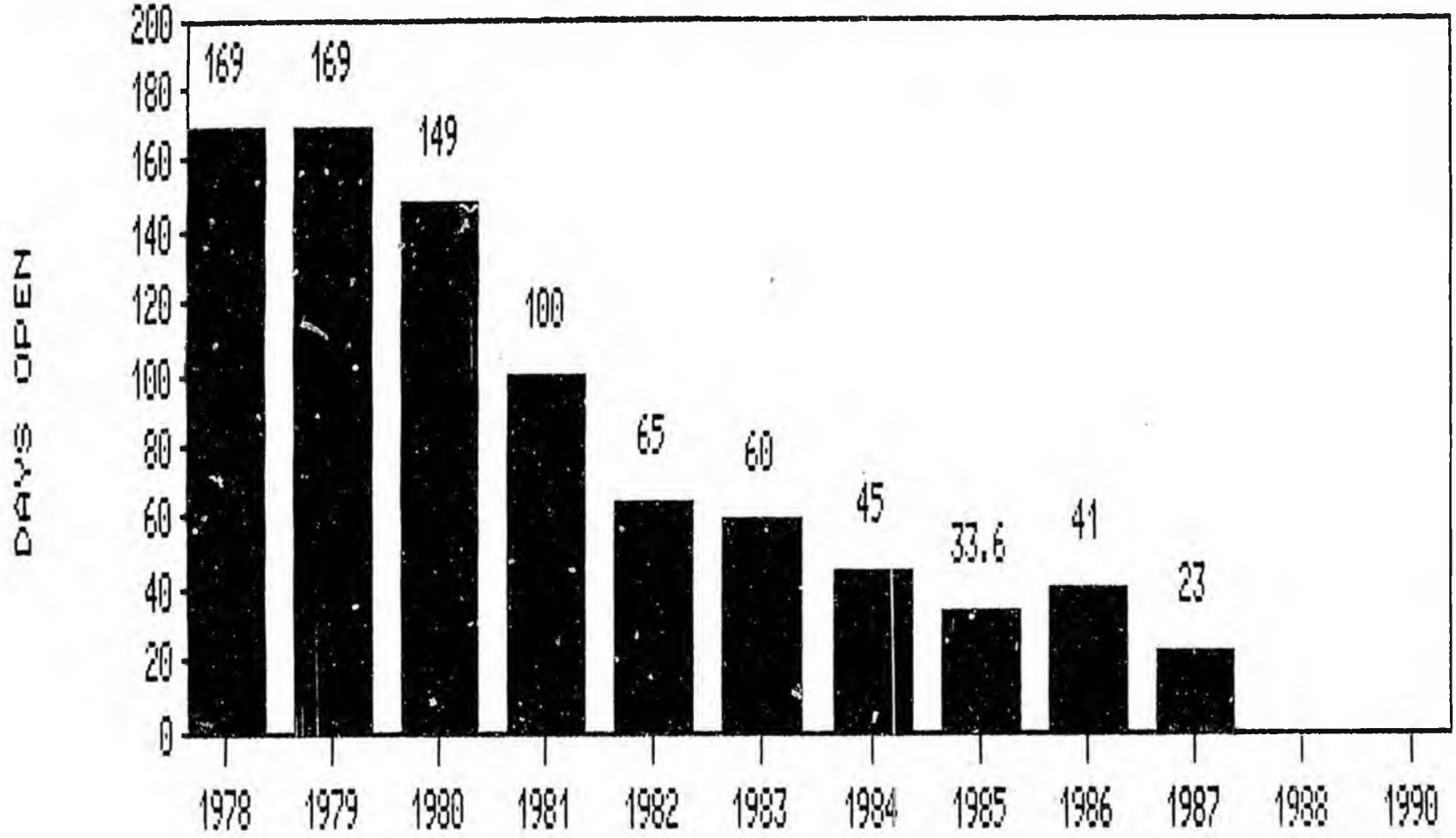
ANALYSIS : (Attach a separate page if necessary)

Prepared by: Roland Shanks
Phone: 465-4100
Division: Commissioner's Office
Date: 2/9/88

