ALASKA LEGISLATURE COMMITTEE FILES 1993-1994 8672

8451 SENATE RESOURCES - SENATE STATE AFFAIRS

Figure 2. Forested U-shaped valley in Chatham district.

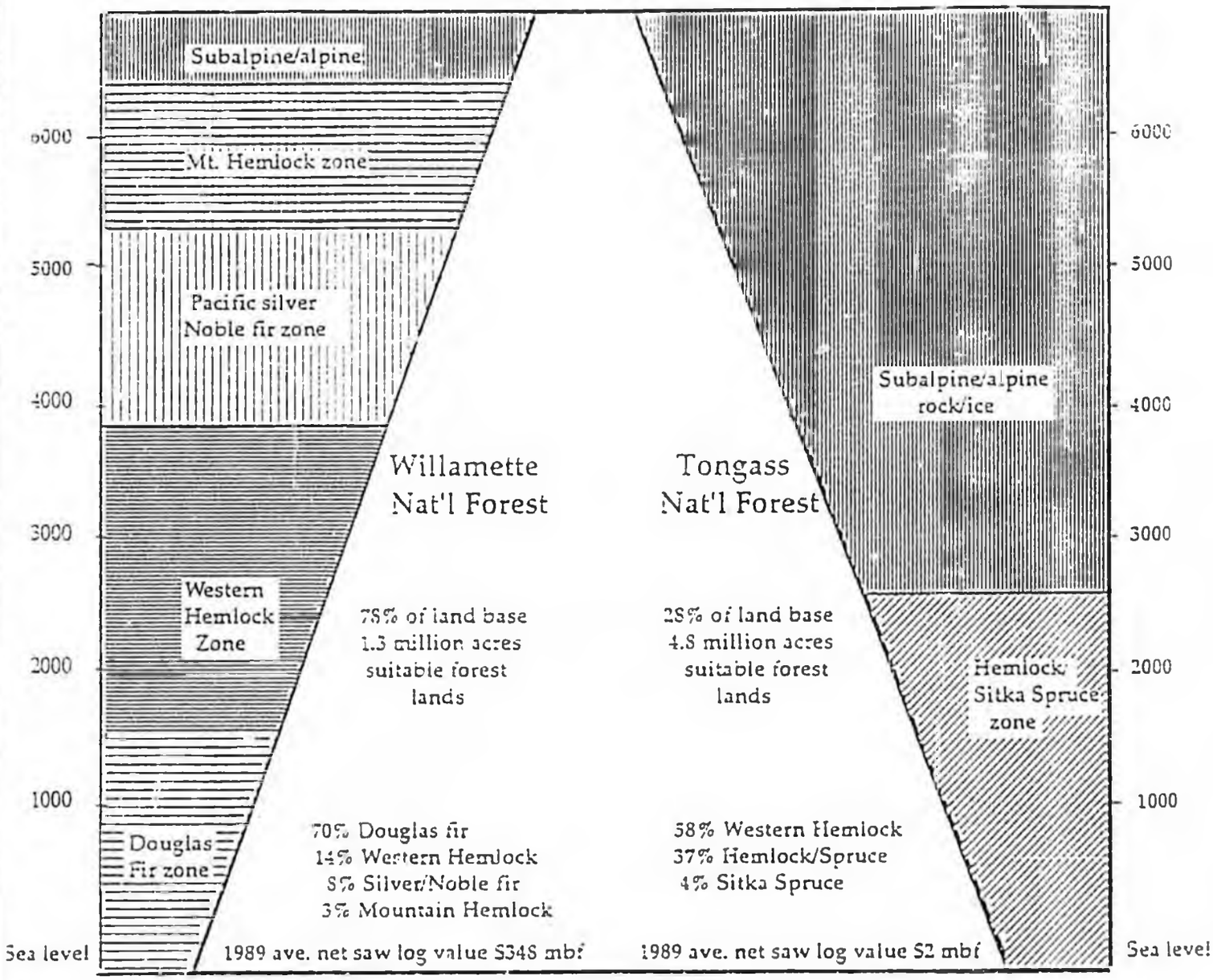

Figure 3. SCHEMATIC COMPARISON OF VERTICAL DISTRIBUTION AND COMPOSITION OF SUITABLE FOREST LANDS IN THE WILLAMETTE (Oregon) AND TONGASS (Alaska) NATIONAL FORESTS

Comparison of Land Suitability Classifications

Willamette and Tongass National Forests

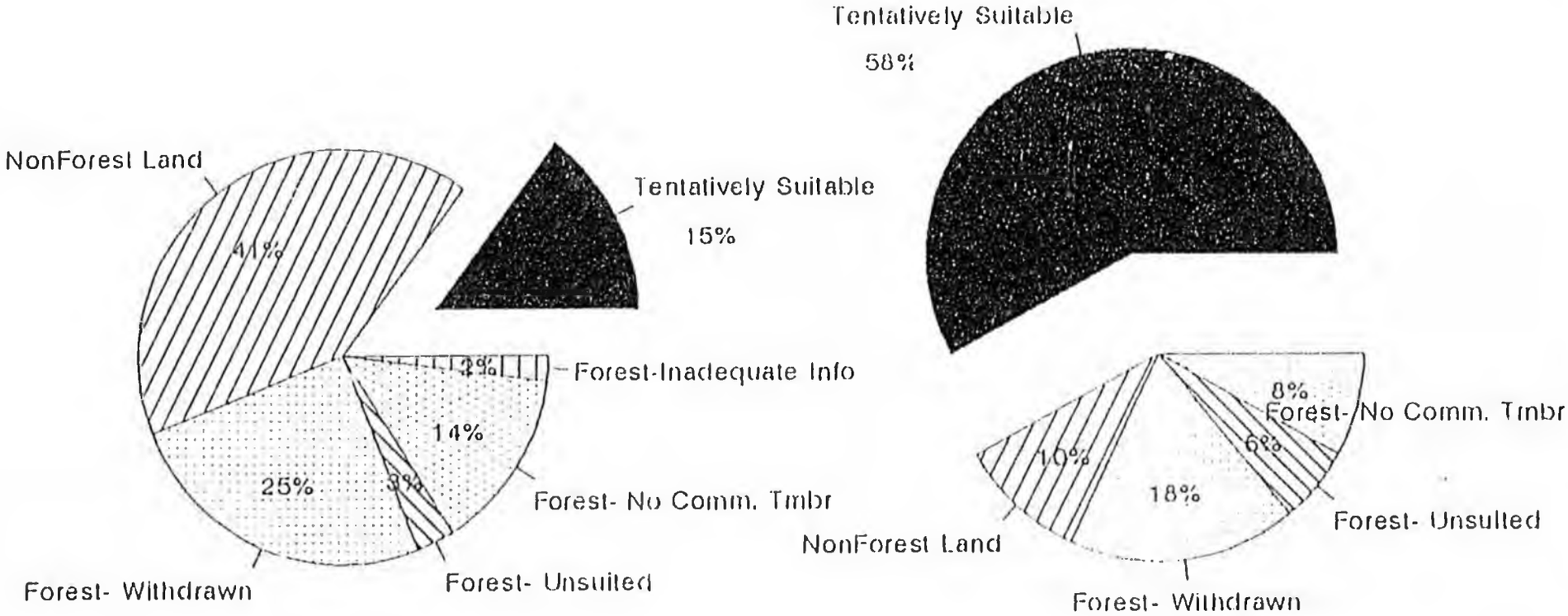

Figure 4

less timber. Present planning guidelines for the Tongass provide for approximately 2 million board feet of timber per mile of road. Under PACFISH this would drop to 0.5-1.5 million available board feet per mile of road estimated to access the timber. This impact would make it extremely difficult to avoid below cost timber sales on the Tongass.

TABLE 1: Effects of PACFISH on harvestable timberlands on the Tongass National Forest

Timberlands	NET Tentatively Suitable Timberlands			Suitable and Available		
Land Unit	*Pre-PF	*Post-PF	% Change	*Pre-PF	*Post-PF	% Change
PAXCI	44,795	25,683	43	24,827	13,419	46
Tongass 4 Quad Ave.	40,150	22,211	45	30,070	16,804	44

* Acres PF=PACFISH

An additional feature of the PACFISH program is that road design standards are upgraded to 100 year flood events for culverts and bridges. This is retroactive to existing roads. Present design criteria for the Tongass are 50 year events for bridges and 25 years for culverts, with an 18 inch minimum culvert size. The cost to retrofit existing roads is estimated to be $100,000 per mile, while the additional cost for new construction to the 100 year flood standard is $50,000 per mile.

