

ALASKA LEGISLATIVE COMMITTEE FILED 1907

1833 HRES HB 101. - HB 126

13

(D) fuel used by nonprofit power associations or corporations for generating electric energy for resale, or

(E) fuel used by charitable institutions;

(3) "user" means a person consuming or using motor fuel, who either purchases the fuel out of the state and ships it into the state for his own use within the state or manufactures the fuel in the state. (§ 48-5-1 ACLA 1949; am § 1 ch 56 SLA 1949; am § 9 ch 47 SLA 1955; am § 26 ch 70 SLA 1964; am §§ 6, 7 ch 158 SLA 1970; am § 1 ch 74 SLA 1972; am § 5 ch 116 SLA 1977)

Cross reference.— See editor's note to AS 08.04.380.

Effect of amendment.— The 1977 amendment in paragraph (2), added the subparagraph designations, substituted "or aircraft, and fuel used in and on watercraft for any purpose" for "aircraft, boat or watercraft", "run" for "propelled", and "motor fuel does not include" for "except on consignments of motor" in the

introductory paragraph, substituted "consigned" for "oil" in present subparagraph (A), substituted "fuel sold" for "except motor fuel oil sold" in present subparagraph (B), deleted "and except" preceding "fuel used" and "or" following "general public" in present subparagraph (C), and inserted "fuel used" at the beginning of present subparagraphs (D) and (E).

Article 2. Additional Tax Levy on Transfers or Consumption of Motor Fuel.

Section

110—120. [Repealed]

Secs. 43.40.110—43.40.120.

Repealed by § 8 ch 158 SLA 1970.

Editor's note.— The repealed sections derived from chs. 62, 63, SLA 1960; ch. 52, SLA 1961; ch. 131, SLA 1962.

Chapter 43. Disaster Taxes.

Article

1. Disaster Relief Tax (Repealed)
2. Disaster Severance Tax (Repealed)

Article 1. Disaster Relief Tax.

Section

10—60. [Repealed]

Secs. 43.43.010 —43.43.060.

Repealed by § 1 ch 48 SLA 1969.

Editor's note.— The repealed article derived from § 1, ch. 27, FSSLA 1967.

Secs. 43.31.360 — 43.31.390.

Repealed by § 46 ch 113 SLA 1980.

Cross reference. — For present provisions concerning criminal penalties, see AS 43.05.290. Editor's note. — The repealed sections derived from § 2, ch. 24, SLA 1970.

Chapter 35. Coin-Operated Devices and Punchboards.

Article 1. Coin-Operated Amusement and Gaming Devices.

Section

80. [Repealed]

Sec. 43.35.080. Penalties.

Repealed by § 46 ch 113 SLA 1980.

Cross references. — For present provisions concerning civil penalties, see AS 43.05.220. For present provisions concerning criminal penalties, see AS 43.05.290. Editor's note. — The repealed section derived from § 48-3-3 ACLA 1949; § 3, ch. 142, SLA 1960; § 2, ch. 58, SLA 1971.

Chapter 40. Motor Fuel Tax.

Article 1. General Tax Levy on Transfers or Consumption of Motor Fuel.

Section

20. [Repealed]
30. Refund for nonhighway use
40. [Repealed]
50. Refund claim by affidavit

Section

80. Examination of books and records
90. [Repealed]
100. Definitive

Sec. 43.40.020. Penalty for violation.

Repealed by § 46 ch 113 SLA 1980.

Cross reference. — For present provisions concerning criminal penalties, see AS 43.05.290. Editor's note. — The repealed section derived from § 48-5-3, ACLA 1949; § 4, ch. 153, SLA 1972; § 3, ch. 116, SLA 1977.

Sec. 43.40.030. Refund for nonhighway use.

(b) The entire tax levied by this chapter shall be refunded to the purchaser on that part of the motor fuel used in a foreign country on which duty is paid when the fuel is sold and delivered in the state for nonhighway use in a foreign country.

(d) If a person obtains motor fuel on which the tax levied by this chapter has been paid and the motor fuel is exempt from the tax, the person is entitled to a refund of the tax paid.

(am §§ 35, 36 ch 113 SLA 1980)

Effect of amendment.

The 1980 amendment, effective June 21, 1980, and retroactive to January 1, 1980, substituted "this chapter" for "AS 43.40.010 — 43.40.100" in subsection (b), and added subsection (d).

As the rest of the section was not

affected by the amendment, it is not set out.

Editor's note. -- Section 52, ch. 113, SLA 1980, effective June 21, 1980, makes this section applicable to tax years beginning after December 31, 1979.

Sec. 43.40.040. Applications and permits for refund.

Repealed by § 45 ch 113 SLA 1980.

Cross reference. — For present provisions concerning contents of applications for refunds, see AS 43.40.050(a).

Editor's note. — The repealed section derived from § 3, ch. 47, SLA 1955; § 4, ch. 131, SLA 1962.

Section 52, ch. 113, SLA 1980, effective June 21, 1980, makes the repeal of this section applicable to tax years beginning after December 31, 1979.

Sec. 43.40.050. Refund claim by affidavit. (a) A person who claims a refund as provided in this chapter shall present his claim to the commissioner of revenue by affidavit upon a form provided by the commissioner. The claim shall include the name, address and occupation of the applicant, the nature of the business of the applicant, and a description sufficient to identify the machinery or equipment in which the motor fuel for which the refund is claimed was used. The claim shall be accompanied by each invoice issued to the claimant at the time the motor fuel was purchased. The commissioner may require any additional information which he considers necessary for the administration of this chapter.

(am § 37 ch 113 SLA 1980)

Effect of amendment. -- The 1980 amendment, effective June 21, 1980, and retroactive to January 1, 1980, in subsection (a), substituted "this chapter" for "AS 43.40.010 — 43.40.100" at the beginning and at the end of the subsection, substituted the present second sentence for the former material, which read: "with the information the commissioner requires", and substituted "was" for "is"

preceding "purchase" at the end of the present third sentence.

As the rest of the section was not affected by the amendment, it is not set out.

Editor's note. Section 52, ch. 113, SLA 1980, effective June 21, 1980, makes this section applicable to tax years beginning after December 31, 1979.

Sec. 43.40.080. Examination of books and records. (a) To determine the validity of a claim for refund, the Department of Revenue may examine the books and records of the claimant and the books and records of a distributor of motor fuel. The Department of Revenue may cancel the refund permit of the claimant relying upon a fraudulent invoice for a period of not more than one year.

(b) Repealed by § 46 ch 113 SLA 1980. (§ 5 ch 47 SLA 1955; am § 46 ch 113 SLA 1980)

Effect of amendment. — The 1980 amendment, effective June 21, 1980, repealed subsection (b).

Sec. 43.40.090. Criminal violation.

Repealed by § 46 ch 113 SLA 1980.

Cross reference. — For present provisions concerning criminal penalties, see AS 43.05.290.

Editor's note. — The repealed section derived from § 11, ch. 47, SLA 1955; § 4, ch. 27, SLA 1957.

Sec. 43.40.100. Definitions. In AS 43.40.010 — 43.40.100

(2) "motor fuel" means fuel used in an engine for the propulsion of a motor vehicle or aircraft, and fuel used in and on watercraft for any purpose, or in a stationary engine, machine or mechanical contrivance which is run by an internal combustion motor; "motor fuel" does not include

(A) fuel consigned to foreign countries,

(L) fuel sold for use in jet propulsion aircraft operating in foreign countries,

(C) fuel used in stationary power plants operating as public utility plants and generating electrical energy for sale to the general public,

(D) fuel used by nonprofit power associations or corporations for generating electric energy for resale,

(E) fuel used by charitable institutions, or

(F) [Effective January 1, 1981] fuel which is at least 10 percent alcohol by volume.

(am § 13 ch 83 SLA 1980)

Effect of amendment. — The 1980 amendment, effective January 1, 1981, added subparagraph (F) in paragraph (2).

As the rest of the section was not affected by the amendment, it is not set out.

Chapter 45. School Tax.

Section

10—60. [Repealed]

Editor's note. — The repealed chapter derived from §§ 37-4-3 — 37-4-6, ACILA 1949; § 1, ch. 41, SLA 1957; § 1, ch. 175, SLA 1957; § 1, ch. 149, SLA 1959; §§ 1—5, ch. 179, SLA 1960; § 111, ch. 127, SLA 1974.

Section 3, ch. 64, SLA 1980, effective June 13, 1980, makes the repeal of this chapter applicable to tax years beginning after December 31, 1979.

Section 4, ch. 64, SLA 1980, effective June 13, 1980, provides: "The Department

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STATE OF ALASKA

DEPARTMENT OF REVENUE

OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, GOVERNOR

POUCH 5
JUNEAU, ALASKA 99811

February 23, 1981

The Honorable Fred F. Zharoff
The Honorable Terry Gardiner
Co-Chairmen
House Resources Committee
Room 120 - Capitol Building
Juneau, Alaska

Re: House Bill No. 103

Dear Mr. Zharoff and Mr. Gardiner:

House Bill No. 103, an Act repealing the fisheries business tax and making related amendments, was introduced in the House on February 4, 1981 and was referred to the House Resources and Finance Committees.

For the consideration of the House Resources Committee, I am enclosing copies of Fiscal Notes prepared by Mr. Gary Jenkins, Director, Audit Division; Mr. Donald Barnes, Deputy Director, Administrative Services Division and Mr. Bill Yankee, Research Section of the Department of Revenue concerning the proposed legislation.

Sincerely,



R. D. Stevenson
Special Assistant

cc: The Honorable Samuel R. Cotten
Chairman
House Finance Committee

Donald Barnes, Deputy Director
Administrative Services Division
Department of Revenue

Joseph K. Donohue
Deputy Commissioner
Department of Revenue

Bill Yankee
Research Section
Department of Revenue

Gary Jenkins, Director
Audit Division
Department of Revenue

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. HB 103

Title Repealing the fisheries business tax and making related amendments.

Requested by House Resources Committee Date Feb. 7, 1981

II. FISCAL DETAIL

Agency Affected Department of Revenue

Program Category Affected Revenue Collection and Management

BRU, Program, or Subprogram(s) Affected Division of Audit

(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES		(28.3)	(28.3)	(28.3)	(28.3)	(28.3)
200 TRAVEL						
300 CONTRACTUAL		(1.2)	(1.2)	(1.2)	(1.2)	(1.2)
400 COMMODITIES		(.4)	(.4)	(.4)	(.4)	(.4)
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL		(29.9)	(29.9)	(29.9)	(29.9)	(29.9)

FUNDING (Thousands of Dollars)

GENERAL FUND	(29.9)	(29.9)	(29.9)	(29.9)	(29.9)
FEDERAL FUNDS					
OTHER (Specify Fund Source)					

POSITIONS

FULL TIME	(1)	(1)	(1)	(1)	(1)
PART TIME					
TEMPORARY					

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

This bill would completely repeal the fisheries business tax. If this bill is passed, it would result in the reduction of one position in the Audit Division. The position to be deleted would be a Tax Examiner I.

It should be remembered that many of the smaller communities depend on the revenue which they receive from the sharing of the Fisheries Business Tax. The revenue sharing provision in Sec. 9 of the bill is a one time only sharing of the tax collected for 1980.

IV. DATE Feb. 18, 1981

PREPARED BY Gary L. Jenkins

AGENCY Audit Division

PHONE 465-2320

Original: Legislative Finance

cc: Budget and Management

Prime Sponsor (First Legislator Named)

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. HB 103
 Title Fisheries Business Tax & Making Related Amendments
 Requested by Zharoff & Bettisworth Date February 4, 1981

II. FISCAL DETAIL

Agency Affected _____ Revenue _____
 Program Category Affected _____ General Government _____
 BRU, Program, or Subprogram(s) Affected Administration & Support, Management Services
 (Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL		Ø	Ø	Ø	Ø	Ø

FUNDING (Thousands of Dollars)

GENERAL FUND		Ø	Ø	Ø	Ø	Ø
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

This Bill has no effects on administration.