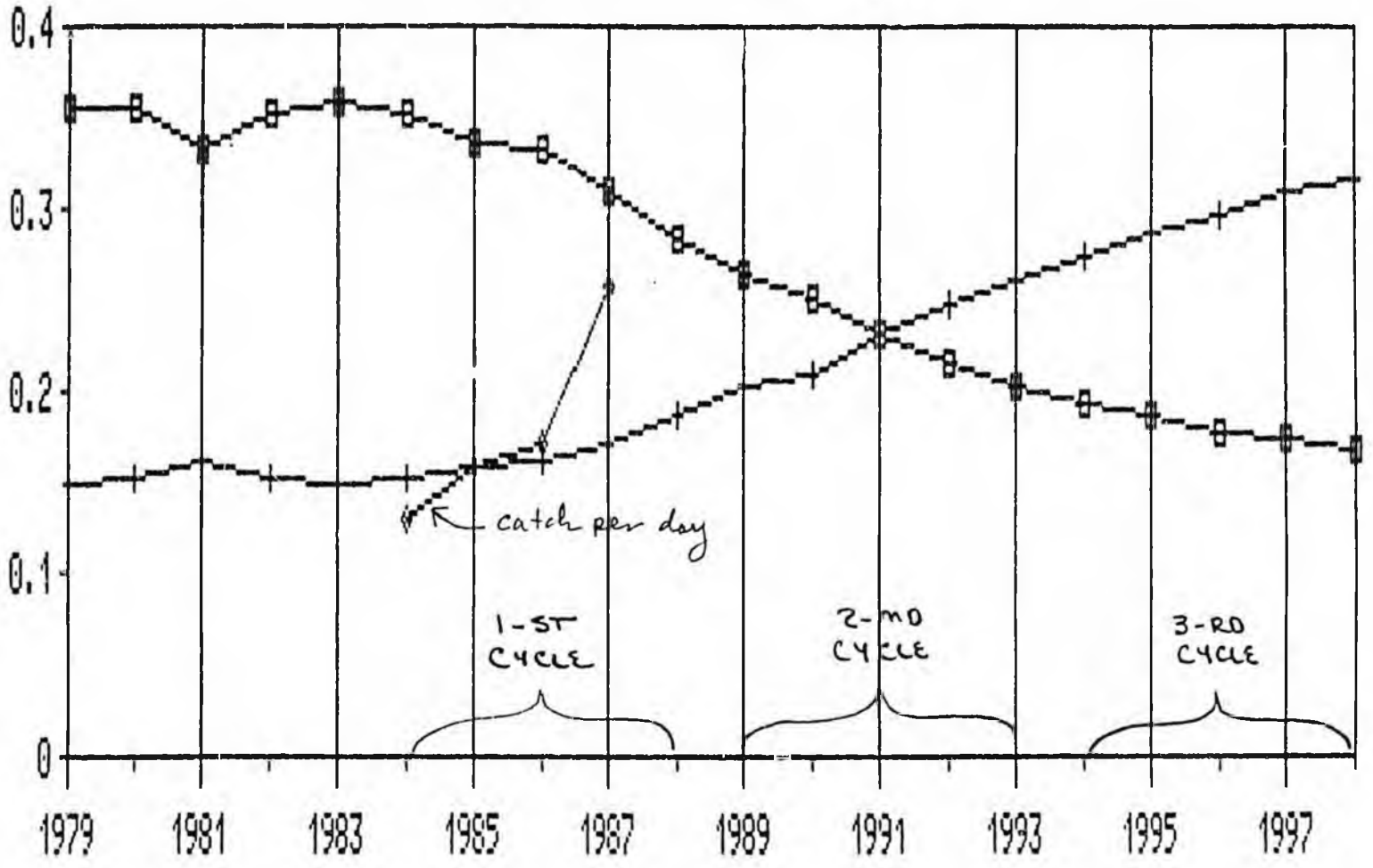
Approved by Commissioner:
Date: 2/8/88
Agency: Fish and Game

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

S.E. ALASKA SUMK.. TROLL SEASON
DAYS OPEN FOR CHINOOK FISHING



MODELED EFFECTS OF CHINOOK REBUILDING
S.E. AK OCEAN EXPLOIT. RATES AND ABUND.



□ MODEL EXPLOIT RATE + MODEL REL ABUND ◊ S.E. AK REL ABUND

The equipment may be signed out for up to eight days and the booklet may be retained by novice fishermen. Members of the Herkimer Fishing Derby Committee will maintain equipment, and local sports shops have committed themselves to replace the articles as needed. It is anticipated that senior citizens and other groups will utilize this equipment for daily outings.

It is anticipated that the youth of the community will avail themselves of this program and, hopefully, develop a lifelong interest in fishing.

LAKE MEAD FERTILIZATION

According to an article "Fertilization Shows Signs of Success," published in the October 1987 issue of the *California Angler*, fertilization of the 20,000 acre Overton Arm of Lake Mead with 20,000 gallons of liquid fertilizer (amonium polyphosphate) this past spring shows promise of improving the sport fishery.

For many years, Lake Mead provided one of the most productive sport fisheries in the nation. However, productivity was substantially reduced after completion of two upstream reservoirs, Lake Powell and Flaming Gorge on the Colorado/Green River watershed, which acted as nutrient traps. Nutrients in Lake Mead were further reduced by the near total elimination in 1981 of phosphorous from effluents from the wastewater treatment discharged in the Las Vegas Wash Arm of the Lake. The adverse impact of the reduced nutrients on sport fishes was further aggravated by the virtual explosion of striped bass, introduced several years ago that had virtually decimated the already limited plankton feeding forage fish base (primarily threadfin shad).

Dr. Larry Paulson, of the University of Nevada, Las Vegas, who supervised the project, was quoted as saying "...there's no question that fertilization brought about a tremendous response in the threadfin shad population."

The fertilizer application was accomplished May 30, 1987, by over 1,000 volunteers in over 300 boats, and was timed to increase peak plankton production levels just as the larval threadfin shad were hatching. Trawl samples taken just 18 days after the application showed a significant increase in the number of shad compared to other, untreated areas of the lake. The number of larval shad collected were also higher than historical numbers in the same area. The project was working.

