ALASKA LEGISLATURE COMMITTEE FILES 1991-1992 8672
7619 SENATE RESOURCES

appropriate district recorder within 30 days by the submitting agency.

(f) The minimum monumentation requirements for

(1) right-of-way acquisition subdivisions are a 5/8" x 24" reinforcement bar with appropriate identification cap set on the margin of the right-of-way at all points marking the beginning and end of each curve and on tangents so that the distance between monumented points does not exceed 1,320 feet; an alternate method may be utilized that consists of placing primary type monuments at centerline points marking the beginning and end of each curve and on tangents so that no distance exceeds 1,320 feet; all recovered monumented property corners of records, the lines of which are intersected by a right-of-way acquisition, shall be monumented as part of the right-of-way plat, either on the right-of-way line or at the original monument position;

(2) an airport parcel and land for a similar public purpose subdivision not defined by centerline shall be as provided in AS 40.15.320.

(g) If construction of improvements is scheduled to follow the right-of-way acquisition, the placement of the centerline monuments may be delayed until the improvements have been completed, in which case a statement designating the schedule for placing the monuments must be included on the plat.

(h) The state, its agencies, instrumentalities, or political subdivisions may acquire or obtain conveyances, including dedication of lots or tracts of a right-of-way acquisition plat, before submittal of a right-of-way acquisition plat for approval by the commissioner. A right-of-way acquisition conveyance may be recorded before approval and recording of the right-of-way acquisition plat.

Sec. 40.15.400. DEFINITIONS. In AS 40.15.300 - 40.15.400,

(1) "commissioner" means the commissioner of natural resources;

(2) "monument" means a fixed physical object marking a point on the surface of the earth used to commence or control a survey or to establish a lot corner;

(3) "plat" means a map or delineated representation of a tract or parcel of land showing the subdivision of land into lots, blocks, streets, or other divisions;

(4) "street" has the meaning given in AS 40.15.290;

(5) "subdivision" has the meaning given in AS 40.15.290(2);

(6) "surveyor" means an individual licensed to practice land surveying in the state

under AS 08.48.

* **Sec. 8.** AS 40.15.075 is repealed.

* **Sec. 9.** AS 40.15.330 and 40.15.370, added in sec. 7 of this Act, take effect immediately under AS 01.10.070(c).

* **Sec. 10.** Except as provided in sec. 9 of this Act, this Act takes effect September 1, 1991.

DIVISION OF LEGAL SERVICES

LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA

P.O. Box Y, Juneau, Alaska 99811
(907) 465-3867 or 465-2450
FAX (907) 465-2029

Deliveries to: 240 Main Street
Court Plaza, Room 500
Mail Stop 3101

MEMORANDUM February 7, 1991

SUBJECT: Platting Authority for the Unorganized Borough (CSSB 81( ), (W.O. 17LS-0343\J))

TO: Senator Bettye Fahrenkamp

FROM: Jerry Luckhaupt JER
Legislative Counsel

You have requested a memorandum outlining possible problems with the draft committee substitute we have provided at your request. This memorandum is not intended to exhaustively examine the bill but merely to document problems we have previously discussed.

1. Page 4, lines 18 - 21, of the draft CS, provide for DEC approval of plats prior to the submission of the plat to the commissioner of natural resources. This DEC approval is to ensure that plans for sewage and industrial waste disposal are adequate, as provided in AS 46.03.090. The restatement of this requirement from AS 46.03 in this bill is not necessary; the requirement is fully stated in AS 46.03, its restatement in AS 40.15 is redundant and contrary to normal drafting procedure. Further, any failure to restate the requirement in AS 40.15 should not be fatal to or in any way impliedly repeal the approval requirement of AS 46.03.090. See State v. Anderson, 749 P.2d 1342, 1347 (Alaska 1988).

2. Page 5, lines 7 - 8, of the draft CS, provides an exception from the plat approval requirements of the bill for plats which are prepared "for the issuance of licenses or permits." Conceivably, this could exclude a very large number of subdivisions from the platting requirements. Anytime a permit was necessary in the subdivision process, as for example in part 1 of this memorandum, this provision could except those subdivisions and in the process emasculate the intent of the legislation. One remedy may be to insert "solely" on line 8, following "or".

If you have further questions, please contact me at your convenience.

GPL:lmb
91-033.lmb

DIVISION OF LEGAL SERVICES

LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA

P.O. Box Y, Juneau, Alaska 99811
(907) 465-3867 or 465-2450
FAX (907) 465-2029

Deliveries to: 240 Main Street
Court Plaza, Room 500
Mail Stop 3101

MEMORANDUM January 23, 1991

SUBJECT: Platting Authority for the Unorganized Borough (W.O.17LS-0343)

TO: Senator Bettye Fahrenkamp
Attn: Dan Austin

FROM: Gerald P. Luckhaupt
Legislative Counsel

Enclosed please find a draft of your bill request on the above-referenced topic and work order. This draft, version D, is in response to changes provided to Dan Austin by Pat Kalen of the Surveyor's Advisory Board. These changes were provided to me January 15th, and at Dan's request I have had several discussions with Mr. Kalen about them. Be advised that version G, which has been provided to you in final form at Dan's request, does not incorporate these changes. I have several comments about the changes the surveyors requested and which have been embodied in the bill.

1. The changes proposed by the surveyors include two different definitions for the term subdivision. The existing definition of subdivision, contained in AS 40.15.-290(2), is retained in Section 6 of the bill, while an additional definition of subdivision is added in Section 7 of the bill. We have confined the reach of these definitions to specific groups of statutes but the potential for confusion still exists. You may want to give some consideration to retaining the existing definition of subdivision throughout the bill, including the new provisions, or to applying the new definition of subdivision to the existing provisions.

2. Proposed sec. 40.15.310(c), page 4, lines 18 - 21, provides that a plat for a subdivision in the unorganized borough be approved by the Department of Environmental Conservation, pursuant to AS 46.03.090, prior to the submittal of the plat to the commissioner of natural resources for approval. There is no DEC approval requirement imposed by AS 40.15 for plats in the organized borough. Further, AS 46.03.090 only provides that DEC may require the submission of plans for sewage and industrial waste disposal or treatment. No affirmative requirement for the submission or approval of these plans prior to the creation of the subdivision by the plat is stated. Finally, even if AS 46.03.090 does impose a requirement that

DEC's preapproval be obtained for any proposed plat for a subdivision in the unorganized borough, that requirement should not necessarily be restated in AS 40.15. Any requirement of AS 46.03.090 should be able to stand on its own and should not ~~necessarily be restated in~~ AS 40.15.

** 3. Proposed sec. 40.15.310(d), page 4, lines 15 - 17, provides that any proposed plat for a subdivision in the unorganized borough fronting on a state maintained right-of-way must be preapproved by the Department of Transportation and Public Facilities prior to the submission of the plat to the commissioner for approval. No such requirement is imposed by the bill for subdivision plats in the organized boroughs. No statutory authority was provided by the surveyors for this requirement. Further, no procedures apparently exist regarding DOTPF's authority to withhold approval or on what grounds approval may be granted. This provision appears to be a grant of complete and unfettered discretion to DOTPF in regard to all subdivision plats in the unorganized borough. (d) REMOVED.

7-8

*** 4. Proposed sec. 40.15.360(1), page 5, lines ~~1 - 4~~, provides that subdivisions prepared "for the issuance of licenses and permits" are excluded from the requirements of Section 7 of the bill. Conceivably, this could exclude a very large number of subdivisions from the platting requirements. Anytime a permit was necessary in the subdivision process, as for example in parts 2 and 3 of this memorandum, this provision could except those subdivisions and in the process emasculate the intent of the legislation. One remedy may be to add "solely" before "for the issuance of licenses or permits." Be advised that this concern exists in version G which has already been supplied to you in final form.

If you have any questions, please contact me at your convenience.

GPL:pl
91-019.plm

Enclosure

7-LS0343\J
Luckhaupt
2/7/91

CS FOR SENATE BILL NO. 81 ( )

IN THE LEGISLATURE OF THE STATE OF ALASKA

SEVENTEENTH LEGISLATURE - FIRST SESSION

BY

Offered:
Referred:

Sponsor(s): SENATOR FAHRENKAMP

A BILL

FOR AN ACT ENTITLED

"An Act establishing the Department of Natural Resources as the platting authority in certain areas of the state; relating to subdivisions and dedications; and providing for an effective date."

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

* Section 1. AS 29.03.030 is amended to read:

Sec. 29.03.030. PLATTING AUTHORITY. **The** [SUBJECT TO AS 40.15.075, THE] Department of Natural Resources is the platting authority **for the state except within a municipality that has the power of land use regulation and that has adopted ordinances implementing AS 29.40** [IN THE UNORGANIZED BOROUGH IN THE AREA OUTSIDE ALL CITIES].

* Sec. 2. AS 40.15.010 is amended to read:

Sec. 40.15.010. APPROVAL, FILING, AND RECORDING OF SUBDIVISIONS. Before the lots or tracts of any subdivision or dedication may be sold or offered for sale, the subdivision or dedication shall be **approved by** [SUBMITTED FOR APPROVAL TO] the authority having

New Text Underlined [DELETED TEXT BRACKETED]

jurisdiction, as prescribed in this chapter **and** [. THE REGULAR APPROVAL OF THE AUTHORITY SHALL BE SHOWN ON IT OR ATTACHED TO IT AND THE SUBDIVISION OR DEDICATION] shall be filed and recorded in the office of the recorder. The recorder may not accept a subdivision or dedication for filing and recording unless it shows this approval. [IF NO PLATTING AUTHORITY EXISTS AS PROVIDED IN AS 40.15.070 AND 40.15.075, LAND MAY BE SOLD WITHOUT APPROVAL.]

* **Sec. 3.** AS 40.15.070 is amended to read:

Sec. 40.15.070. PLATTING AUTHORITY. If land proposed to be subdivided or dedicated is situated within a **municipality that has the power of land use regulation and that has adopted ordinances implementing AS 29.40** [FIRST OR SECOND CLASS BOROUGH], the proposed subdivision or dedication shall be submitted to the **municipal** [BOROUGH] planning commission for approval. If **a municipality that has the power of land use regulation and that has adopted ordinances implementing AS 29.40** [THE LAND IS SITUATED WITHIN A CITY IN THE UNORGANIZED BOROUGH OR THE THIRD CLASS BOROUGH, THE PROPOSED SUBDIVISION OR DEDICATION SHALL BE SUBMITTED TO THE CITY PLANNING COMMISSION FOR APPROVAL. THE BOROUGH PLANNING COMMISSION IS THE PLATTING AUTHORITY FOR THE FIRST OR SECOND CLASS BOROUGH, THE CITY PLANNING COMMISSION IS THE PLATTING AUTHORITY FOR THE CITY, AND THE DEPARTMENT OF NATURAL RESOURCES IS THE PLATTING AUTHORITY IN THE REMAINING AREAS OF THE STATE AND THIRD CLASS BOROUGH FOR THE CHANGE OR VACATION OF EXISTING PLATS OR A PORTION OF SUCH PLATS, AS PROVIDED IN AS 40.15.075. IF THE BOROUGH OR THE CITY] does not have a planning commission, the [BOROUGH ASSEMBLY OR THE CITY] governing body [, RESPECTIVELY,] is the platting authority and the proposed subdivision or dedication shall be submitted to it. A subdivision may not be filed and recorded until it is approved by the platting authority.

* **Sec. 4.** AS 40.15.070 is amended by adding a new subsection to read:

(b) The Department of Natural Resources is the platting authority in the areas of the state not described in (a) of this section.

* **Sec. 5.** AS 40.15.200 is amended to read:

Sec. 40.15.200. APPLICATION TO STATE AND POLITICAL SUBDIVISIONS. All

subdivisions of land made by the state, its agencies, instrumentalities and political subdivisions are subject to the provisions of **AS 40.15.010 - 40.15.290** [THIS CHAPTER] and AS 29.40.070 - 29.40.160, or home rule ordinances or regulations governing subdivisions, and shall comply with ordinances and other local regulations adopted under **AS 40.15.010 - 40.15.290** [THIS CHAPTER] and AS 29.40.070 - 29.40.160 or former AS 29.33.150 - 29.33.240, or under home rule authority, in the same manner and to the same extent as subdivisions made by other landowners.

*** Sec. 6.** AS 40.15.290 is amended to read:

Sec. 40.15.290. DEFINITIONS. In **AS 40.15.010 - 40.15.290** [THIS CHAPTER]

(1) "street" **means an access way in common use including all of the land lying within a dedicated right-of-way as delineated on a plat showing streets, whether improved or unimproved** [INCLUDES STREETS, AVENUES, BOULEVARDS, ROADS, LANES, ALLEYS, AND OTHER WAYS];

* (2) "subdivision"

(A) means the division of a tract or parcel of land into two or more lots **or by creation of public access** [, SITES, OR OTHER DIVISIONS FOR THE PURPOSE, WHETHER IMMEDIATE OR FUTURE, OF SALE OR BUILDING DEVELOPMENT, AND INCLUDES RESUBDIVISION AND, WHEN APPROPRIATE TO THE CONTEXT, RELATES TO THE PROCESS OF SUBDIVIDING OR TO THE LAND OR AREAS SUBDIVIDED];

(B) does not include cadastral plats, cadastral control plats, open-to-entry plats, or remote parcel plats created by or on behalf of the state regardless of whether these plats include easements or other public dedications.

*** Sec. 7.** AS 40.15 is amended by adding new sections to read:

ARTICLE 4. PLATTING IN AREAS OUTSIDE CERTAIN MUNICIPALITIES.

Sec. 40.15.300. EXAMINATION OF PLATS BEFORE RECORDING. (a) The commissioner shall exercise the platting authority for the state except within a municipality that has the power of land use regulation and that has adopted ordinances implementing AS 29.40.

(b) The commissioner shall review and approve each plat under AS 40.15.300 - 40.15.400 before the plat is recorded under AS 40.17. The approval by the commissioner shall be affixed to the plat in the form of the following statement:

PLAT APPROVAL

This plat is approved by the commissioner of natural resources, or the commissioner's designee, in accordance with AS 40.15.

_____ _____

Commissioner Date

(c) The recorder may not accept for filing and recording a plat for which the commissioner's approval is required under AS 40.15.300 without the approval of the commissioner endorsed on the plat.

(d) Within 45 days after a plat is filed, the commissioner shall approve the plat or return it to the applicant for modification or correction. Unless the applicant for plat approval consents to an extension of time, the plat is approved and a certificate of approval shall be issued by the commissioner if the commissioner fails to act within that period. The commissioner shall state in writing reasons for disapproval of a plat.

Sec. 40.15.310. REQUIREMENTS FOR PLAT APPROVAL. (a) Each plat must show on its face a certificate of ownership, with the names and addresses of each owner listed. Each owner of record shall sign the certificate and the signatures shall be acknowledged.

(b) The surveyor preparing the plat shall sign and affix the seal of the surveyor.

* * (c) A plat for a subdivision requiring the approval of the Department of Environmental Conservation as provided in AS 46.03.090 and in regulations adopted under AS 46.03.090 may not be submitted to the commissioner until it is approved by the Department of Environmental Conservation, and that approval shall be attached or affixed to the plat.

Sec. 40.15.320. MONUMENTS. (a) In a subdivision with five or fewer lots, the existence of each monument at a controlling exterior corner of the subdivision shall be established by the surveyor.

(b) In a subdivision of more than five lots, each lot corner shall be monumented.

(c) If a monument of record does not lie on the parcel or tract boundary, the plat shall reflect a boundary survey and tie to a monument of record.

Sec. 40.15.330. PLAT STANDARDS. The commissioner shall establish plat standards by regulation.

Sec. 40.15.340. ENGINEERING STANDARDS. The commissioner may not establish engineering standards for subdivisions.

Sec. 40.15.350. CERTIFIED COPY OF PLAT AS EVIDENCE. A copy of a plat certified by the recorder of the recording district in which it is filed or recorded as a true and complete copy of the original filed or recorded in the recording office for the district is admissible in evidence in all courts in the state with the same effect as the original.

Sec. 40.15.360. APPLICABILITY. The provisions of AS 40.15.300 - 40.15.400 do not apply to subdivisions prepared

*** (1) for the purpose of transferring a leasehold interest, for the extraction of natural resources, or for the issuance of licenses or permits; or

(2) for surveyed sections where the aliquot parts described are 40 acres or larger.

Sec. 40.15.370. REGULATIONS. The commissioner may adopt regulations to implement, clarify, or make specific the provisions of AS 40.15.300 - 40.15.400.

Sec. 40.15.380. APPLICABILITY TO GOVERNMENTAL BODIES; RIGHT-OF-WAY ACQUISITION PLATS. (a) Except as provided in this section, AS 40.15.300 - 40.15.400 apply to the state, its agencies, instrumentalities, and political subdivisions in the same manner and to the same extent that they apply to other landowners.

(b) A plat for a subdivision created by the acquisition by the state, its agencies, instrumentalities, or political subdivisions, of a right-of-way, airport parcel, or land for a similar public purpose in an area outside a municipality that has the power of land use regulation that has adopted ordinances implementing AS 29.40, is subject only to the approval provisions of this section and any provision of AS 40.15.300 - 40.15.400 not in conflict with this section.

(c) A right-of-way acquisition plat must contain the

(1) location and name of the acquisition project;

(2) approximate timetable for the acquisition and construction;

(3) dimensions and area of the proposed tract, parcel, or parcels to be acquired and the remainder of the parcel or parcels;

(4) name of the record owner or owners of the subject parcels;

(5) signature and seal of the surveyor preparing the plat.

(d) The commissioner shall review each right-of-way acquisition plat for compliance with this section. If the plat does not meet the requirements of this section, it shall be returned to the submitting agency with an explanation of the deficiencies. A plat for which the commissioner's approval is required under AS 40.15.300 may not be recorded under AS 40.17 without the

commissioner's approval endorsed on the plat.

(e) After approval by the commissioner, the original plat shall be filed with the appropriate district recorder within 30 days by the submitting agency.