An associated effect of implementing PACFISH is that the total [suitable/available] Tongass timber base would drop approximately 45% from 1.9 million acres currently in the available timber base to 0.95-1.14 million acres. This would only support an annual harvest of less than 200 million board feet per year on a sustained yield basis. Such annual harvest rates would immediately impact both pulp mills and the existing sawlog industry in the State. At present 52% of the logs off the Tongass are suitable only for the pulp mills. of the remaining timber, 11% is exported, and 37% is milled. Waste from milling operations provides an additional 21% of the timber supply to the pulp mills.

TONGASS SALMONID FISHERIES

The Alaskan situation with regard to anadromous Pacific salmonids is entirely different than is the case in California, Idaho, Oregon, and Washington. The status of Alaskan stocks of anadromous Pacific salmonids is most generally strong and healthy. None of the thousands of stocks of anadromous Pacific salmonids in Alaska are listed as threatened or endangered, none of the stocks are considered extinct, and none of the stocks

are yet classified as of "special concern. " Rather, all of these stocks are at this time considered "secure." In recent years there has been an apparent decline in steelhead stocks throughout their range. This decline has been attributed primarily to high seas fishery impacts. There are also two salmon stocks listed as sensitive by the U.S.Forest Service, the Hyder chums and the Island chinooks. The Hyder chum fishery is under international treaty regulation and is not impacted by logging in Southeast Alaska. The Island chinook run is a unique king salmon run of special interest to the State, and is located within a watershed that is totally protected from logging activities.

Major timber harvests in Southeast Alaska have taken place, predominantly using clearcutting as a harvest method, since the early 1950's. Large scale conversion to second growth, now on the decline due to a variety of reasons including withdrawal of land from multiple use by TTRA. Alaska commercial salmon harvests for Southeast are shown in figures 7 and 8, while timber harvest for the last 10 years are shown in figure 9 and exhibit no direct relationship. Fish returns are dynamic, with record runs for one fishery or another common, with no recorded or perceived correlation between runs and timber harvest. That is true for tests against any annual timber harvest and for any aggregation of timber harvests. This is in contrast to the relationship shown in figure 10 for the Alaska fishery enhancement program, which correlates with increased commercial catches since its inception.

In many areas, roads, required and constructed by timber harvests, have enabled dispersion of sport and subsistence fishing effort. Fishing communities scattered throughout the region enjoy and depend on federal timber dollars.

The situation with regard to the four H's is also entirely different in Alaska. Very few hydroelectric facilities have been developed in Alaska; those that have been developed have not been situated on streams with major anadromous salmonid runs- as a result, impacts of hydroelectric facilities and operations on stock status of anadromous Pacific salmonids in Alaska has been and continues to be nil.

Hatcheries have been developed in Alaska to enhance fisheries rather than as mitigation efforts. The state has used an estimated $300,000,000 of predominantly petroleum royalty and tax dollars to enhance fisheries, chiefly through hatcheries. Additionally, the state spends $97.97 per capita managing its fisheries. Strong policies were and continue to be implemented by the State of Alaska to prevent potential transfer of diseases and to prevent detrimental genetic impacts from resulting from Alaska hatcheries.