IV. DATE February 9, 1981 PREPARED BY Philip A. Wall
 AGENCY Revenue
 PHONE 465-2313
 Original: Legislative Finance
 cc: Budget and Management
Prime Sponsor (First Legislator Named)

Donald H. Barrow for

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. House Bill #103
 Title Act repealing the fisheries business tax and making related amendments
 Requested by House Resources Committee Date 2/9/81

II. FISCAL DETAIL

Agency Affected _____
 Program Category Affected _____
 BPU, Program, or Subprogram(s) Affected _____
 (Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						

TOTAL

FUNDING ^{Millions}
(Thousands of Dollars)

GENERAL FUND	-0-	(17.6)	(19.4)	(21.3)	(23.4)	
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section II)

This bill proposes to repeal the fisheries business Tax for catch years 1981 and beyond. The amount for FY82 of \$17.6 million is based on the 1981 catch forecast of Fish and Game. For fiscal years 83-85, the estimates have been increased by 10% per year to reflect price increases in line with inflation. The catch is assumed to remain stable.

IV. DATE 2/9/81 PREPARED BY Bill Yankoo
 AGENCY Resource Research
 PHONE 465 2173
 Original: Legislative Finance
 cc: Budget and Management
Prime Sponsor (First Legislator Named)

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COMMITTEE REPORT

HOUSE

FURTHER: FINANCE

2/4/81

(11)

Date: FEBRUARY 23, 1981

Mr. Speaker:

The Committee on RESOURCES has had HB 116

"An Act relating to king crab marketing and quality control."

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

- do pass do not pass
- do pass with attached amendments(s)
- replace with CS for _____ same title
 new title
- and recommends _____
- AND attaches a "Letter of Intent" New Fiscal Note
- reports it back without recommendation
- referred to the _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

_____ → _____

CHAIRMAN

February 2, 1981

Speaker of the House
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Mr. Speaker:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill adding to the definition of "gross dollar value paid" which is used in determining assessments for king crab marketing and quality control. Under the present definition, it is unclear what the assessment should be when the crab are caught by a catcher-processor and no actual price is paid for the crab. Although the present definition has been interpreted to apply to catcher-processors, this bill will clear up any confusion. The catcher-processor will be liable on the basis of the market value of the raw king crab. The bill will have the same effect as a similar provision recently enacted in the definitions section for the raw fish tax (AS 43.75.140(7), enacted in ch. 79 SLA 1979).

Sincerely yours,

S/SSH

Jay S. Hammond
Governor

LEGISLATURE OF THE STATE OF ALASKA
ELEVENTH LEGISLATURE

FISCAL NOTE

I. REQUEST
 Bill/Resolution No. HOUSE BILL NO. 116
 Title An Act relating to King Crab Marketing and Quality Control
 Requested by The Rules Committee by request of the Governor Date January 21, 1981

II. FISCAL DETAIL
 Agency Affected Department of Fish and Game
 Program Category Affected NRMEC
 BRU, Program, or Subprogram(s) Affected Alaska King Crab Marketing and Quality Control Board
 (Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING (Thousands of Dollars)

GENERAL FUND	-0-	-0-	-0-	-0-	-0-	-0-
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME	-0-	-0-	-0-	-0-	-0-	-0-
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

This bill will amend Section 1, AS 18.90.220(6) by adding to the definition of "gross dollar value paid" which is used in determining assessments for king crab marketing and quality control. Under the present definition, it is unclear what the assessment should be when the crab are caught by a catcher-processor and no actual price is paid for the crab. Although the present definition has been interpreted to apply to catcher-processors, this bill will clear up any confusion. The catcher-processor will be liable on the basis of the market value of the raw king crab.

IV. DATE January 21, 1981 PREPARED BY Russell H. Clark
 AGENCY Department of Fish and Game
 PHONE 465-4120
 Original: Legislative Finance
 cc: Budget and Management
 Prime Sponsor (First Legislator Named)

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COMMITTEE REPORT

HOUSE

(11)

FURTHER:

2/5/81

Date: 4/24/81

Mr. Speaker:

The Committee on RESOURCES has had HB 124

"An Act relating to the purchase of raw fish; and providing for an effective date."

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

- do pass do not pass
- do pass with attached amendments(s)
- replace with CS for HR 124 same title
- and recommends DO PASS new title
- AND attaches a "Letter of Intent" New Fiscal Note
- reports it back without recommendation
- referred to the _____ Committee

MEMBERS SIGNING
DO PASS

[Signature]

[Signature]

Tony Gardini

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

MEMBERS HAVING
OTHER RECOMMENDATIONS:

[Signature]

Tony Gardini
CHAIRMAN

Committee Substitute Bill 124 has left out certain sections of the original bill introduced by the administration. These omissions are again aimed at protecting the small processor.

HOUSE BILL 124: COMMITTEE SUBSTITUTE

SECTION 1: Amends A.S. 16.10 to allow the Commissioner to adopt regulations

SECTIONS 2, 5, and 7: These sections have been eliminated from the Committee substitute of the bill as they would have required that posted security be either a cash deposit of \$10,000. or a \$10,000. Surety Bond. The Commissioner would no longer accept real estate or property currently in the state as security. I have not included these sections as small processors with just several employees often do not have either \$10,000 for a cash deposit or \$10,000 in the bank so that he can obtain a surety bond. One example of a man who uses property for his posted security is ~~Jimmy~~ *Sidney* Huntington in Galena.

SECTION 4: This section allows the Commissioner the flexibility to waive the bonding requirement in one specific case- when an operation does not purchase fish or hire employees. This section is aimed at fishermen/processors and family operations.

SECTION 6: This bond provides for a penalty for persons required to post the bond but fail to do so.

SECTION 8: This section has been eliminated in the Committee Substitute as an immediate effective date would occur during ^{the} fishing season and would create confusion.

SECTION 9: This section provides for an effective date of December 31, 1981 so the new requirements would be in place for the 1982 fishing season

Committee Substitute Bill 124 is acceptable to the Administration and is supported by the Alaska Native Foundation and the Bering Sea Fisherman's Association.

PROPOSED COMMITTEE SUBSTITUTE, HOUSE BILL 124

AMENDMENTS TO A.S. SEC 16.10.290 SECURITY FOR COLLECTION OF WAGES AND
PAYMENT FOR RAW FISH

BACKGROUND.

While statistics are not available, a growing number of fishermen are processing their own catch. These fishermen/processors are often very small operations either consisting of a single person who catches then processes his own fish or a family unit working together. Unfortunately, these operations are subject to the same bonding requirements as large processors under AS 16.10.290. This bonding requirement is unnecessary and a serious imposition on small family operations and individuals who catch and process their own product.

Committee Substitute H.B. 124 would allow the Commissioner of Labor to waive the \$10,000. bonding requirement in cases where no fish is purchased or employees hired; i.e. for single person or family operations. The Committee Substitute of H.B. 124 further helps the small processor by retaining sections which allow real property or equipment to be posted for Security rather than only cash or a Surety Bond.

At present, the posting of Security for Collection of Wages and Payment for Raw Fish as required by A.S. 16.10.290 is required by all persons requiring a Fisheries Business License (A.S. 43.75.011), and this includes anyone who processes and sells fish (A.S. 43.75.140(3)).

The purpose of the required Security is laudable. It is aimed at protecting fishermen and processing workers against non payment. Therefore we feel it should be retained for most processing operations and Section 6 of H.B. 124 provides a penalty for persons who are required to but fail to post the bond.

The main purpose of H.B. 124 is to allow the Commissioner of Labor to waive the posting of Security when the fisherman and processor are one in the same person so that protection against non-payment is unnecessary.

Examples of cases where the existing Security requirement has been found to be onerous include:

1. Several village fishermen from Alukanuk on the mouth of the Yukon catch, smoke, then sell their own fish in the local store. Each man is now required to post a bond.
2. Two men in Mekoryuk and Hooper Bay will be longlining for halibut and cod this summer then selling their catch to the local store. In this case, too, each man is required to post \$10,000. in security, yet only he will be involved in his operation.

Committee Substitute Bill 124 has left out certain certain sections of the original bill introduced by the administration. These omissions are again aimed at protecting the small processor.

HOUSE BILL 124: COMMITTEE SUBSTITUTE

SECTION 1: Amends A.S. 16.10 to allow the Commissioner to adopt regulations

SECTIONS 2, 5, and 7: These sections have been eliminated from the Committee substitute of the bill as they would have required that posted security be either a cash deposit of \$10,000. or a \$10,000. Surety Bond. The Commissioner would no longer accept real estate or property currently in the state as security. I have not included these sections as small processors with just several employees often do not have either \$10,000 for a cash deposit or \$10,000 in the bank so that he can obtain a surety bond. One example of a man who uses property for his posted security is ~~Jimmy~~ Sidney Huntington in Galena.

SECTION 4: This section allows the Commissioner the flexibility to waive the bonding requirement in one specific case- when an operation does not purchase fish or hire employees. This section is aimed at fishermen/processors and family operations.

SECTION 6: This bond provides for a penalty for persons required to post the bond but fail to do so.

SECTION 8: This section has been eliminated in the Committee Substitute as an immediate effective date would occur during ^{the} fishing season and would create confusion.

SECTION 9: This section provides for an effective date of December 31, 1981 so the new requirements would be in place for the 1982 fishing season

Committee Substitute Bill 124 is acceptable to the Administration and is supported by the Alaska Native Foundation and the Bering Sea Fisherman's Association.

STATE OF ALASKA

DEPARTMENT OF LABOR

WAGE AND HOUR DIVISION

Kristine
JAY S. HAMMOND, GOVERNOR

P.O. BOX F30
JUNEAU, ALASKA 99811
PHONE:

465-4870

March 26, 1981

The Honorable Don Bennett
Alaska Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Bennett:

Commissioner Orbeck has requested that I respond directly to you concerning the impact of the Wage and Hour Division on the Alaska fishing industry.

The number of wage and return transportation claims filed with the division by seafood processing workers against their employers are not remarkable considering the total number of people involved, the remoteness of many of the plants, and the transient nature of the worker.

I believe that the greatest impact the Wage and Hour Division may have on the industry is in the enforcement of the bonding provisions, AS 16.10.290-295. This law requires all "fish processors" and "primary fish buyers" to file with the Commissioner of Labor a surety bond (with the State of Alaska) conditioned upon the promise to pay (1) all persons furnishing labor to a fish processor or primary fish buyer, including contractual employee benefits; and (2) independent registered commercial fishermen for the price of the raw fishery resource purchased from them. The bond shall be in the amount of \$10,000.

This has been a most difficult act to enforce primarily because there is no penalty provision for those that violate the law. For example, if an individual buys fish or hires employees to process seafood and does not obtain a license from the Department of Revenue, and does not post a bond with the Department of Labor, the only action the Department of Labor can take is to issue a Cease and Desist Order and then conduct a follow-up investigation to ascertain whether or not the order is being violated. This sort of enforcement activity is vitually impossible with our limited resources.

In response to a department request, the administration has introduced legislation to address the penalty provision and other areas of the law that the department perceives to be problem areas. House Bill 124 is now assigned to the House Resources Committee. I have enclosed the department's position paper on that bill as well as a March 5, 1981 letter to the Co-Chairman of the House Resources Committee which further explains the concerns we have with the present law.

Existing statutes require certain individuals to post a bond which is probably not necessary. There are individuals and partnerships who catch and process their own product and they neither hire employees nor do they buy any fish. Yet, those in this category must post a bond because the law requires that everyone required to have a license (AS 43.75.010) with the Department of Revenue must also post a surety bond. I have also enclosed the Attorney General opinion J-66-663-79, dated April 27, 1979 which covers this point.