(f) The minimum monumentation requirements for

(1) right-of-way acquisition subdivisions are a 5/8" x 24" reinforcement bar with appropriate identification cap set on the margin of the right-of-way at all points marking the beginning and end of each curve and on tangents so that the distance between monumented points does not exceed 1,320 feet; an alternate method may be utilized that consists of placing primary type monuments at centerline points marking the beginning and end of each curve and on tangents so that no distance exceeds 1,320 feet; all recovered monumented property corners of records, the lines of which are intersected by a right-of-way acquisition, shall be monumented as part of the right-of-way plat, either on the right-of-way line or at the original monument position;

(2) an airport parcel and land for a similar public purpose subdivision not defined by centerline shall be as provided in AS 40.15.320.

(g) If construction of improvements is scheduled to follow the right-of-way acquisition, the placement of the centerline monuments may be delayed until the improvements have been completed, in which case a statement designating the schedule for placing the monuments must be included on the plat.

(h) The state, its agencies, instrumentalities, or political subdivisions may acquire or obtain conveyances, including dedication of lots or tracts of a right-of-way acquisition plat, before submittal of a right-of-way acquisition plat for approval by the commissioner. A right-of-way acquisition conveyance may be recorded before approval and recording of the right-of-way acquisition plat.

Sec. 40.15.400. DEFINITIONS. In AS 40.15.300 - 40.15.400,

(1) "commissioner" means the commissioner of natural resources;

(2) "monument" means a fixed physical object marking a point on the surface of the earth used to commence or control a survey or to establish a lot corner;

(3) "plat" means a map or delineated representation of a tract or parcel of land showing the subdivision of land into lots, blocks, streets, or other divisions;

(4) "street" has the meaning given in AS 40.15.290;

(5) "subdivision" has the meaning given in AS 40.15.290(2);

(6) "surveyor" means an individual licensed to practice land surveying in the state under AS 08.48.

* Sec. 8. AS 40.15.075 is repealed.

* Sec. 9. AS 40.15.330 and 40.15.370, added in sec. 7 of this Act, take effect immediately under AS 01.10.070(c).

* Sec. 10. Except as provided in sec. 9 of this Act, this Act takes effect September 1, 1991.

FISCAL NOTE

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NO. SB 81

Revision Date: Feb. 8, 1991
Department Affected: Environmental Conservation
Title: DNR Platting Bill
BRU: Environmental Quality
Component: Environmental Quality Projects
Sponsor: Senator Fahrenkamp
Requestor:
COMPONENT SERIAL NO. 1 0 1 6

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

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

POSITIONS:

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

Estimate of current year impact: None

ANALYSIS: (Attach a separate page if necessary.)

Prepared By: Dick Farnell
Phone: 465-2656
Division: Environmental Quality
Date: Feb. 5, 1991

Approved by Commissioner:
Agency: Environmental Conservation
Date:

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Rev 10/90

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NUMBER: CSSB 81( )
7-LS0343\

FISCAL NOTE

Revision Date:
Department Affected: DOT&PF
Title: DNR Platting Authority in Unorganized Borough
bRU: Admin. Services

Sponsor: Fahrenkamp
Component: Leasing
Requestor:
Component Serial Number:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY92	FY93	FY94	FY95	FY96	FY97
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING:	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUNDS	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL FUNDING:	0	0	0	0	0	0

POSITIONS

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

Estimate of current year impact: None.

ANALYSIS: (Attach a separate page if necessary)
The bill, as drafted, will not unduely affect impact capital or fiscal budgets. However, there are two portions of the bill, which if changed or eliminated, would have serious fiscal implications. These include the the language found in Sections 40.15.360 and 40.15.380. So long as these sections remain intact, we fully support and endorse this bill.

Prepared by: Kit Duke, Regional Director Phone: 266-1440

Division: Central Region Date: February 7, 1991

Approved by Commissioner: Phone: 465-3900
Frank G. Turpin

Agency: Department of Transportation and Public Facilities Date: February 7, 1991

Distribution By Preparer: Legislative Finance, Legislative Sponsor, Requestor, OMB, Impacted Agency(ies).

Alaska State Legislature

SENATOR BETTYE FAHRENKAMP
CHAIRMAN, RESOURCES COMMITTEE
119 N. CUSHMAN STREET, SUITE 201
FAIRBANKS, ALASKA 99701
OFFICE (907) 452-4882
HOME (907) 456-2899

Senate

FEB 7

WHILE IN JUNEAU
PO BOX V
JUNEAU, ALASKA 99811
CAPITOL, ROOM 125
OFFICE (907) 465-3834
HOME (907) 780-6027

MEMORANDUM

TO: Senator Lloyd Jones, Chair, Resources Committee

FROM: Senator Bettye Fahrenkamp

DATE: January 28, 1991

SUBJECT: Senate Bill 81

SENATE BILL NO. 81

" An Act establishing the Department of Natural resources as the platting authority in certain areas of the state; relating to subdivisions and dedications; and providing for an effective date."

This legislation was requested by the state Surveyor's Advisory Board to establish clear authority for registering plats in areas of the state where no municipality or borough has the power of land use regulation.

Under current statutes there is no single department or agency of the state with primary responsibility for registration of plats of subdivisions and dedications in the unorganized borough. Certain state agencies (DEC and DOT) have approval authority for plats in the unorganized borough, but their areas of interest are limited and they are not given the responsibility for actual registration.

The Surveyor's Advisory Board (DEC and DOT are members) are currently working on suggestions for minor revisions to the bill to clear up some questions of the definition of subdivision etc. A representative of the Board will be in Juneau on February 8 to testify if a hearing can be scheduled for that date.

BF:dga

MEMORANDUM State of Alaska

FEB 1 3 RECD

TO: Senator Lloyd Jones, Chairman
Senate Resources Committee

DATE: February 13, 1991

FILE NO:

TELEPHONE NO:

THRU:

SUBJECT: Information on SB 81

FROM: Dick Farnell, Domestic Wastewater Prog.
Dept. Environmental Conservation

Dick Farnell

Senator Frank had asked me during the hearing on SB 81 on February 8 to provide the committee with a list of all possible DEC permits that a subdivision might need:

- Wastewater disposal permit
- Section 404 (Clean Water Act) state certification
- Coastal Zone consistency determination

Please contact me at 465-2656 if you would like any additional information pertaining to the Bill.

cc: Janice Adair, ADEC

02-001 (Rev. 8/85)

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

WALTER J. HICKEL, GOVERNOR

400 WILLOUGHBY AVENUE
JUNEAU, ALASKA 99801-1796
PHONE: (907) 465-2400
FACSIMILE: (907) 586-2754

February 6, 1991

The Honorable Lloyd Jones, Chair
Senate Resources Committee
P.O. Box V
Juneau, AK 99811

Dear Senator Jones:

Subject: SB 81, Platting Authority in Certain Areas of the State.

Position: The Department of Natural Resources supports the intent of this bill. We are working with the sponsor concerning various technical amendments.

Background: Currently, the Department of Natural Resources is the platting authority for the unorganized borough outside of cities. Our authority, however, is restricted to the review of plats where a right-of-way is to be vacated. Review of plats for adherence to minimal survey and monumentation standards does not occur and, as a result, problem plats are recorded. This bill would give the department the authority to review plats in the unorganized borough, before they are recorded, for adherence to minimal survey and monumentation standards.

Recommendations: We will continue to work closely with the sponsor, other affected state agencies, and the Survey and Mapping Advisory Board in the development of this bill.

Sincerely,

Harold C Heinze

Harold C. Heinze
Commissioner

cc: Committee Members
Senator Fahrenkamp
Bruce Kendall, Legislative Liaison, Office of the Governor
Edgar Blatchford, Commissioner, Department of Community and Regional Affairs
John Sandor, Commissioner, Department of Environmental Conservation
Frank Turpin, Commissioner, Department of Transportation and Public Facilities

10-J9LH

FISCAL NOTE

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NO. SB 81

Revision Date: 6-Feb-91 Department Affected: Natural Resources

Title: Establishing DNR as Platting Authority in certain areas of state

BRU: Land & Water Management

Components: Land & Water Management

Sponsor: Senator Fahrenkamp

Requestor: Senate Resources

COMPONENT SERIAL NO. 431

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
PERSONAL SERVICES	65.8	67.7				
TRAVEL						
CONTRACTUAL	5.0	5.0				
SUPPLIES	3.0	3.0				
EQUIPMENT						
LAND&STRUCTURES						
GRANTS,CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	73.8	75.7	0.0	0.0	0.0	0.0
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND	73.8	75.7				
FEDERAL FUNDS						
OTHER						
TOTAL	73.8	75.7	0.0	0.0	0.0	0.0

POSITIONS:

FULL-TIME	1.0	1.0				
PART-TIME	1.0	1.0				
TEMPORARY						

Estimate of Current year impact:

ANALYSIS: (Attach a separate page if necessary)

See Attached

Prepared by: Dick LeFebvre Phone: 762.2692

Division: Land and Water Management Date: 6-Feb-91

Approved by Commissioner: Harold Heinze HCH Date: 6-Feb-91

Agency: Department of Natural Resources

Distribution (by preparer) : Legislative Finance, legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

REV 10/90

This bill requires the Department of Natural Resources to approve a plat or return it to the applicant for modification or correction within 45 days. If the department fails to take action within 45 days, and the applicant does not consent to an extension of time, the plat is automatically approved and a certificate of approval must be issued. Because of the need to review an estimated 150 plats per year within the 45 day time period, a new, full time Cadastral Surveyor I position and a part time Clerk Typist III position are required. Additional funds are needed for rental space, telephones and supplies.

SENATE COMMITTEE REPORT
FIRST COMMITTEE OF REFERRAL

DATE: 4/2/91 FURTHER: Finance

Date of 5-Day Notice: _____ DATE TURNED
(in accordance with Uniform Rule 23) INTO OFFICE: _____

Resources Committee considered SSSB 85

Prohibiting certain sales of milk; authorizing embargo and detention remedies in case of violation of prohibition; making the commissioner of environmental conservation reponsible for enforcing the prohibition.

and recommended:

[ ] replace with _____ CS _____ [ ] same title
[ ] new title

[ ] attached amendment(s)

[ ] _____ letter of intent adopted

[ ] do pass

[ ] do not pass

[ ] no recommendation

[ ] individual recommendations

[ ] further referral to _____

ATTACHES NEW FISCAL NOTE(S):

Department(s)/Date: Department(s)/Date:

[ ] fiscal note(s) _____ [ ] zero fiscal note(s) _____

_____ _____

_____ _____

_____ _____

[ ] appropriation-no fiscal note [ ] Governor's bill w/fiscal note

SIGNING DO PASS: OTHER RECOMMENDATIONS:

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____
Chair: Signature and Recommendation

AMERICAN LEGISLATIVE EXCHANGE COUNCIL

The State Factor

Volume 17, Number 3 February 1991

THE BIOTECHNOLOGY EVOLUTION: A LEGISLATOR'S GUIDE

See pg. 14

Introduction

As biotechnology enters the 1990s, a wide range of issues and trends will impact the development of this emerging industry. While some will present new challenges brought on by the introduction of a new technology, others are ones every high-technology industry must address. These factors will in part be determined by state legislators.

Clearly, biotechnology's potential is enormous -- and the stakes are high. Whether pharmaceuticals for the treatment of disease, or healthier, safer foods for consumers, biotechnology's end products promise to offer a wealth of economic and social benefits which many believe will rival the computer boom which played such a large role in the economic growth of the 1980s.

State governments are continually searching for ways to promote economic growth, improve and expand their infrastructures, increase their educational standards, and create additional employment. As state governments conduct their search, they would be well-advised to turn increasingly to biotechnology companies and programs as important components in charting the path to optimum growth. Biotechnology, as with other high-technology industries, offers tremendous economic development possibilities whose limits have yet to be tested.

Biotechnology is a rapidly expanding industry and, as such, offers the promise of new jobs and increased revenue. As a high-technology industry, biotechnology relies heavily on a strong academic environment due to the constant exchange of ideas between industry and universities. State governments find this exchange of knowledge particularly inviting because it raises educational levels in their states. States can rely on biotechnology to bring in revenue and to attract a highly-skilled, highly-educated work force. This is positive for the overall economic development of any state.

Moreover, as biotechnology companies expand into manufacturing, they create a need for a diverse work force. These production jobs do not require advanced degrees and would be available to those with high school diplomas or the equivalent. Thus, biotechnology has the potential to create many jobs at various educational levels.

ALEC • 214 Massachusetts Ave., NE • Washington, DC 20002 • (202) 547-4646
Executive Director Samuel A. Brunelli Publications Director Michael Tanner

Many states are recognizing biotechnology as one of the increasingly rare fields where the U.S. retains a decisive leadership role in international markets. Accordingly, it is incumbent upon all the key players -- including federal and state government leaders -- to ensure that we retain our competitive edge both nationally and internationally.

There are several methods by which a state can promote development of biotechnology in their state. States may provide funds or programs for biotechnology training at state universities or colleges, financial assistance or tax incentives that would be less burdensome to biotechnology companies, research parks supported by states primarily for biotechnology purposes, and centers where biotechnology companies and members of the academic community may meet to foster technology exchange. States can provide predictable and stable climates within which the industry can grow and mature, while ensuring public confidence in the process.

Yet a great deal of uncertainty, confusion, and fear continues to exist in the halls of state government with regards to America's emerging biotechnology industry. This edition of *State Factor* provides an overview of the science of biotechnology and serves as a legislative primer for elected officials interested in pursuing what promises to be one of the great technological booms of the 21st Century.

What is Biotechnology?

Biotechnology is the use of living organisms and biological agents to produce goods. This includes common products such as foods, beverages, and pharmaceuticals. While the use of microorganisms to produce medicines, such as antibiotics, goes back only several decades, the cultivation of plants and the use of yeast in food production goes back to antiquity.

One new biotechnology, recombinant DNA technology (also referred to as genetic engineering), became possible when scientists learned how to utilize certain enzymes that could be used like scissors and paste to isolate and rearrange genes with precision. Using these enzymes, researchers have been able to identify the genes that produce specific proteins. These enzymes also allow scientists to insert genes into plasmids, rings of genes that can move into and out of bacteria.

Once a certain gene is inserted into a plasmid, the plasmid can carry the new genetic material into bacteria. Inside the bacteria, the gene begins to produce its specific protein. In effect, the bacteria become miniature protein factories.

Scientists are using biotechnology to develop bacteria that can make proteins that can be used in vaccines and drugs. When grown in fermentation vessels, these bacteria produce large quantities of proteins for use as human or animal health products.

Recent developments in plant biology have allowed scientists to move genes in and out of plants. Thus, plants can be modified by genetic engineering to improve agronomic properties such as disease and insect resistance and food quality.

In addition, genetically engineered bacteria, plants, and animals are being developed for use in agriculture. Biotechnology has the potential to make farming more reliable, reduce the farmer's input costs, produce higher quality foods, and protect the environment.

Safety Record

Although the techniques used in biotechnology are relatively new, scientists already understand a great deal about their possible effects on health and the environment. In fact, no previous technology has been so thoroughly studied at such an early stage in its development as has biotechnology.

Biologists turned their attention to the issue of biotechnology safety shortly after the first genetic engineering experiments were conducted. Scientists took the unprecedented step of self-imposing a moratorium on recombinant DNA research. In 1975, at a special conference held in Asilomar, California, scientists developed a set of guidelines for ensuring the safety of genetic experiments.

Several years later, similar guidelines were formally adopted by the National Institutes of Health to govern university research. Biotechnology companies have voluntarily complied with these guidelines or their own higher standards. The NIH guidelines have been relaxed over the years as thousands of trouble-free experiments have provided sufficient evidence that biotechnology research is safe.

Paralleling the 1970s debate over the safety of laboratory experiments is a more recent debate over the safety of field testing of genetically engineered organisms. Environmental legislation passed by Congress in the 1970's, together with other federal laws, has provided the necessary framework for protection of the public health and the environment.

Biotechnology in Medicine

The human body is an exquisite example of nature's art. In health, its inner systems are finely tuned, in balance with one another. In sickness, the balance is disturbed and the body's natural ability to protect itself from disease is disrupted.

Aided by recent advances in biotechnology, medical researchers are beginning to understand how the body maintains its delicate balance. With this knowledge, researchers are discovering how human proteins and other natural substances can be used to treat, or even prevent, diseases that have stymied the medical community for generations.

Some diabetics, for example, can not produce insulin, a protein that helps control the amount of sugar in the blood. The absence of insulin results in dangerously high blood sugar levels. Injecting insulin in appropriate amounts restores the body's normal blood sugar balance.

In addition to supplying a missing or deficient protein, doctors can use appropriate proteins to stimulate and assist natural disease-fighting processes. One protein can dissolve the blood clots accompanying heart

attacks before they cause death or permanent injury. Other proteins stimulate the body's immune system to kill cancer cells. Some proteins stimulate production of red and white blood cells.