Harvests of anadromous Pacific salmonids in Alaska is almost entirely

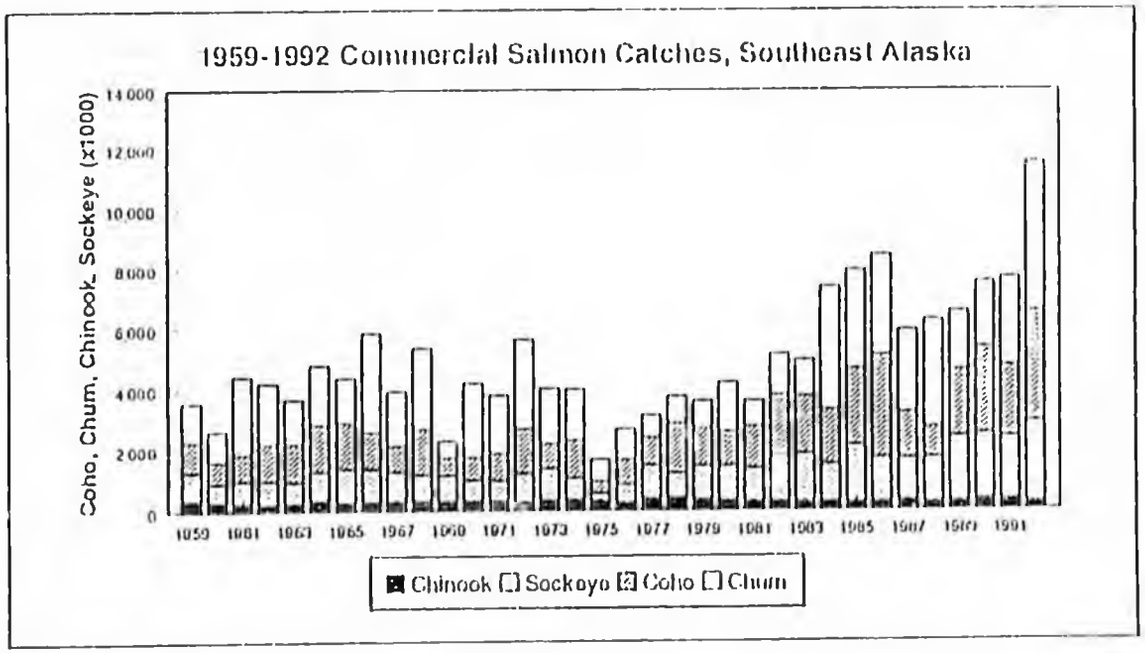

FIGURE 7

1959salm.cgm
1959salm.pcx

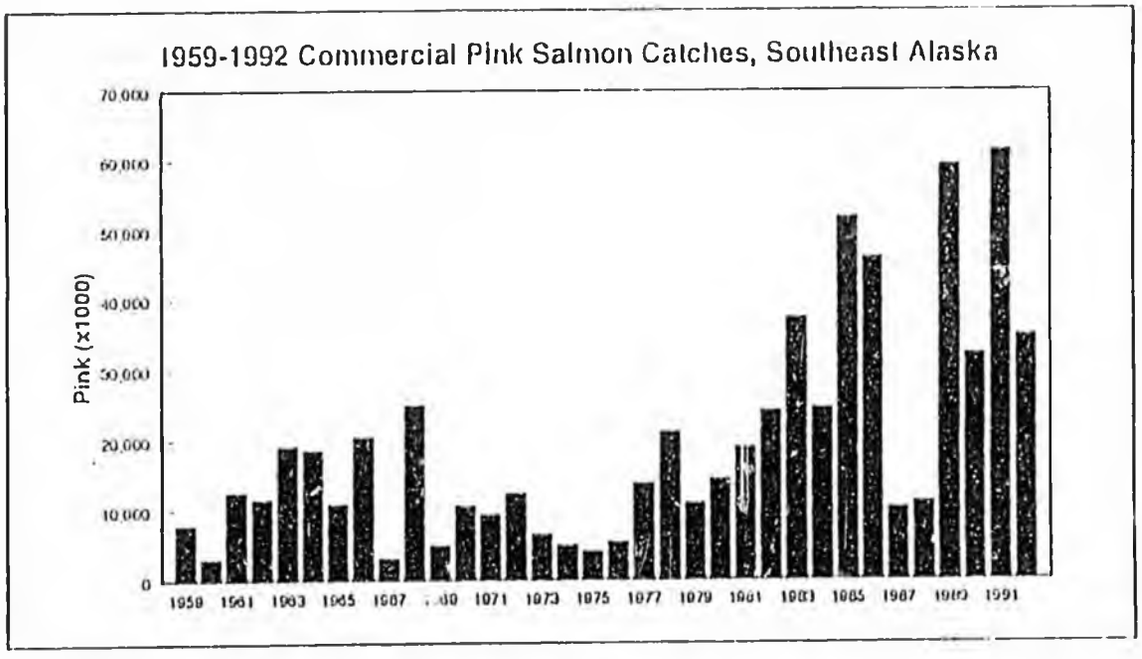

FIGURE 8

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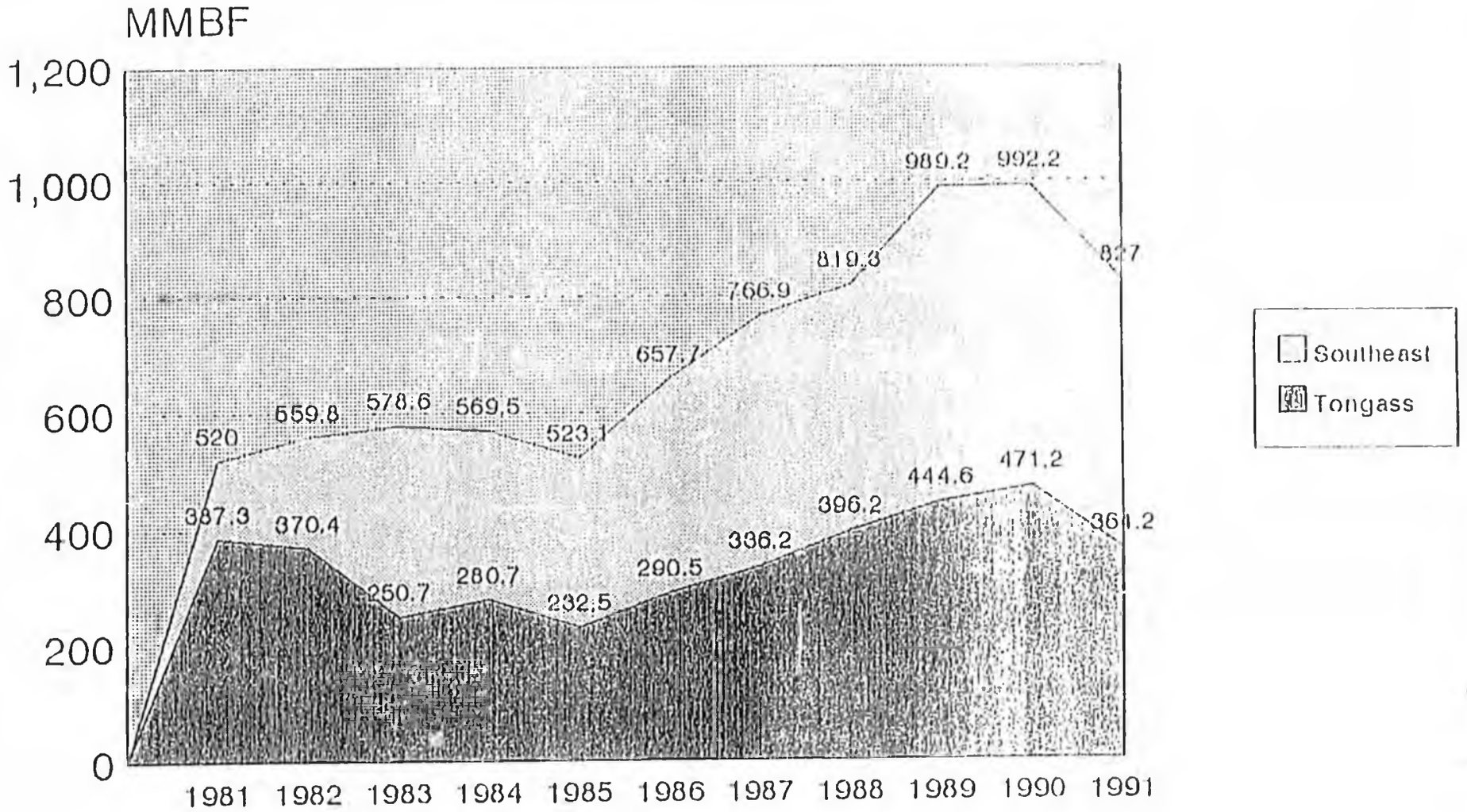
Comparison of Timber Harvest

Southeast Alaska and Tongass National Forest

Figure 9



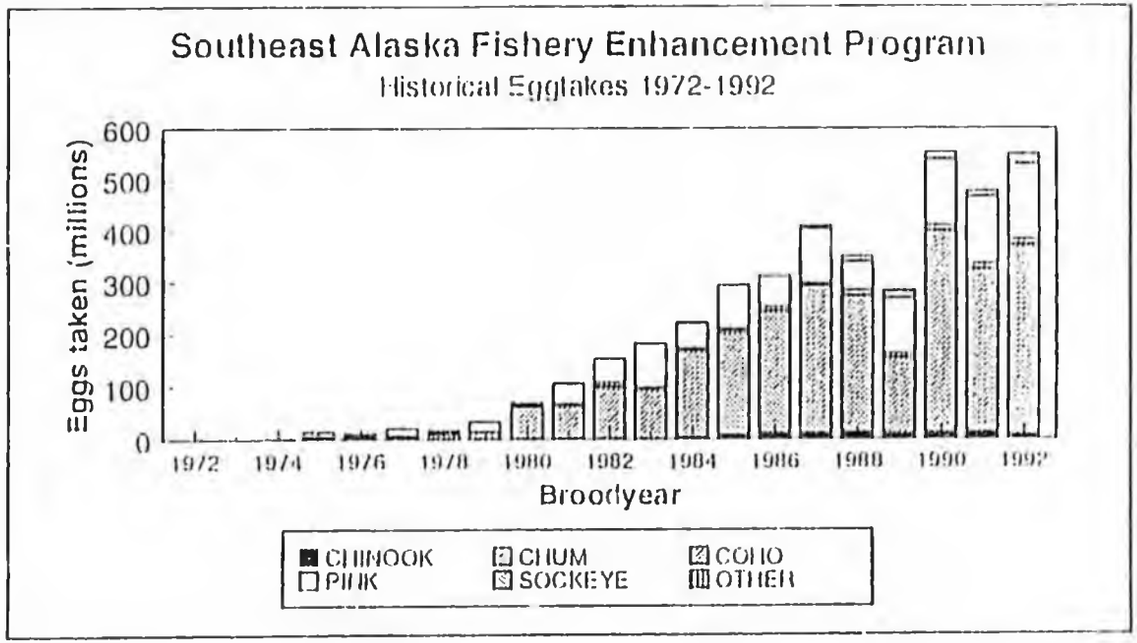


FIGURE 10

enhance.cgm
enhance.pcx

regulated by the Alaska Department of Fish and Game, (ADFG) and the Alaska Board of Fisheries (BOF) although some coordination occurs with various Federal entities. Management includes commercial, sport and subsistence fisheries, as well as habitat. The Alaska Constitution requires that fisheries be managed for sustained yield and that mandate has been interpreted by both ADFG and the BOF to apply on a priority basis to wild stocks even when that results in under-harvests of surplus hatchery stocks. Since Statehood, emergency order authority of local ADFG fishery managers to alter fishing areas and seasons has ensured healthy stocks of anadromous Pacific salmonids. Such management authority and action was shown most recently in Southeast Alaska when both catch and gear restrictions were imposed on an emergency basis to ensure that chinook sport harvest levels remained within quota limits established by the BOF. Monitoring of the sport harvest, and projections of catch to the end of season, prompted this proactive management decision. As a result of the Constitutional mandate and the direct jurisdictional authority in Alaska, harvests of anadromous Pacific salmonids have been at record levels and yet spawning requirements have been met resulting in strong and healthy runs of almost all stocks.

RIPARIAN AND INSTREAM HABITAT PROTECTION ON THE TONGASS

The instream and riparian habitat of the majority of streams in Alaska that lie outside of communities is in pristine condition. However, areas logged on state and private land prior to May 1990, when the Alaska Forest Resources and Practices Act (FPA) was revised, and areas logged on the Tongass National Forest prior to the Tongass Timber Reform Act (TTRA) of 1990, did not receive the level of fish habitat protection that experts now know is needed. For example, some freshwater systems in southeast Alaska have been impaired due to past logging practices that included clearcutting to the stream bank and retaining inadequate buffers along streams. Effects of these practices included blowdown of forested stream buffers, increased temperature in temperature-sensitive watersheds that were heavily clearcut, and sedimentation of streams due to extensive networks of unpaved roads in a watershed.

In response to the growing awareness of the adverse impacts timber harvest can have on sustained yields of anadromous and resident freshwater fish important for commercial, sport and subsistence fisheries, as well as to many species of wildlife, the State of Alaska took the initiative in 1989 to strengthen the State FPA. The Alaska Legislature revised the FPA in 1990 based on recommendations resulting from lengthy negotiations between state and federal resource agencies, environmentalists, fisheries groups, tourism groups, and the timber industry. The FPA requires that logging on federal land in Alaska protect fish and wildlife resources by implementing the following standards, among others, under the Alaska Coastal Management Program

(ACMP). The FPA is one of the standards of the federally approved ACMP and thus requires that federal actions be consistent with State law and regulations.