In the three years we have been enforcing this law, we have found many processors and buyers who are confused by the number of agencies with which they must deal. For example: one must post an Intent to Operate with the Department of Fish and Game, obtain a license from the Department of Revenue, and then post a bond with the Department of Labor; all to perform the same function. All of the agencies involved are trying to work closely on this problem. However, the Department of Fish and Game, Department of Revenue and the Department of Labor all have their own goals and objectives and obviously there are times when they are in conflict.

If J or the Wage and Hour staff can be of any assistance in proposing amendments to the act to make this law enforceable or to make it less confusing for the public. we are willing to work with the Legislature towards this purpose.

Sincerely,



Dale W. Cheek
Director
Wage and Hour Division

Enclosures:

STATE OF ALASKA

DEPARTMENT OF LABOR

JAY S. HARRISON, GOVERNOR

BOX 1145
JUNEAU, ALASKA 99811

Ph: 465-2700

March 5, 1981

The Honorable Fred Zharoff
Co-Chairman, House Resources Committee
Pouch V
Juneau, Alaska 99811

Dear Representative Zharoff:

At your request, the Department has prepared and enclosed a position paper for House Bill 124, "An Act relating to the purchase of raw fish; and providing for an effective date." This bill is of primary concern to the Department for changes that need to be enacted this year. Until ample experience had been obtained under Chapter 102, SLA 1977, the Department did not attempt to draft a bill to address the problem areas.

It was apparent from the committee hearings that certain objections have been expressed. If the Committee objects to Section 2, 3 and 5, which delete the provision "or other negotiable security," a committee substitute could be prepared omitting these sections. The Department does recognize that allowing an applicant to deposit securities such as a money market certificate is the least expensive way to comply with this requirement.

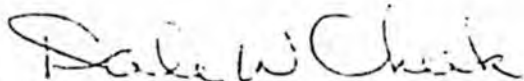
According to my testimony to the Committee, Section 4 as well as Section 6 are primary concerns of the Department. Section 4 as submitted is necessary to provide the discretion to grant waivers to those operators who neither hire employees nor purchase fish from anyone else. Section 6 which requires a penalty for those who choose neither to be licensed or bonded is a major concern. This section is supported not only by the Department of Labor but the Departments of Revenue and Fish and Game.

Section 7 repeals AS 16.10.290(c). The Department is cognizant of the abuse of this section by individuals who pledge the property of others, property without clear title or property in bankruptcy. Due to the many problems, the Department did recommend repeal. However, if there are objections, this section of the bill could be deleted and the statutory subsection left in the law. It is recognized that this is the only vehicle which allows some individuals to operate. The Department could address this problem through regulations by placing the burden of proof on the applicant, provided Section 1 was enacted.

The Honorable Fred Znaroff
March 5, 1981
Page 2

Thank you for the opportunity to provide further comments. Please advise if we can be of further assistance to the Committee. A bill to remedy the deficiencies referenced is most important.

Sincerely,



Dale Cheek, Director
Wage & Hour Division

cc: House Resources Committee

STATE OF ALASKA

DEPARTMENT OF LABOR

WAGE AND HOUR DIVISION

JAY S. HAMMOND, GOVERNOR

P.O. BOX 630
JUNEAU, ALASKA 99811

PHONE:

465-4870

April 20, 1981

The Honorable Frank Ferguson
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Ferguson:

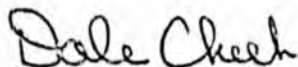
I am in receipt of a copy of the April 9, 1981 letter to you from Lynne Zeitlin Hale, Fisheries Specialist with the Alaska Native Foundation.

In that letter the writer points out that the bonding requirements in AS 16.10.290 are unnecessary and a serious imposition on small family operations who catch and process their own product.

Shortly after the Department of Labor began to enforce AS 16.10.290 we came to the same conclusion. However, under the present law we have no authority to grant waivers to anyone who is licensed as a fish buyer or fish processor. This is one of the reasons why the department requested the administration to introduce House Bill 124, which if passed into law would give the Commissioner the authority to grant waivers to those operators who neither buy fish nor hire employees. This bill is presently before the House Resources Committee.

If I can be of any further service please advise.

Very truly yours,



Dale Cheek
Director
Wage and Hour Division

cc: Commissioner Edmund Orbeck

Bill No. House Bill No. 124

Date March 5, 1981

Title "An Act relating to the Purchase of raw fish;
and providing for an effective date."

Contact: Dale W. Chees
465-4870
Judy Knight
465-2700

Chapter 102, SLA 1977 gave the Department of Labor responsibility for the enforcement of the bonding requirements related to the Purchase of Fish. Because of the inequities and difficulties experienced by the Wage and Hour Division in enforcing the requirements of AS 16.10.270 - AS 16.10.296, House Bill No. 124 was introduced this year.

Section 1 Adds a new section AS 16.10.275 which would give the Commissioner authority to adopt regulations in order to carry out the provisions of Article 6, Purchase of Fish.

Section 2 Deletes the words "or other negotiable security" from this section which would require a processor or buyer to make a cash deposit or obtain a surety bond. Experience has shown that to execute against a negotiable security such as a savings certificate requires lengthy litigation to the detriment of the worker or fisherman who must wait a considerable period of time for his wages or payment for his fish.

However, the department does recognize that allowing an applicant to deposit securities such as a Money Market Certificate is the least expensive way to address the requirements.

Section 3 Deletes "or other security" as referred to in Section 2.

Section 4 Amends AS 16.10.292 by adding a subsection which allows the Commissioner, after investigation, to grant a waiver for the bonding requirements of Article 6. Waivers may be granted only to those that do not purchase fish or hire employees. The Department is aware of many individuals or partners who catch and process their fish and who, because of the definition of a "fish processor" are required to post a bond. The current statute imposes an unnecessary and inequitable financial burden on these small operators.

Section 5 Deletes "or other security" previously described in Section 2 and Section 3.

Section 6 Adds a new section AS 16.10.295 which provides for a penalty for those who fail to obtain the bond as required by Article 6. This section provides for Class A misdemeanor for each violation. Currently the Department has the authority to suspend or revoke the license of those individuals who do not comply with the bonding requirements of AS 16.10.290--296. However,

POSITION PAPER/Department of Labor

the Department has no authority to take action against those individuals who do not obtain a license. In 1979 over 700 parties filed an intent to operate with the Department of Fish and Game and we have good reason to believe that a large number of those individuals or companies did operate within the State as primary fish buyers or processors. Less than 200 of that number actually posted the bond with the Department of Labor as required by the law. Only a slightly larger number obtained a license from the Department of Revenue.

The necessity for a penalty section is a primary concern because we have no enforcement power against those who are neither licensed nor have obtained bonding. It is apparent that these unlicensed, unbonded operators are causing the majority of the problems. The enactment of a penalty section would serve as a deterrent to those who would otherwise fail to comply with the law.

Section 7 Repeals AS 16.10.290(c) which allows the Department to waive the requirement of posting the bond if the fish processor or primary fish buyer has more than \$10,000 in lienable property in the state. In recovering against such property pledged, the department has found that in many cases the property listed is already heavily mortgaged or worth much less than the applicant alleged. In some cases the applicant did not even own the property. The Department does not have the resources to do title searches and other investigations to ascertain if the property pledged is free and clear.

Section 8 Provide for effective dates.
and 9

The Department of Labor recommends that legislation be enacted to provide for a means of enforcement as well as to alleviate the inequities that currently exist. The Department of Fish and Game and Revenue have indicated their support for this bill.

MEMORANDUM

TO: Dale W. Cheek, Director
Wage & Hour Division
Department of Labor

DATE: April 27, 1979

FILE NO: J-66-663-79

TELEPHONE NO.

FROM: AVRUM M. GROSS
ATTORNEY GENERAL

SUBJECT: Fishermen Subject to
Surety Bond Requirements

By: *Teo C. Spengler*
Teo C. Spengler
Assistant Attorney General

You have requested the advice of this department as to whether the security bond requirements of AS 16.10.290 apply to a self-employed fisherperson. The answer to your inquiry depends upon the exact line of business in which the person is engaging or attempting to engage.

AS 16.10.290(a) provides:

A fish processor or primary fish buyer shall file with the Commissioner of Labor a surety bond running to the State of Alaska conditioned upon the promise to pay (1) all persons furnishing labor to a fish processor or primary fish buyer, including contractual employee benefits; and (2) independent registered commercial fishermen for the price of the raw fishery resource purchased from them. The surety or sureties shall be satisfactory, in the determination of the Commissioner.

The definitions of the terms "fish processor" and "primary fish buyer" must be ascertained by reference to other statutes.

AS 16.10.296 provides definitions for terms used in Chapter 10. Therein, "primary fish buyer" is defined as "a person, other than a cooperative corporation organized under AS 10.15, engaging or attempting to engage in the business of originally purchasing or buying any raw fishery

resource in intrastate, interstate, or foreign commerce." Clearly, if an individual is purchasing any raw fishery resource, he or she is required to file the security bond, pursuant to AS 16.10.290. If an individual does not purchase any raw fishery resource, he or she is not a "primary fish buyer" under the terms of AS 16.10.296.

AS 16.10.296(3) defines "fish processor" as "a person engaging or attempting to engage in a business for which a license is required under AS 43.75.010 through .090". AS 43.75.010 requires a person engaging or attempting to engage in enumerative lines of business a connection with the state's fisheries to obtain a license. Those lines of business include (1) salmon canneries, both shore based and floating; (2) herring processing plants in the business of canning, curing, salting, freezing or making meat or oil or other process products; (3) crab canneries, both shore based and floating; and (4) clam canneries. AS 43.75.060 requires that a person engaging or attempting to engage in certain lines of business in connection with the state's commercial fisheries obtain a license. The enumerated lines of business include (1) shore-based cold storage and other fish processors, and (2) freezer ships and other floating cold storages. Thus, a person engaging in any of those lines of business is required to be licensed as a fish processor and is subject to the surety bond requirements of AS 16.10.290.

Your specific inquiry was whether a self-employed fisherperson who holds a fish processor's license but processes his or her own fish, and neither purchases fish nor hires employees, is required to post a surety bond pursuant to AS 16.10.290. Under present statutes, if the person was required under AS 43.75.010 through .090 to obtain a license, that person must post a surety bond.

TCS/lm

NOTICE

February 5, 1981

The Honorable Jim Duncan
Speaker of the House
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Mr. Speaker:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill which would amend the bonding requirements of AS 16.10 which a fish processor or primary fish buyer must meet to qualify for a business license or fisheries business license. The processor, or person engaging or attempting to engage in a "fisheries business" as defined in AS 43.75.140(3) must obtain a fisheries business license under AS 43.75.011. The primary fish buyer must obtain an Alaska business license under AS 43.70.020. The bill would delete the existing provision allowing the processors or buyers to pledge a negotiable security rather than obtain a surety bond, permitting only a surety bond or a cash deposit. The exemption in AS 16.10.270(c) from the requirement of obtaining a bond for a person with property in the state which exceeds \$10,000 in value that is unencumbered would also be repealed. This would relieve the Department of Labor from the responsibility of investigating the value and title of the property used as security.

The bonding requirement under this bill could be waived by the commissioner for those small operations that do not purchase fish or hire employees. This bill also would establish a penalty for those processors and buyers who fail to obtain a bond, and authorizes the commissioner of labor to adopt regulations to carry out the purposes of AS 16.10.270 -- 16.10.296.

Sincerely,

SJS/

Jay S. Hammond
Governor

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST HOUSE BILL NO. 124
 Bill/Resolution No. _____
 Title An Act relating to the purchase of raw fish, and providing for an
 Requested by governor Date January 7, 1981
 effective date.