SOME DISEASES THAT MAY BE TREATED OR PREVENTED WITH BIOTECHNOLOGY

Condition	Number of People Affected in the United States	Drug or Vaccine
Heart Attack	1.5 million per year	TPA
Cancer	One million new cases per year	Interferon-alpha Interleukin-2 Tumor necrosis factor Colony stimulating factors Monoclonal antibodies armed with cancer-killing drugs
AIDS	More than 1.5 million infected with the HIV	CD4 Interferon-alpha Interleukin-2 Colony stimulating factors Genetically engineered vaccines
Diabetes	600,000 to 1.1 million need insulin	Human insulin
Dwarfism	1,700 children received growth hormone	Human growth hormone
Hemophilia	20,000	Factor VIII purified with monoclonal antibodies Genetically engineered Factor VIII
Anemia	500,000 people, including 90,000 on kidney dialysis and more than 100,000 with AIDS	Erythropoietin
Acute tissue rejection episode in kidneys	4,500 kidney transplant patients may experience tissue rejection per year	Orthoclone OKT3
Hepatitis B	----------	Hepatitis B vaccine

Gene Therapy

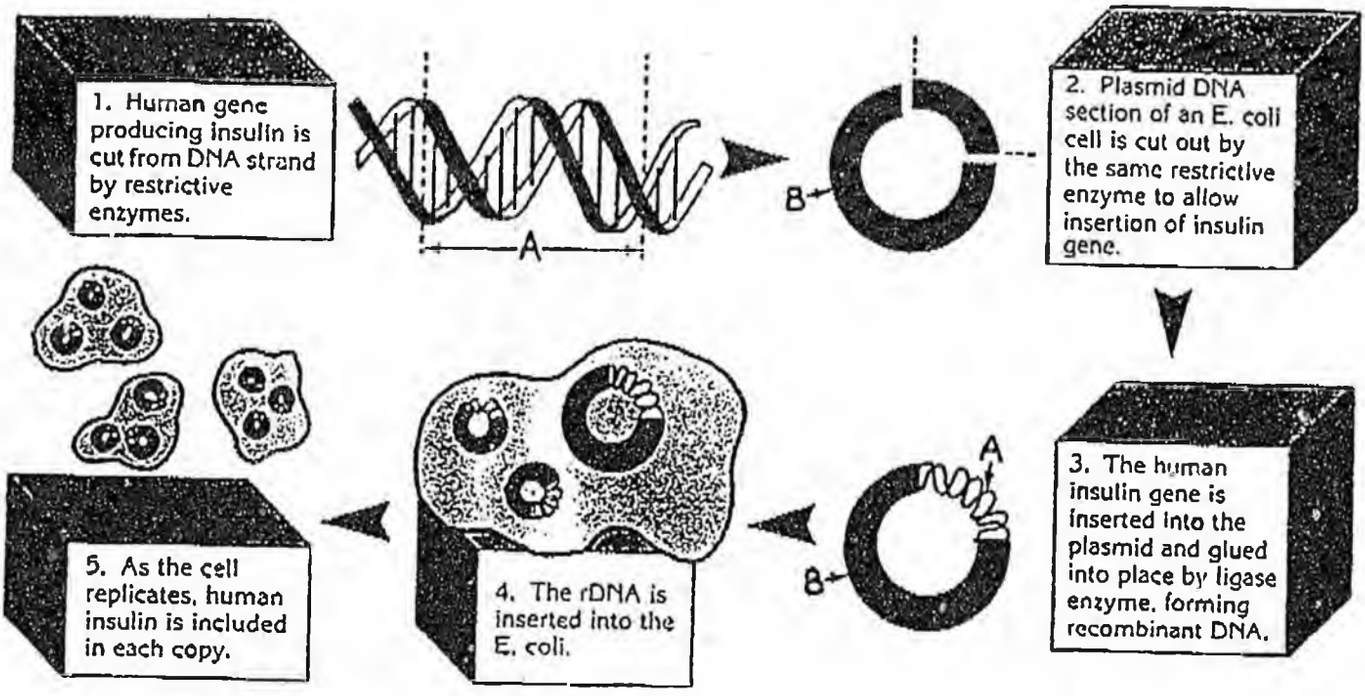
Human genetics is in the midst of a revolution. In the mid-1970s, about all that could be done was study inherited diseases and track their frequency. Now it is possible to locate and identify those genes that cause hereditary diseases. As scientists learn more about defective genes, the role they play in disease, and their locations relative to each other, they are able to create a type of map. This process, called genetic mapping, allows for the development of tests to diagnose diseases. Further study of the gene may provide new directions for human gene therapy.

Scientists have pinpointed the gene that causes cystic fibrosis, a disease that affects the digestive and respiratory systems so severely that, if not diagnosed early, premature death is often the result.

While their is no known cure for cystic fibrosis, early diagnosis can lead to therapy that can improve both the quality of life and the life expectancy of the patient.

Defective genes have been linked to other diseases as well, including Duchenne muscular dystrophy, adult polycystic kidney disease, a familial form of Alzheimer's disease and a familial form of colon cancer.

MAKING HUMAN INSULIN



Fighting Heart Disease

Heart attacks occur in people whose arteries have been narrowed by the accumulation of cholesterol. If a blood clot enters one of the coronary arteries, which supply blood to the heart muscle, it may become lodged in a narrowed section of the artery, thereby cutting off blood flow to a portion of the heart muscle. Without quick and effective treatment, the heart may be damaged permanently.

Each year, 1.5 million people suffer heart attacks. More than 540,000 of those attacks are fatal. Many of these patients can be saved from death or permanent disability by using a genetically engineered drug called tissue plasminogen activator, or TPA.

TPA is naturally-occurring protein that is able to dissolve blood clots. TPA is present in the blood, but in amounts too minute to prevent a heart attack.

When a heart attack strikes, doctors can inject genetically engineered TPA into the patient's blood. The protein travels to the clot, breaks it up within minutes, and restores blood flow to the heart muscle. By quickly restoring blood flow, TPA helps prevent life-threatening damage to the heart muscle.

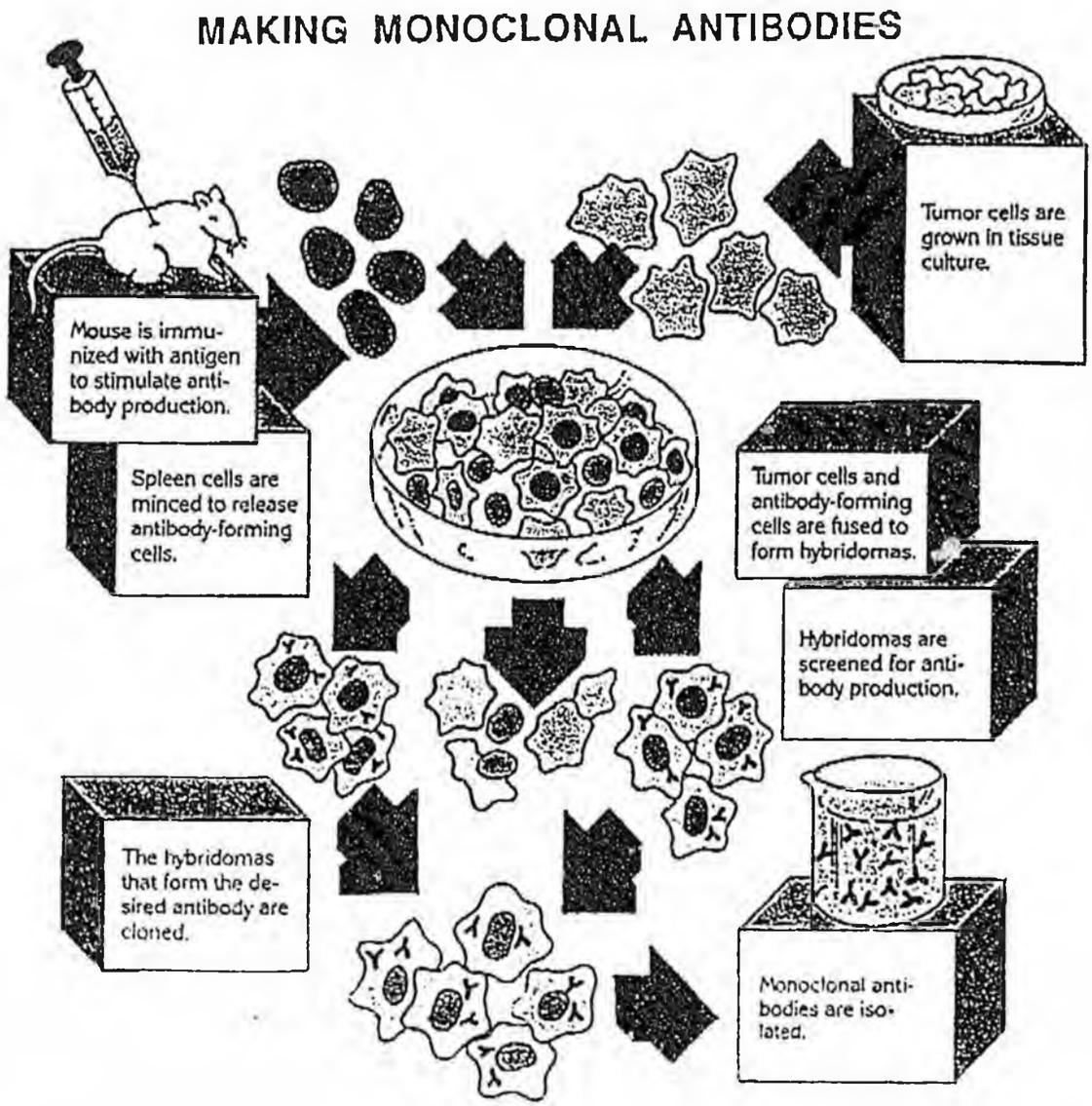
In 1987, the U.S. Food and Drug Administration approved the use of TP and it is now available in most hospitals. Eventually, the drug may be us by ambulance crews -- or heart patients themselves -- to stop heart attac even before the patient reaches the hospital.

New Weapons for the War on Cancer

Cancer is an error in cell development. Normal cells grow and reproduce rapidly when they are young, and then slow down or stop reproducing when they mature. Somehow, cancer cells get tricked into staying immature, therefore reproducing wildly.

Despite the nation's War on Cancer, declared in the early 1970's, cancer is still second only to heart disease as a killer. Each year, nearly one million Americans develop cancer, and 480,000 die.

Biotechnology is used to treat cancer in three ways. Some genetically engineered proteins, called lymphokines, appear to attack cancer cells directly, or they may trigger the body's immune system to attack the cancer. Other genetically engineered proteins, called growth factors, appear to push cancer cells to maturity, slowing down the cell's rampant reproduction. And monoclonal antibodies, also derived through biotechnology, are armed with radioactive material, cancer drugs, or other poisons to search out and destroy cancer cells.



One genetically engineered lymphokine, alpha-interferon, is used to treat people with hairy cell leukemia, a cancer that several hundred Americans develop each year.

Before alpha-interferon, a diagnosis of hairy cell leukemia was a virtual death sentence. People with the disease required frequent blood transfusions and became highly susceptible to infections. There were no effective long-term treatments.

Today, alpha-interferon can restore people with hairy cell leukemia to normal health. The protein appears to bind to the surface of the cancer cell, halting its growth.

In addition to alpha-interferon, doctors are experimenting with other genetically engineered lymphokines to treat cancer patients. Interleukin-2 activates special white blood cells, called killer cells, which can destroy cancer cells. These activated killer cells may prove to be an effective treatment for people with advanced skin or kidney cancer.

Another group of proteins, called colony stimulating factors, trigger production and activity of cells of the immune system. Colony stimulating factors may prove useful in marshalling the body's defenses against cancer and AIDS. Colony stimulating factors may also help restore normal blood production in patients with severe anemia or those undergoing bone marrow transplantation.

Fighting Anemia in Dialysis Patients

Anemia is caused by low levels of red blood cells usually the result of erythropoietin deficiency. Erythropoietin is a glycoprotein that is normally produced by the kidneys and circulated through the bloodstream into the bone marrow. Once in the bone marrow, erythropoietin stimulates the development of immature stem cells into mature red blood cells. When kidneys fail, proteins like erythropoietin are no longer produced. Since dialysis is not able to replace the lost proteins, most patients with chronic renal failure develop anemia.

However, scientists have developed a recombinant erythropoietin, known as EPO, that is able to replace the erythropoietin that failed kidneys are no longer able to produce. EPO provides dialysis patients with the levels of erythropoietin necessary to produce normal levels of red blood cells. Through the use of EPO doctors have helped many of the 100,000 patients with renal disease lead a more normal life.

EPO is safer than blood transfusions, the traditional method of treating anemia. Blood transfusions increase the number of red blood cells and offer the patient temporary relief, but there are risks involved. Through transfusions it is possible to contract undetected blood-borne infections such as AIDS, non-A or non-B hepatitis. Also, patients that receive frequent transfusions may develop large amounts of iron in vital organs, a condition known as iron overload. Finally, patients may form antibodies that may not allow them to receive a successful kidney transplant, the only known cure for kidney failure.

Counterattacking the AIDS Epidemic

Even though it kills fewer people than heart disease or cancer, acquired immune deficiency syndrome (AIDS) is feared more than other disease. Striking suddenly in the 1970's, it has already killed tens of thousands of people. More than 1.5 million people have been infected with the human immunodeficiency virus (HIV), which causes AIDS, and most of them will die of the disease unless a cure is found soon.

HIV infection destroys a portion of the immune system known as the T-4 lymphocytes. Without these T4 lymphocytes, the patient is defenseless against a wide range of diseases that a healthy body normally keeps in check without difficulty.

With the aid of biotechnology, biomedical researchers have been able to identify the virus quickly, understand it, and mount a counter-attack against it. To help prevent the spread of the HIV, researchers have employed monoclonal antibody technology to develop a laboratory test that shows whether or not blood is contaminated with the virus. Using the test, blood banks can now screen donated blood to ensure that it is not contaminated with the HIV.

Several genetically engineered proteins, including some of those originally developed as cancer therapies, are being examined as possible treatments for AIDS or for the infectious diseases that accompany AIDS.

A protein called CD4, found on the surface of T-4 cells, acts as a gate allowing the virus to enter cells. Doctors hope to be able to flood the patients' bloodstream with genetically engineered CD4, thereby providing million of decoys that the virus could attack instead of entering into T-4 cells.

Lymphokines such as alpha-interferon and interleukin-2, which stimulate the body's immune response, are being used experimentally in conjunction with AZT, a conventional drug that slows reproduction of the virus. Another experimental AIDS drug, dideoxycytidine (DDC), was discovered using biotechnology methods which help researchers identify promising new pharmaceuticals. The FDA recently approved a new use for a biotech derived drug, erythropoietin (EPO). EPO had previously been approved for treatment of dialysis patients with chronic renal failure. The new use will significantly reduce the need of blood transfusions for some people with AIDS who suffer debilitating anemia due to AZT therapy and low levels of naturally occurring erythropoietin. As the search for AIDS treatments continues, other scientists hope to halt the epidemic by developing vaccines.

Traditionally, vaccines have been made from killed or weakened viruses. Although unable to produce disease, a killed or weakened virus stimulates the body's natural defenses against the virus. If an immunized person is later infected with the natural virus, the stimulated immune system quickly destroys the invader.

Currently, scientists cannot use the entire HIV in searching for a vaccine, even weakened or killed, because it may become reactivated in the body and cause AIDS rather than conferring immunity. Instead, scientists hope to

develop a vaccine using only a portion of the HIV, such as a piece of the protein coat that surrounds the virus.

Several biotechnology companies are using genetic engineering techniques to remove genes from the virus that carry the code for the HIV's protein coat. Inserted in bacteria or other cells, these genes can produce quantities of the protein-coat fragments for experimental use as AIDS vaccines.

The search for a vaccine has been slow, however, because the virus is continuously changing. Several different strains of the virus have already been identified, and no single vaccine is likely to be effective against all of them. Doctors do not expect a vaccine to be widely available before 1995.

Other Diseases

In the seventeen years since the first gene was spliced, a number of proteins have become widely available to diagnose, treat, and prevent disease. Heart disease, cancer, AIDS, diabetes, and anemia are just five of many diseases biotechnology will help treat in the coming years. Here is a sample of some of the other conditions for which biotechnology products are available:

Dwarfism. Children lacking sufficient growth hormone cannot grow to normal height without regular injections of human growth hormone. Traditionally, these children were treated with limited supplies of growth hormone extracted from cadavers. However, in 1985 cadaver-derived hormone was removed from the market after several children died from a rare virus that contaminated the hormone. Unlike cadaver-derived hormone, genetically engineered growth hormone is a safe therapy for the 1,700 children being treated for dwarfism.

Hemophilia. Hemophiliacs are constantly at risk of internal bleeding because their bodies cannot produce sufficient amounts of a protein called Factor VIII, which controls blood clotting. Transfusions of Factor VIII from human blood can control the disorder, but these transfusions contain only one percent Factor VIII and also may transmit viral diseases. In the early 1980s, some hemophiliacs were infected with HIV from transfusions and they are still susceptible to hepatitis from contaminated transfusions of Factor VIII.

Today, scientists are utilizing monoclonal antibody technology to produce Factor VIII that is 99 percent pure. Studies also are under way to develop genetically engineered Factor VIII which is completely pure and incapable of transmitting disease.

Organ rejection. When a patient receives a kidney or other transplanted organ, the patient's immune system may recognize it as an invader and attack it. This rejection may cause a transplant to fail, and in some cases, it may be fatal. By using monoclonal antibodies, doctors can eliminate T cells, those elements of the immune system responsible for organ rejection.

Hepatitis B vaccine. Hepatitis B is one of at least three hepatitis viruses that cause a systemic infection that can disrupt liver function. The hepatitis B virus is an important cause of viral hepatitis with no specific treatment for this disease. However, through biotechnology, scientists have developed a safer hepatitis B vaccine. The Centers for Disease Control (CDC) estimates that there are approximately 0.5 to 1 million chronic carriers of hepatitis B virus in the United States and that pool of carriers is growing by 2% - 3% per year.

Biotechnology in Agriculture

Biotechnology utilizes a variety of techniques for developing new products and improving microbes, plants, and animals. In agriculture, biotechnology has the potential to make farming more reliable, reduce the farmer's input costs, produce higher quality foods, protect the environment through the substitution of biodegradable products for non-biodegradable products, and help developing nations feed their people.

Agriculture is a nation's most essential enterprise. The ability to produce food, fiber, and other agricultural products largely determines the standard of living that people in that nation will enjoy. Nations have prospered or perished through the success or failure of their agriculture.

However, farming is a risky business. Weeds compete with crops for moisture and nutrients. Insects and plant disease take their toll. A late frost in spring or an early frost in autumn can destroy an entire season's produce. Too much rain can be just as devastating as too little.

Some of the problems faced by farmers today require both political and economic solutions. Technological changes, however, can alter the forces that make farming an unpredictable and sometimes unprofitable occupation. Many of these changes will arise from the field of biotechnology.

Biopesticides

In the past, chemical pesticides have been the main line of defense against pests. Farmers annually spend $20 billion worldwide -- $5 billion in the United States alone -- on crop protection products, primarily synthetic chemicals. In the United States, farmers spend $1.6 billion on agricultural chemicals to control insect pests. For example, in 1988 it was estimated that 34-38 million acres of corn were treated with chemical pesticides to control damage caused by the insects corn rootworm and corn borer. These insect pests respectively cause $900 million and $500 million worth of damage annually to the U.S. corn crop.

Growing public concerns about water contamination, chemical pesticide resistance, dietary exposure to pesticide residues, and worker exposure to chemicals have led farmers to search for alternative methods of pest control. Many agricultural scientists believe that biotechnology offers a politically and economically acceptable alternative.