Since 1990, with regulation of riparian areas under the TTRA, ACMP, and the FPA, fish habitat on the Tongass National Forest has been protected both through forest-wide requirements and through the ability to require additional protection due to site-specific conditions, as follows:

1) Harvest of timber may not occur within 100 feet from the shore or bank of an anadromous or high value resident fish waterbody (except where variations to this standard are approved by the Alaska Department of Natural Resources (DNR), with due deference given to the Alaska Department of Fish and Game (ADF&G)); (ACMP/FPA)

"High value resident fish" means resident fish populations that are used for recreational, personal use, commercial, or subsistence purposes.

2) Forest land shall be administered for the multiple use and sustained yield of the renewable resources of the land in the manner that best provides for the present needs and preserves the future options of the people of the state;(ACMP/FPA)

3) There may not be significant impairment of the productivity of the land and water with respect to renewable resources;(ACMP/FPA)

4) Allowance must be made for important fish and wildlife habitat.(ACMP/FPA)

5) Commercial timber harvest is prohibited within 100 feet of Class I streams or resident fish streams that flow directly into Class I streams (TTRA). (Class I is defined as anadromous fish streams or streams that could become anadromous fish habitat through enhancement.)

6) Timber harvest between 100 and 300 feet from an anadromous or high value resident fish waterbody may occur but must be consistent with the maintenance of important fish and wildlife habitat. This provision of the FPA may be applied to federal lands where data indicates this provision is needed if logging on federal land is to be consistent with the ACMP (ACMP/FPA).

7) Best management practices must be followed to control non-point source pollution of any waters, including those without fish (ACMP/FPA).

8) Additional protection for fish habitat may be required on federal land through the adoption of a forest plan or a coastal district management plan (ACMP). For example, the 1991 draft revision of the Tongass Forest Plan would not allow programmed commercial timber harvest within 100 to 200 feet from certain types of low-gradient floodplain rivers and estuarine channels, or within 100 to 500 feet of certain types of estuarine channels. It would also recommend 269 miles of Wild and Scenic River designation by Congress along which timber harvest would be prohibited within 1/4 mile of the river.

The state resource agencies are also able to condition the design of timber harvest support activities, including log transfer and sort yards, under the ACMP review process. For example, the ACMP standards generally do not allow dredge-and-fill operations to disrupt the movement of fish in a waterbody; offshore marine areas must be managed as a fisheries conservation zone; and wetlands and tideflats must be managed so as to assure adequate water flow, nutrients and oxygen levels and to avoid adverse effects on natural drainage patterns, the destruction of important habitat and the discharge of toxic substances.

The ADF&G has diligently pursued the protection of fish habitat on the Tongass National Forest through the revision of the Tongass Forest Plan. The department rejected the validity of the models initially proposed by the Forest Service (FS) to predict the effects of future logging and roading on fish production. The department also objected to the FS stating in public documents that increased harvests of salmon correlated with increased timber harvests on the Tongass in the absence of research to establish causal linkage of these two parameters. ADF&G has worked closely with the FS to develop forest-wide standards and guidelines that would provide fish habitat protection.

ADF&G has conducted a limited number of post-harvest field inspections and notified the FS of riparian buffers that had not been retained as required under the TTRA. The FS has responded positively to these inspections and is working to reduce or avoid mistakes in buffer layout. Finally, ADF&G continues to assert its authority to implement the State's Anadromous Fish and Fishways Acts on both the Tongass and the Chugach National Forests to ensure that instream and nearshore riparian fish habitat is protected during roading and logging.

Collectively, the intent of the TTRA, FPA, ACMP, and state fish habitat statutes are virtually identical to that of PACFISH: To ensure the adequate preservation of fish habitat by maintaining a short- and long-term source of large woody debris, stream bank stability, channel morphology, water temperatures, stream flows, water quality, adequate nutrient cycling, food sources, clean spawning gravels, and sunlight. Aside from achieving greater enforcement of Alaska's Anadromous Fish and Fishways Acts on national forests, these management instruments are already in place. In fact, the Commissioner of DNR began the final phase of undertaking a revised FPA program in Alaska when he adopted implementing regulations for the FPA in June of 1993.

WATER QUALITY MANAGEMENT ON THE TONGASS

Maintaining water quality in Alaska's National Forests through Best Management Practices (BMPs) implementation and effectiveness monitoring is a critical component of the FPA strategy. As the state's lead water quality protection and management agency, the Alaska Department of Environmental Conservation (ADEC) has the responsibility and the authority to control nonpoint source pollution on National Forest lands in Alaska.

Responsibilities for forestry related sources of nonpoint source pollution and water quality protection and monitoring between the ADEC and the Forest Service was formalized through a Memorandum of Agreement (MOA), signed on April 6, 1992. The purposes of the MOA are:

1) for ADEC and the Forest Service to commit to the responsibilities and activities to be performed by each agency pursuant to National Forest water quality protection tasks described in the Alaska Nonpoint Source Pollution Control Strategy (NPS Strategy), approved by the U.S. Environmental Protection Agency (EPA) in August 1990;

2) to ensure Forest Service activities meet Federal consistency requirements of

a. § 319(b)(2)(f) and 319 (k) of the Clean Water Act as amended (PL 100-4) as specified in pages 88 through 92 of the NPS Strategy,
b. § 313 of the Clean Water Act,
c. Executive Order 12088; and,

3) to establish the Forest Service as the agency responsible for monitoring and protecting water quality on National Forest System lands in Alaska for purposes of the Clean Water Act (CWA), as amended.

The MOA references three attachments that together constitute the "Forest Service Alaska Region Water Quality Management Plan." The ultimate purpose of this plan is to maximize water quality protection on National Forest Lands in Alaska by specifying ADEC and Forest Service water quality management and protection responsibilities.
The three MOA attachments are the:

1) Forest Service Soil and Water Conservation Handbook, Chapter 10 (FSH 2509.22); also known as the Forest Service BMP Handbook;
2) NPS Strategy; and
3) Alaska Water Quality Standards - 18 AAC 70.

Forest Service Soil & Water Conservation Handbook (BMP Handbook)

The Forest Service Soil and Water Conservation Handbook consolidates the Forest Service BMPs (including riparian buffer and management requirements) that are to be implemented for all ground disturbing activities on the Tongass and Chugach National Forests, including timber harvest related activities.

The Environmental Protection Agency (EPA) has recognized that BMPs are the primary mechanism to enable the achievement of State Water Quality Standards (WQS), and if designed and implemented in accordance with a State approved process, will normally constitute compliance with the CWA.

The Forest Service BMPs have been designed, when properly implemented, to achieve the WQS. The WQS are used in part as parameters of BMP effectiveness monitoring projects, information that is then used to determine the effectiveness of the BMPs. BMP implementation and effectiveness monitoring objectives are detailed in the BMP Handbook.

Periodic reviews of the BMP Handbook, as per MOA requirement and ADEC input, are done to help achieve the goal of BMP implementation meeting the WQS and protecting water uses such as growth and propagation of fish, shellfish, and other aquatic life. The latest revision of the Forest Service BMP Handbook was recently completed and effective June 25, 1993.

Alaska Water Quality Standards

The goal of the ADEC/Forest Service BMP implementation and effectiveness program is to meet the WQS found in 18 AAC 70. The WQS were developed in part to protect water uses such as growth and propagation of fish, shellfish, and other aquatic life. WQS are revised every three years based on new information, changing policies, and public concerns.

Other components of the Water Quality Program
on National Forest Lands.

1) Water quality is assured through the Alaska Coastal Zone Management Program using standards found in the FPA and the Forest Resources and Practices Regulations.

2) The state is currently preparing an assessment of the § 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990. A draft document analyzes the federal management measures, including forestry management measures, as part of Alaska's response to § 6217 (g). Final participation in this new federal program will be based on a final analysis of the program to Alaska and pending federal guidance.

3) Procurement of Clean Water Act 319 monies fund, in part, BMP effectiveness monitoring projects. An example is the Lake Florence BMP effectiveness monitoring project.

4) As required by § 305(b) of the Clean Water Act, the ADEC assesses and documents the quality of the state's waters. This document is developed every two years. In the 1992 report only three impaired waterbodies are listed associated with timber harvest activities.