II. FISCAL DETAIL
 Agency Affected Labor
 Program Category Affected Worker Protection
 BRU, Program, or Subprogram(s) Affected Wage & Hour
 (Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL	0	0	0	0	0	0

FUNDING (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME	0	0	0	0	0	0
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

IV. DATE January 7, 1981 PREPARED BY Nico Bus Finance Officer
 AGENCY Labor
 PHONE 465-2720
 Original: Legislative Finance
 cc: Budget and Management
 Prime Sponsor (First Legislator Named)

TO: Dale W. Cheek, Director
Wage & Hour Division
Department of Labor

DATE: April 27, 1979

FILE NO: J-66-663-79

TELEPHONE NO:

FROM: AVRUM M. GROSS
ATTORNEY GENERAL

SUBJECT: Fishermer Subject to
Surety Bond Requirements

By: *Teo C Spengler*
Teo C. Spengler
Assistant Attorney General

You have requested the advice of this department as to whether the security bond requirements of AS 16.10.290 apply to a self-employed fisherperson. The answer to your inquiry depends upon the exact line of business in which the person is engaging or attempting to engage.

AS 16.10.290(a) provides:

A fish processor or primary fish buyer shall file with the Commissioner of Labor a surety bond running to the State of Alaska conditioned upon the promise to pay (1) all persons furnishing labor to a fish processor or primary fish buyer, including contractual employee benefits; and (2) independent registered commercial fishermen for the price of the raw fishery resource purchased from them. The surety or sureties shall be satisfactory, in the determination of the Commissioner.

The definitions of the terms "fish processor" and "primary fish buyer" must be ascertained by reference to other statutes.

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AS 16.10.296(3) defines "fish processor" as "a person engaging or attempting to engage in a business for which a license is required under AS 43.75.010 through .090". AS 43.75.010 requires a person engaging or attempting to engage in enumerative lines of business a connection with the state's fisheries to obtain a license. Those lines of business include (1) salmon canneries, both shore based and floating; (2) herring processing plants in the business of canning, curing, salting, freezing or making meat or oil or other process products; (3) crab canneries, both shore based and floating; and (4) clam canneries. AS 43.75.060 requires that a person engaging or attempting to engage in certain lines of business in connection with the state's commercial fisheries obtain a license. The enumerated lines of business include (1) shore-based cold storage and other fish processors, and (2) freezer ships and other floating cold storages. Thus, a person engaging in any of those lines of business is required to be licensed as a fish processor and is subject to the surety bond requirements of AS 16.10.290.

Your specific inquiry was whether a self-employed fisherperson who holds a fish processor's license but processes his or her own fish, and neither purchases fish nor hires employees, is required to post a surety bond pursuant to AS 16.10.290. Under present statutes, if the person was required under AS 43.75.010 through .090 to obtain a license, that person must post a surety bond.

TCS/lm

STATE OF ALASKA

DEPARTMENT OF LABOR

JAY S. HAMMOND, GOVERNOR

BOX 1149
JUNEAU, ALASKA 99811
Ph: 455-2700

March 5, 1981

The Honorable Fred Zharoff
Co-Chairman, House Resources Committee
Pouch V
Juneau, Alaska 99811

Dear Representative Zharoff:

At your request, the Department has prepared and enclosed a position paper for House Bill 124, "An Act relating to the purchase of raw fish; and providing for an effective date." This bill is of primary concern to the Department for changes that need to be enacted this year. Until ample experience had been obtained under Chapter 102, SLA 1977, the Department did not attempt to draft a bill to address the problem areas.

It was apparent from the committee hearings that certain objections have been expressed. If the Committee objects to Section 2, 3 and 5, which delete the provision "or other negotiable security," a committee substitute could be prepared omitting these sections. The Department does recognize that allowing an applicant to deposit securities such as a money market certificate is the least expensive way to comply with this requirement.

According to my testimony to the Committee, Section 4 as well as Section 6 are primary concerns of the Department. Section 4 as submitted is necessary to provide the discretion to grant waivers to those operators who neither hire employees nor purchase fish from anyone else. Section 6 which requires a penalty for those who choose neither to be licensed or bonded is a major concern. This section is supported not only by the Department of Labor but the Departments of Revenue and Fish and Game.

Section 7 repeals AS 16.10.290(c). The Department is cognizant of the abuse of this section by individuals who pledge the property of others, property without clear title or property in bankruptcy. Due to the many problems, the Department did recommend repeal. However, if there are objections, this section of the bill could be deleted and the statutory subsection left in the law. It is recognized that this is the only vehicle which allows some individuals to operate. The Department could address this problem through regulations by placing the burden of proof on the applicant, provided Section 1 was enacted.

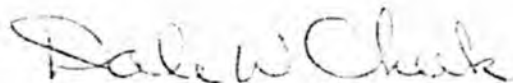
To Richard
I don't have any problem
with Charlie's recommendation

John Sund.

The Honorable Fred Zharoff
March 5, 1981
Page 2

Thank you for the opportunity to provide further comments. Please advise if we can be of further assistance to the Committee. A bill to remedy the deficiencies referenced is most important.

Sincerely,



Dale Cheek, Director
Wage & Hour Division

cc: House Resources Committee

Bill No. House Bill No 124

Date March 5, 1981

Title "An Act relating to the Purchase of raw fish;
and providing for an effective date."

Contact: Dale W. Cheek
465-4870
Judy Knight
465-2700

Chapter 102, SLA 1977 gave the Department of Labor responsibility for the enforcement of the bonding requirements related to the Purchase of Fish. Because of the inequities and difficulties experienced by the Wage and Hour Division in enforcing the requirements of AS 16.10.271 - AS 16.10.296, House Bill No. 124 was introduced this year.

- Section 1 Adds a new section AS 16.10.275 which would give the Commissioner authority to adopt regulations in order to carry out the provisions of Article 6, Purchase of Fish.
- Section 2 Deletes the words "or other negotiable security" from this section which would require a processor or buyer to make a cash deposit or obtain a surety bond. Experience has shown that to execute against a negotiable security such as a savings certificate requires lengthy litigation to the detriment of the worker or fisherman who must wait a considerable period of time for his wages or payment for his fish.
- However, the department does recognize that allowing an applicant to deposit securities such as a Money Market Certificate is the least expensive way to address the requirements.
- Section 3 Deletes "or other security" as referred to in Section 2.
- Section 4 Amends AS 16.10.292 by adding a subsection which allows the Commissioner, after investigation, to grant a waiver for the bonding requirements of Article 6. Waivers may be granted only to those that do not purchase fish or hire employees. The Department is aware of many individuals or partners who catch and process their fish and who, because of the definition of a "fish processor" are required to post a bond. The current statute imposes an unnecessary and inequitable financial burden on these small operators.
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POSITION PAPER/Department of Labor

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The necessity for a penalty section is a primary concern because we have no enforcement power against those who are neither licensed nor have obtained bonding. It is apparent that these unlicensed, unbonded operators are causing the majority of the problems. The enactment of a penalty section would serve as a deterrent to those who would otherwise fail to comply with the law.

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and 9

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STATE OF ALASKA

DEPARTMENT OF LABOR

JAY S. HAMMOND, GOVERNOR

BOX 1149
JUNEAU, ALASKA 99811
Ph: 465-2700

*Koils
File* *HB 124*

March 5, 1981

The Honorable Fred Zharoff
Co-Chairman, House Resources Committee
Pouch V
Juneau, Alaska 99811

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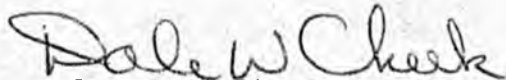
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The Honorable Fred Zharoff
March 5, 1981
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Wage & Hour Division

cc: House Resources Committee

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Date March 5, 1981

Title "An Act relating to the Purchase of raw fish;
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Contact: Dale W. Cheek
465-4870
Judy Knight 
465-2700

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POSITION PAPER/Department of Labor

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Section 8 Provide for effective dates.
and 9

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HB

126

PROPOSED
AMENDMENT

OFFERED IN THE HOUSE:

By: MOSS

To: _____ ss HOUSE BILL No. 126

SENATE BILL No. _____

PAGE: 1

LINE: _____

- Line 11: Delete "Department of Natural Resources" and insert "Department of Commerce and Economic Development for the Alaska Agricultural Action Council"
- Line 11: after the word "harvest", insert the words, "and if economically feasible"
- Line 12: Insert a period after the word "resources"
- Line 15: Delete "Department of Natural Resources" and insert "Department of Commerce and Economic Development, Alaska Agricultural Action Council"
- Line 19: Delete "Department of Natural Resources" and insert "Department of Commerce and Economic Development, Alaska Agricultural Action Council"
- Line 20: Delete the word "lots" and insert the word "tracts"
- Delete the word "area" and insert the words "Agricultural Development Project"
- Line 23: After the word "production", add a period, and delete the remainder of the sentence on lines 23 and 24.
- Line 26: Delete "Department of Natural Resources" and insert "Department of Commerce and Economic Development, Alaska Agricultural Action Council"
- Line 28: Delete the period after the word "facility" and insert the language, "to process livestock produced in the Nenana-Totchaket area"

ENGINEERING ESTIMATE

for
CONSTRUCTION of

ACCESS ROADS & BRIDGES in the
TOTCHAKET AREA

(1983 DOLLARS)

I.	23 Miles of primary access roads constructed to secondary standards by construction contract (single borrow source @ Nenana)	
	23 Miles @ \$519,956.52/ /mile	\$11,959,000
II.	RIGHT-OF-WAY ACQUISITION	\$30,300
III.	NENANA RIVER BRIDGE (440 foot span) overall	\$3,800,000
IV.	THREE SMALLER BRIDGES across the: Little Nenana River (140 ft span) East Middle River (101 ft span) West Middle River (120 ft span)	\$1,900,000
	<u>TOTAL</u>	<u>\$17,689,300</u>

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. Sponsor Substitute for HB 126
 Title Special Appropriations for Agricultural Development in Nenana - Totchaket
 Requested by Department of Environmental Conservation Date March 1, 1982

II. FISCAL DETAIL

Agency Affected Department of Environmental Conservation
 Program Category Affected _____
 BRU, Program, Or Subprogram(s) Affected BRU: EQO (Lab, \$348.0) (NRO \$92.0)
 (Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
100 PERSONAL SERVICES		3.0	3.0	3.0		
200 TRAVEL		7.8	2.0	2.0		
300 CONTRACTUAL		331.0	34.9	34.9		
400 COMMODITIES		3.5	2.5	2.5		
500 EQUIPMENT		10.0				
600 LAND & STRUCTURES GRANTS, CLAIMS, ETC.						
TOTAL		355.3	42.4	42.4		

FUNDING (Thousands of Dollars)

	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
GENERAL FUND		355.3	42.4	42.4		
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS

	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instruction, Section III)

Attached

IV. DATE March 1, 1982 PREPARED BY Bill Leitch
 AGENCY ADFC
 Original: Legislative Finance PHONE 465-2653
 cc: Budget and Management
 Prime Sponsor (First Legislator Named)
 33-001 (Rev. 12/81)

Fiscal Analysis

Sponsor Substitute for HB 126

Assumptions:

1. No new positions are required to carry out the tasks described below.
2. Well-drilling, hydrographic surveying, and related tasks will be provided through contractual services.
3. The Department's laboratory has the capability to carry out the required water quality analysis.

A major question related to a primary Alaskan resource and a rapidly growing Alaskan industry remains unanswered: Does large scale agricultural development significantly affect the quality of public waters in Alaska? The funds requested in this fiscal note are to support water quality monitoring programs intended to answer that question.

Groundwater quality monitoring is an expensive procedure. Supplemental funds are requested because the activity requires expenditures beyond the fiscal capabilities of the Department's routine operating budget.

Groundwater Quality Monitoring: Nenana-Totchaket

The primary source of water in the Nenana-Totchaket area is groundwater; surface water is scarce. Groundwater sampled during the only water quality study that has been undertaken in the area indicated sufficiently high concentrations of arsenic, nickel, iron, and manganese to suggest that problems could develop if the untreated water were to be used for irrigation or drinking. The quality and dynamics of the groundwater resource is of particular significance in this region because it is entirely underlain by cone sand deposits that vary in thickness from 5-200 feet.