Many biopesticides do not remain in the environment -- a major environmental benefit. The active elements produced by bacterial pesticide

products are fragile molecules which are quickly broken down when exposed to the sun or other natural elements. This characteristic of biopesticides should eliminate public concerns about residues on crops and in groundwater.

Biopesticide technology is based on potent, naturally occurring microorganisms, such as *Bacillus thuringiensis* (B.t.). Discovered at the turn of the century, B.t. has been used without risk in the United States for almost three decades by home gardeners, farmers, and forestry officials. Its active component, a protein crystal, specifically attacks the alkaline stomachs of target pests. Higher organisms, however, such as mammals, fish, birds and other non-target species remain unthreatened by this highly specific bioinsecticide. Inconsistent performance of these products has, however, resulted in a relatively small market. Today's biotechnology techniques permit the development of B.t. products which are as effective as chemical pesticides without their disadvantages.

In order for protein toxins to be effective as commercial insecticides, they must remain active for an adequate period of time under field conditions. As a result, various methods of extending the activity of bioinsecticides are now being developed. One method involves spraying the insecticidal proteins directly onto crops. As insects feed on the sprayed crops, the protein is activated in the insect's stomach whereupon the insects immediately stop eating. Another method involves inserting the B.t. gene directly into the genetic makeup of crops. This method gives the crops a built-in resistance to insects. Similarly, the B.t. gene can be inserted into a third party, such as a microorganism that lives within the plant's sap. These organisms -- known as endophytes -- multiply within the host plant and move throughout the plant's vascular system forming a microscopic defense against feeding insects. This process resembles vaccines moving throughout a person's vascular system to defend against harmful disease. Another system has been developed which protects the B.t. toxin in a natural microcapsule within which it is produced, formulated, and sprayed on crops. The resulting product consists of a potent protein toxin with an inert microcapsule.

Companies engaged in agricultural biotechnology are aiming toward the same goal -- providing attractive alternatives to the farmer that will allow him to be competitive in the marketplace.

In addition to biopesticides, work is also underway to develop effective bioherbicides and fungicides. While biopesticides will not eliminate the need for chemical pesticides in many cases, the two types of products will be used in concert with each other toward the same goals. Advances in agricultural biotechnology, however, will eventually make it possible to develop pesticides of greater potency, certainty, and with broader applications than current products.

Through the development of more potent biopesticides and improved delivery systems, biotechnology will provide excellent control to the farmer. In cases where a product must be able to control a large spectrum of pests, biotechnology provides industry with the tools to deliver multiple biotoxins into delivery systems while still maintaining the safety to the surrounding ecosystems. In addition, using biotechnology techniques, organisms can be developed that can provide more toxic dosages to the target pests so that

the pest's feeding is halted after only a couple of bites, therefore, causing only minimal damage to the plant.

Plant Biotechnology

Although plant science is a relative modern discipline, its fundamental techniques have been applied throughout human history. When early man went through the crucial transition from nomadic hunter to settled farmer, cultivated crops became vital for survival. These primitive farmers, although ignorant of the natural principles at work, found that they could increase the yield and improve the taste of crops by selecting seeds from particularly desirable plants.

Farmers long ago noted that they could improve each succeeding year's harvest by using seed from only the best plants of the current crop. Plants that, for example, gave the highest yield, stayed the healthiest during periods of drought or disease, or were easiest to harvest tended to produce future generations with these same characteristics. Through several years of careful seed selection, farmers maintained and strengthened such desirable traits.

The possibilities for improving plants expanded as a result of Gregor Mendel's investigations in the mid-1860s of hereditary traits in peas. Once the genetic basis of heredity was understood, the benefits of cross-breeding, or hybridization, became apparent: plants with different desirable traits could be used to cultivate a later generation that combined these characteristics.

Understanding of the scientific principles behind crop improvement practices has come only in the last hundred years. But the early, crude techniques, even without the benefit of sophisticated laboratories and automated equipment, were a true practice of biotechnology -- guided natural processes to improve man's physical and economic well-being.

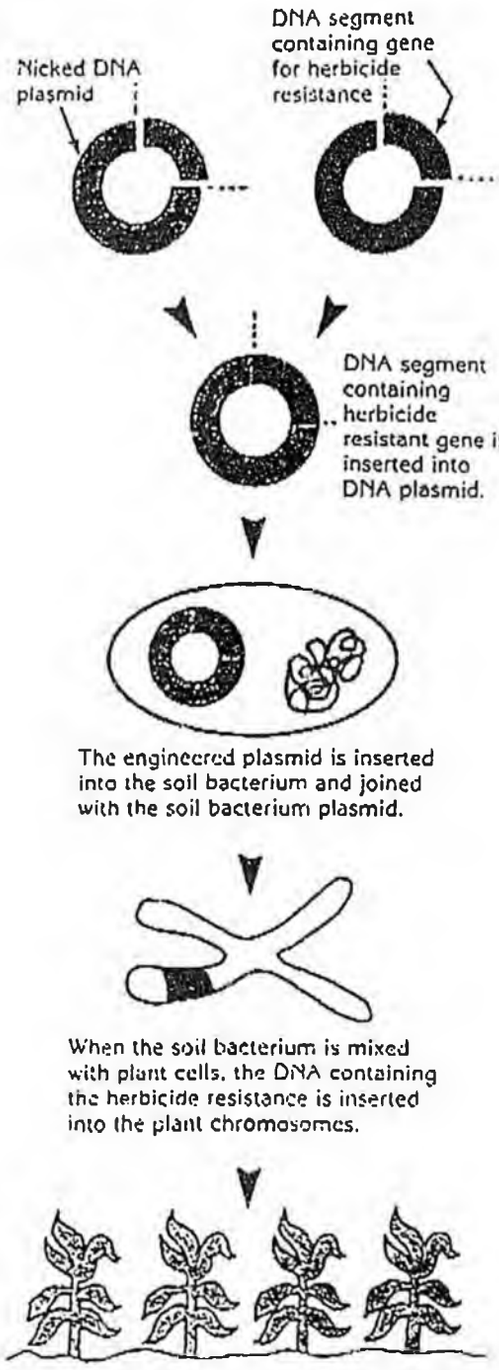
Today, applied plant science has three overall goals: increased crop yield, improved crop quality, and reduced production costs. Biotechnology is proving its value in meeting these goals. Progress has, however, been slower than medical and other areas of research. Because plants are genetically and physiologically more complex than single-cell organisms such as bacteria and yeasts, the necessary technologies are still in development.

In one active area of plant research, scientists are exploring ways to use genetic modification to confer desirable characteristics on food crops. Similarly, agronomists are looking for ways to harden plants against adverse environmental conditions such as soil salinity, drought, alkaline earth metals, and anaerobic (lacking oxygen) soil conditions.

One new development in the area of plant biotechnology is herbicide-tolerant crop plants. These plants are genetically modified to resist applications of herbicides that will kill the targeted weeds. This is important to agriculture as weeds compete with crop plants for moisture and nutrients, thus decreasing the farmers yield. New crop plants selected for herbicide tolerance will increase the farmer's options in selecting his use of herbicides. These plants will enable him to choose environmentally softer

new herbicides with appropriate weed spectrum and low application rate. Herbicide-tolerant plants not only reduce the use of agricultural chemicals, but they also reduce the economic burden to the farmer by eliminating the costs associated with excess labor and materials.

PLANT BIOTECHNOLOGY



Genetic engineering to improve characteristics -- such as taste, texture, size, color, acidity or wetness, and ripening processes -- of food crops, such as fruits and vegetables, are being explored as a much better strategy than the traditional method of cross-breeding.

Research in this area of agricultural biotechnology is complicated by the fact that many of a crop's traits are encoded not by one gene but by many genes working together. Therefore, scientists must first identify all of the genes that function as a set to express a particular property. This knowledge can then be applied to altering the germlines of commercially important food crops. For example, it may eventually be possible to transfer the genes regulating nutrient content from one variety of tomatoes into a variety that naturally grows to a larger size. Similarly, by modifying the genes that control ripening, agronomists hope to provide supplies of seasonal fruits and vegetables for extended periods of time.

Biotechnological methods for improving field crops, such as wheat, corn, and soybeans, are also being sought, since seeds serve both as a source of nutrient for people and animals and as the material for producing the next plant generation. By increasing the quality and quantity of protein or varying the types of these crops, scientists can improve their nutritional value. For example, a major protein of corn has very little of two amino acids, lysine and tryptophan, which are essential for human growth. Increased amounts of these amino acids could make corn products a source of improved protein.

BST: Improving Milk Production Efficiency

More than half a century ago, researchers discovered that a cow's milk production is regulated in part by the release of a protein secreted from the pituitary gland called bovine somatotropin (BST). Studies showed that when the cow's natural BST is supplemented, milk production can increase dramatically -- and the ratio of feed intake to milk output is lowered at the same time, making the cow a more efficient producer.

For a long time, this knowledge was of no practical use, since BST had to be extracted from the pituitaries of slaughtered cattle. But the advent of recombinant DNA technology now permits commercial production of mass quantities of BST which has the same biological effect as that produced by cows themselves.

If the Food and Drug Administration (FDA) approves BST for general use, dairy farmers will have a new management tool with the power to significantly increase their herds' efficiency. Recent on-farm studies demonstrate that supplemental BST can boost an individual cow's milk production 10 percent to 25 percent with only 5 percent to 15 percent more feed. Because milk production increases within a few days after supplementation begins, farmers will be able to quickly adjust production to meet demand, thereby helping to assure consumers of a steady, reasonably priced milk supply.

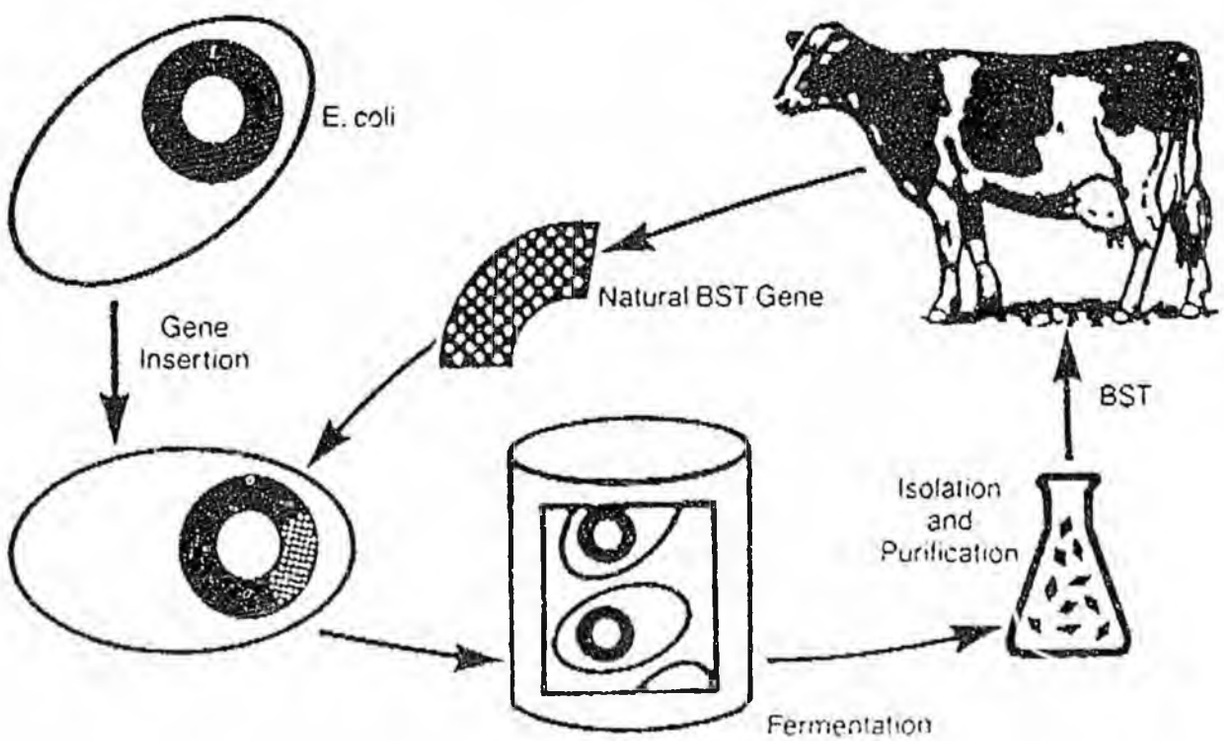
And, because supplemental BST will not require capital investment up front (unlike many other new farm technologies), its benefits will be equally accessible to operators of small and large dairy farms.

Some dairy farmers have been concerned that introduction of BST could lead to significant over-production of milk, causing milk prices for dairy farmers to fall. Several economic studies, however, have indicated that because of gradual adoption of BST by dairy farmers and its use on only *some* animals in a herd, additional milk production nationally from BST is likely to be modest and manageable. Thus, the USDA has forecast that BST use could increase the milk supply nationwide only 2 percent to 5 percent during the first few years of its use.

Field research to date indicates that cows receiving supplemental BST and managed properly exhibit no detrimental effects from either the BST or their increased milk output. This on-farm research is part of an extensive battery of studies required of companies developing BST by the FDA. These tests include work to demonstrate that BST poses no immediate or long term health hazards for BST-supplemented cows or their offspring. Other required studies relate to assuring that BST is effective, that a quality product can be manufactured, and that its use causes no environmental harm. To date, more than five years of research and millions of dollars have been invested by companies developing BST products to meet FDA's testing requirements for safety and effectiveness.

Milk produced with the help of supplemental BST is no different in composition from the milk of unsupplemented cows. All milk contains traces of the BST generated by the cow; the BST levels in milk from supplemented cows are in the same range as those levels that have always been found in milk.

HOW IS BST PRODUCED?



Furthermore, *all* BST -- whether produced by the cow herself or given supplementally -- is safe for human consumption. BST ingested with milk and other dairy foods is broken down in the digestive system, like all other proteins.

The human safety of BST was further demonstrated in the 1950s when researchers attempted to use BST derived from the pituitaries of cattle as treatment for human dwarfism. They found that even when BST was injected (thereby avoiding breakdown in the digestive system) there was still no effect on the human body.

The FDA certified the human safety of supplemental BST in 1985, and since then has allowed the marketing of milk and meat from cows involved in on-farm tests of BST's long-term effects on the animals. A recent NIH study confirms BST's safety.

In coming years, biotechnology will have a significant and beneficial impact on the production of food from farms animals. Milk produced with the help of supplemental BST may be among the first evidences on the grocer's shelf of this technological advancement.

Waste Management and the Environment

The raw materials and by-products of biotechnology are mostly intrinsically harmless. The advantages of biotechnological approaches to cleaning up the pollution caused by traditional industries are already evident, and in some cases more than one goal can be achieved in a single process. For example, methane fuel production by biotechnology not only generates a useful product, but simultaneously removes domestic and agricultural waste.

Even the smallest communities throughout the developed world have employed biotechnology in one key role -- that of sewage disposal. In these, microorganisms are used to purify waste water by breaking down a variety of solids contained in the effluent. Because of the variety of microbes involved, and the variable composition of sewage, precise details of how this works are not entirely clear. The fact that the methodology has changed little since it was first introduced is a testimony of its effectiveness.

Bacteria such a *pseudomonas* break down a range of products including hydrocarbons. Plasmids from several different strains have been added to a single cell with the aim of generating a bacterium effective for oil spills. This may be the effective answer in the long term, but for the moment mixtures of microbes are used successfully to remove oil and gasoline spills.

Mixtures of microbes and enzymes also have been designed to deal with paper mill waste. The paper-making industry generates a particularly noxious waste known as sulfite liquor. If discharged into rivers and lakes, it rapidly depletes the oxygen in the watercourse with disastrous consequences. In order to cope with this, a solution was devised in Finland which involves passing the effluent over *Paecilomyces* fungi, which both purifies the waste liquid and supports the growth of numerous

microbes. These can be sold for animal feeds, so this is a further example of a waste disposal process with a useful by-product. Methanogenic bacteria can also be used to purify paper-making waste, producing a useful energy source -- methane -- in the process.

Finally, biotechnology has the potential for cutting in half the costs of acid rain mitigation imposed by the 1990 reauthorization of the federal Clean Air Act. "Acid rain" is thought to result when materials containing sulfur and/or nitrogen are oxidized and allowed to escape into the atmosphere. Small-scale test plants have shown the practicability of a biotechnological approach to remove these harmful wastes through the use of bacteria which rely on sulfur compound as its energy source.

Regulation of Biotechnology

Biotechnology companies are regulated by the U.S. Environmental Protection Agency, the U.S. Department of Agriculture, the U.S. Food and Drug Administration, and the Occupational Safety and Health Administration. In 1986, the White House's Office of Science and Technology Policy issued a framework for coordinating the activities of all federal agencies involved in regulating biotechnology.

Under federal regulations, organisms with new genes from unrelated species must be evaluated for safety before being tested outdoors. Federal regulatory agencies review data from laboratory and greenhouse experiments to determine whether test organisms are toxic to humans, animals,. or to determine if they are beneficial to plants and insects.

Government agencies have set up scientific advisory boards to advise them on the safety of proposed field tests of genetically engineered plants and microorganisms. These expert panels have recommended approval of the proposed tests. A number of these field tests have been completed, with no evidence of harm to the environment.

Scientific evidence indicates that biotechnology is safe. Genetically engineered organisms look and behave much like their traditional counterparts, which have been used safely in agriculture for many years.

Economic Considerations

Biotechnology is considered an important investment market for the 1990s. The market for biotechnology products will be expanding as the 1990s bring about tremendous increases in the number of biotechnology derived products introduced into the marketplace. As a whole, the biotechnology industry is not yet profitable, but the industry has reported increasingly higher revenues and sales during the last several years. Biotechnology companies predict that in the next five years there will be a ten-fold increase in sales and twenty-five-fold increase in sales in the next ten years. In order to achieve these goals, however, biotechnology companies must find new ways of raising capital.

In bringing biotechnology to the market place, companies must spend an enormous amount of money. In order to continue conducting research,

biotechnology companies have had to develop unique ways of raising capital. To this point, most of the money raised by biotechnology companies has been through venture capital and private equity. These methods of raising capital will remain important to small companies, but larger companies will be searching for ways to expand their horizons. In the future, biotechnology companies will increasingly be looking towards strategic alliances, mergers, and public equity as a means of increasing funds.