5) ADEC participates with the Alaska Working Group on Cooperative Fisheries and Forestry Research. This working group is composed of agency, industry, and environmental interest groups with the goal to develop research priorities and procure funding for research projects.

The NPS Strategy

The NPS Strategy, approved by the EPA in 1990, integrates existing water quality programs to address nonpoint source pollution. For forest practices, the NPS Strategy details seven tasks to address forest source nonpoint source pollution specific to National Forest lands in Alaska. The MOA was revised in part to ensure that ADEC/Forest Service NPS Strategy tasks are adequately addressed.

The seven tasks that relate to National Forest lands in Alaska are:

1) revise and reauthorize the ADEC/Forest Service Memorandum of Understanding (now referred to as the MOA);

2) revise and reauthorize the Division of Governmental Coordination/Forest Service Memorandum of Understanding;

3) evaluate and certify the Forest Service BMP Handbook;

4) evaluate the effectiveness of Forest Service BMPs in meeting WQS and make appropriate revisions to the BMP handbook;

5) evaluate Forest Service planning framework, watershed and water quality protection guidelines, and inspection and enforcement processes;

6) conduct ongoing review and evaluation of selected Forest Service planning products: forest land management plans, EISs, EAs, contracts, annual operating plans, and harvest unit layouts; and

7) conduct ongoing, periodic field inspections of timber harvest operations on National Forest lands in cooperation with the Forest Service.

With the exception of task 2, all of the tasks have been or are currently being addressed by ADEC and Forest Service staff. A majority of the tasks are ongoing and require a priority commitment by the agencies. This priority commitment was made a part of the MOA. Additionally, to help ensure MOA implementation, the ADEC and Forest Service annually meet at a public noticed meeting to discuss Forest Service water quality monitoring reports and other MOA issues.

FISCAL NOTE

STATE OF ALASKA
1994 LEGISLATIVE SESSION

BILL NO. HJR 56

Revision Date: 2/21/94
Title: Exempting Alaska for "Pacfish" regulations
Sponsor: By request of the House Economic Task Force
Requested: House Fisheries

Department Affected: Commerce and Economic Development
BRU: DCED
Component:
COMPONENT SERIAL NO.

Expenditures/Revenues:

OPERATING EXPENDITURES	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00
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 EXPENDITURES	0	0	0	0	0	0
CHANGE IN REVENUES ( )	0	0	0	0	0	0
FUND SOURCE						
1002 Federal Receipts	0	0	0	0	0	0
1003 GF Match	0	0	0	0	0	0
1004 GF	0	0	0	0	0	0
1005 GF/Program Receipts	0	0	0	0	0	0
1006 GF/MHTIA	0	0	0	0	0	0
Other	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

Estimate of current year (FY 94) cost: $ 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

ANALYSIS: (Attach a separate page if necessary.)

Prepared by:
Division:
Phone:
Date:

Approved by Commissioner: Paul Fuhs
Agency: Commerce and Economic Development
Date: 2-22-94

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Rev 11/93

FISCAL NOTE: DEPT. OF COMMERCE

Div of Econ Devt, DCED

Impacts of the Proposed PACFISH Management Strategy to the Southeast Alaska Economy August 1993

INTRODUCTION

The forest products industry has been a major component of the Southeast Alaska economy since the 1950s. However in the 1990s, there is uncertainty regarding the future of the industry. This is due in large part to the restricted access to stable timber supplies. The proposed PacFish management strategy has the potential to have significant adverse impacts to the economy of Southeast Alaska by essentially shutting down this basic sector industry.

In 1992, the forest products industry, including timber harvest-related US Forest Service (USFS) employment, directly generated an annual average of 2950 jobs and $124 million in payroll from Tongass Forest timber resources, excluding private (native) timber.[1] The forest products industry accounts for over one-third (34%) of all private basic industry employment, or 24% of all basic industry including government basic industry, in the region. This industry accounts for an even greater percentage of the key winter months private employment options for the region.

Forest Service estimates indicate 42% of the land base will be impacted by the proposed PacFish management strategy. Assuming this will ultimately correspond to volume of timber offered for harvest, which in turn corresponds to employment generated by the forest products industry, Southeast Alaska can expect a loss of 1711 jobs and a $72 million reduction in payroll from direct employment alone.

For the purpose of this analysis, a conservative range, a 42 to 70% reduction in land base is carried though. It is important to note that additional impacts to the land base may be experienced depending on the PacFish alternative implemented. Furthermore, the economic viability of the remaining timber in current markets may effectively decrease supply by more than 70%.

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[1] Direct employment includes all labor involved in accessing timber, falling the timber and transporting the logs to sawmills or pulpmills, and finally processing the logs into lumber or pulp. Direct employment does not include labor involved with the supplying of remote camps, other transportation support of logging communities, or labor employed in the sales or contracted service of logging equipment, McDowell Group, 1993

IMPACTS OF PACFISH

Reduction in Land Base

The Forest Service prepared an analysis of the effects of the proposed PacFish management strategy on the Tongass by examining four pilot quads on Northeast Chichagof, Kuiu, and North Prince of Wales Islands. These four quads showed less than 15% variation. Thus it is reasonable to assume that they represent forest-wide effects. In the analysis it is estimated that 42-43% of the suitable forest lands would fall within riparian habitat conservation areas (RHCAs). If intermittent streams are assumed to be "Class IV" streams then the effect in terms of forest lands that fall within RHCAs would be increased to 52-53%.

The Forest Service also did a rough logging-transportation plan for the remaining timber resources. The plan assumes that, during watershed analysis, roads will be permitted through RHCAs. In the four transportation sheds analyzed, the amount of timber accessed per mile of road was reduced by 45%. Furthermore, new road construction would increase $50,000 per mile and reconstruction to new design standards could be increased by $100,000 per mile. These costs would be approximately double what is currently the case and will greatly impact the marketability of remaining timber resources. Added road construction costs could be expected to preclude additional timber stands from development.

An additional 13% would change in operability due to isolation brought about as a result of conflicts with RHCAs mandated by PacFish. The Forest Service assumes that individual tracts of forested lands isolated due to PacFish setbacks could only be harvested by helicopter. If these isolated stands are added to those directly impacted by the RHCAs the total land base is reduced by 65-66%.

What the Forest Service does not consider is the fact that the higher grade timber is, by and large, located on the better developed soils of the stream corridors. Thus, the economic viability of the remaining woodpile is further diminished. An actual percentage is not estimated in this analysis, but it is clear that the cumulative impacts of PacFish (both reduction in land base and economic viability) could effectively decrease supply upwards of 70%.

Regional Economic Impacts - Background

The modern forest products industry was born in the 1950s, when the pulp industry was drawn to the region. It was the assurance of supply via long term timber harvesting contracts that induced pulp manufacturers to make the huge investment required in Southeast Alaska. In 1954, the Ketchikan Pulp Company completed construction of a facility near Ketchikan and five years later, Alaska Lumber and Pulp Company completed construction of pulpmill near Sitka, marking a turning point in the economic development of these communities, in particular, and Southeast Alaska in general. Almost overnight, the forest products industry became Southeast Alaska's leading industry.

In the 1980s and 1990s, legislative and resource management issues have been as important as market conditions among the forces shaping the region's forest products industry. The net effect of the Alaska National Interest Lands Conservation Act and the Tongass Timber Reform Act was to significantly reduce the available Tongass timber resource. By placing high value timber off-limits, these acts have further reduced the overall quality of the Tongass timber resource. Finally, the Timber Reform Act mandated changes in Tongass management practices that could negatively impact timber availability of the remaining commercial forest land base.

PacFish Impacts on Employment

In 1992, estimates indicate that Tongass National Forest timber harvests generated an annual average of 2,500 jobs with a payroll of $103 million. Included in Tongass forest products industry employment are approximately 900 pulpmill jobs accounting for $40 million in payroll. These figures do not include pulpmill employed loggers or sawmill workers. The pulpmills are the largest single employers in Sitka and Ketchikan and the State of Alaska's largest manufacturing employers.

Sawmills generated the annual equivalent of 537 jobs during 1992. Sawmill workers earned approximately $21 million in wages and salaries. Logging on the Tongass National Forest generated an estimated annual average of 840 jobs during 1992. Tongass loggers earned $34 million in wages and salaries. Timber harvest-related road construction accounts for approximately 120 jobs (annual equivalent) to the Tongass forest products industry. These construction jobs accounted for about $5 million in payroll earned during 1992.