Then, as the shad grew, the striped bass began feeding on them. By mid-summer, the skinny stripers had begun to put on some weight, because they were feeding upon schools of shad throughout the upper part of the Overton Arm. Anglers reported catching 20 to 40 stripers per day that Paulson says were beginning to put a dent in the increased shad population.

The Lake Mead enrichment project is scheduled to be repeated both next spring (hopefully with two applications in 1988), and again the following year to completely test the fertilization's effectiveness.

According to Dr. Paulson, the road to restore that fishery has been uphill from day one. The final permit to complete the May 30 project was not received until the evening before the fertilizer was applied. And the National Park Service and Environmental Protection Agency continue to voice concerns over the experiment, which could still stall it before the three-year test is complete.

According to this experiment, large-scale lake fertilizations can be done without having any adverse affects on water quality. The Gregg Basin on Mead has been proposed for fertilization for next year, and the lower portion of Lake Powell, which is also suffering from a loss of nutrients, is another spot being targeted for an enrichment boost. Fertilization may be a key to keeping the sport fisheries of the Colorado River reservoirs productive in the future.

"YEAR OF THE CHINOOK"

As a current television ad says, "It just doesn't get any better than this." That's the way the Oregon Department of Fish and Wildlife is talking about chinook salmon this year.

Record-breaking ocean harvests and strong chinook returns to inland waters have biologists calling 1987 "The Year of the Chinook."

"I'm very pleased and a little bit surprised about the tremendous chinook production we have seen this year," says Oregon Department of Fisheries, Chief Harry Wagner. "Good things are happening just about everywhere we look, and prospects for next year appear excellent as well."

Wagner has good reason to be happy. So do a lot of commercial and sport fishermen. Some highlights include:

- Record chinook catches for ocean commercial salmon trollers off Oregon;
- Record chinook catches for ocean sport anglers;
- Outstanding recovery of fall chinook returns to the Columbia River;
- Record sport chinook catches at Buoy 10 on the lower Columbia;
- Excellent fall, lower Columbia commercial salmon gillnet fishery;
- Good prospects for sport chinook fisheries in Oregon's coastal bays, including fish weighing more than 60 pounds;
- Excellent in-river spring chinook returns on the Willamette, Rogue, and Umpqua rivers; and
- Strong fall chinook returns on the Rogue River.

Wagner attributes this strong showing to several factors. "It's a combination of excellent ocean survival, reduced harvests off Alaska and Canada, hatchery production improvements and expansion, and improved downstream smolt passage at dams," he said.

The big fish that started showing in coastal bays last fall are back again this year. "Credit for that belongs directly to the treaty between the United States and Canada that reduced catches in the Gulf of Alaska and off British Columbia," Wagner said.

OFF THE PRESS

STREAMBANK STABILIZATION AND MANAGEMENT GUIDE FOR PENNSYLVANIA LANDOWNERS, prepared by the Pennsylvania Department of Environmental Resource's Division of Scenic Rivers. Although prepared with Pennsylvania landowners in mind, much of the information contained in the guide is applicable everywhere.

The purpose of this handbook is to help owners of streamside property manage their streambanks in ways that result in increased benefits and fewer erosion problems. Information is presented which will allow the reader to more fully understand the behavior of streams and why streambank failure or erosion occurs. A summary of the advantages, disadvantages, effective-

■ NEWS CONTENT IN THIS SECTION WAS PREPARED BY THE SEA

SECTION **D**
Sunday, January 17, 1988
The Seattle Times
Seattle Post-Intelligencer

Northwes

Salmon comeback: 'big nest' in river

This year's Columbia run is greatest since dam-building era began

by Jim Klahn
Associated Press

VERNITA, Franklin County — Fisheries technician Rich Petit, draped over the stanchion in the front of the work boat, was at a loss to point out individual salmon nests as he peered into three feet of Columbia River water where the fish had come to spawn.

"It's all one big nest," he said, throwing up his hands.

Wild fall chinook salmon, at the end of a 350-mile odyssey from the Pacific Ocean, flashed back and forth in front of the boat as it floated over Vernita Bar on a cold, clear day.

Since 1982, there has been a steady increase in the salmon run, and this year's run of a half-million fish is the biggest since dams were built on the Columbia in the 1930s, when record-keeping began.

"It's like being in an aquarium," marveled Tony Floor, a spokesman for the state Department of Fisheries.

The department's 16-foot boat floated over a stretch of the 50-mile-long, free-flowing Hanford Reach, the last major spawning grounds on the heavily dammed Columbia. The reach, upstream from Richland, flows through the federal Hanford Nuclear Reservation.

Typically, says Joe Hymer, a biological technician, a chinook redd, or nest, is eight feet across and round. The rock and gravel are scrubbed clean of silt and algae by the spawning salmon.

On Vernita Bar, there were few round nests, just ridges of rocks where redds overlapped each other. All the gravel was swept clean.

"The gravel is full of eggs," Hymer said.

The scene was testimony to the success of this year's return of "upriver brights," the largest run of salmon returning to the Columbia and the largest run in the United States outside Alaska.

While 20 percent of the run is hatchery-produced, fully 80 percent remains wild — from the same stocks that have migrated to Columbia River gravel for thousands of years.