Many biotechnology companies currently rely heavily on strategic alliances with large pharmaceutical companies. At the moment, strategic alliances are the most important means of raising capital for some biotechnology companies. Strategic alliances provide an important marketing strategy for companies that wish to sell products both in the U.S. and abroad. Through strategic alliances many biotechnology companies have been able to raise capital and increase both research capability and regulatory expertise.

Mergers appear to be on the rise and experts are predicting that the industry may be going through the first stage of consolidation. Most mergers involve biotechnology companies and large pharmaceutical companies. This arrangement usually benefits both parties as the pharmaceutical companies have a ready-made means of entering the biotechnology industry and the biotechnology companies are able to increase their resources (i.e., research and development, marketing, and manufacturing) as they prepare to bring their products to the marketplace.

Public equity will become increasingly important to biotechnology companies, especially larger companies, as more and more companies bring their products onto the market place. With increased numbers of products on the market, biotechnology companies should find a warm reception on the public equity market.

The United States is currently the world leader in biotechnology; however, as U.S. biotechnology companies face shrinking options within the U.S. for financing their businesses, some biotechnology companies may be forced to turn to foreign investors for capital. Many foreign investors have large amounts of money and supportive governments.

In the future, it appears that the U.S. will be facing its toughest competition from Japan. Japanese biotechnology is supported by large corporations which are well funded and have substantial resources. Japanese biotechnology is also aided by a business structure that appears to be more conducive to commercialization of biotechnology than does the U.S. system.

Intellectual Property Protection

In 1984, the Office of Technology Assessment identified intellectual property law as one of the 10 key factors influencing U.S. competitiveness in biotechnology. It remains so today.

The substantial investment required to bring a biotechnology product to the marketplace and the significant risk that many products will fall by the wayside make patent protection essential. Because biotechnology is a process by which innovative new products are produced, protection from

unfair competition by foreign companies using U.S.-developed processes -- a policy that other countries have adopted to protect their own companies -- will help insure a strong and growing industry.

Also important is expeditious and thorough review of patent applications by the U.S. Patent Office. Until a company's patent application is approved, it may have difficulty raising the capital needed to further develop, produce, and market a product. The current backlog of biotechnology patent applications at the Patent Office currently stands at 15,000. Also, it takes the Patent Office approximately 26.3 months to review and act on a typical biotechnology patent.

Patent protection and expeditious review of patent applications are important to the biotechnology industry because the economic livelihood of many companies hinges on the issuance of patents in a timely manner. The backlog in the patent process has tied up the product development and marketing capabilities of many biotechnology companies. The excessive review period is proving to be costly to many biotechnology companies trying to bring their products to the marketplace.

Conclusion

States are increasingly eager to obtain the many economic benefits of biotechnology. Many states are promoting the development of biotechnology by funding research and training programs, tax and other financial incentives, and research parks and centers.

In order to effectively introduce biotechnology into their state and reap the greatest benefits from biotechnology, state legislators should carefully examine the existing federal regulatory framework and strive to avoid duplication in state laws affecting biotechnology. The achievement of a harmonious and stable market will be ensured through open and ongoing communications.

CREDENTIALS

This edition of *State Factor* was prepared by Mr. Jerry Taylor, director of ALEC's National Task Force on Agriculture, and Mr. Michael Tanner, director of ALEC's National Task force on Health Care. *State Factor* is intended for informational purposes only.

JAMA SUMMARY

Here's What Your Doctor Reads About Bovine Somatotropin.

An article in *The Journal of the American Medical Association (JAMA)* answered the important questions about bovine somatotropin for your doctor. The doctor learned that this product, sometimes called BST, is being developed for use by dairy farmers to help their cows produce milk more efficiently. It is currently under review by the Food and Drug Administration.

JAMA is a trusted source of information for physicians. All material published in it is reviewed and approved for scientific validity by a panel of physicians. Here is what it said about BST in the issue of August 22/29, 1990:

Is the milk safe?

JAMA *Comments*

The Food and Drug Administration (FDA) has investigated BST and concluded that when it is given to cows, the resulting milk is safe for human consumption.

"The FDA has answered all questions and concerns about the safety of milk from bST-supplemented cows for human consumption...."

Why is the milk safe?

1) BST is digested when consumed, and
2) it is not active in humans.

"It has no biological effect on humans for two reasons: When ingested, bST...[is] broken down by digestive enzymes into amino acids and small peptides, as is any other protein in the diet; and even if bST did enter the body in substantial amounts, it is not biologically active."

Does BST change the milk?

BST does not change the composition of milk; it does not change the flavor of dairy foods; it does not change the nutritional qualities of milk; it does not increase the normal trace level of BST in cow's milk.

"Bovine milk composition has been studied for many years, but never as rigorously as in relation to the use of bST.... Bovine somatotropin causes no changes in milk composition."

"...there will be no changes in the flavor or nutritional characteristics of dairy foods if dairy farmers use bST as a production management tool."

"Bovine somatotropin is normally present in trace amounts in milk from unsupplemented cows...studies using the recommended dose levels of bST have found that supplementary bST does not raise significantly the bST levels in milk obtained from supplemented cows."

Does BST do anything else?

BST does not work directly on the mammary gland. Instead, it stimulates the cow's liver to produce another protein hormone, called insulinlike growth factor I (IGF-I). This hormone, produced by all cows, regulates milk production and is found in all milk. The amount of IGF-I in milk increases modestly after BST supplementation but does not exceed normal levels, which vary during lactation. IGF-I is destroyed during the processing of infant formula and does not cause allergies in infants.

"These modest increases are less than the natural variation in milk IGF-I levels...that can occur across a lactation or between multiparous [mature] and primiparous [young] cows...the modest rise in milk IGF-I concentration in milk produced by bST-supplemented cows is well within the endogenous levels in bovine and human milk and would have no impact on milk safety."

"The high level of heat processing normally used to prepare infant formula from dairy ingredients has been shown to inactivate all IGF-I...."

About the Authors

The *JAMA* article on bovine somatotropin was written by two distinguished scientists. They both have recognized expertise in their fields and personal experience in research directly related to bovine somatotropin.

The primary author, William H. Daughaday, M.D., has been honored many times during his distinguished career as a pediatric endocrinologist. He has served on the faculty of the Washington University School of Medicine, served on many study groups commissioned by the federal government, practiced as a physician, served on numerous editorial boards for medical journals, and is a member of several professional and honorary societies such as the National Academy of Sciences and the American Academy of Arts and Sciences. In addition to these accomplishments, Dr. Daughaday has conducted research into purification of bovine insulinlike growth factor I from blood, under contract with Monsanto Agricultural Company.

The coauthor, David M. Barbano, Ph.D., is an associate professor of food science at Cornell University. He is considered an expert in cheese production and the chemical composition of milk and is a member of several professional organizations devoted to the dairy industry. He has conducted research into the chemical composition and processing characteristics of milk from cows receiving supplemental bovine somatotropin under an agreement between Cornell University and Monsanto Agricultural Company.

JAMA Editorial Criticizes Opponents of BST

In the August 22/29, 1990, issue of *The Journal of the American Medical Association*, an editorial criticizes those who oppose the use of bovine somatotropin. Written by Charles J. Grossman, Ph.D., the editorial accuses opponents of BST of using safety and health issues as a red herring for their real concerns, which he says are economic. Dr. Grossman says, "This tactic has resulted in both confusing and frightening the nonscientific public....

"Because milk produced from cows treated with bovine somatotropin is no different from the milk of untreated cows, it is both inappropriate and wrong for special-interest groups to play on the health and safety fears of the public to further their own ends."

Dr. Grossman explains that the economic concerns are based on a fear that smaller dairy farmers may not survive if BST is used. He points to "an intrinsic trend toward larger, more efficient dairy farms, a trend destined to continue regardless of whether this hormone is used.

"Studies have indicated that milk composition is no different in cows treated with bovine somatotropin and that the cows themselves are not adversely affected," Dr. Grossman says.

SCIENCE SUMMARY

Safety for People: The FDA Reports on Bovine Somatotropin

Here is what the Food and Drug Administration (FDA) said in an article published in *Science*, August 1990. The article, written by FDA scientists Judith C. Juskevich and C. Greg Guyer, was reviewed for scientific accuracy by an independent panel of scientists prior to publication. It discusses bovine somatotropin, which is currently under review by the FDA.

BST has been found to be safe for people.

FDA Comments

The Food and Drug Administration has determined that milk and meat from cows receiving bovine somatotropin is safe for human consumption.

(Bovine somatotropin is abbreviated "BST", or "BGH" for bovine growth hormone, or "rbGH" or "rMet-bGH" for recombinant bovine growth hormone.)

"...FDA scientists have determined that milk and meat from rbGH-treated animals are safe for human consumption."

Human safety was determined as part of the initial FDA review of BST research.

The FDA first announced its finding of human safety in 1985 after a review of research information provided by organizations developing BST under an Investigational New Animal Drug Application (INAD).

"Under an INAD application, pharmaceutical companies may conduct human food safety studies required for approval of their product. The results of these studies may be submitted to CVM [The Center for Veterinary Medicine, an office of the FDA] *while the compound is still undergoing investigation."*

The FDA has continued to evaluate research on human safety.

Ongoing research since 1985 has been continuously monitored by the FDA and has not caused the FDA to change its original position with regard to human safety.

"Because the FDA requires the pharmaceutical companies to submit all studies they conducted on their products, the agency continues to receive human food safety information even after the requirements have been met."

The final conclusions about the safety of BST are made by the FDA, not by the companies developing this product.

"The pharmaceutical companies provide descriptions of the human food safety studies and summaries of results but ultimately it is the FDA that decides on the integrity of the data."

The FDA findings of human safety of BST are based on three main facts:

1. **BST is inactive in humans.** The FDA cites two kinds of tests that demonstrate this: 1) actual injection of BST into humans and 2) tests of BST on human tissues.
2. **BST is not active when taken orally by humans or other species.** During research on BST, the FDA required each company developing BST to administer at least 100 times the dose for dairy cattle (relative to body weight) to rats for at least 14 days. There was no effect from this oral administration, even when the studies were continued for 90 days.
3. **Recombinant BST is biologically indistinguishable from BST produced by a cow.** The FDA cites research that compared the effects of recombinant BST with the effects of a cow's own BST. No biological differences were found.

"...GH derived from bovine...pituitaries is ineffective in humans...bGH does not bind to GH receptors in human tissues."

"No toxicologically significant changes were noted in the clinical chemistry, hematology, or urinalysis parameters determined in rats administered rbGH orally."

"These results indicate that the body does not treat rMet-bGH as a protein distinct from a naturally occurring BST variant."

Giving a cow BST does not increase the normal trace amount of BST in the milk.

The FDA did not require studies of BST presence in milk since BST is inactive in humans. However, such studies were conducted and showed no increase in the level of BST in milk when cows were administered normal doses.

"...these very limited studies suggest that milk concentrations of bGH do not increase significantly as a result of the treatment of dairy cows with rbGH at the proposed doses... bGH residues do not present a human food safety concern."

Pasteurization destroys BST.

The FDA cited research showing that any trace of BST that may be present in milk is at least 90 percent destroyed by pasteurization.

"...it has been determined that at least 90% of bGH activity is destroyed upon pasteurization of milk."

BST does not change the composition of milk or its nutritional value.

The FDA found that the milk is not changed by administration of BST to the cow.

(Variations of milk components such as protein, fat and lactose occur during a cow's normal lactation due to changes in feed intake and other normal factors. BST did not alter these normal variations.)

"Milk composition of treated cows is well within the normal variation observed during the course of a lactation."

A secondary product of BST, IGF-I, was studied and dismissed by the FDA as unlikely to present any human food safety concerns. Also known as insulinlike growth factor, IGF-I is generated by the cow in response to the presence of BST. The FDA reported that IGF-I has no oral activity, is not found at levels significant for concern, and is denatured by the process used to prepare infant formula.

Overall conclusion:

The FDA has determined that the use of BST in cows is safe for humans.

"On the basis of this information, the FDA scientists concluded that the use of rbGH in dairy cattle presents no increased health risk to consumers."

AI 7162 (3/91)
GA

NIH SUMMARY

Independent Findings on Human Safety of Bovine Somatotropin (BST)

An independendent study of BST was done by the National Institutes of Health (NIH), which has no connection with proponents or opponents of this product. The NIH is a federal agency responsible to the United States Congress and to the President. This project was sponsored by the National Institute of Child Health and Human Development, the National Institute of Diabetes and Digestive and Kidney Diseases, and the NIH Office of Medical Applications Research.

Bovine somatotropin, also called BST or BGH (bovine growth hormone), is a natural protein hormone produced by cows that regulates milk production. Supplemental BST, also called rBST (recombinant bovine somatotropin), is currently under development for administration to dairy cows.

The NIH Technology Assessment Conference on BST was held December 5 through 7, 1990. A thirteen-member panel of independent experts examined available scientific data and heard presentations by experts and critics. The panel consisted of specialists in the medical profession and related scientific disciplines, clinical investigators, and public representatives. It also included a dairy farmer.

Conclusions of the NIH panel were unanimous. Their conclusions on human safety are presented and summarized below.

The National Institutes of Health is a public agency that is part of the U.S. Department of Health and Human Services.

NIH Panel Conclusions on the Human Safety of BST

"In the unanimous judgement of the panel:

"The composition and nutritional value of milk from rBST-treated cows is essentially the same as milk from untreated cows.

"As currently used in the United States, meat and milk from rBST-treated cows are as safe as those from untreated cows."

	Summary	NIH Panel Conclusions
MILK SAFETY	**The safety and wholesomeness of milk are carefully protected in the United States.**	"Because milk is such an important food in the American diet, ...it receives critical attention of regulatory agencies to ensure its safety and wholesomeness." "Milk is the most monitored food in the American food supply."
MILK QUALITY	**Research shows that milk from cows receiving BST is unchanged in nutritional value.**	"The evidence indicates that the nutritional quality of milk and meat from rBST-treated cows is equivalent to that of milk and meat from untreated cows. Protein, fat, and mineral content, including calcium, of the milk are all within the range found in untreated cows."
MEAT QUALITY	**Meat from cows receiving BST was found to be unchanged in nutritional value, except for a reduction in fat content.**	"Meat derived from treated cows is lower in fat content but otherwise is nutritionally equivalent to that from untreated animals."

	Summary	NIH Panel Conclusions
BST IN MILK	**It was found that giving a cow BST does not change the trace level of BST normally found in milk.**	"The concentration of BST in the milk of cows treated with usual doses of rBST is no higher than the concentration in untreated cows."
	The trace level of BST in milk was found to be mostly destroyed by pasteurization.	"Pasteurization inactivates or destroys most of the BST in milk...."
	Research indicates that BST is digested and, even if it were not digested, could have no effect in humans.	"There are no data to suggest that BST present in milk will survive digestion or produce unique peptide fragments that might have biological effects. Even if BST is absorbed intact, the growth hormone receptors in the human do not recognize BST and, therefore, BST cannot produce effects in humans."
IGF-I	**IGF-I, a protein produced by the cow in response to BST, has not been found to have effects harmful to humans.**	
	IGF-I is digested.	"This protein will also be digested into its amino acid, di- and tripeptide constituents by gut enzymes."
	Even if IGF-I were not digested, there is no evidence that it would be biologically active in humans.	"...nor is there evidence of systemic biological effects in man from any IGF-I absorbed intact, because the amounts of IGF-I that might potentially be ingested are orders of magnitude less than those required to produce such effects."
	It has been found that IGF-I is not destroyed by pasteurization but is destroyed by the heat treatment used to prepare infant formula.	"*[Pasteurization]* has little or no effect on the content of IGF-I *[in milk from cows receiving BST]*.... The more intense heat treatment used in the manufacture of infant formulas inactivates approximately 90 percent of the IGF-I."
	The IGF-I content of milk was found to be slightly increased when BST is administered, but the amounts were found to be within normal experience.	"Milk from rBST-treated cows contains higher concentrations of IGF-I.... The amount of IGF-I ingested in 1 liter of milk approximates the amount of IGF-I in saliva swallowed daily by adults. Young children and infants already ingest IGF-I in commercially available cow's milk or in mother's milk."
IGF-II	**IGF-II, another protein hormone produced by the cow, has not been found in increased levels in milk from cows receiving BST.**	"The concentration of IGF-II does not increase with rBST treatment."

SB

92

SENATE COMMITTEE REPORT

DATE: 3/27/91 FURTHER: Finance

DATE TURNED INTO OFFICE: _____

Resources Committee considered SENATE BILL NO. 92

"An Act relating to the lending authority and loans of the Commercial Fishing and Agriculture Bank; and providing for an effective date."

and recommended:

[ ] replace with _____ CS _____ [ ] same title
[ ] or adopt _____ CS _____ [ ] new title
[ ] technical title change (HB only)

[ ] attached amendment(s)
[ ] _____ letter of intent adopted

[ ] do pass

[ ] do not pass

[ ] no recommendation

[ ] individual recommendations

[ ] further referral to _____

ATTACHES NEW FISCAL NOTE(S):

Dept/Date:

[ ] fiscal note(s) _____

[ ] zero fiscal note(s) _____

[ ] appropriation-no fiscal note

APPROVES PREVIOUS:

Dept/Date:

[ ] fiscal note(s) _____

[ ] zero fiscal note(s) _____

[ ] Governor's bill w/fiscal note

SIGNING DO PASS:

OTHER RECOMMENDATIONS:

NREC

Chair: Signature and Recommendation

SENATE COMMITTEE REPORT
"IRST COMMITTEE OF REFERF

DATE: 1/30/91

FURTHER: Resources
Finance

Date of 5-Day Notice: 3/21/91
(in accordance with Uniform Rule 23)

DATE TURNED INTO OFFICE: 3-27-91

L&C Committee considered SB 92

Lending authority and loans of the Commercial Fishing and Agriculture Bank; efd.

and recommended: and a majority of the committee recommends do pass

[ ] replace with ______ CS ______ [ ] same title [ ] new title

[ ] attached amendment(s)

[ ] ______ letter of intent adopted

[ ] do pass

[ ] do not pass

[ ] no recommendation

[✓] individual recommendations

[ ] further referral to ______

ØFN

ATTACHES NEW FISCAL NOTE(S):

Department(s)/Date:

[ ] fiscal note(s) ______

[ ] appropriation-no fiscal note

Department(s)/Date:

[✓] zero fiscal note(s) Commerce/3-26-91

[ ] Governor's bill w/fiscal note

SIGNING DO PASS:

[signature]

[signature]

OTHER RECOMMENDATIONS:

[signature] - do pass

Chair: Signature and Recommendation

FISCAL NOTE No. 1

STATE OF ALASKA
1991 LEGISLATIVE SESSION

Bill Version: SB 92
(S) Publish Date: 3/27/91

Revision Date: _____ Department Affected:
Title: An Act relating to the lending authority and loans of CFAB
BRU: Banking, Securities & Corporations
Component: Banking & Securities
Sponsor: Sen. Zharoff
Requestor: _____
COMPONENT SERIAL NO. 1 2 3 3

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

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

POSITIONS:

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

Estimate of current year impact: _____

ANALYSIS: (Attach a separate page if necessary.)