An appropriate water quality monitoring program in this area requires the drilling of ten 300'-500' test wells, and analysis of water samples from each well. The sampling period should be three years.

No new positions are required to carry out this program.

The total cost of the monitoring program is \$346,300. Major expenditures are for well-drilling (\$184,000), and for water quality analyses (\$40,000).

Surface Water Quality Monitoring: Delta

Several baseline water quality studies have been carried out in the vicinity of the Delta Project. Most of these studies, however, were completed prior to extensive agricultural development in the study areas. Only two follow-up studies are scheduled to commence in 1982, neither of which are specifically intended to monitor water quality.

An appropriate water quality monitoring program in this area requires collection and analysis of a total of 135 surface water samples from three stations over a three-year period.

No new positions are required to carry out this program. The total cost of the monitoring program is (\$92,000). Major expenditures are for water quality laboratory analyses (\$67,500).

Additional information is attached to this fiscal note.

Department of Environmental Conservation Perspective: Water Quality and
Agricultural Development in Alaska

The State of Alaska possesses over 18 million acres of land suitable for intensive agricultural production; nearly 100 million additional acres are suitable for grazing. At present, only a tiny fraction of these lands are devoted to agriculture, and Alaska now imports nearly 95% of its food. In an effort to correct this situation, the state is promoting a program intended to bring 500,000 acres into agricultural production by 1990.

Large scale development of agriculture in Alaska began in 1978, with the launching of the Delta Agricultural Project. The Department of Natural Resources administers land disposal programs through which about 50,000 acres have now been brought to various stages of production. An additional 11,000 acres are scheduled for release in March, 1982 (Delta II East), and an additional 175,000 acres are being considered for agricultural disposal in late 1982 or early 1983 (Nenana-Totchaket).

The rapid development of previously undisturbed land on such a massive scale introduces the threat of significant short term and long term deterioration of water quality in these areas. Potential threats to water quality that are related to agricultural development arise as a result of two major classes of activities: land development and ensuing agricultural operations.

Land development includes surveying, construction of access roads, bridges, and utilities, and land clearing. Primary water quality effects that can result from such activities are increases in sedimentation, suspended load, and concentration of plant nutrients; decreases in light transmission; and changes in temperature.

Agricultural operations include fertilizing, irrigation, seedbed preparation, chemical treatment of seeds, application of fungicides, insecticides, and herbicides, and so on. Primary water quality effects that can result from these activities are similar to those that result from land development, but in addition include introduction of fungicides, insecticides, and herbicides, and decreased concentration of dissolved oxygen.

Alaska's farming community is not unaware of the potential for development of such problems. During early stages of the Delta Project, a poll of the twenty-member Delta Citizen Council indicated unanimous support for allocating state funds for "air and water quality monitoring within the immediate area of the Delta agricultural community," and for assessing "the effect of large scale agriculture on the ecosystem."

Alaska's agricultural lands are being disposed of so rapidly that state agencies have had difficulty completing resource management plans and preliminary resource studies before the lands are released. At present, these plans contain little or no consideration for water quality management.

The Department of Environmental Conservation considers that an appropriate monitoring program should address both of these concerns, and should be carried out as follows:

Delta

Surface water samples should be collected at each of 3 to 5 sites on a biweekly basis from April through September, and bimonthly during the rest of the year. One hundred thirty-five samples should be collected over a three-year study period. Analysis of samples should include the standard suite of water quality parameters, with particular attention to nitrogens and 2-4,D.

Nenana

Groundwater supply sources will predominate in this region; accordingly, water quality studies should focus on this resource. Such studies, exclusive of hydrologic work, should be conducted as described in the report, "Water Resource Investigation of the Nenana Agricultural Project Area," Larry Peterson et. al., 1981. The work requires the drilling of ten 300'-500' test wells in the study area, and analysis of water samples from each well. Analysis of samples should include the standard suite of water quality parameters, with particular attention to arsenic, nickel, and Lindane.

The precise cost of these studies will depend upon how much of the work were to be conducted by DEC staff and lab, and how much conducted by contractual arrangement. A preliminary budget estimate, based on the assumption that most of the work would be assigned by contract, is attached.

Two bills related to agricultural development in the Nenana area (HB 126 and SB 702) are rapidly progressing through the Alaska State Legislature. House Bill 126 proposes allocation of the state funds to the Department of Natural Resources for removal and marketing of timber, agronomic studies, surveys, and planning, processing, and marketing activities. Senate Bill 702 proposes allocation of state funds to the Alaska Agricultural Action Council for survey and disposal activities, land-clearing loans, and road construction.

Allocation of funds for determination and monitoring of water quality in the Delta and Nenana areas have not been included in these bills. The Department of Environmental Conservation proposes that \$438,300 be added to them for the purpose of carrying out the water quality studies that are an essential prerequisite to large scale development of agriculture in Alaska.

Estimated Program Budget - Ground and Surface Water Quality Monitoring and Large Scale Agricultural Development

<u>Groundwater Program</u>	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>	
Geologist/Hydrologist - 700 hrs @ \$45/hr.	32,500	-----	-----	
Vehicle/Per Diem - 84 days @ \$125/day	5,750	2,375	2,375	
Drilling ten 400' wells @ \$46/foot	184,000	-----	-----	
Ground Control (survey)	50,000	-----	-----	
Bulldozer (for access) - 200 hrs @ \$75/hr plus mobilization	17,000	-----	-----	
Groundwater quality analysis - 80 @ \$500 each	20,000	10,000	10,000	
Field monitoring equipment (pumps, generators, sensing devices)	10,000	-----	-----	
Equipment (chemicals, samplers, etc)	<u>2,000</u>	<u>1,000</u>	<u>1,000</u>	
	\$321,250	\$13,375	\$13,375	TOTAL \$348,000
<u>Surface Water Program</u>				
Principal - 40 hrs @ \$75/hr	5,000	-----	-----	
Biological technician - 360 hrs @ \$25/each	3,000	3,000	3,000	
Water quality analysis - 135 @ \$500/each	22,500	22,500	22,500	
Vehicle/Per Diem - 48 days @ \$125/day	2,000	2,000	2,000	
Administrative overhead/printing	<u>1,500</u>	<u>1,500</u>	<u>1,500</u>	
	\$34,000	\$29,000	\$29,000	TOTAL <u>\$92,000</u>
				PROGRAM TOTAL: \$440,000

ALASKA STATE ASIAN OFFICE

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RECEIVED AUG 12 1981

Charles E. Gibson
Director

Mr. Bob Palmer
Coordinator
Office of the Governor
Pouch AN
Juneau, AK 99811

August 6, 1981

Dear Bob,

The attached is a report on the Alaska Barley feed experiment in Hokkaido. It appears that the Alaskan barley is better in nutrient quality than the Canadian barley sample.

Mr. Sato of the Hokkaido Alaska Kai is planning a trip to Alaska sometime this fall. He requested that I forward this copy to you.

REGARDS,



CG/km

Enc: A report.

cc: Commissioner Webber

Comparative Feeding Trials Between Alaskan and
Canadian Barley For Beef Cattle and Swine

by

Coordinator in Hokkaido, Japan:

Dr. Hisatomo Oohara (Director, Dairy Research Institute)

Introduction

Feed barley grain is a most important feed which is being imported from Canada and Australia for all kinds of livestock in Japan, the yearly imports to 1.4 mil. tons. Dairymen and farmers feeding livestock are seeking always after barley more nutritious and less expensive. In this connection, Alaskan barley is highly spoken of as a feedstuff rich in protein and energy value than any other barley according to the chemical analysis by researchers of the University of Alaska. Last year 15 tons of Alaskan barley was introduced here for feeding trials under the natural conditions of Hokkaido through kind arrangements of the Alaskan State Government in cooperation with Hokkaido Alaska Association in Sapporo, by permission of the Japanese Government, the importation of grains being controlled in this country.

Experimental Procedure

Subjected to feeding trials were beef cattle at three farms and swine at one farm, using Alaskan barley and Canadian barley.

A. Beef cattle at three farms

1. Shihoro Hinode Beef Cattle Center

(1) Duration

91 days from Dec. 9, 1980, to March 10, 1981

(2) Feeding

a. Alaskan barley group

Fed twice a day, daily amounts of consumption were 3.00 kg of Alaskan flaked barley, 7.27 kg of concentrate mixture for beef cattle and 0.84 kg of first-cut timothy hay as roughage.

b. Canadian barley group

Also fed twice a day, daily amounts of consumption were 2.87 kg Canadian flaked barley, 7.58 kg of concentrate mixture for beef cattle and 0.84 kg of first-cut timothy hay as a roughage.

(3) Numbers of cattle

a. Alaskan barley group: 12 Holstein Friesian steer

b. Canadian barley group: 12 Holstein Friesian steer

2. Kunneppu Hokuren Training Farm

(1) Duration

64 days from Dec.9,1980,to Feb.11,1981

(2) Feeding

a. Alaskan barley group

Alaskan flaked barley,concentrate mixture for beef cattle and hay,which were fed twice a day.

b. Canadian barley group

Similarly,Canadian flaked barley,concentrate mixture for beef cattle and hay,which were fed twice a day.

(3) Numbers of cattle

a. Alaskan barley group: 7 Holstein Friesian steer

b. Canadian barley group: 7 Holstein Friesian steer

3. Higashimokoto Fukutomi Satoh Farm

(1) Duration

67 days from Dec.8,1980,to Feb.12,1981

(2) Feeding

a. Alaskan barley group

Alaskan flaked barley accounted for 30 % of the weight of the total concentrate ration; concentrate mixture for beef cattle accounted for 70 % of it; also 2 kg of hay consisting of timoth and orchardgrass were fed.

b. Canadian barley group

Similar to Alaskan barley group.

(3) Numbers of cattle

a. Alaskan barley group: 15 Holstein Friesian steer

b. Canadian barley group: 15 Holstein Friesian steer

B. Swine at Kunneppu Hokuren Swine Farm

(1) Duration

57 days from
Dec.10,1980,to Feb.5,1981

(2) Feeding

a. Alaskan barley group

Alaskan ground barley accounted for 30 % of the weight of the total concentrate ration; concentrate mixture for swine account for 70 % of it with selffeeder.

b. Canadian barley group

Canadian ground barley accounted for 30 % of the weight of the total concentrate ration; concentrate mixture for swine accounted for 70 % of it with selffeeder.