This year an estimated 540,000 chinook salmon returned to Washington waters. Nearly half of those fell victim, as planned, to commercial fishermen, 18,000 were caught in sports fisheries, and tens of thousands were caught in ocean fisheries. About 40,000 got past the four dams upriver from the ocean to spawn at hatcheries or in the gravel.

But Hymer and Floor realize salmon are more than just good eating, more than a moneymaker for fishermen and sports supply stores. Indians revere the salmon. The fish is not only food on their table but perhaps their greatest asset, since treaty rights entitle them to one-half the harvest.

Salmon are also part of the entire region's social fabric and identity.

"They're almost priceless in that way," said Hymer, as he guided the boat along the 600-foot-wide river, bordered by waist-high grasses and orchards, the dry Saddle Mountains to the west. "Genetically, they are unique. They range so far, but still return to spawn."

After 15 years of salmon runs ranging from 130,000 to 220,000 fish, the number of wild fish dropped below 100,000 in 1980 and 1981. Only a few thousand reached spawning grounds.

"Six years ago, our thinking was that we were going to have a funeral service for another wild salmon run," Floor said. "There wasn't a unified commitment to rebuilding a run that seemed to be headed for some kind of limited extinction."

Overfishing from Alaska to the Columbia, and death at the dams, also helped reduce the salmon numbers.

Many factors helped turn the fishery around, including the participation by a small army of fisheries biologists and favorable ocean conditions after a disastrous "El Nino" weather phenomenon.

Also:

■ The Northwest Power Act, passed by Congress, directed a rebuilding of fisheries damaged by dam-building.

■ A U.S.-Canada Salmon Treaty cut back Canada's take of fish along the British Columbia coast.

■ A new spirit of cooperation has emerged in the region, after years of contention when a 1974 federal court ruling held that Indians had rights to half of the salmon.

Floor says the effect was that the state was committed to protecting the run.

The goal, under the Northwest Power Act, is to double the output of the Columbia and its tributaries by the year 2000 to a total of about 5 million salmon and steelhead.

Much of the money paying for salmon conservation comes from electric utility customers. The rationale is that the dams producing electricity caused much of the decline in salmon runs.

Ten dams range along the Columbia: Grand Coulee Dam, 550 miles from the sea, bars any ocean-migrating fish.

Despite a growing conservationist ethic in the Northwest, there are still projects threatening the salmon run. One proposal is to dredge the Hanford Reach for a shipping channel so barges can carry cargo as far upriver as Wenatchee, 60 miles above the reach.

"This is one of the most damaging projects to come along in a long time," says Phil Peterson, regional habitat manager for the Department of Fisheries.

The Corps of Engineers had wanted to build an artificial spawning channel on the reach this year to determine whether salmon

Please see **SALMON** on D 2

Sh-h-h: Mount St. Helens may be taking another nap

Associated Press

LONGVIEW — Scientists are wondering if Mount St. Helens has entered another century of dormancy, now that it has slept through 1987.

Last year was the first time it has remained so quiet since it boomed to life cataclysmically in 1980

too, if St. Helens is dead or not," says Don Swanson, scientist in charge of the U.S. Geological Survey's Cascade Volcano Observatory in Vancouver, Wash.

The mountain rumbled to life on March 20, 1980, with an earthquake measuring 4.1 on the Richter scale.

Two months later, on May 18,

of timberland. Ash fell over much of the Northwest and a cloud of ash circled the globe.

Other eruptions followed, but the more recent ones have been nonviolent and merely increased the size of a lava dome in the crater.

Since September 1987, scientists have detected small earth-

ten rock to the surface, is empty and sagging. As this rock moves, it sends out shock waves that register as earthquakes.

Under the other theory, the conduit still contains molten rock that is blocked from reaching the surface "but is restless to get out," Swanson said.