Prepared By: Willis F. Kirkpatrick, Director Phone: 465-2521
Division: Banking, Securities & Corporations Date: 3/26/91
Approved by Commissioner: Glenn A. Olds Asst Comm
Agency: Department of Commerce & Economic Development Date: 3-26-91

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Rev 10/90
WFK/dg19024D-2/032691a

SENATOR FRED F. ZHAROFF

ALASKA STATE LEGISLATURE

P. O. BOX 405, KODIAK, ALASKA 99615 (907) 486-5259

DURING SESSION:

P. O. BOX V, JUNEAU, ALASKA 99811 • (907) 465-3473 • 465-3474

DISTRICT N

ALASKA PENINSULA • ALEUTIAN CHAIN • BRISTOL BAY • KODIAK ISLAND • LAKE CLARK/LAKE ILIAMNA • PRIBILOF ISLANDS • SHUMAGIN ISLANDS

MEMORANDUM

TO: Senator Lloyd Jones
Chair
Senate Resources Committee

FROM: Senator Fred F. Zharoff

DATE: April 2, 1991

RE: Senate Bill 92 - "An Act relating to the lending authority and loans of the Commercial Fishing and Agriculture Bank; and providing for an effective date."

Senate Bill 92 moved out of the Senate Labor and Commerce Committee on March 25 with three "do pass" recommendations. I respectfully request that SB 92 be scheduled for a hearing before the Senate Resources Committee at the committee's earliest convenience.

SB 92 would allow the Alaska Commercial Fishing and Agriculture Bank to develop a small loan program specifically targeted at rural commercial fishermen.

CFAB is a cooperative lending institution that was created by the Alaska Legislature in 1978 to serve Alaska's commercial fishing and agriculture industries. In recently evaluating CFAB's effectiveness, the officers concluded the institution was not doing as good a job as it could in Western Alaska and the Arctic-Yukon-Kuskokwim area. The commercial fishermen in these regions generally are engaged in relatively low income fisheries in which a relatively small capital investment is required for participation.

Financing for these fisheries operations, in general, has been difficult to obtain because of the regions' remoteness (all business must be transacted by phone or mail), language difficulties, less exposure to financial systems and institutions, the fishermen's lack of alternate income, and the annual fluctuations in salmon returns and income.

To serve these people, CFAB plans to start a program for small loans of less than $25,000. CFAB envisions establishing relationships with rural businesses and agencies (village corporations, Native associations, etc.) for originating and servicing these small loans.

CFAB could set up the program for small loans without legislation. The program is included in the bill so the legislature will have a full understanding of what is being proposed. The operative change CFAB requires in statute to go forward with its plans is in (b)(1) of Section 1, an exemption from CFAB's membership requirement.

As a cooperative, CFAB requires its borrowers to become members/owners. This involves the purchase of capital stock, extensive documentation, and a recordkeeping/communication burden. The administrative requirements are complicated and costly for both CFAB and its borrowers, and an impediment to small loans.

Through SB 92, CFAB is requesting the legislature to make the small loans program more feasible -- both for CFAB and the borrowers -- by granting a membership exemption under the limited circumstances proposed in the bill.

SB 92 also makes clarifying changes in CFAB's existing statute by confirming that using permits for collateral, nominating another person to assume a note, and instituting legal action to recover deficiencies applies to CFAB loans for fishing-related needs as well as loans for the purchase of entry permits.

The following backup information is attached:

1. Sectional analysis.

2. Position paper and zero fiscal note from the Department of Commerce and Economic Development.

3. Zero fiscal note from the Department of Fish and Game.

4. Letter of support from the Community Enterprise Development Corporation of Alaska.

5. CFAB's 1990 annual report.

6. CFAB statutes.

SENATOR FRED F. ZHAROFF
ALASKA STATE LEGISLATURE
P. O. BOX 405, KODIAK, ALASKA 99615 (907) 486-5259
DURING SESSION:
P. O. BOX V, JUNEAU, ALASKA 99811 • (907) 465-3473 • 465-3474
DISTRICT N
ALASKA PENINSULA • ALEUTIAN CHAIN • BRISTOL BAY • KODIAK ISLAND • LAKE CLARK/LAKE ILIAMNA • PRIBILOF ISLANDS • SHUMAGIN ISLANDS

SECTIONAL ANALYSIS

SENATE BILL 92

"An Act relating to the lending authority and loans of the Commercial Fishing and Agriculture Bank; and providing for an effective date."

SECTION 1

Adds a new section to statutes, AS 44.81.225, authorizing the Alaska Commercial Fishing and Agriculture Bank (CFAB) to make small loans to qualified borrowers who are not bank members.

(a) Explains the reason for the program.

(b)(1) Allows the small loan borrower to be exempt from the CFAB membership requirement.

(b)(2) Limits the amount that may be loaned to each borrower under this program to no more than $25,000.

(c) Limits the total amount of money that may be used for small loans to no more than eight percent of CFAB's total capital. CFAB's capital is presently about $37 million, so the amount available for small loans at the present time would not exceed $2,960,000.

(d) Allows CFAB to contract with a public agency or legal entity to service small loans.

SECTION 2

Amends 44.81.230(a) to include a reference to 41.81.225. 44.81.230(a) is an existing requirement for the Commercial Fisheries Entry Commission to certify that a fisherman who borrows for the purchase of a limited entry permit qualifies as a permit transferee under the limited entry statutes and regulations.

SECTION 3

Amends 44.81.230(b) -- which lists the requirements for pledging an entry permit as collateral for a loan -- to include a reference to 44.81.225. Also, by including a reference to 44.81.235, confirms that a permit lien can apply to loans made for fishing-related needs other than the purchase of limited entry permits.

SECTION 4

Amends 44.81.230(f) -- which allows a loan debtor to avoid foreclosure on an entry permit by nominating another person to assume the note -- to include a reference to 44.81.225. Also, by including a reference to 44.81.235, confirms that this method of avoiding foreclosure is applicable to CFAB loans for other fishing-related needs.

SECTION 5

Amends 44.81.250(d) -- which allows CFAB to institute legal action to recover deficiencies -- to include a reference to 44.81.225, thereby extending this section to cover the small loans program. Also, by including a reference to 44.81.235, confirms this section applies to loans for other fishing-related needs.

SECTION 6

Immediate effective date.

(2)

Department of Commerce & Economic Development / POSITION PAPER

SB 92: "An Act relating to the lending authority and loans of the Commercial Fishing and Agriculture Bank; and providing for an effective date."

The department encourages the intent to foster further development of our commercial fisheries industry, especially geographic areas which may discourage normal lending sources. It is our understanding that this type of development activity is the foundation upon which CFAB was built.

We do question, but are not opposed to, the exemption provisions of membership to be qualified for a loan. One of the fundamental elements in the well-being of any cooperative is the support of its members and, in turn, the coop's membership service. It may be in the best interest of not only the success of CFAB but fisheries development to expand membership rather than dilute it.

The department encourages passage of SB 92.

Glenn Allwood Asst. Comm.

Glenn A. Olds, Commissioner

Date: 3-26-91

GAO/WFK/dgl9015D-2
032691a

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NO. SB 92 (3)

Revision Date: 3/13/91 Department Affected: Fish and Game

Title: Loans Secured by Limited Entry Permits BRU: Commercial Fisheries

Component: Commercial Fisheries

Sponsor: Sen. Zharoff

Requestor: Governor COMPONENT SERIAL NO. 045

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

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

POSITIONS:

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

Estimate of current year impact: None

ANALYSIS: (Attach a separate page if necessary.)

Prepared By: Bob Clasby Phone: 465-4210

Division: Commercial Fisheries Date: 3/13/90

Approved by Commissioner: Ron Somerville by MEL

Agency: ADF&G Date: 3/28/91

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Rev 10/90

(4)

March 22, 1991

Senator Fred Zharoff
Post Office Box V
Juneau, Alaska 99811

Dear Senator Zharoff,

For the Community Enterprise Development Corporation of Alaska and its members, I wish to voice our support for Senate Bill No. 92. This Bill, if passed, would allow the Alaska Commercial Fishing & Agriculture Bank to make $25,000 commercial fishing loans.

Please allow me to tell you something about Community Enterprise Development Corporation of Alaska (CEDC). CEDC, formed by the Federal Government in 1968, is a non-profit organization designed to promote economic development in rural Alaska. We have 168 rural organizations who are members of CEDC, and the geographic areas which our members come from range from Sitka to Barrow.

One of the programs which we have, and is perhaps the most visible one in rural Alaska is our EDA Boat Loan Program. CEDC inherited this program from the Alaska Native Foundation in 1983. It is now the most creditable Federal Loan Program in rural Alaska. This program gives Western Alaska Fishermen, who otherwise could not qualify for a commercial bank loan, alternative financing for their boats. Since 1983, ninety four fishermen received financing worth $1,123,973 for boats and gear from CEDC.

Our program has, and will continue to have a positive economic impact in Western Alaska. However, we do have restrictions with this program, and this is why we support Senate Bill No.92.

Our loan fund is small, and on an average we can only make 10 new boat loans per year. We cannot make loans outside of Western Alaska. Also, because we can not take fishing permits as collateral, we do not make permit loans. Within our service area the average fishing permit is worth from $12,000-$25,000.

CEDC
Community Enterprise Development Corporation of Alaska
1577 'C' Street Plaza Suite 304/Anchorage Alaska 99501 907 274 5400

Based on the number of inquiries that we get from fishermen outside of our service area. And due to limitations in our program. We can see there is adequate need for small fishing boats, and fishing permit financing in and outside of our service area.

CEDC and CFAB share a common interest with commercial fishermen. We both would like to see fishermen meet their goal of self-sufficiency. If this bill passes, this goal will be more attainable for the small boat fishermen.

Sincerely,

COMMUNITY ENTERPRISE DEVELOPMENT
CORPORATION OF ALASKA

Perry R. Eaton
President & CEO

(5)

Alaska Commercial Fishing and Agriculture Bank

1990 Annual Report

Table of Contents

For more information contact

Alaska Commercial Fishing and
Agriculture Bank
2550 Denali Street Suite 1201
Anchorage Alaska 99503
(907) 276-2007 or (800) 544-2228

Executive Message to Members

May 31, 1990, marked the end of the 11th year of CFAB operations. We believe that in some respects, though, it's appropriate to view Fiscal 1990 as the **first** year of "normal" operations. From 1980 on into 1984, CFAB's activities and results were influenced in part by its immaturity, by both internal and external exuberance in implementation of a unique concept, and by an aggressiveness in keeping with the inflationary trends of the time and with the trend of Alaska's economy in general.

The mid-80's were marked by the effects of crippling loan losses to CFAB; policies, practices, and financial results were dramatically influenced by the need to retrench and recover. At best, those years can be characterized as a "holding period."

Fiscal 1988 and 1989 were brighter. The significant distortions to CFAB's activities and financial results were generally favorable, reflecting recoveries which were the results of prior years' efforts. Fiscal 1989 was a particular example of that with over 50 percent of its gross income and about 80 percent of its net proceeds attributable to the efforts and events of prior years.

There were very few elements such as the above, and none which were extreme, affecting operations and financial results in Fiscal 1990. We are pleased by the short-term trends and inferences which can be drawn from such limited experience.

New Loan Activity

There were 102 new members of CFAB in Fiscal 1990, the largest number, by far, in any twelve-month period since 1983. These are individuals, partnerships, and corporations who turned to CFAB for the first time to meet their respective financing needs.

Excluding seasonal loans to processors (to avoid confusing distortions), CFAB made 171 new loans in Fiscal 1990; they involved advances of over $14.0 million. One hundred of those loans, totaling about $8.8 million, were to new members. The remaining 71 were repeat loans to "old" members and involved about $5.3 million.

Neither CFAB's Board of Directors nor its management are inclined to guide the institution on a course of "bigness for bigness' sake." Nevertheless, we are heartened by the indications that CFAB is providing service to new segments, or new generations, in the Alaska seafood industry: by the gradually reducing average loan balance (which tends to limit CFAB's vulnerability to localized adverse developments); and by the continuing diversity of its loan portfolio among major fisheries.

Financial Condition

We invite your attention to CFAB's financial statements, and its independent auditors' opinion letter, elsewhere in this Annual Report. CFAB's total assets increased about $10.8 million during the year, slightly less than the $11.2 million increase in net loans and receivables outstanding. Further analysis of the latter change, aided by a review of NOTE B to the financial statements, discloses that CFAB's gross **earning** loans and receivables increased by about $12.9 million. This increase, offset in part by an increase of only $9.2 million in interest-bearing debt, implies an enhancement of future opportunities for net proceeds. This in turn made possible a reduction in the interest rate charged on all variable rate loans; that reduction was made effective June 1, 1990.

CFAB's net equity increased about $1.8 million in Fiscal 1990. Much of that increase is related to the retention of net proceeds, but over $700,000 is the result of new borrowers' direct investment in Class B Preferred Stock. There was a small net reduction of about $3,000 in outstanding Class A Membership Stock. This arose through the retirement of the Class A Stock of about 400 members who had been inactive for three or more years. In most cases, the $10 par value was paid to those members; in the few instances involving members who had previously defaulted on obligations to CFAB, the par value was transferred to CFAB's unallocated surplus account.

Financial Results of Operations

CFAB's statement of net proceeds for Fiscal 1990 shows some major changes from the prior year, primarily in the areas of gross revenues and net proceeds. As mentioned earlier, this is because in Fiscal 1989 CFAB received large amounts of long-overdue interest income while Fiscal 1990 was essentially a "normal" operating year.

There are several categories of operating expenses, as reported, which reflect relatively large increases from the prior year and which merit comment. "Salaries and benefits" increased nearly $95,000. That amount does in fact include modest and "normal" increases in compensation to CFAB's employees as well as significantly higher health insurance costs. The majority of the increase, however, is related first to the recording of the cash value of accrued vacation leave ($35,000) at May 31, 1990, to conform with accounting rules; and, second, to the fact that Fiscal 1989's reported expenses had been reduced by receipt of proceeds ($40,200) from termination of a supplemental retirement plan.

There was an increase of about $35,000 in "Advertising and promotion" expenses. This arose primarily from (1) the one-time expense of CFAB's 10th Anniversary Open House, (2) the introduction of radio advertising, (3) broader use of newspaper advertising, and (4) increased participation in trade shows, etc. Evaluation of the effectiveness of the latter three activities is ongoing, and related expenditures are likely to fluctuate in amount. We do believe that increased loan activity in Fiscal 1990 was due — at least in part — to CFAB's promotional efforts.

"Professional fees" were about $25,000 greater than in Fiscal 1989. Most of that arose from CFAB's defense of a lawsuit emanating from a 1982 personnel action. We believe that suit has no merit. In fact, CFAB has been granted summary judgment, but the matter is still embedded in the appeal process.

Member Note Program

In CFAB's 1989 Annual Report, and in subsequent newsletters, the Member Note Program was announced. That program makes it possible for members to effectively utilize short-term funds through the purchase of unsecured CFAB notes. To date, the program has not been used by a wide range of CFAB members. For those members who have participated, though, it seems to be an attractive arrangement — over the 9-month course of its availability, notes totaling $1,008,000 were sold.

CFAB *Staff*

There were no changes in CFAB's 18-person fulltime employee group during Fiscal 1990. We are pleased with the staff's stability and commitment, which result in clear and definite benefits to existing member-borrowers and which contribute to the growth trends as well.

Board Changes

At CFAB's 1989 Annual Meeting, Bristol Bay fisherman Glenn Gustafson of Anchorage and Prince William Sound fisherman C. Ross Mullins of Cordova were elected to CFAB's Board of Directors. They replaced Harvey Samuelsen and Bob Waldrop, each of whom had declined to seek reelection. Mr. Samuelsen was one of CFAB's original Directors (and the last to serve as an active Director), and he and Mr. Waldrop together represented over 17 years' experience with CFAB. All of CFAB's members have benefitted from the dedication and contributions of these longtime Directors.

1990 *Annual Meeting*

One three-year Director's term is subject to election in 1990, and a call for nominations will have been issued prior to distribution of this Annual Report. In addition, it will be necessary to seek candidates for completion of the unexpired term of CFAB's "farmer" Director.

The number and percentage of eligible members voting in Director elections and on other CFAB business have continued to increase in recent years. However, actual attendance at Annual Meetings has continued to be minimal even though a variety of approaches — including sectional meetings in coastal communities — has been attempted. Therefore, the Board has concluded to hold the 1990 Annual Meeting on Friday, October 26, in CFAB's own quarters and with limited special features in order to minimize the cost. Official notices will be mailed in September.

Statewide Fishermen's Conference

CFAB has been invited to participate with a broad group of Anchorage and Southcentral businesses to present a trade show and conference for Alaska fishermen in late November at Anchorage's Egan Convention Center. We have taken particular interest in the conference itself, which is being structured to give fishermen insight into the dramatically changing market forces which affect Alaska seafood, especially salmon. Fishermen tend naturally to focus their attention and energies on production and production-related factors. We believe the direct effects on fishermen's incomes from competitive market developments are equally worthy of attention and understanding, and we expect to vigorously promote and support CFAB member attendance at the November conference.