Other basic components of the Tongass forest products industry added an additional 110 jobs and nearly $4 million in payroll. This includes log scalers, towing and stevedoring workers.

The table below shows the potential range of impacts to the forest products industry employment and payroll as a result of implementing PacFish.

PacFish Impacts on 1992 Employment and Payroll

Component	1992 Average Employment	After PacFish	Total Payroll	After PacFish
Pulpmills	906	272 - 525	$39.7 million	11.9 - 23.0 million
Sawmills	537	161 - 311	$20.8 million	6.2 - 12.1 million
Logging	840	252 -487	$33.9 million	10.2 - 19.7 million
Road construction	120	36 - 70	$ 5.0 million	1.5 - 2.9 million
Towing, Stevedoring and Other	110	33 -64	$ 4.0 million	1/2 - 2.3 million
Tongass Industry Total	**2,513**	**754 -1457**	**$103.4 million**	**$ 31.0 - 60.0 million**

The Forest Service itself generated 935 full-time equivalent positions in Southeast Alaska in 1992. The Forest Service estimates that 448 are directly involved in timber sale preparation, implementation and management. These Forest Service workers earned an estimated $20.8 million in annual payroll in 1992.

A very significant portion of Forest Service employment in Southeast Alaska, resulting from management of the Tongass as a commercial timber resource, is expected to decline. It is not possible to determine exactly how Forest Service employment would be affected by a reduction in the Tongass commercial timber resource base as a result of PacFish. Reallocation of federal funding to other types of Tongass management activities, such as watershed analyses, could mitigate Forest Service employment reductions.

In the past, when timber harvest and forest products industry employment declined overall, timber related USFS employment increased in response to Congressional direction to accelerate the timber sale preparations. In the long-term, however, it is anticipated that timber related USFS employment would reflect the amount of commercial timber resource available under PacFish management. The table below shows potential range of reductions in employment and payroll as a result of PacFish.

Total Tongass Forest Products Industry
Estimated Employment and Payroll In 1992

	1992 Average Employment	After PacFish	Total Payroll	After PacFish
Tongass Industry Total	2,513	754 - 1457	$103.4 million	31.0 - 60.0 million
US Forest Service	448	134 - 260	$20.8 million	6.2 - 12.0 million
Grand Total	**2,961**	**88 8 - 1717**	**$124.2 million**	**37.2 - 72.0 million**

Outlook Under PacFish

There is little certainty regarding the outlook for the Tongass forest products industry. However, the implementation of any interim Forest Service policy that has the potential effect of reducing the land base by 42 to 70+% will most certainly have a negative impact. In the near term, the industry is faced with weak markets for pulp, strong markets for lumber, and continuing concern over timber availability. Considerable hope has been expressed recently that Alaska could develop an increased value-added component to its Southeast facilities due to the increased cost of alternative supplies. The impact of the PacFish management strategy on timber availability will **eliminate** Southeast Alaska's ability to respond to increased demand for forest products.

Southeast Alaska's, seafood industry generates the annual equivalent of 4,100 jobs. Tourism adds an estimated 2,200 jobs to the basic economy. As a result of the recent closure of Green's Creek, mining accounts for less than 200 jobs. State and federal government continue to be important components in Southeast Alaska's basic economy adding upwards of 5,000 and 2,000 basic sector jobs respectively.

The forest products industry accounts for more than one in three private basic industry jobs in Southeast Alaska. Timber harvest and manufacturing from the Tongass National Forest accounts for about 62% of the forest products industry in the region. In spite of recent declines, the role of the forest products industry among all basic industry, including government, is still substantial. The forest products industry including related Forest Service employment accounts for nearly one quarter (24%) of all basic industry employment. Thus a 42 to 70+% reduction to the Tongass component will have an unacceptable impact on the region's economy.

This analysis <u>does not consider the indirect impacts</u> of the forest products industry on the Southeast economy. It is, however, important to note that the industry does have important secondary impacts and that indirect impacts vary from one segment of the industry to another. The pulpmills have by far the greatest impact. They provide hundreds of high-paying, year-round, almost entirely resident jobs which account for a high level of local spending.

Sawmills have comparatively high indirect and induced impacts. They too have generally well paid, resident workforce and represent an important industrial property tax bases. Among the various components of the forest products industry, remote logging camps have the lowest level of indirect and induced impacts. Still, remote logging operations do provide a significant market for many Southeast Alaska service and supply businesses.

There are many indirect service oriented activities and jobs that can only exist in the presence of a viable, functioning private sector. Substantial indirect economic losses are expected to occur as a result of the loss of land base available for the forest products industry.

Community Economic Impacts - Sitka and Ketchikan

The pulpmills are the largest employers in Sitka and Ketchikan. There is grave concern regarding the ability of these mills to maintain operations with the timber supply diminished by the proposed PacFish policies. While both mills have survived in past years without extended shut downs, PacFish is being proposed at a time when the Sitka mill has already announced an indefinite shutdown. Cumulatively, weakening markets, already artificially constrained timber supply, and additional PacFish constraints will force the permanent shut-down of the pulpmills. PacFish gives rise to 42 to 70+ % reductions in the scale of pulp mill operations. Reductions of this magnitude are not economically feasible. Major plants have volume-related economies of scale only when the plant is operating at, or near, full capacity. These important advantages are lost at reduced volumes. A reduction of 42 to 70+% in log supply is more likely to result in full closure than in reduced operations.

It is not possible to say that implementation of the proposed PacFish management strategy will unequivocally cause the closure of both pulp mills, as the permanent closure of one could result in increased supply for the other. Given current market conditions, however, it is a reasonable scenario. The result could be the loss of over 900 jobs in Sitka and Ketchikan, plus hundreds of support jobs.

Further, pulpmills represent an important property tax base in Sitka and Ketchikan. The pulpmills add millions of dollars to local government coffers either through property tax payments or through purchases of public utilities; These property tax payments and high volume purchases of public utilities help keep local government and public utility costs lower for residents of the communities.

All told, without the pulp mills, the economies of Sitka and Ketchikan would shrink by about one-quarter and some costs of living for remaining residents would increase significantly. Property values in Sitka and Ketchikan would be expected to decline sharply.

Alaska Pulp Corporation (APC) will suspend its Sitka pulp mill operations indefinitely beginning September 30, a move that company officials say is primarily related to the USFS administration of its long-term timber purchase contract. Implementation of the proposed PacFish management strategy on the Tongass National Forest will likely affect the timber supply for APC to the point where permanent closure is the only reasonable economic alternative available to the company.

The actual timing of impacts due to closure will vary depending on the existing financial circumstances and the schedule for shutting down. Studies of other Alaska communities show almost all impacts are experienced within two years, the heaviest impacts being within the first six months. The initial period of outmigration and economic recession is followed by bankruptcies, collapse of the real estate market, business closures, reductions in government services and additional job loss and outmigration as the effects are played out throughout the support sector of the remaining economy.

The following table from a recent study provides a summary of projected impacts due to the closure of just one mill on the economy of Sitka. Based on 1988 figures (The McDowell Group, 1989):

Impact	Loss	% of Sitka Total
Population	2,050	24.1
School Enrollment	413	24.1
Employment	944	24.1
Payroll	$28.7 million	28.5
Gross Business Sales	$37.4 million	28.5
Selected Municipal Impacts	$6.4 million	32.7
Real Estate Values	$170.8 million	46.1

A detailed study has not been conducted for potential closure of Ketchikan Pulp Corporation. It is reasonable to assume similar impacts to the City of Ketchikan and Gateway Borough, as adjusted for the combined population of 22,588. Although the greater Ketchikan area is nearly three times the population of Sitka, community profiles[2] suggest that local economy and employment statistics are proportional.

Other Southeast Communities

Most of the other communities in the region are highly dependent on the forest products industry for their livelihood. They are extremely limited with respect to opportunities for economic diversification.

Although fishing is the mainstay in terms of number of jobs, forest products provides over half the cash economy for the Cities of Hoonah, with a population of 793 and Kake, with a population of 725. The forest products industry contributes approximately 35% to the economy of the City of Wrangell, or nearly 300 jobs. The APC sawmill is the largest employer in this community of 2,539. Thorne Bay (population 637), Klawock (population 758) and Craig (population 1,637), located on Price of Wales Island, all rely on the forest products industry for approximately 90% of their private sector employment. Unemployment Insurance data indicate an annual average of 557 jobs for this combined census area in 1992[3].