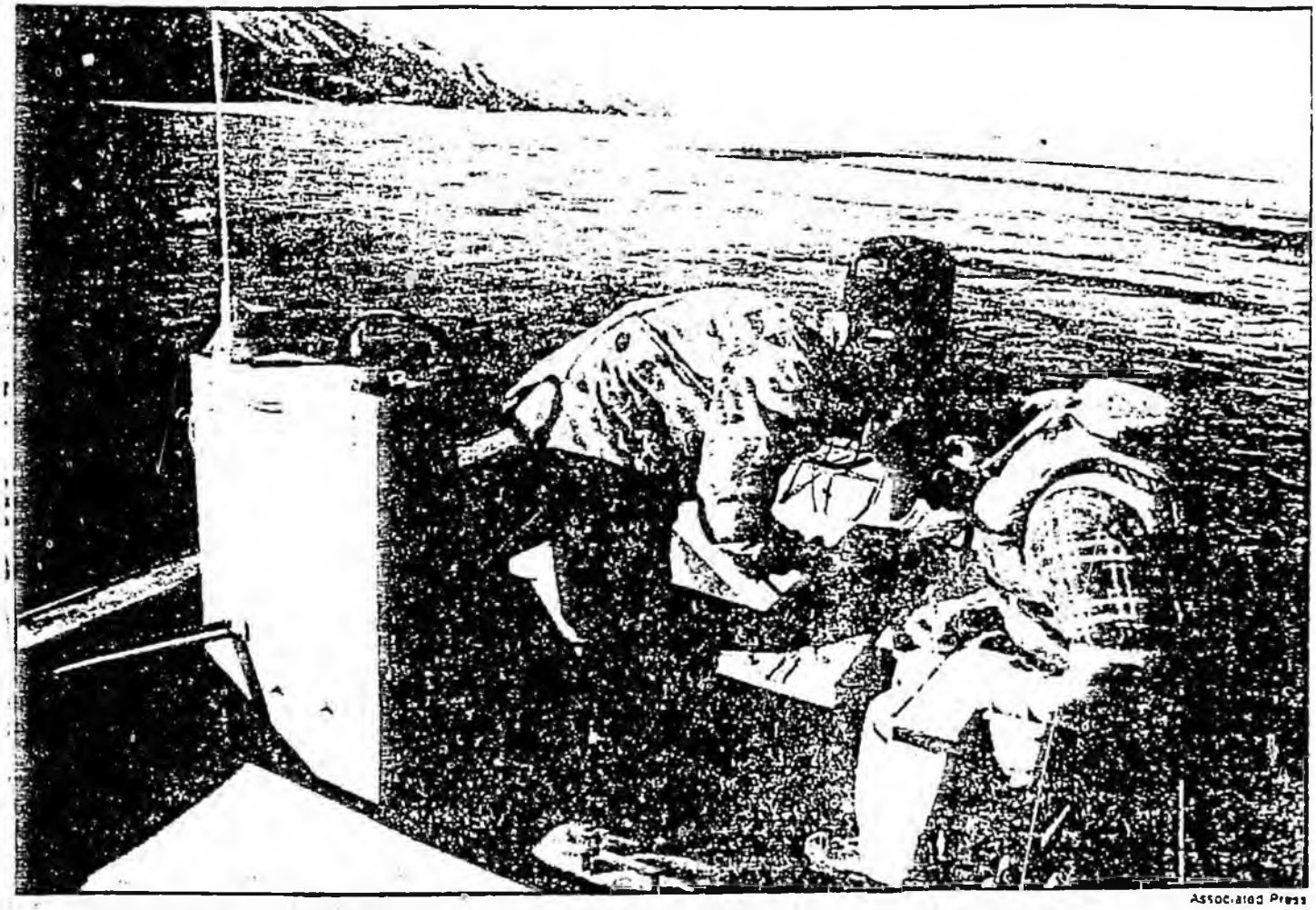
"People have to remember that we're looking three miles a

ton Fair Share, Washington State Grange), two of three state utility regulators (Sharon Nelson and Dick Casad) and the state Department of Information Systems. Independent phone companies are neutral.

■ **How can they be opposed to competition?** They say they aren't. Opponents say PNB wants [illegible] states, they say, the state already must deregulate any services that phone companies can prove are truly competitive.

■ **So what's wrong with existing law?** PNB says it needs the flexibility its competitors have to respond to rapidly changing market conditions. Under current law, the phone company says, it has to [illegible] to collect any rates [illegible] million last year. This, they say, is exactly the wrong time to scrap a tried and true system for one that allows automatic rate increases.

■ **What isn't covered by the cap?** Only basic residential and business rates are covered, according to the bill. So pay-phone rates probably are not limited by [illegible] up in a [illegible] If nothing happens, opponents are skeptical. In the 84 years since the break up of Ma Bell, they note, PNB has produced nearly $5-6 million in dividends for its parent company, US West. But proponents say the statistic simply proves that existing regulations do nothing more than "guarantee profits."



Associated Press

Technicians Joe Hymer, left, and Rich Petit take scale samples from a salmon that has spawned at Hanford Reach.

This year's Columbia run is greatest since dam-building era began

SALMON

continued from D 1

could be enticed to use it instead of the river's gravel.

But the agency delayed the preliminary work on the plan in September. Corps spokesman Steven Foster says the corps lacked time to obtain permits, and that several animal and plant species in the area might be designated rare or endangered.

The outcry against construction of a channel has come from conservationists, Indian tribes, sportsmen and the state Fisheries and Wildlife departments. Washington's U.S. senators and Rep. Sid Morrison, whose district includes the Hanford area, have prepared legislation to make the reach a wild and scenic river.

North of the reach, above Priest Rapids Dam, the Army wants to expand its Yakima Firing Range and is proposing a river-crossing training area. Peterson says the Fisheries Department also opposes that project, in part because it would increase the possibility of oil spills into the Columbia.

But he thinks the dredging project is the biggest threat to the returning chinook.

"If we can't hold the [illegible] Hanford Reach [illegible] know where we can.

PRO

In all the years Vic and Tony fished the sturdy, double-ended, deep-drafted *Donnawae*, very little changed in the Southeast troll fishery. They drug hooks through the water along the craggy outside coast of Baranof Island year-round, catching kings. Vic and Tony are gone now, both the young Sitkan and the old Spaniard dying in separate incidents back in '83, and with them

Victor's last trip aboard the Donnamae, *fall of '83.*

seems to have gone the laid-back trolling lifestyle which initially drew so many to the fishery. One wonders if they would've adapted to the change.