(3) Numbers of swine

a. Alaskan barley group: 40 fattening pigs

b. Canadian barley group: 41 fattening pigs

Results

Experimental results at three farms on beef cattle and one farm on swine are shown as follows:

A. Beef cattle

1. Shihoro Hinode Beef Cattle Center

Table 1 Effect of feeding Alaskan barley and Canadian barley on daily gain and feed/gain ratio of beef cattle

Item	Alaskan barley group		Canadian barley group	
	Total	Aver. per head	Total	Aver. per head
Body weight(kg) before the start of the trial(A)	7,135	594.6	7,350	612.5
Body weight(kg) after the finish of the trial(B)	8,172	681.0	8,255	687.9
Total body gain(B-A)	1,037	86.4	995	75.4
Daily gain(kg)	11,396	0.944	10,934	0.829
Amounts of concentrate consumed(kg)	11,207	934	11,528	961
Concentrate/gain		10.81		15.29
Amounts of roughage consumed(kg)	915	76.0	915	76.0
Amounts of total feed consumed during the trial(kg)	12,059	1,005	12,443	1,037
Total feed/gain		11.63		13.75

2. Kunneppu Hokuren Training Center

Table 2 Effect of feeding Alaskan barley and Canadian barley on daily gain and quality of beef of beef steer

Item	Alaskan barley group	Canadian barley group
	Aver. per head	Aver. per head
Body weight(kg) before the start of the trial(A)	612.6	603.0
Body weight(kg) after the finish of the trial(B)	664.0	648.0
Total body gain(B-A)	51.4	44.9
Daily gain(kg)	0.803	0.701
Amounts of barley consumed (kg)	201	201
Amounts of concentrate mixture consumed(kg)	469	469
Hay consumed(kg)	71.6	71.6
Concentrate/gain	13.0	14.9
Weight of beef with bone(kg)	383.3	346.1
Percentage of carcass(%)	57.7	53.4
Grading	good <u>3</u> ; fair 4	good <u>1</u> ; fair 6
Marvelness of fat	0.4	0.7
Area of roas center(cm ²)	41.4	45.7
Color of beef	3.7	3.6
Color of fat	2.1	2.0

3. Higashimokoto Village Satoh Farm

Table 3 Effect of Alaskan barley and Canadian barley on daily gain and feed/gain ratio on beef cattle

Item	Alaskan barley group		Canadian barley group	
	Total	Aver.per head	Total	Aver.per head
Body weight(kg) before the start of the trial(A)	8,309	553.9	7,692	512.8
Body weight(kg) after the finish of the trial(B)	9,409	627.3	8,762	584.1
Total body gain(B-A)	1,100	73.3	1,070	71.3
Average daily gain(kg)	16.67	1.11	16.21	1.08
Amounts of barley consumed				
(kg)	3,267	217.8	3,267	217.8
Amounts of concentrate mixture consumed(kg)				
	5,940	396.0	5,940	396.0
Total concentrates(kg)				
	9,207	613.8	9,207	613.8
Concentrates/gain				
		8.37		8.60

B. Swine at Kunneppu Hokuren Swine Farm

Table 4 Effect of feeding Alaskan barley and Canadian barley on daily gain and feed/grain ratio on swine.

Item	Alaskan barley	Canadian barley
Body weight at the start of the trial(kg) (A)	52.09	52.04
Body weight at the finish of the trial(kg) (B)	105.74	106.56
Daily gain during the trial(B-A)	53.65	54.84
Duration of the trial(days)	68.5	77.2
Average daily gain(g)	799.0	717.0
Average amounts of feed consumed per head(kg)	200.8	206.8
Feed/grain ratio	3.74	3.77

Discussion

Following is a discussion on the experimental results obtained from feeding trials with Alaskan barley and Canadian barley:

A. Beef cattle

The trials were carried out at the late fattening stage of dairy steer. Generally, concerning the body gain and concentrate/gain ratio, Alaskan barley were superior to those fed with Canadian barley at all experimental farms. Particularly, the weight of carcass was significant at a 2 % level and the percentage of the weight of carcass was significant at a 1 % level statistically. Other items such as body gain, color of fat and beef, and grading, etc., did not indicate the statistical significance between both feeding groups.

This seems to result from the factors that Alaskan barley is better in quality, namely rich in nutrients for beef production and high in conversion of barley to beef than Canadian barley.

B. Swine

The feeding trial to compare Alaskan barley with Canadian barley disclosed that the former was more effective than the latter on body gain during the trial, being significant at a 1 % level, but was not significant on the feed/grain ratio. The quality of pork such as carcass, grading, melting point of fat, the occurrence of soft fatty pork, etc., were not different statistically between both feeding groups.

Summary

Experimental trials were conducted to look into feeding effects of Alaskan barley and Canadian barley on beef cattle at three farms and swine at one farm in Hokkaido, Japan, for a comparison between the two barleys. The results are summarized as follows:

1. Alaskan barley was slightly superior to Canadian barley as feed of beef cattle on body gain, weight of carcass, etc.
2. Similarly, Alaskan barley was more effective as feed of swine than Canadian barley on body gain.

The experimental trials confirmed that Alaskan barley is an excellent feed for beef cattle and swine under natural conditions of Hokkaido.

Acknowledgment

The author takes a delight in acknowledging kindnesses of President K. Satoh of Hokkaido Alaska Association and Former Vice-Governor S. Shibata of Hokkaido Government, who provided helpful advice in promoting mutual communication between Alaska and Hokkaido. He also wishes to thank Governor N. Dogakinai of Hokkaido Government for his encouragement of this research program.

He is particularly indebted to staffs concerned of Hokkaido Government, Hokuren, and the experimental farms. He is also grateful to Mr. T. Ooe of American Center Sapporo for his assistance in preparing this manuscript. Further, he is most appreciative of generosity of Mr. W. I. Palmer, Special Project Coordinator, Office of the Governor of the Alaska State Government and Drs. Thomas and Husby of the University of Alaska for their kind arrangements of this research.

ALASKA
COMMERCIAL
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DEVELOPMENT
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COOPERATIVE EXTENSION SERVICE, University of Alaska and USDA Cooperating

ECONOMIC
INTERRELATIONSHIPS
WITHIN ALASKA'S
DEVELOPING
AGRICULTURAL
INDUSTRY

J. Michael Harker
Assistant Professor &
Resource Economist
Cooperative Extension Service
University of Alaska

January 1982
P-148

ECONOMIC INTERRELATIONSHIPS WITHIN ALASKA'S
DEVELOPING AGRICULTURAL INDUSTRY

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Cooperative Extension Service
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January, 1982

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PREFACE

This bulletin is intended to demonstrate several of the economic interrelationships inherent among the various elements of a modern agricultural industry, an industry of a size significant to Alaska's general economy. The bulletin is not intended to contribute in any significant way to the base of factual information available on specific elements of the industry. Much of the data utilized was borrowed from other publications, from some unpublished sources and from judgements arrived at by various professional agriculturalists within the state. Use of the data is for the specific purpose of demonstrating the importance of systematic linkages among several elements of agricultural production and infrastructure. Included are such elements as a livestock slaughter/processing facility, a grain export facility, the Point MacKenzie project, the Delta projects and others. It is because of the economic importance of these linkages, both for the industry as a whole and for the individual elements within the industry, that they are herein specifically addressed. A better understanding of these interrelationships and their influence can improve the understanding of Alaska's agricultural development as a whole.

I. THE SETTING FOR MAJOR AGRICULTURAL DEVELOPMENT

The Soil Conservation Service, U.S. Department of Agriculture, estimates that within Alaska there are 15,516,000 acres of potential agricultural lands, of which 8,852,000 acres have soils particularly well suited to agricultural development (8). This land-resource base, compared to a total of 20,180 acres in crop production in 1978, demonstrates the potential for development of Alaska's latent agricultural capability (1). Conversely, agricultural development is often considered to refer simply to improving the situation faced by farmers of the 20,000 acres currently being farmed within the state.

The Alaska Agricultural Action Council, created by the State Legislature in 1979 and charged with the planning and management of Alaskan agricultural development projects, has proceeded in attempting to begin development of an ultimately self-supporting agricultural industry that, as a renewable resource based industry, can make a substantial and sustainable contribution to the State's economy.

The challenge of developing a major agricultural sector within the Alaskan economy requires progression well beyond our current agriculture. Viability is dependent on operating competitively with the agricultural system of the rest of the U.S.: a system whose efficiency relates considerably to the economies of scale that have been attained in all elements of the food and fiber production/distribution system. It is thus not feasible to approach development of Alaskan agriculture via gradual

expansion from the existing base. Rather, expansion must be premised on adding units of production compatible with the use of the most efficient technology available (i.e. large 4-wheel drive tractors and controlled environment livestock facilities).

Such an approach, however, carries a concurrent challenge to simultaneously develop the infrastructure complementary to such production units. That is to say, transportation systems, intermediate and final marketing systems for agricultural inputs and products, processing, credit services, technical assistance, research and extension, a balanced crop-livestock mix, and a favorable policy and regulatory setting are essential as integrated components of an agricultural development program based on creating a competitive and therefore viable agricultural industry.

It is necessary to look at production elements and infrastructure elements of agriculture simultaneously to understand the challenge faced in agricultural development. Development projects, such as the Delta Agricultural project or the Point MacKenzie project can create the opportunity for individuals to establish farm production units (grain farms, dairies, hog farms, etc.) of an appropriate size to utilize the most efficient technology available. Since such farms must ultimately compete with producers "outside", be it on world markets or in our own local markets, they will not be viable simply because they are appropriately sized and utilizing the best technology available. They must also be served by efficient infrastructure which is also competitive with that "outside." To be so, however, the

infrastructure must handle a large enough volume to enjoy economies of size similar to those elsewhere in U.S. agriculture.

It is lack of volume through initial development periods that has prompted consideration of state financial assistance in the development process. The question arises, "Can agricultural development be subsidized yet not become an industry dependent on continued subsidization?" Clearly, a farm fully developed with all land in production should be expected to operate at a profit. However, in the initial years the front-end costs of clearing land, purchasing equipment and erecting buildings place considerable financial burden and risk on new farmers. State programs aimed at offsetting these pressures can ease the process of farm development and can speed the achievement of fully developed farms.

The same logic applies to the development of infrastructure. Subsidization should play only the limited role of enhancing the opportunity for initial development, thus permitting survival until sufficient business volume is available to accommodate plant capacities. A grain export terminal provides a good example. For such a terminal to be cost competitive with systems elsewhere in North America it must be designed to have a put-through capacity of the magnitude of hundreds of thousands of bushels per year. In consequence, to operate efficiently the plant would have to handle a volume approaching this magnitude each year. The cropland required to meet this production level plus production for in-state use will require several years to be surveyed, released by the State, cleared and prepared for crops. While an export

facility will encourage grain production by insuring a market for all production, several years will be required for production to increase to levels sufficient for the facility to cover all costs. Again, it is lack of volume through the development period that raises the need for state provided development incentive.

Relative to the wisdom of providing incentives for the development of farmsteads, the Delta Agricultural Project provides a demonstrated example. As suggested by the report by Faris and Hildreth (3), such a project would demonstrate whether or not relatively large parcels of land could be brought under production in a fairly rapid fashion. It is being done. Land is being cleared within a reasonable time schedule and at a reasonable cost. Efficient technology is being adapted (i.e. equipment and agronomic techniques), and crops are being produced, dried and properly stored. On-farm production is benefiting from the economies of scale available elsewhere in U.S. agriculture and we can see that clearing and production itself can be economically undertaken (5).

Yet it is not a fully viable economic endeavor. To be so, it must be accompanied by input and product markets designed to handle a volume of activity sufficient to enjoy technologically available economies of scale. Such economies for farm production were systematically incorporated into the planning of the Delta Project, and so must they be incorporated into the planning of infrastructure development. A more complete discussion of the possible merits of short-term subsidy for the purpose of stimulating

development has been presented by the Alaska Economic Information and Reporting System (2:15-22).

Agricultural potential clearly exists in Alaska. The industry offers a development opportunity based on renewable resource use. Current oil revenues can provide the capital necessary to reduce diseconomies inherent in the development process. Improved understanding of the economic interrelationships within an agricultural industry is necessary as decisions are made to commit public funds and land resources to agricultural development.

II. SCOPE OF ANALYSIS

Development of Alaskan agriculture implies the potential for production of several different commodities. Grains, forage, and vegetable production as well as other crops, such as grass seed and oil seed crops, have known agronomic potential in Alaska and could conceivably become part of the agricultural industry. Other farm production possibilities include livestock: swine, beef, dairy and assorted small livestock. In Figure 1, these on-farm production enterprises are schematically related to the basic farm-input enterprises and farm product processing and marketing enterprises. Seed, fertilizer and chemical and equipment suppliers will be required for all forms of crop production. In turn, swine, beef, dairy and other livestock production requires a feed grain base and the intermediate service of feed milling. Dairy production also requires a forage production base and beef production will require both rangeland and forage production.¹ Beef finishing is assumed to be carried out in a central feed lot.

In addition to in-state use of grain for livestock feed, full-scale grain production also requires export marketing and consequently, an export facility. Also required for regular marketing of grain, be it for export or in-state movements are country elevators to consolidate, store and handle grain.

Beef, swine and dairy production all require slaughter/processing facilities and distribution systems for meat products.