Gil Gunderson
Chairman, Board of Directors

Edward E. Crane
President

Deloitte & Touche

Independent Auditor's Report

Board of Directors
Alaska Commercial Fishing
and Agriculture Bank
Anchorage, Alaska

We have audited the balance sheets of Alaska Commercial Fishing and Agriculture Bank as of May 31, 1990 and 1989, and the related statements of net proceeds, changes in capital and patronage, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of Alaska Commercial Fishing and Agriculture Bank as of May 31, 1990 and 1989, and the results of its operations and its cash flows for the years then ended in conformity with generally accepted accounting principles.

Deloitte & Touche

Certified Public Accountants
June 14, 1990

Balance Sheets

	May 31, 1990	May 31, 1989
Assets:		
Cash	$ 21,890	$ 126,752
Loans and other receivables, net of allowance for loan losses of $1,205,648 and $1,471,399, respectively	45,300,534	34,107,728
Accrued interest receivable	1,944,488	1,661,180
Deferred income tax benefits	426,203	239,912
Investment in National Bank for Cooperatives	4,549,247	5,374,626
Bank premises, furniture and equipment, net	118,382	155,413
Acquired assets held for sale	133,395	133,406
Other assets	42,813	20,336
Prepaid income taxes	140,000	
	$ 52,676,952	$ 41,819,353
Liabilities:		
Accounts payable and accrued expenses	$ 193,395	$ 91,655
Accrued interest payable	229,367	186,449
Class B preferred stock subscriptions	99,077	28,249
Notes payable	16,359,128	7,190,780
Dividend payable	48,600	37,328
Income taxes payable		363,547
	16,929,567	7,898,008
Commitments and Contingent Liabilities (Note H)		
Capital:		
Share capital -		
Class C special preferred stock, $10,000 par value, authorized 4,000 shares, outstanding 3,180 shares	31,800,000	31,800,000
Class B preferred stock, $100 par value, authorized 400,000 shares, outstanding 28,187 and 26,261	2,818,700	2,626,100
Loans receivable on Class B preferred stock	(442,700)	(955,900)
Class A membership stock, $10 par value, authorized 10,000 shares, outstanding 843 and 1,147	8,430	11,470
	34,184,430	33,481,670
Capital in excess of par value	111,600	102,420
Contributed capital	144,626	144,626
Unallocated surplus	1,306,729	192,629
	35,747,385	33,921,345
	$ 52,676,952	$ 41,819,353

See notes to financial statements.

Statements of Net Proceeds

	Year ended May 31,	
	1990	1989
Gross Loan Revenues:		
Interest and fees on loans and other receivables	$ 4,701,341	$ 8,103,810
Provision for allowance for loan loss	204,500	132,300
Net Loan Revenues	4,496,841	7,971,510
Interest expense	900,648	1,308,357
Net proceeds before other income, operating expenses, income tax expense and extraordinary credit	3,596,193	6,663,153
Other Income:		
Interest on temporary investments	2,379	231,113
Gain on sale of assets	798	425
Net income from acquired assets	13,659	10,000
	16,836	241,538
	3,613,029	6,904,691
Operating Expenses:		
Salaries and benefits	1,229,207	1,135,476
Occupancy expense	157,665	162,328
Advertising and promotion	119,014	83,937
Professional fees	93,829	68,679
Travel, lodging and meals	65,687	57,365
Office operations	47,783	46,807
Depreciation and amortization	46,116	75,142
Telephone and postage	31,822	30,184
Directors' fees	22,375	16,650
Miscellaneous	25,581	22,612
	1,839,079	1,699,180
Net proceeds before income tax expense and extraordinary credit	1,773,950	5,205,511
Income tax expense	784,000	2,100,000
Proceeds before extraordinary credit	989,950	3,105,511
Extraordinary credit — Utilization of net operating loss carryforward	172,000	1,970,000
Net Proceeds	$ 1,161,950	5,075,511

See notes to financial statements.

Statements of Changes in Capital and Patronage

	Share capital	Capital in excess of par value
Balance, May 31, 1988	$ 32,864,080	$ 95,310
Allocation to unallocated undistributed loss		
Issuance (redemption) of stock during the year:		
Class B preferred stock, 5,026 shares, net	(502,600)	
Class A stock, 79 shares	790	7,110
Reduction in loans receivable on Class B preferred stock	1,119,400	
Net proceeds		
Amortization of unallocated patronage deficit		
Dividends declared		
Unallocated surplus		
Balance, May 31, 1989	33,481,670	102,420
Issuance (redemption) of stock during the year:		
Class B preferred stock, 1,926 shares, net	192,600	
Class A stock, 229 shares, net	(2,290)	9,180
Class A stock, 75 shares, cancelled	(750)	
Reduction in loans receivable on Class B preferred stock	513,200	
Net proceeds		
Dividends declared		
Unallocated surplus		
Balance, May 31, 1990	$ 34,184,430	$ 111,600

See notes to financial statements.

Contributed capital	Unallocated surplus	Allocated undistributed patronage	Net proceeds	Unallocated patronage earnings (deficit)	Total
$ 144,626	$ —	$ 825,691	$ —	$ (5,671,245)	$ 28,258,462
		(825,691)		825,691	
					(502,600)
					7,900
					1,119,400
			5,075,511		5,075,511
			(4,845,554)	4,845,554	
			(37,328)		(37,328)
	192,629		(192,629)		
144,626	192,629	—	—	—	33,921,345
					192,600
					6,890
	750				
					513,200
			1,161,950		1,161,950
			(48,600)		(48,600)
	1,113,350		(1,113,350)		
$ 144,626	$ 1,306,729	$ —	$ —	$ —	$ 35,747,385

Statements of Cash Flows

	Year ended May 31, 1990	1989
Cash flows from operating activities:		
Interest received	$ 4,208,059	$ 8,441,456
Fees received	212,353	234,178
Payments for operating expenses	(1,748,486)	(1,677,811)
Interest paid	(857,730)	(1,556,634)
Income taxes paid	(1,301,838)	(6,365)
Cash Provided by Operating Activities	512,358	5,434,824
Cash Flows from Investing Activities:		
Loan originations, net of undisbursed funds and principal repayments on member loans	(11,362,521)	5,323,534
Required investment in National Bank for Cooperatives	(102,988)	(122,516)
Proceeds from retirement of investment in National Bank for Cooperatives	928,367	274,519
Proceeds from lease of acquired assets	13,659	10,000
Proceeds from sale of equipment	798	425
Satisfaction of lien on acquired assets held for sale	12	(47,817)
Payments for purchase of equipment	(9,085)	(1,749)
Net Cash Provided by (used in) Investing Activities	(10,531,758)	5,436,396
Cash Flows from Financing Activities:		
Additions (repayment) of notes payable, net	9,161,097	(11,508,891)
Repayment of capital lease	(12,749)	(8,872)
Proceeds from issuance of Class B stock	705,800	616,800
Proceeds from issuance of Class A stock, net	6,890	7,900
Proceeds from subscription for Class B stock	70,828	22,549
Payment of dividends to members	(37,328)	
Proceeds from member notes, net	20,000	
Net Cash Provided by (used in) Financing Activities	9,914,538	(10,870,514)
Net Increase (Decrease) in Cash	(104,862)	706
Cash, beginning of year	126,752	126,046
Cash, end of year	$ 21,890	$ 126,752

See notes to financial statements.

	Year ended May 31,	
	1990	1989
Reconciliation of Net Proceeds to Net Cash Provided by Operating Activities:		
Net Proceeds	$ 1,161,950	$ 5,075,511
Adjustments to reconcile net proceeds to cash provided by operating activities -		
Depreciation	46,116	75,142
Deferred tax benefit	(186,291)	(239,912)
Provision for loan losses	204,500	132,300
Lease income from assets held for sale	(13,659)	(10,000)
Gain on sale of assets	(798)	(425)
Foreclosure costs	(34,786)	(144,398)
Changes in assets and liabilities:		
Accrued interest receivable	(283,308)	340,711
Other assets	(22,477)	(6,947)
Accounts payable and accrued expenses	101,740	(46,827)
Accrued interest payable	42,918	(103,878)
Income taxes payable	(363,547)	363,547
Prepaid income taxes	(140,000)	
Total Adjustments	(649,592)	359,313
Net Cash Provided by Operating Activities	$ 512,358	$ 5,434,824
Supplemental Schedule of Noncash Investing and Financing Activities:		
Addition of a capital lease obligation for equipment		$ 58,840

See notes to financial statements.

Notes to Financial Statements

Year Ended May 31, 1990 and 1989

Note A — Summary of Significant Accounting Policies:

Operations: The Alaska Commercial Fishing and Agriculture Bank (CFAB) was incorporated on May 4, 1979 to promote growth of Alaska agriculture and fishing by providing debt financing to resident-owned businesses engaged in harvesting, processing or marketing, and to promote its own growth as a strong user-oriented institution through cooperative ownership and self-governance.

Interest on loans: The accrual of income is suspended on loans for which the payment of interest is contractually past due more than 90 days.

Investment in National Bank for Cooperatives: The investment in National Bank for Cooperatives (NBC) is stated at cost plus noncash patronage notifications. No ready market exists for this investment. Patronage dividends from NBC reduce interest expense to NBC in the year declared.

Allowance for loan losses: The allowance for loan losses is based upon review and evaluation of nonaccrual loans, other delinquent loans, and large loans as well as application of a potential loss factor consistent with CFAB's experience.

Acquired assets held for sale: Acquired assets held for sale include those assets acquired through foreclosure. These assets are carried at the lower of fair value or the recorded investment in the related loan. Holding costs are expensed when incurred unless such costs increase the fair value of the asset.

Bank premises, furniture and equipment: Bank premises, furniture and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are charged to operations by use of the straight-line method over estimated useful lives of three to ten years. Expenditures for maintenance and repairs are charged to operating expense as incurred. Expenditures for renewals or improvements which extend the life of an asset are capitalized at cost and depreciated as stated above. Upon sale, retirement or other dispositions of property, the cost and accumulated depreciation are removed from the respective accounts and the resulting gain or loss recorded.

Income taxes: CFAB qualifies as a cooperative taxable under Subchapter T of the Internal Revenue Code.

Deferred loan fees: Statement of Financial Accounting Standards (SFAS) No. 91, "Accounting for Nonrefundable Fees and Costs Associated with Originating and Acquiring Loans and Initial Direct Costs of Leases," became effective for loan originations beginning January 1, 1988. SFAS No. 91 requires loan origination fees and direct loan origination costs, if material, to be capitalized and the net fee or cost to be amortized over the life of the related loan as an adjustment to yield. SFAS No. 91 was not applied because the effects were not material to the financial position or results of operations.

Net reporting of cash receipts and payments: Statement of Financial Accounting Standards (SFAS) No. 104, "Net Reporting of Certain Cash Receipts and Cash Payments and Classification of Cash Flows from Hedging Transactions," becomes effective June 15, 1990. SFAS No. 104 amends SFAS No. 95 to permit banks to report net amounts of cash receipts and cash payments for loans made to customers and principal collections of loans, and deposits accepted and repayments of deposits. As permitted, CFAB has elected early adoption of SFAS No. 104 and the 1989 financial statements have been restated.

Reclassification: Certain items in the 1989 financial statements have been reclassified to conform to 1990 presentation.

Note B — Loans:

CFAB's loan portfolio by major category is as follows:

	May 31,	
	1990	1989
Seafood harvesters	$ 30,170,321	$ 27,080,586
Fish processors	11,902,245	7,116,742
Agriculture and timber	3,409,048	588,386
Other receivables	1,467,268	1,749,313
	46,948,882	36,535,027
Less loans receivable on Class B preferred stock	442,700	955,900
	46,506,182	35,579,127
Less allowance for loan losses	1,205,648	1,171,399
	$ 45,300,534	$ 34,107,728

In accordance with its statutory mandate and authority, CFAB's financing activity is limited to the Alaskan commercial fishing and agriculture industries. This concentration of loans in resource-based industries results in an unusual level of risk exposure.

Notes to Financial Statements *continued*

The loan portfolio includes loans which have been classified as nonaccrual. Nonaccrual loans by major category are as follows:

	May 31, 1990	May 31, 1989
Seafood harvesters	$ 1,341,632	$ 2,500,981
Fish processors	898,882	1,498,416
Agriculture and timber		233,385
Other receivables		129,352
	2,240,514	4,362,134
Less loans receivable on Class B preferred stock	10,600	156,000
	$ 2,229,914	$ 4,206,134

Activity in the allowance for loan losses is as follows:

	May 31, 1990	May 31, 1989
Balance at beginning of year	$ 1,471,399	$ 2,197,140
Charged to expense	204,500	132,300
Recoveries on loans previously charged off	317,950	27,400
	1,993,849	2,356,840
Less loan amounts charged off	788,201	885,441
Balance at end of year	$ 1,205,648	$ 1,471,399

The allowance for loan losses is periodically evaluated by management and changes are recorded through the current period provision for loan losses.

Loans to Directors: To qualify for election to the CFAB Board of Directors, an individual must be a borrowing member or be an officer or principal of a corporation, partnership, or joint venture which is a borrowing member. Loans to these directors or their interests totalled $323,485 and $215,605 at May31,1990 and 1989, respectively.

Note C — Bank Premises, Furniture and Equipment:

Bank premises, furniture and equipment consists of the following:

	May 31, 1990	May 31, 1989
Furniture, fixtures and equipment	$ 902,865	$ 893,781
Leasehold improvements	147,202	147,202
	1,050,067	1,040,983
Less accumulated depreciation and amortization	931,685	885,570
	$ 118,382	$ 155,413

Note D — Notes Payable:

Notes payable consists of:

	May 31, 1990	May 31, 1989
NBC long-term notes with interest rate of 11.28%, maturing in January, 1993	$ 5,000,000	$ 5,000,000
NBC short-term notes and seasonal loan with interest rates ranging from 9.11% to 10.0%, maturing May 1, 1991	11,301,440	2,140,766
Member note with interest rate of 8.5% maturing August 26, 1990	20,424	
Other - Capital lease	37,264	50,014
	$ 16,359,128	$ 7,190,780

The NBC notes are secured by substantially all CFAB assets.

Principal payments required on notes payable are as follows:

Year ending May 31,	Amount
1991	11,333,632
1992	11,768
1993	5,011,768
1994	1,960

Note E — Employee Benefit Plans:

CFAB has an employee benefit plan as defined under Section 401(k) of the Internal Revenue Service Code covering substantially all employees.

An employee is allowed to contribute up to 15% of his/her earnings to the maximum limit allowed by the Code. Contributions by CFAB to the plan are at the discretion of the Board of Directors. Contributions by CFAB for the years ended May 31, 1990 and 1989 were $56,279 and $54,018, respectively.

Note F — Capital:

Share capital: Shares owned by the State of Alaska must be repurchased by CFAB on or before July 20, 2000.

Preferential shareholders' rights on dissolution are attached in the order of Class C, Class B and Class A.

The following rights apply to the three categories of stock:

Class C - No voting or dividend rights. May only be issued to the State of Alaska.

Class B - No voting rights. Class B stock may only be held by members of CFAB. Prior to December 31, 1985, all loans required a purchase of Class B stock in an amount equal to 10% of the loan balance; however, this purchase was not funded but was evidenced by notes. On loans made subsequent to December 31, 1985, each borrower is required to make a cash purchase of Class B stock in an amount equal to 5% of the total loan. This investment will remain in place until retired by the Board of Directors.

Class A - No dividend rights. Each member of CFAB must own one share of Class A stock. Each share of stock carries one vote. To vote, a member must be a current borrower or have borrowed from CFAB during the preceding two years or have minimum retained membership earnings and/or Class B stock with CFAB of $2,500.

Note G — Income Taxes:

The provision for income taxes consists of the following:

	Year ended May 31,	
	1990	1989
Current payable - Federal	$ 798,000	$ 369,912
Deferred benefit - Federal	(186,000)	(239,912)
	$ 612,000	$ 130,000

The deferred income tax benefit relates principally to the timing difference arising from the effect of the Tax Reform Act of 1986 on the allowance for loan losses. For Alaska State income tax calculation purposes, CFAB has $1,908,000 net operating loss carryforward available as of May 31, 1990, to offset future taxable earnings. The net operating loss carryforward expires May 31, 1998.

Note H — Commitments and Contingent Liabilities:

Commitments: CFAB leases office space under a noncancelable operating lease agreement which expires in 1992 and for which the remaining lease obligation is $265,609. Rental expense under this lease totalled $151,844 and $156,872 for the years ended May 31, 1990 and 1989, respectively.

Contingencies: CFAB is a litigant in several legal actions arising from normal business activities, primarily related to delinquent loans and foreclosures. CFAB reserves for potential losses on delinquent loans as described in Note A. As to litigation outside of delinquencies and foreclosures, management believes that those actions are without merit or that the ultimate liability, if any, resulting from them will not materially affect CFAB's financial position or its results of operations.

Board of Directors and Staff

Board of Directors

Gilbert Gunderson, Chairman
Juneau

Alan Otness, Vice Chairman
Petersburg

Dean Paddock, Secretary-Treasurer
Juneau

Glenn Gustafson, Director
Anchorage

Hyoung "Henry" Kim, Director
Anchorage

C. Ross Mullins, Director
Cordova

Charles W. Trowbridge, Director
Palmer

Staff

Iver H. Amundsen
Assistant Vice President

Karl D. Barnard
Vice President

Dan A. Berkshire
Vice President

Cynthia D. Blush
Bookkeeper

Darleen S. Church
Senior Vice President

Robert H. Clark
Vice President

Wendy M. Clark
Administrative Secretary

Edward E. Crane
President

Elton E. Engstrom
Loan Officer Trainee

A. W. Hall
Business Development Officer

Lela F. Hart
Vice President

Isabelle R. Kautzky
Receptionist

Sharon A. Morgan
Administrative Support Secretary

Mary B. Ober
Documentation Assistant

David G. Rogers
Senior Vice President

Douglas W. Sindt
Data Processing Supervisor

Lora C. Smith-Thilmony
Senior Bookkeeper

Deborah A. Tosch-Price
Documentation Paralegal

Godelieve C. Van Lint
Administrative Support Clerk

DeLories M. vonGemmingen
Executive Secretary

Office Address: 2550 Denali St., Suite 1201 (Denali Towers), Anchorage

Mailing Address: P.O. Box 92070, Anchorage, AK 99509-2070

Telephone: (907) 276-2007; (800) 544-2228 (Outside Anchorage)

FAX: (907) 279-7913

What is CFAB?