"In the old days," says Alan Davis, troll biologist for the Alaska Department of Fish and Game, "we'd see boats spread out all up and down the beach. Now we just see these big peaks of boats." The pack atmosphere. First seen with the ominously efficient Seattle "clone fleet" spread out the entire length of Southeast testing the waters of each bay, coded calls would converge fiberglass clones on one drag to mop up a bite. If you can't beat 'em, join 'em: Today a complex of intertwining code groups fills an empty horizon with a swarm of boats thick as flies within just hours.

These increased rates of harvest yield higher catches sooner—eating the quota faster, compressing seasons further. The derby mentality. During the '80s trollers watched their traditional 180-day summer king season nearly evaporate to just 23 fast and furious days by 1987, compelling many to abandon yesterday's habits and routine to go hardcore, grinding the drag from the first hint of dawn till the last shard of light pierced the Panhandle's western horizon.

Petersburg troller Gary Slaven, chairman of the Alaska Board of Fisheries and vice-chairman, northern panel, U.S. section of the U.S./Canada salmon treaty team, says negotiators anticipated the Southeast fleet's average daily king catch to be 5,500 fish, a figure ADF&G agreed was "in the ball park." With about a 200,000-fish quota, the 1987 season should've stretched from its opening June 20 into late July.

"Well, we went out there and it never did drop that low," Slaven says. The average catch per day of 9,000 to 11,000 fish closed kings in short order at midnight July 12. With number of boats and lines fixed by limited entry and technological effort fairly stabilized since about 1985, he continues, fishermen, processors, and managers alike attribute the higher catch rates to a greater resource abundance.

"If there's not a new hootchie around," Davis surmises, "there must be more availability." More fish, in fact, than ever anticipated by population models for the coastwide, 15-year chinook stock rebuilding program undertaken with the 1984 signing of the U.S./Canada Pacific Salmon Treaty. ADF&G commissioner Don Collinsworth calls it a "flooding effect here in Southeast Alaska," and Slaven remarks that it "doesn't take a mathematical genius to figure (the season) might only be 15, 16 days next year."

Locked into a set quota by international treaty, Southeast Alaska's chinook abundance brings its own set of problems: short seasons and shaking kings during a coho-only fishery. Shaking kings, in turn, brings some level of associated mortality—a resource loss, Collinsworth points out, that neither adds to escapement goals nor accrues any kind of benefit to the fishermen. "In the great scheme of things," says the commissioner, "that doesn't make a helluva lot of sense."

As the National Marine Fisheries Service Auke Bay Lab analyzes data from its two-year study of chinook hook-and-release mortality, preliminary results lend harder numbers to indicate a lower mortality rate than sometimes previously assumed. The unique study involves sea pens—holding fish to observe delayed mortality—and seems to corroborate findings from earlier tag recovery studies, according to Alex Wertheimer, task leader for the NMFS Early-Ocean Salmon Research Project. Results suggest an overall mortality rate of about 25.5% for sublegal chinook hooked and released and 22.5% for legals.

With shaking kings, Wertheimer says, it appears "nuances of technique (are) not as important as wound location." If gill-hooked, "That fish is going to die." Post-mortem examination of larger fish dying from apparently minor injuries usually revealed hidden gill damage.

One of four U.S. negotiators on the Pacific Salmon Commission, Collinsworth notes that some interests along the coast would like to see the Alaskan troll quota reduced for this incidental chinook mortality. Such a penalty, he says, would only fuel the situation by

reducing quotas further—causing even shorter king seasons, thus longer periods of non-retention, and yet higher incidental mortality: "A death spiral for our troll fishery and something we cannot allow to happen." Collinsworth calls such fish accounting a "total mortality quota" rather than a harvest quota.

This management problem doesn't look like it'll just go away. Troll biologist Davis expects good king returns to continue (barring some natural disaster that would severely affect escapements on a coastwide basis), especially since 1989 will be the first year to see the direct results in escapements from the treaty. Davis adds that if we *didn't* see more kings while continuing to increase production from both hatcheries and wild stock enhancement, then something's wrong. And trollers saw more kings, caught more kings, then shook more kings than they can remember.

"It was really neat to see 'em back," says fisherman Eric Jordan, a representative on the Sitka Fish and Game Advisory Committee raised in the Southeast troll fishery. Jordan recounts that each year of the last five he's had a day when he caught more kings than the biggest score his father, "Skip," ever had before his death in 1965. "So big, so many of 'em," Jordan says, "it just made it all the harder to release them."

"I guess I'll never get used to shaking these kings," comments longtime troller Jake Phillips of Pelican. Many Southeast trollers echo his sentiment, often becoming frustrated and disillusioned with the politics of a treaty they see as rigid and unresponsive to a changing situation.

"We're seeing a little faster turnaround than everyone expected," admits Davis. "One of the problems with the treaty is that it's fairly inflexible to react to a sudden population increase." Although the treaty's 15-year rebuilding plan officially went into effect in 1985 (and unofficially in '84 with a "gentlemen's agreement"), Alaskans had already enacted some self-imposed restrictions back in 1980 to counteract coastwide environmental degradation and over-harvesting trends of the '70s.

Next issue...

Features

Tuna Update plus Directory

Along with many other Pacific fisheries, tuna is exhibiting a resurgence. This timely feature explains what's behind this turnaround and how long we can expect it to last. Also includes a complete directory of the U.S. high-seas tuna fleet.