¹The term "forage" is used to identify hay, silage and improved pasture.

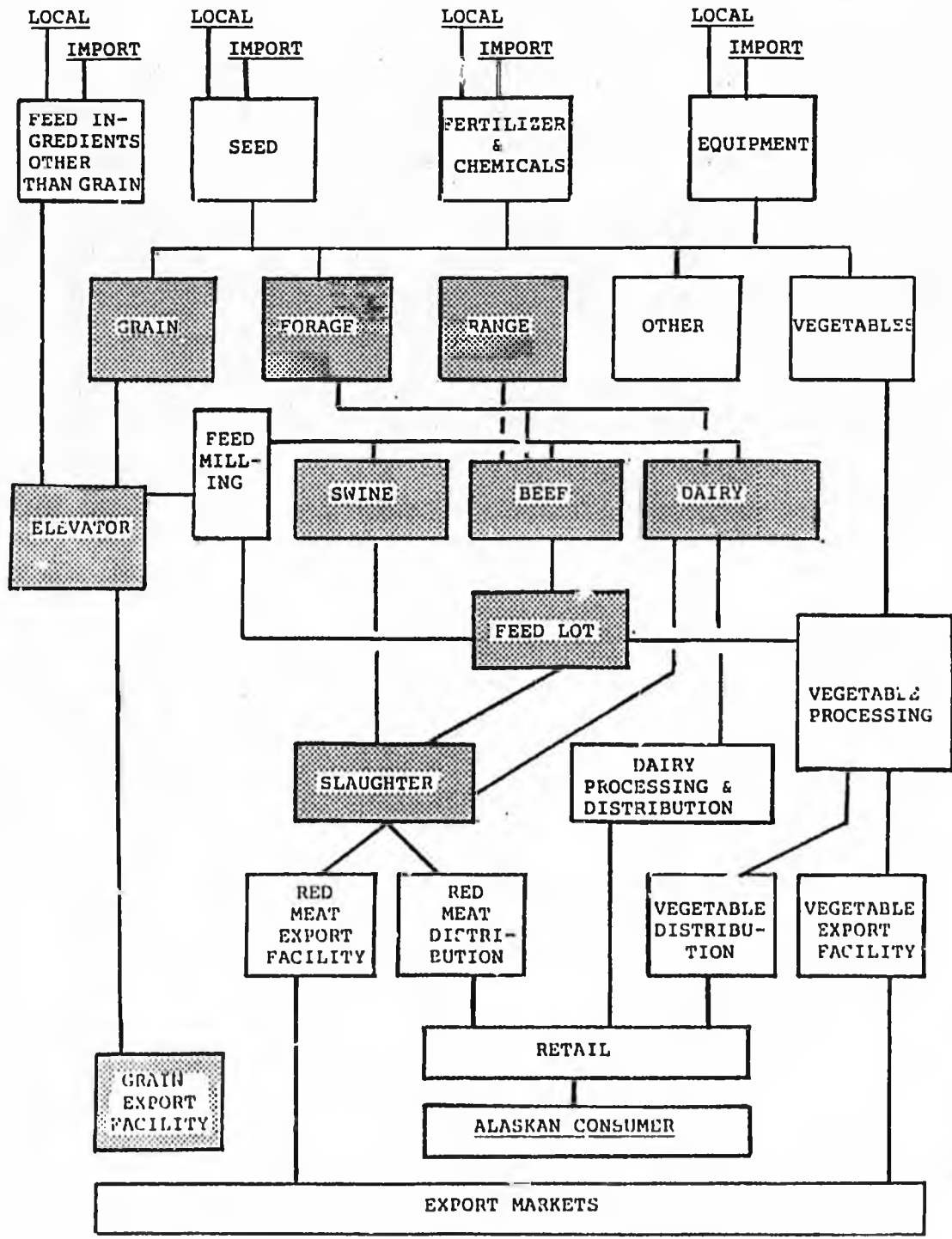


Figure 1 Schematic diagram of linkages between sectors of an agricultural industry.

Dairy production also requires specific processing and distribution of dairy products. Vegetable production requires a unique processing and distribution system.

While Figure 1 does not depict all possible relationships among enterprises, it does depict the major associations and product movement possibilities. The relationships among those enterprises denoted by shaded backgrounds in Figure 1 are considered in this bulletin. This limitation results from three factors: 1) It is in these areas that the greatest public interest has been shown, 2) State involvement has focused in these areas, and 3) It is assumed that development of these elements of the agricultural industry can provide the agricultural base for other elements of the industry to evolve unaided in response to economic opportunity either during or after this decade.

The final assumptions made for the purpose of limiting the scope of this report deal with the agricultural base existing prior to State efforts to encourage major expansion of agriculture and with small scale and/or non-project agriculture. Neither pre-existing nor non-project agriculture have been explicitly considered in this report. While both can be major contributors to successful growth of the industry, it was assumed they would not be a major determinant of the success or failure of an agricultural industry of the scale being addressed in this report. It should be emphasized that this assumption is made solely to facilitate analysis. It is not intended to reflect on the actual role of non-project agriculture in general agricultural development.

III. ANALYTIC APPROACH

While analysis of the feasibility of several specific agricultural projects has been undertaken (4,6,7,9), there has been little work to evaluate interrelationships existing between various projects. This report specifically addresses these interrelationships. The analysis is quantitative but results should be viewed only in a qualitative sense. Effective quantitative results would require a data base far superior to that currently available and collection of such data will be costly. However, via use of data currently available, this analysis has been conducted in order to demonstrate the magnitude and direction of influence of interrelationships within an agricultural industry.

Fixed and variable costs were roughly estimated for the various elements of the industry to be analyzed. Next, grain and livestock production schedules were projected. General industry requirements necessary to accommodate these production levels were then estimated. As an example, these estimates included range requirements for beef production and facilities requirements for swine production.

Ownership costs, operating costs, tariff levels and operating deficits were projected for an export facility, country elevators, a slaughter facility and a feed lot based on the assumed production schedule and the estimates of industry requirements and cost structures. Investment costs and schedules were also developed.

Importantly, infrastructure tariff rates used in this analysis were set as constant over time and determined to be in an amount equal to that required to break-even upon reaching the full level of projected production. The graph in Figure 2 can help to explain this approach. Curve A depicts the total cost for handling increasing volumes of product through a facility: grain through an export terminal or livestock through a slaughter facility for example. Curve B depicts total earnings. With a fixed tariff charge and steadily increasing product volumes moving through the facility, total earnings would also increase steadily as shown. Envision the horizontal axis to represent a series of production periods (days, months or years) with product put-through increasing in each period. With the vertical axis representing dollars, the distance between the two curves represents the difference in costs and revenues for each period. Below the point of intersection of the curves, costs exceed earnings. Beyond that point, revenues exceed costs and therefore represent profitable operation. The shaded area between the curves and below the point of intersection represents what could be termed "development cost." This is a "cost" that would not exist if sufficient crop and livestock production could be instantly brought on-line to fully utilize major infrastructure facilities.

This "development cost" is estimated for each major element of infrastructure discussed in this bulletin. These estimates are intended to demonstrate relative magnitude of this "development cost" among different elements of agricultural infrastructure. A substantially better data base would be necessary for accurate estimation.

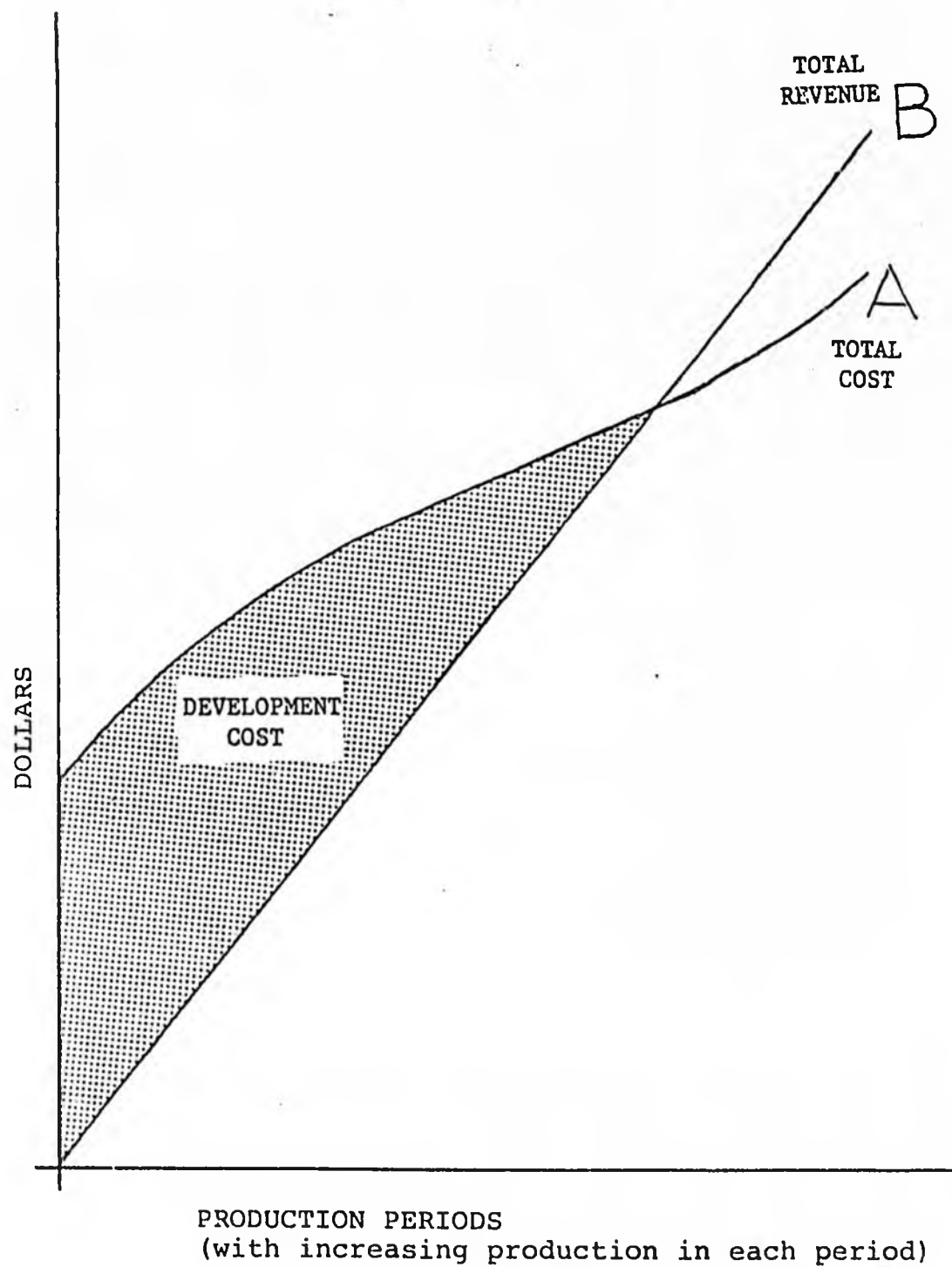


Figure 2. A graphic example of "development cost."

IV. ANALYSIS OF INDUSTRY COMPONENTS

Central to this analysis are four key facilities: a grain export terminal, a system of country elevators, a livestock slaughter/processing facility and a beef feed lot. Looking back at Figure 1, it can be seen that an export facility and country elevators (plus implied transportation) are the two infrastructure requirements necessary to link Alaska grain production to world export markets. Comparably, a feed lot and a slaughter/processing facility are the link between farm livestock production and a distribution system which can provide red meat products to the Alaskan consumer.

The common element to these two very different market channels can be traced back specifically to the grain production base. Movement of grain can either be into direct export, or when fed to livestock, into in-state retail food markets.