Clearly, a reduction of 42 to 70+% in the land available for harvesting of forest products would be devastating to these small, undiversified economies. For the Price of Wales area alone, the number of jobs would be reduced by 234 - 390, a tremendous impact to an area of 3032 people.

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[2]Alaska Department of Community and Regional Affairs' Community Database - Research and Analysis Section, Municipal and Regional Assistance Division, Juneau, Alaska, 1993.
[3]Alaska Department of Labor, Research and Analysis Section, Southeast Forest Product Wage and Salary Employment by Census Area, 1993.

Of key, and sometimes overlooked importance, is the disproportionate impact of the forest products industry to the wintertime economy of the region. The remaining private sector employment, fishing and tourism, is of a highly seasonal nature. The forest products industry, however, provides the economic glue that holds a major part of the economy and hence society together during the winter months.

The loss of the forest products industry associated with PacFish may drive companies away from Southeast which could ordinarily survive the winter doldrums. Given the migratory nature of businesses catering to the fishing and tourism industries, there would be little inducement for the service sector to remain in Ketchikan or Sitka absent the incremental sales associated with the Forest products industry. A disproportionate impact to year-round availability of services in these communities would be the result of the implementation of interim PacFish policies.

CONCLUSION

For the most part, this analysis has focused on the direct, and to a lesser extent the indirect, impacts to the economy of Southeast Alaska. There are many other indirect impacts that will likely be experienced that are beyond the scope of this study, but nevertheless, deserve mention. This report has not attempted to quantify the significant socio-cultural and psychological impacts that would undoubtedly be associated with an economic impact of this scale. Nor has an effort been made to assess impacts beyond the geographic scope of Southeast Alaska. It is not unreasonable to anticipate impacts to the balance of trade, particularly with the pacific rim and with our newest trading partners in Russia. Suffice it to say, implementation of interim/permanent PacFish strategies will hurt many people in Alaska.

This analysis clearly demonstrates that the proposed PacFish management strategy has serious, negative, economic ramifications for the people of Southeast Alaska, and the State of Alaska as a whole. If we consider only the least case impacts of the proposed PacFish management strategy, Southeast Alaska would be faced with the loss of 1711 jobs and $72 million in payroll. PacFish would create an untenable situation for a region that relies on the forest products industry for 24% of its basic industry.

Unequivocally, the proposed PacFish management strategy, both interim and long term, have devastating and potentially far reaching impacts to the people of Alaska.

PACFISH STRATEGY
Executive Summary

Revised May 1, 1993

Introduction

The purpose of this executive summary is to provide an overview of the background, issues and current status of the Pacific salmon and steelhead management strategy of the USDA Forest Service (Forest Service) and USDI Bureau of Land Management (BLM). Updates to this briefing will be provided periodically.

Over the past several years, significant new research information about the status of Pacific salmon and steelhead stocks, current habitat conditions, and habitat requirements has become available. This new information makes it necessary for the Forest Service and BLM to take immediate and long-term actions to assure proper management of anadromous fish habitat in Alaska, California, Idaho, Oregon and Washington. Changes in management guidance will affect about 75% of the Ranger Districts on 34 National Forests in five Forest Service Regions and 29 Area Offices on 16 Districts in four BLM State Offices.

Background

Pacific anadromous salmonids (including salmon, steelhead and sea-run cutthroat trout, and dolly varden) occur naturally from southern California northward to the Arctic Ocean. These fish are comprised of a large number of stocks, or populations that originate from specific watersheds during specific times of year as juveniles, migrate to the ocean, and generally return to reproduce in their natal streams at the same time of year they were spawned. In many areas of the West Coast, naturally reproducing stocks of Pacific salmon, steelhead and sea-run cutthroat trout are at risk of extinction. Of the more than 400 stocks from California, Idaho, Oregon, and Washington recently evaluated by the American Fisheries Society (AFS), 214 were considered to be at "moderate" or "high" risk of extinction or of "special concern," 106 were extinct, and about 120 were considered secure.

About 134 "at risk" stocks identified by the AFS report are found on National Forests and 109 are found on Public Lands administered by the BLM. Recent information suggests that coho and chum salmon, and steelhead stocks in Alaska probably are declining also. To more accurately characterize the situation in Alaska, Forest Service researchers began an investigation in 1992 that is due to be completed in late spring 1993 to identify the unique stocks of anadromous fish on National Forests in Alaska. The Alaska Chapter of the AFS has undertaken a review of the status of anadromous fish throughout the state of Alaska and in 1994 expects to publish a report on stocks at risk in Alaska.

Reasons for the decline of the Pacific anadromous salmonids vary by species and geographic area. The depressed status of the 214 stocks reflects the interaction of inherently variable environmental conditions, such as oceanic productivity and weather patterns, and a variety of management activities. In general, stock survival is threatened by some combination of hydroelectric development and operation, fish harvest, fish hatchery influences on disease and genetic fitness, and fish habitat conditions. These management activities sometimes are referred to as the "four H's."

- **Hydroelectric**, flood control, and irrigation dams have reduced fish production in many drainages throughout the range of the Pacific salmon, steelhead, and sea-run cutthroat trout. This is especially true in the San Joaquin and Sacrament River Valleys of central California, and the Columbia River Basin of Idaho, Oregon and Washington. Recovery of as many as 20% to 40% of the stocks identified by AFS as "at risk" is limited primarily by dam operations. The problem of hydroelectric development and operations is particularly acute in the Columbia River Basin, where: (a) more than 30% of the salmon, steelhead and sea-run cutthroat trout's historic range has been blocked by dams without fish passage facilities, (b) adult fish have difficulty in locating and negotiating past dams where ladders have been installed, (c) direct mortality of juvenile fish as a result of passing through power turbines is estimated at 12-20% per dam, and (d) mortality of juvenile fish has increased due to an approximately four-fold increase in downstream travel time (from 7-9 days to nearly 4 weeks) as a result of turning all but about 50 miles of the Columbia River into a series of placid lakes. The demise of a large majority of the extinct stocks is attributable to dam construction and operation.

- **Harvest** of Pacific salmon, steelhead, and sea-run cutthroat trout occurs in a variety of sport, commercial, and subsistence fisheries. Because small naturally spawning fish stocks mix in the ocean with abundant hatchery stocks, management for a "maximum sustained yield" can result in overharvest of some stocks, appropriate harvest of some, and underharvest of others. Further confounding the issue is the fact that much of the commercial harvest occurs outside the national waters of the U.S. and of Canada, and much of the subsistence harvest is guaranteed under treaty or given special priority by law. As a result, complex jurisdictional authorities must grapple with allocating a "fair share" of an ever-dwindling resource among various nations, states, and tribes.

- **Hatcheries** were built to be a part of the solution to declining populations of salmonics. However, many have become part of the problem and some have had a subtle, but adverse impact. Traditional hatchery practices have contributed to the decline, or may limit recovery, of 104 of the 214 stocks identified by AFS as "at risk." Hybridization of hatchery stock with wild salmonids can reduce the genetic fitness of the wild stock by affecting run timing and life history characteristics important to long-term viability. Competition between juvenile wild salmon, steelhead, and sea-run cutthroat trout and juvenile hatchery fish (that typically are larger because of hatchery feeding and/or time of hatching, and are released in large numbers) can be overwhelming. Further, crowded rearing conditions, warmer water, and greater concentrations of fish waste in many hatcheries can increase the incidence of disease among hatchery fish that can be transmitted to naturally-reproducing fish. Genetic contamination of the remaining lower Columbia River coho population by hatchery fish, and the resulting extinction of "wild" genes,

was one of the primary reasons cited by the National Marine Fisheries Service in their decision that listing the stock was not warranted.

- **Habitat** is an very important component of salmonid production. In fact, declining habitat condition is the single factor affecting nearly all of the stocks at risk. Degradation of spawning and rearing habitat has occurred on all land ownerships throughout the range of Pacific anadromous fish stocks. Detrimental changes in habitat condition include reduction in water quality (as measured by increases in temperature, sedimentation, changes in nutrient levels and water chemistry, and the presence of toxic substances), changes in water quantity and/or timing of water flow, and reduction in habitat complexity (as indicated in loss of deep pools, reduction in amounts of large woody debris, and changes in width:depth ratios and bank angles).