Alaska Commercial Fishing and Agriculture Bank (CFAB) began operations in 1980. Its sole mission is to provide financing of all kinds to the commercial fishing industry and the agriculture industry (including timber) in Alaska.

What kinds of loans and repayment programs are available from CFAB?

CFAB can make loans for almost any fishing-related or farming-related purpose. The most common purposes are the purchase, modification, or refinancing of a vessel; purchase of a limited entry permit; gear, engine, or equipment replacement or upgrade; general operating capital; and fish processing, etc. There are no "standard" repayment terms or programs — we work with each applicant to determine a repayment schedule appropriate to that particular loan transaction.

Who may borrow from CFAB?

In order to be eligible for consideration as a CFAB borrower, an applicant must be commercially involved in one of the industries mentioned earlier. An individual applicant must be a bona fide Alaska resident. A partnership must be comprised of Alaska residents. If the applicant is a corporation, the majority ownership and control must rest with Alaskans. There are some exceptions to the latter rule for companies which are involved in shorebased fish processing.

Eligibility, however, is only a first step. To obtain a CFAB loan, an applicant must be found by CFAB to be capable and creditworthy within the context of the specific loan request. The standards used by CFAB are essentially the same as those of any responsible lender. However, CFAB's specialized purposes, and the experience we have gained, may permit us to consider a broader range of applicants than do most other lenders.

Who owns CFAB?

CFAB is a cooperative. This means that each borrower becomes an owner through a modest purchase of CFAB stock when a loan is made. The State of Alaska is also an owner. CFAB was established by a special Alaska statute, and the State made an initial investment of "seed money" — that money is expected to be returned to the State as borrowers' ownership grows.

Does that mean the State operates CFAB?

CFAB's statute provides for it to be operated as a private cooperative rather than as a State agency. Its basic policies and directions are established by a seven-person Board of Directors, which hires professional management and staff to operate the business. Five of the Directors must be borrower-owners of CFAB and are elected by the total borrower-ownership. The other two Directors are appointed by the Governor of Alaska. All Directors' terms are for three years. CFAB holds an ownership meeting each year - borrower-owners have the opportunity to vote on important matters, to receive reports from Directors and management, and to elect Directors. The State's stock is non-voting, although CFAB provides periodic reports to State officials.

Where does CFAB *get its money to loan?*

CFAB is not limited as to its source of funds. Since its inception, CFAB has borrowed funds for re-lending from the Federal Farm Credit System.

What is CFAB's *interest rate and how is it set?*

Although CFAB occasionally makes fixed rate loans, the vast majority of its loans are on a variable rate basis. That is, the rate will change — up or down — as CFAB's costs change. There is no single initial rate — the initial rate is based on the kind of loan involved. Most important, we use a procedure to objectively analyze the credit-worthiness of each individual applicant, which permits us to offer the most favorable interest rates to the most desirable risks. CFAB's interest rates overall are set to provide sufficient income to pay its own interest costs and operating expenses and to provide a small margin. Since CFAB is a cooperative, any margin which is actually produced is either returned to the borrower-owners or otherwise used to their benefit.

— EXCERPTED FROM A CFAB BROCHURE. —

SB

107

SENATE COMMITTEE REPORT

DATE: 2/6/91 FURTHER:

Date of 5-Day Notice: _____
(in accordance with Uniform Rule 23)

DATE TURNED INTO OFFICE: _____

Resources Committee considered SB 107

Regulations of the Board of Fisheries and Board of Game applicable to units of the national park system.

and recommended:

[ ] replace with _____ CS _____ [ ] same title
[ ] or adopt _____ CS _____ [ ] new title
[ ] technical title change (HB only)

[ ] attached amendment(s)
[ ] _____ letter of intent adopted

[ ] do pass

[ ] do not pass

[ ] no recommendation

[ ] individual recommendations

[ ] further referral to _____

ATTACHES NEW FISCAL NOTE(S):

Dept/Date:

[ ] fiscal note(s) _____
_____
_____

[ ] zero fiscal note(s) _____
_____
_____

[ ] appropriation-no fiscal note

APPROVES PREVIOUS:

Dept/Date:

[ ] fiscal note(s) _____
_____
_____

[ ] zero fiscal note(s) _____
_____
_____

[ ] Governor's bill w/fiscal note

SIGNING DO PASS:

_____
_____
_____
_____
_____
_____

OTHER RECOMMENDATIONS:

_____
_____
_____
_____
_____
_____

_____
Chair: Signature and Recommendation

. . . Resources/ Business. . .

State regulations in national parks: Sen. Dick Shultz has introduced SB-107, prohibiting the Boards of Fish and Game from adopting regulations applicable to areas within the national park system that are *more* stringent than corresponding regulations of the National Park Service. Exceptions to this rule may be made if either board finds that the more stringent regulations are necessary for the conservation of fish or game. The regulations must also be approved by a 2/3 majority of the appropriate board.

***

Economic impact of land classifications: The commissioner of Dept. of Natural Resources would be required to submit an *economic analysis* of proposed land classifications and reclassifications along with his regular annual report, under Sen. Dick Shultz' SB-108. The analysis would cover the probable economic effects of the classification or reclassification, including the estimated value of resources on the land, the probable short-term and long-term economic effects, and the types and number of persons affected by the proposed classification or reclassification.

***

Annual minerals report: Rep. Bert Sharp has introduced a bill requiring the Resources commissioner to submit annual reports detailing lands removed from mining or mineral exploration during the past year. HB-97 would also require that state agencies annually review their policies regarding mineral exploration and development, to identify inconsistencies or deficiencies with the state's mineral policy. This particular provision would be in effect only until the Alaska Minerals Commission sunsets.

***

Kachemak Bay timber buy-out: A bill to buy out Seldovia Native Association's and the Timber Trading Company's inholdings and timber rights within Kachemak Bay State Park has been introduced by Rep. Mike Navarre. A similar bill failed on reconsideration in the House last year by a vote of 20-20. HB-83 appropriates $20 million to the Dept. of Natural Resources for the buy out. High cost of the bill is probably the reason that it didn't pass last year. Timber Trading Company, subsidiary of Koncor Forest Products, is in the process of acquiring permits to harvest the timber, and likely will start cutting once permits are in place. Both Seldovia and Koncor would rather sell their rights, if the legislature passes the appropriation.

***

The new Health Care Cost Containment Task Force report to the legislature is out, and it has a sobering message:

- Health care costs in Alaska are rising at two and three times the inflation rate for all other goods and services. Health care spending in the state during 1990 reached $1.5 billion, up 300 percent from $480 million spent in 1979, despite no substantial change in the state's population.
- Over 90,000 Alaskans cannot afford to pay medical bills, are not covered by a group health insurance plan, do not qualify for public assistance programs, and cannot afford to pay individual health insurance premiums.
- If current inflationary trends continue, spending for Alaska health care will reach $10 billion by the year 2000, and over 25 percent of the state's residents will be uninsured.
- Health care costs are the fastest-growing component of the state budget, accounting for $385.5 million of the Fiscal Year '90 operating budget. The Task Force estimates that absent immediate action, costs to state government will continue to escalate at the rate of the last ten years and will exceed $1 billion by FY '95.
- The legislature's action on past Task Force recommendations accounted for savings over $20 million in the cost of providing health coverage to state employees in FY '90 and '91.

***

Alaska Railroad extension: Any real work on extension of the Alaska Railroad to the Yukon River would depend on development of a wood industry in the Yukon River Valley. A reassessment, and gathering of current information, on timber resources in the Yukon Valley region will have to be be done to produce even a 'probable reserve' estimate.

Princess Hotel in Fairbanks: Railroad officials told the Senate Transportation Committee last week that the Princess Hotel group has backed away from negotiations with ARR to put their proposed new 250-room hotel in Fairbanks on railroad-owned land. Officials say that the problem was not terms, but that the site across the river from the Alaskaland recreation park required considerable expense for extension of utilities across the river. Princess is now looking at a second site. Observers say the added expense was a real factor, but that the ARR site would have had good collateral benefits for the railroad, the city, Princess, and the nearby Alaskaland.

***

Alaska State Legislature

SENATOR DICK SHULTZ

P.O. Box V
Juneau, Alaska 99811
(907) 465-4940
Home: P.O. Box 487
Tok, Alaska 99780

Member
Finance Committee
Transportation Committee
Special Committee on Oil & Gas

Senate
District J

District 17

ALCAN BORDER
ANDERSON
BIG DELTA
BOUNDARY
CANTWELL
CHICKEN
CHISTOCHINA
CLEAR
COPPER CENTER
DELTA JUNCTION
DENALI PARK
DOT LAKE
DRY CREEK
EAGLE
EAGLE VILLAGE
GAKONA
GLENNALLEN
GULKANA
HEALY
HEALY LAKE
KENNY LAKE
MENDELTNA
MENTASTA LAKE
NABESNA
NELCHINA
NENANA
NORTHWAY
PAXSON
SLANA
TANACROSS
TAZLINA
TETLIN
TOK
TOLSONA
TONSINA

District 18

BADGER ROAD
EIELSON/MOOSE CREEK
NEWBY
NORTH POLE
PLACK
RICHARDSON
SALCHA

MEMORANDUM

TO: MEMBERS OF SENATE RESOURCES

FROM: SENATOR DICK SHULTZ

DATE: APRIL 5, 1991

RE: SB 107

****

Under the terms of the Alaska National Interest Conservation Act (ANILCA) rural Alaskans were guaranteed the ability to hunt, fish and trap in our National Parks.

Since three of our largest Parks are in my District I am very concerned as I see the National Park Service systematically eliminate these activities guaranteed under ANILCA.

Here is a typical example. Our state boards meet and decide the residents along the Parks Highway in the Cantwell area do not qualify for customary traditional use of fish and game resources because of lack of data to support such a designation. Immediately Park Service revokes the permits they had issued to all rural residents in the area.

In another case, the game board established a regulation which allowed rural residents of game management 13 to hunt moose in either unit 12 or 13, but prohibited unit 12 rural residents from hunting in unit 13. Here again, Park Service adopted these regulations and many hundreds of unit 12 residents were wrongfully denied hunting opportunities. These are but two of many instances in District J.

I know the problems in my District are not unique. In Southeast the Park Service is

eliminating fishing opportunities in Glacier Bay, in the Arctic, Park Service is trying to eliminate traditional access to caribou.

Many of the regulations adopted by our boards have blatantly violated ANILCA, but since our boards passed them Park Service quickly uses this as justification for closures.

Senate seeks to prevent our state boards from doing anything more restrictive than Park Service authority under ANILCA.

Please support this important legislation.

Public Law 96-487
96th Congress

An Act

To provide for the designation and conservation of certain public lands in the State of Alaska, including the designation of units of the National Park, National Wildlife Refuge, National Forest, National Wild and Scenic Rivers, and National Wilderness Preservation Systems, and for other purposes.

Dec. 2, 1980
[H.R. 39]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Alaska National Interest Lands Conservation Act.
16 USC 3101 note.

SECTION 1. This Act may be cited as the "Alaska National Interest Lands Conservation Act".

TABLE OF CONTENTS

79-139 O - 80 : 3231

owned by the State of Alaska unless the State shall have concurred in such boundary extension and such extension is accomplished under the notice and reporting requirements of this Act.

Publication in Federal Register. Filing with Speaker of House and President of Senate.

(b) As soon as practicable after enactment of this Act, a map and legal description of each change in land management status effected by this Act, including the National Wilderness Preservation System, shall be published in the Federal Register and filed with the Speaker of the House of Representatives and the President of the Senate, and each such description shall have the same force and effect as if included in this Act: *Provided, however,* That correction of clerical and typographical errors in each such legal description and map may be made. Each such map and legal description shall be on file and available for public inspection in the office of the Secretary. Whenever possible boundaries shall follow hydrographic divides or embrace other topographic or natural features. Following reasonable notice in writing to the Congress of his intention to do so the Secretary and the Secretary of Agriculture may make minor adjustments in the boundaries of the areas added to or established by this Act as units of National Park, Wildlife Refuge, Wild and Scenic Rivers, National Wilderness Preservation, and National Forest Systems and as national conservation areas and national recreation areas. For the purposes of this subsection, a minor boundary adjustment shall not increase or decrease the amount of land within any such area by more than 23,000 acres.

Minor boundary adjustments, notification of Congress.

(c) Only those lands within the boundaries of any conservation system unit which are public lands (as such term is defined in this Act) shall be deemed to be included as a portion of such unit. No lands which, before, on, or after the date of enactment of this Act, are conveyed to the State, to any Native Corporation, or to any private party shall be subject to the regulations applicable solely to public lands within such units. If the State, a Native Corporation, or other owner desires to convey any such lands, the Secretary may acquire such lands in accordance with applicable law (including this Act), and any such lands shall become part of the unit, and be administered accordingly.

TITLE II—NATIONAL PARK SYSTEM

ESTABLISHMENT OF NEW AREAS

Administration by Interior Secretary. 16 USC 410hh.

SEC. 201. The following areas are hereby established as units of the National Park System and shall be administered by the Secretary under the laws governing the administration of such lands and under the provisions of this Act:

Aniakchak National Monument. 16 USC 431 note.

(1) Aniakchak National Monument, containing approximately one hundred and thirty-eight thousand acres of public lands, and Aniakchak National Preserve, containing approximately three hundred and seventy-six thousand acres of public lands, as generally depicted on map numbered ANIA-90,005, and dated October 1978. The monument and preserve shall be managed for the following purposes, among others: To maintain the caldera and its associated volcanic features and landscape, including the Aniakchak River and other lakes and streams, in their natural state; to study, interpret, and assure continuation of the natural process of biological succession; to protect habitat for, and populations of, fish and wildlife, including, but not limited to, brown/grizzly bears, moose, caribou, sea lions, seals, and other marine

and wildlife, including but not limited to caribou, grizzly bears, Dall sheep, moose, wolves, and for waterfowl, raptors, and other species of birds; to protect archeological resources; and in a manner consistent with the foregoing, to provide opportunities for scientific research. The Secretary may establish a board consisting of scientists and other experts in the field of arctic research in order to assist him in the encouragement and administration of research efforts within the preserve.

(b) All lands located east of centerline of the main channel of the Noatak River which are—

(1) within

(A) any area withdrawn under the Alaska Native Claims Settlement Act for selection by the village of Noatak, and 43 USC 1601 note.

(B) any village deficiency withdrawal under section 11(a)(3)(A) of such Act which is adjacent to the area described in subparagraph (i) of this paragraph, 43 USC 1610.

(2) adjacent to public lands within a unit of the National Park System as designated under this Act, and

(3) not conveyed to such Village or other Native Corporation before the final conveyance date, shall, on such final conveyance date, be added to and included within, the adjacent unit of the National Park System (notwithstanding the applicable acreage specified in this paragraph) and managed in the manner provided in the foregoing provisions of this paragraph. For purposes of the preceding sentence the term "final conveyance date" means the date of the conveyance of lands under the Alaska Native Claims Settlement Act, or by operation of this Act, to the Village of Noatak, or to any other Native Corporation which completes the entitlement of such Village or other Corporation to conveyance of lands from the withdrawals referred to in subparagraph (1).

(9) Wrangell-Saint Elias National Park, containing approximately eight million one hundred and forty-seven thousand acres of public lands, and Wrangell-Saint Elias National Preserve, containing approximately four million one hundred and seventy-one thousand acres of public lands, as generally depicted on map numbered WRST-90,007, and dated August 1980. The park and preserve shall be managed for the following purposes, among others: To maintain unimpaired the scenic beauty and quality of high mountain peaks, foothills, glacial systems, lakes, and streams, valleys, and coastal landscapes in their natural state; to protect habitat for, and populations of, fish and wildlife including but not limited to caribou, brown/grizzly bears, Dall sheep, moose, wolves, trumpeter swans and other waterfowl, and marine mammals; and to provide continued opportunities, including reasonable access for mountain climbing, mountaineering, and other wilderness recreational activities. Subsistence uses by local residents shall be permitted in the park, where such uses are traditional, in accordance with the provisions of title VIII. Wrangell-Saint Elias National Park. *Post*, p. 2422.

(10) Yukon-Charley Rivers National Preserve, containing approximately one million seven hundred and thirteen thousand acres of public lands, as generally depicted on map numbered YUCH-90,008, and dated October 1978. The preserve shall be managed for the following purposes, among others: To maintain the environmental integrity of the entire Charley River basin, Yukon-Charley Rivers National Preserve.

Alaska State Legislature

SENATOR DICK SHULTZ

P.O. Box V
Juneau, Alaska 99811
(907) 465-4940
Home: P.O. Box 487
Tok, Alaska 99780

Member
Finance Committee
Transportation Committee
Special Committee on Oil & Gas

Senate
District J

MEMORANDUM

TO: ALL SENATORS

FROM: SENATOR SHULTZ DS

DATE: MARCH 12, 1991

RE: PROPOSED REGULATIONS

********** ********** **********

I am sure it is as difficult for most of you as it is for me to determine which proposed regulations you should comment on. One thing is quite clear, it would be next to impossible to comment on all the ones which cross my desk.

In that light, I have introduced a bill which would require agencies to inform the legislature of the origin of each regulation they propose. It would also require both the initial and annual cost of implementation of each proposed regulation, along with the justification.

This additional information not only would help us determine our feelings about a particular proposed regulation, it might help us predict the size of the coming supplemental budget which undoubtedly covers many of these "after the fact costs" of government.

DEPARTMENT OF FISH AND GAME

POSITION PAPER

Bill No: SB 107

Sponsor: Senator Shultz

Division: Boards

Bill Title: Fish and game regulations in national parks

Department Position: SB 107 would restrict the Boards of Fisheries and Game from enacting regulations applicable within a national park that is more restrictive than any corresponding regulation of the National Park Service unless: (1) the board makes a finding that the regulation is necessary for conservation, and (2) the board passes the regulation by two thirds vote of the full membership.

The Department of Fish and Game understands some of the frustrations that led to the introduction of this bill, but believes that passage in its present form would have a number of unintended negative effects. We would be interested in working with the sponsor and a subcommittee appointed by the chairman to address the sponsor's concern.

Commissioner's Signature Ron Somerville Date 4/5/91