While grain is the specific link between the two market channels, all crop production competes for the same land base. Thus, increased red meat production will negatively affect grain export volume in two ways. First grain use would be increased by livestock production, thus directly reducing volumes available for export. Secondly forage and/or range production would need to increase to accommodate increased red meat production and this in turn would indirectly cut export grain volume since use of some land would shift from grain production to allow increased forage or range production.

Export is typically a residual market and has consistently

been viewed as such for Alaska. In other words, local demand for grain will be met and the residual supply will move into the export market. In this report, the livestock market channel is first considered, a projection of total grain production is made and finally the grain marketing channel is addressed.

Livestock Production and Processing. The Nenana Livestock Report (4) provides the basis for assessment of the livestock marketing channel. In that report, total construction costs for a slaughter/processing plant with capacity to handle 70,000 head of swine and 26,000 head of beef annually was estimated to be \$3,517,900. Completion date on the facility was suggested to be mid 1984 with initial work beginning in 1981. The schedules of development of livestock production units shown in Table 1 were assumed to be as rapid a development scenario as could be expected to result if the slaughter facility were built.

TABLE 1. Development of Livestock Production Units

Year	81	82	83	84	85
150 sow/unit swine operations			10	11	10
250 cow/unit beef operations	.	20	20		
150 cow/unit dairies (Pt. MacKenzie)	5	10	5		

If all female calves were used as replacements or to increase breeding herds until an annual beef production rate of 23,000 head per year was obtained, the production schedules listed for

all species at the top of Table 2 would be attained by this development scenario.

Ownership costs for the slaughter/processing plant are also presented in Table 2.² Since the plant would be in operation for the last half of 1984, ownership costs accrued in that year are one half of that in later years.

From the Nenana Livestock Report operating cost per head was determined to be \$37.98 for beef and \$13.66 for pork with the plant operating at capacity (4). Because operation below capacity can be expected to result in operating inefficiencies, per unit operating costs were adjusted upward in early years of plant operation.³ Per unit operating costs times the number of head processed provides the total annual operating costs (O.C.) for each species as listed in Table 2.

Total cost of slaughter and processing per head for each species is listed in this table. A fixed tariff, equal to per head cost when the plant is operating at capacity, was set for all years. Deficit per head for each species, calculated by subtracting the fixed tariff from per head cost in each year, is listed. This, multiplied by number of head, yields total deficit for each year.

$$^2 \text{ Annual Interest Expense} = \frac{\text{Investment Cost}}{2} (.06)$$

$$\text{Annual Depreciation} = (\text{Investment Cost}) (.03)$$

³ Per Unit Operating Costs:

$$\text{Beef: Unit Cost} = [2 - \frac{1}{26,000} (\text{no. head})] 37.98$$

$$\text{Pork: Unit Cost} = [2 - \frac{1}{70,000} (\text{no. head})] 13.66$$

TABLE 2. Operating Budget: Slaughter Facility

Year	84	85	86	87	88	89	90
Head of Pork	11,788	47,772	69,812	70,000	70,000	70,000	70,000
Head of Dairy Beef	1,025	1,895	2,300	2,300	2,300	2,300	2,300
Head of Beef	2,850	5,700	6,755	8,864	15,520	22,413	23,700
OWNERSHIP COSTS:							
Interest on Investment	52,769	105,537	105,537	105,537	105,537	105,537	105,537
Depreciation	87,948	175,895	175,895	175,895	175,895	175,895	175,895
OPERATING COSTS:							
Manager's Salary	32,501	65,000	65,000	65,000	65,000	65,000	65,000
Other O.C. (Pork)	294,932	859,783	956,193	956,200	956,200	956,200	956,200
Other O.C. (Beef)	272,411	491,577	568,045	665,955	889,736	985,060	987,480
TOTAL COST	740,560	1,697,792	1,870,670	1,968,587	2,192,368	2,287,692	2,290,112
Total Cost/hd. Pork	32.37	21.62	16.18	16.13	16.13	16.13	16.13
Fixed Tariff	16.13	16.13	16.13	16.13	16.13	16.13	16.13
Deficit/hd. Pork	(16.24)	(5.49)	(.05)	-0-	-0-	-0-	-0-
Total Cost/hd. Beef	92.65	87.76	81.86	75.17	59.65	46.87	44.64
Fixed Tariff	44.64	44.64	44.64	44.64	44.64	44.64	44.64
Deficit/hd. Beef	(48.01)	(43.12)	(37.22)	(30.53)	(15.01)	(2.23)	-0-
Total Deficit	(377,476)	(588,902)	(340,518)	(340,837)	(267,478)	(55,110)	-0-
Cumulative Deficit	(377,476)	(966,378)	(1,306,896)	(1,647,733)	(1,915,211)	(1,970,321)	

The final line in the table is the cumulative deficit from operation through the development years. This amount can be referred to as the "development costs."

Head of beef to be feed lot finished annually was derived from the projected beef production schedule and is presented at the top of Table 3. The difference between head of beef produced, Table 2, and the head of beef finished, Table 3, is due to cull cows which would be used as utility beef and would not be feed lot finished.

The Nenana Livestock Report estimated construction costs of a feed lot at \$500,000. Using that figure as base, this analysis assumes that the feed lot could be built in two phases, the first requiring a \$300,000 investment and the addition costing \$200,000. Using the same methods for calculating interest and depreciation expense as were used earlier for the slaughter facility, ownership costs are listed in Table 3. A full-time manager, salaried at \$40,000 per year, was assumed necessary in the first year of operation and thereafter. Other operating expenses, excluding feed costs, were estimated to be \$16.67 per head.

Again a fixed tariff was set for all years as equal to the per unit cost of operation when at full production. The per head deficit and the cumulative deficit are listed at the bottom of the table. The cumulative deficit or "development cost," is \$208,901.

Barley Production. Estimation of total barley production is

TABLE 3. Operating Budget: Feed Lot

Year	84	85	86	87	88	89	90
Head of Beef Finished	2,350	4,700	5,570	7,309	13,526	20,028	21,182
OWNERSHIP COSTS:							
Interest	9,000	9,000	9,000	9,000	15,000	15,000	15,000
Depreciation	15,000	15,000	15,000	15,000	25,000	25,000	25,000
Subtotal	24,000	24,000	24,000	24,000	40,000	40,000	40,000
OPERATING COSTS:							
Management	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Other	39,175	78,349	92,852	121,841	225,478	333,867	353,104
Subtotal	79,175	118,349	132,852	161,841	265,478	373,867	395,104
TOTAL COST¹	103,175	142,349	156,852	185,841	305,478	413,867	435,104
Total Cost/hd. ¹	43.90	30.29	28.16	25.43	22.58	20.66	20.54
Fixed Tariff ¹	20.54	20.54	20.54	20.54	20.54	20.54	20.54
Deficit/hd.	(23.36)	(9.75)	(7.62)	(4.89)	(2.04)	(.12)	-0-
Total Deficit	(54,896)	(45,825)	(42,443)	(35,741)	(27,593)	(2,403)	
Cumulative Deficit	(54,896)	(100,721)	(143,164)	(178,905)	(206,498)	(208,901)	

¹Does not include feed.

based on the projection of Delta and Nenana area agricultural lands being phased into production over a seven year period as shown in Table 4. Of the total acreages available for each of the four projects, it is assumed that 60 per cent will be in barley production each year. The acreages listed in the first four lines of this table are the projected yearly barley acreages. Assuming a per acre yield equal to the U.S. national average, 1.15 tons per acre total tonnage of barley production rounded to the nearest thousand is presented for each year.

Feed grain use was projected from the livestock production schedule and based on the following rates of livestock feed consumption: 724 pounds of barley per market hog produced, 1.45 tons of barley per head of finished beef produced and 2.90 tons of barley annually per lactating dairy cow. Total projected annual use of barley by these three livestock species is listed as "in-state use."

The difference between the projections of total production and total livestock feed use is the quantity available for export. This is presented on the final line of Table 4.

Grain Handling Facilities. Based on the quantities of barley available for export a projected operating budget for an export facility is presented in Table 5. With construction costs for an export facility estimated at \$5,700,000, average depreciation and interest expense were calculated in the same manner as for the slaughter facility. Estimates of insurance, maintenance and all operating costs as well as the construction cost were taken

TABLE 4. Projected barley acreages, production and in-state and export use.

	1981	1982	1983	1984	1985	1986	1987
Delta I	16,000	30,000	36,000	36,000	36,000	36,000	36,000
Delta II	-0-	-0-	5,000	15,000	27,000	27,000	27,000
Nenana I	-0-	-0-	-0-	5,000	27,000	27,000	27,000
Nenana II	-0-	-0-	-0-	-0-	15,000	50,000	77,000
Total Acres	16,000	30,000	41,000	56,000	105,000	140,000	167,000
Total Tons	18,000	35,000	47,000	64,000	121,000	161,000	192,000
In-State Use	7,000	11,238	17,731	25,082	35,901	52,349	63,474
Export	11,000	23,762	29,269	38,918	85,099	108,651	128,526

TABLE 5. Operating Budget: Export Facility

Year	81	82	83	84	85	86	87
Tonnage	11,000	23,762	29,269	38,918	85,099	108,651	128,526
OWNERSHIP COSTS:							
Interest on Investment	171,000	171,000	171,000	171,000	171,000	171,000	171,000
Depreciation	188,100	188,100	188,100	188,100	188,100	188,100	188,100
Property Insurance	113,000	113,000	113,000	113,000	113,000	113,000	113,000
General Maintenance	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Subtotal	492,100	492,100	492,100	492,100	492,100	492,100	492,100
OPERATING COSTS:							
Inventory Insurance	2,000	4,000	6,000	8,000	18,000	24,000	30,000
Management & Labor	52,500	75,450	85,041	102,875	198,679	253,604	300,067
Utilities	2,000	4,752	5,854	7,784	17,019	21,730	25,705
Miscellaneous	1,000	2,000	3,000	4,000	9,000	12,000	15,000
Subtotal	57,500	86,202	99,895	122,659	242,698	311,394	370,772
TOTAL COST	549,600	578,302	591,995	614,759	734,798	803,494	862,872
Total Cost Per Ton	49.96	24.32	20.23	15.80	8.63	7.40	6.71
Fixed Tariff (assumed)	6.71	6.71	6.71	6.71	6.71	6.71	6.71
Deficit Per Ton	(43.25)	(17.63)	(13.52)	(9.09)	(1.92)	(.69)	(0.00)
Total Deficit	(475,750)	(418,424)	(395,717)	(353,765)	(163,390)	(74,969)	
Cumulative Deficit	(475,750)	(894,174)	(1,289,891)	(1,643,656)	(1,807,046)	(1,882,015)	

from initial projections made by the Alaska Agricultural Action Council in January 1981. With a put-through volume of 128,526 tons in 1987 the annual total cost is \$862,872 or \$6.71 per ton. Fixing the tariff at \$6.71 per ton for all years of operation, the operating deficit per ton was calculated. The final two lines in the table are total deficit per year and cumulative deficit. Under this scenario the total cumulative deficit or the amount being termed "development costs" is \$1,882,015.

Annual production of barley on 62,000 acres at Delta and 104,000 acres at Nenana is assumed to be served by a system of 5 country elevators each with annual put-through, storage and handling capacity of 40,000 tons and costing \$1,650,000 each to construct. The first of these five facilities, the existing Delta facility, is assumed to be at operational capacity and invested to the \$1.65 million level by 1982. Thereafter, complete facilities are projected to be constructed as required by volumes of grain produced. This implies an additional facility at Delta in 1983 and one facility per year in 1984, 1985 and 1986 at Nenana. Average interest expense and depreciation expense are listed under ownership costs in Table 6. Work by Thomas shows per ton operating costs of such a facility to decline from \$51.16 per ton at the 3800 ton put-through level to \$15.62 per ton at a put-through level of 29,000 tons annually (9). Operating cost projections in the table are the sum of the annual operating cost calculated for each of the five facilities. Individual facility operating costs were calculated based on annual put-through times a per unit