Why Fish Goes Bad

Seafood quality is increasingly important to your prosperity. In 1988 Technical Editor Dennis Lodge is writing a series on fish quality. His first article explains how a fish deteriorates once it's aboard a vessel.

Alternate Gear in California

California gillnetters are beset by opponents who want to get rid of their gear. Diane Pleschner explores this controversy and looks at possible alternatives.

Also features on a possible new hagfish fishery and Oregon's new marine management plan.

Plus

Seafood Report
Fish Tips
Who's Doing What
Japan Update
Tech Talk by Dennis Lodge
New Vessels
Opinion
...and Classifieds
...and more Classifieds
...and more Classifieds

Statement of Ownership

Statement of ownership, management and circulation. 1. Title of publication: Pacific Fishing. A. Publication no. 5445000. 2. Date of filing: October 1, 1987. 3. Frequency of issue: Monthly. A. No. of issues published annually: 12. B. Annual subscription price: $20.00. 4. Complete mailing address of known office of publication: 1515 NW 51st, Seattle, WA 98107. King County. 5. Complete mailing address of the headquarters or general business offices of the publishers: 1515 NW 51st, Seattle, WA 98107. 6. Full names and complete mailing addresses of publisher and editor. Publisher, Duane M. Kelly, 1515 NW 51st, Seattle, WA 98107. Managing Editor, Ken Talley, 1515 NW 51st, Seattle, WA 98107. Owners: Salmon Bay Communications, 1515 NW 51st, Seattle, WA 98107. 8. Known bond holders, mortgagees or other securities: None. 11. Extent and nature of circulation. A. Total number of copies printed (net press run): Average number of copies each issue during preceding 12 months, 11,838; actual number of copies of single issue published nearest filing date, 10,700. B. Paid circulation—Sales through dealers and carriers, street vendors and counter sales. Average number of copies each issue during preceding 12 months, 1,444; actual number of copies of single issue published nearest to filing date, 1,300. B2. Mail subscriptions: Average number of copies each issue during preceding 12 months, 7,409; actual number of copies of single issue published nearest to filing date, 7,129. C. Total paid circulation (sum of B1 and 1082): Average number of copies each issue during preceding 12 months, [illegible]; actual number of copies of single issue published nearest to filing date, 8,429. D. Free distribution by mail, carrier or other means, samples, complimentary and other free copies: Average number of copies each issue during preceding 12 months, 1,366; actual number of copies of single issue published nearest to filing date, 1,145. E. Total distribution (sum of C and D): Average number of copies each issue during preceding 12 months, 10,259; actual number of copies of single issue published nearest to filing date, 9,571. F. Copies not distributed—1. Office use, left over, unaccounted, spoiled after printing: Average number copies each issue during preceding 12 months, 283; actual number copies of single issue published nearest to filing, 126. 2. Returns from news agents: Average number copies each issue during preceding 12 months, 1,444; actual number copies of single issue published nearest to filing date, 1,000. G. Total (sum E, F1 and 2— should equal net press run shown in A): Average number copies each issue during preceding 12 months, 11,838; actual number of copies of a single issue published nearest to filing date, 10,700. 11. I certify that the statements made by me above are correct and complete.
Valerie A. McNeil (Office Manager)

"Just like it takes a long time to rebuild," Davis continues, "it took a long time to knock 'em down." He concedes fishermen's frustrations, but explains the intent of rebuilding stocks is to let more fish go to ultimately spawn and die. He adds that if fishing had been halted altogether during the process—admittedly an economically unfavorable option—the same incidence of seeing kings you couldn't catch would occur: "As the rebuilding schedule is in progress you're going to have more fish around and the catch limits will be low to maximize escapement. ...s."

But on the heels of this year's chinook abundance, Davis tempers premature postulations that "the fish are rebuilt" by suggesting population increases might be short-lived, a "little bump" which might fall back down again in a couple more years rather than a trend. "There's a lot of fish around, there's no doubt about that."

Commissioner Collinsworth agrees when he says, "I guess one year does not a trend make." Yet he points to the broad distribution of chinook and the continued population highs throughout the year as "empirical evidence" that there's more fish than anticipated, a situation in Alaska more durable than just "fish on the bite" or kings "taking the bait better," as some might suggest.

"If stocks are in fact in better condition and are rebuilding more rapidly, there should be an opportunity for the present generation of fishermen to harvest those fish," he says. But the commissioner also cautions that the 15-year process is broken into threes, a "3-year rebuildi[illegible] program," that some experts sa[illegible] quires completing the first cycle after the 1988 season before developing a trend analysis.

Fifteen years is a long time for fishermen tightening their belts to conserve a resource—fishermen understandably disgruntled when those same fish swim south to others' hooks and profits down the line. Collinsworth maintains that "it seems a reasonable and fair thing" to allow some marginal increase in quota "as long as we meet objectives of the program by 1988." Conservative departmental management of the fishery, too, saw the 1986 Southeast [illegible] season opening and closing like a revolving door trying to prevent going over-quota, and kept the catch in 1987 to within 1% of the quota although granted a 7% margin by the commission.

"When they negotitated the treaty," Jordan says, "the emphasis was on rebuilding depressed stocks. There was so much political effort into proving the stocks were so low and needed so much help," he adds, most negotiators from down south worried about even meeting the rebuilding schedule.

"So now (we're) in a situation of an unanticipated surplus and no plan to allocate the surplus," Jordan charges. "So what's happening is the last people downstream—Washington, Oregon, the Indians—are having a bonanza while Alaska and Canada are having a real difficult time living within the quota."

Indeed, early evidence of catch returns indicates more chinook upriver brites harvested in the Columbia this season than the whole of the Alaskan troll quota. "I think that the Columbia River is rebuilt," Slaven says. Canadian trollers, too, faced the problems inherent to single-species, coho-only fisheries when the west coast of Vancouver Island first closed to kings last year, northern British Columbia joining them this year. Managers worry what this increased effort in directed fishing for cohos will do to those stocks; some runs already troubled from poor escapements in 1983 suffered heavy pressure this summer from a hungry fleet fishing harder and ever farther offshore.

Alaska Board of Fisheries Chairman Slaven stresses that Alaska is serious about rebuilding chinook stocks to the "viable runs" of the '60s, and says that any further treaty negotiations necessarily relate directly back to the rebuilding schedule: the "appropriateness of current harvest ceilings;" incidental mortality coastwide and in all gear groups; transboundary river disagreements; and the definition of the so-called "Pass-Through Provision" which directs the

Trollers tie up at Sealing Cove, one of four Sitka harbors, named by Mt. Edgecumbe Volcano 15 miles distant.

bulk of fish saved by conservation efforts to escapement and not reallocation.

"Right now we're negotiating how we share the pain of rebuilding," says Slaven and he warns that post-treaty negotiations determining how West Coast fishermen "share the fruits" promise to be equally controversial.

"I think we can meet our commitment and catch more fish," he ventures, a view he admits may yet be peculiar to Alaska. "We're trying to cope with an availability we've never seen before."

"The whole purpose," Collinsworth agrees, "was to rebuild the stocks on a coastwide basis and then have a management program to keep stocks from being over-harvested." He calls pre-treaty harvest levels (10 years ago about twice today's) "not sustainable."

[illegible] conceited effort. [illegible] their commandment [illegible] initiate the quick [illegible] stocks. Only Alaska has [illegible] ed for its carefully [illegible] and recovery program—[illegible] hatchery-production [illegible] "hatchery add-on" [illegible] commission: a [illegible] year grew to 10,000 [illegible] jections indicating permits [illegible] 40,000 kings next [illegible] long after.

Still, accelerated fleet [illegible] and competition suggest [illegible] rates will remain high in these [illegible] resource abundance. Even a substantial increase in quota would [illegible] into only modest gains of a few [illegible] days in the tightly compressed, intense fishery. Slaven speculates that the traditional lifestyle [illegible] Southeast Alaskan salmon [illegible] unlikely to return unless the [illegible] again fall to their depressed [illegible]

Photo by Bob Watson "Sea Wolf"

1976 to '78. "I just don't see any new innovative ways to turn the clock back on trolling, anymore than we can on black cod." He says he's listening if anyone's got any "creative ideas."

"The best thing we can hope for," he says, is to help rebuild stocks and "get our fair share." Perhaps political pressures will press harder to account for undetermined chinook losses to foreign high-seas interception and the unmonitored domestic trawl industry. "We don't know whether it's 10 or 19 million fish that are bound for Alaska" taken on the high seas, Jordan says, with little more known about domestic trawl bycatch in the absence of observers.

Even so, the future of troll-caught Southeast salmon may very well hinge on the outcome of the state's finfish mariculture debate, temporarily on hold for a year's moratorium of study before the legislature takes action on the controversial issue. Jordan likens the bitterly divided battle to the "fencing of the open range sort of thing." One wonders if the Western cowboy and the Alaskan troller might both suffer the same fate?

Regrettably, the good old days of the Alaskan troller are slipping away. It's a new age, new rules, a new fishery—what biologist Davis calls "a totally different ball game . . . also just the nature of the beast of change."

Once known as the gentlemen's fishery, "It's getting to be a very, very, very professional fishery now," Slaven says. The last bastion of a lifestyle tuned to seasonal rhythms of the sea may well be the winter troll fishery—short days, less pressure, and long seasons still stretching the six-month distance. One wonders, too, if the locals will long enjoy it.

When tragedy twice struck the double-ender *Donnamae* that sad year, Tony's ashes were scattered in her wake off Biorka, Victor's down at Snipe. Wherever those two Southeast trollers are today—probably still arguing—the slab king salmon are surely on the bite, and the season never closes. PF

Beth McGinley

Making Hay While the Sun Shines

BY BETH McGINLEY

A red hot seafood market made this year's ANUGA food show a bonanza for U.S. seafood companies. Salmon in particular fueled the frenzied buying and selling.

A sizzling seafood market boiled over into ANUGA '87, the world's largest food show, and sent prices and sales of U.S. product to record highs. American companies sold over $6 million worth of seafood at the show itself and expect to sell nearly $70 million over the next year.

Colorful booths, shining display cases, and crowds filled the

Seafood displayed at this year's ANUGA food show.