The Forest Service and BLM have an important role to play in the management of watersheds and fish habitat in Alaska, California, Idaho, Oregon, and Washington. The watersheds on National Forests encompass approximately 50% of the remaining freshwater anadromous fish spawning and rearing habitat in the lower 48 states and about 25% of such habitat in Alaska. Public Lands managed by the BLM include 13,200 stream miles in the lower 48 states and 133,000 miles in Alaska that provide anadromous fish spawning and rearing habitat.

For those stocks affected primarily by habitat factors, the management of watersheds to ensure good fish habitat on National Forests and Public Lands is important. Management of these lands also can play an important role in moderating the rate of decline for those stocks affected primarily by hydroelectric development and operations, hatcheries, and fish harvest, and can provide a buffer against environmental extremes. Of the 134 "at risk" stocks identified by the 1991 AFS report that are found on National Forests in the lower 48 states and the 109 "at risk" stocks that are found on BLM administered Public Lands, approximately 23% are affected primarily by hydroelectric development and operation. For the remaining stocks that are limited primarily by other factors (habitat, harvest, hatcheries), poor habitat condition most often is the primary cause of decline or impediment to recovery.

PACFISH Strategy Framework

The 1991 AFS report, coupled with the November 1991 listing of the Snake River sockeye salmon as endangered and the April 1992 listing of the Snake River spring/summer and fall chinook salmon as threatened, served as a wake-up call for the Forest Service, BLM, and others to provide more sensitive management of Pacific anadromous fish and their habitat. In an effort to address the issue of declining fish stocks in the Alaska, California, Idaho, Oregon and Washington, the Forest Service initiated a team effort in early spring 1992 to undertake an assessment and develop a management strategy that addresses the habitat needs of all Pacific anadromous "at risk" stocks on National Forests (see December 1992 Informational Report). During this same time, the BLM began revising its 1988 "Anadromous Fish Habitat on Public Lands" strategic plan. In March 1993, the Forest Service and the BLM announced their commitment to develop a common strategy for management of Pacific salmon and steelhead habitats and

associated watersheds on Forest Service and BLM administered lands in the West. This comprehensive strategy has become known as "PACFISH."

To facilitate a strong linkage between management and research, the PACFISH effort is staffed with technical specialists and managers from the Forest Service National Forest System and the BLM, and research scientists from the Forest Service research organization. The organizational framework for the PACFISH effort includes three components:

- **Washington Office Policy Group** - Provides overall direction for development of the strategy. This group is led by USDA-FS Associate Deputy Chiefs Dave Unger, National Forest System, and Eldon Ross, Research, and USDI-BLM Deputy Assistant Director Kemo Conn, Land and Renewable Resources. Members of the group include Washington Office Staff Directors from the Forest Service and Washington Office Division Chiefs from the BLM. Ad hoc members include representatives from the Department of Agriculture Office of General Counsel and the Department of Interior Office of the Solicitor.

- **Washington Office Work Group** - Established to work with the Field Team to develop the strategy for managing salmon and steelhead habitats on Forest Service and BLM administered lands. This group is led by Forest Service Assistant Director for Wildlife and Fisheries Phil Janik, Pacific Northwest Research Station Aquatic/Land Interactions Program Team Leader Jim Sedell, BLM Science Advisor Jack Williams, and BLM Rangeland Resources Branch Chief Glen Secrest. Core members include representatives with expertise in fisheries, economics, public affairs, watershed management, land management planning, and range management. Additional representatives with other expertise serve ad hoc as needed.

- **Inter-regional Field Team** - Established to provide information and work with the Washington Office Work Group in the development of the strategy. This team is led by Forest Service Deputy Regional Forester Bob Joslin and Pacific Northwest Research Station Aquatic/Land Interactions Program Project Leader Fred Everest, and BLM Deputy State Directors for Resources Elaine Zielinski (OR/WA) and Dick Bastin (ID). Members include representatives from each of the three Forest Service Research Stations (PSW, PNW, INT) and five Regions (1, 4, 5, 6, 10), and each of the four BLM State Offices (CA, ID, OR/WA, AK) responsible for management of Pacific anadromous fish habitat. Forest Service and BLM Anadromous Fisheries Coordinators, Gordon Haugen and Bob House, assist with Field Team activities

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Current Habitat Conditions Were Assessed

As part of the PACFISH assessment, Forest Service research scientists, working with fisheries biologists and watershed specialists on National Forests with Pacific anadromous fish habitat, have characterized current habitat conditions in many watersheds on National Forests and other lands in Alaska, California, Idaho, Oregon and Washington. Generally, these habitats have 30% to 70% fewer large, deep pools, more fine sediments in spawning gravels and greater disturbance of riparian vegetation than is acceptable and have experienced a reduction in fish habitat capability. These downward trends in

data/data for Ak ?

habitat conditions represent the cumulative effects, across all ownerships, of past and present land management activities. For example:

- **Coastal Oregon** streams on west-side forested lands have been degraded. The amount of bedrock bottom exposed has gone from 30% to 80-90%. Pool-riffle ratios have gone from about 50:50 to 20:80 or 10:90 based on Oregon Game Commission surveys in 1960 and Forest Service surveys in the 1970's. The loss of 50% of deep pools and complex edges since late 1960's translates directly into a 50% loss of summer rearing habitat for juvenile salmonids. Stream channel condition in 77% of the 211 miles of anadromous fish habitat in BLM's Salem District of western Oregon fail to meet desired BLM standards.

- **East-side Oregon** habitat in the Upper Grande Ronde River Basin has been degraded. 80% of fish habitat fails to meet current Forest Plan standards and guidelines for temperature, sediment, and riparian condition. 20% exceeds current Forest Plan standards and guidelines. BLM habitat in the basin has undergone similar degradation.

- **Upper Snake River Basin** habitat in the developed portions of the Middle Fork Clearwater and Lochsa Rivers watersheds on the Clearwater National Forest in Idaho have been degraded. 70% fail to meet Forest Plan standards and guidelines. Between 1935 and 1992, the number of large pools in the Salmon River Basin has decreased by 52% in managed watersheds and increased by 29% in Wilderness area watersheds.

"Good" Habitat Conditions Were Defined

With the help of historic inventory and survey data, as well as current research, "good" anadromous fish habitat conditions have been defined. This was determined by comparing quantitative habitat surveys, completed between 1989 and 1992, with surveys done by the Bureau of Fisheries, now the National Marine Fisheries Service, between 1934 and 1941 on 116 watersheds in Alaska, Idaho, Oregon and Washington. "Good" habitat has been defined using physical features as surrogates for the processes that form salmonid habitat. One key feature (pool frequency) and four supporting features (water temperature, amount of large woody debris interacting with stream channels, streambank stability and bank angle, and width to depth ratio of stream channels) are used to describe habitat quality. In "good" habitat, all five features are above the following threshold levels:

- **Pool Frequency** (pools per mile). Varies by wetted width of stream

Wetted Width	5	10	15	20	25	50	75	100	125	150	175	200
Pools/Mile	184	96	70	56	47	26	23	18	14	12	10	9

- **Water Temperature**. Compliance with State Water Quality standards generally provide adequate protection for salmonid assemblages, except that summer temperatures should be less than 68 degrees F.

- **Large Woody Debris**. The amount of large wood debris needed varies by geographic location.
  Southeast Alaska, Northern California, and western Oregon and Washington: greater than 80 pieces per mile; greater than 24 inch diameter; greater than 50 foot length.

  East of Cascade Crest in Oregon, Washington, and Idaho: greater than 20 pieces per mile; greater than 12 inch diameter; greater than 35 foot length.

- **Bank Stability and Lower Bank Angle** (non-forested setting): Bank stability exceeds 80%. 75% of banks should be undercut (i.e. less than 90 degree angle). Less than 25% of bank angles should be greater than 90 degrees.

- **Width to Depth Ratio**: less than 10 in all systems (measured as mean wetted width divided by mean depth).

Elements Of The PACFISH Strategy

The PACFISH effort is a proactive, ecosystem approach to management of watersheds and Pacific anadromous fish habitats across five Forest Service Regions and four BLM state administrative units, including the states of Alaska, California, Idaho, Oregon and Washington. Eight alternatives are being evaluated, including six developed by the PACFISH Field Team, alternative 9A from the Gang of Four Report, and a draft riparian management strategy from Region 5 of the Forest Service. The eight alternatives include some combination and application of key watershed identification, watershed analysis, Riparian Habitat Conservation Areas and standards and guidelines, and watershed restoration. The PACFISH strategy is building upon a scientifically sound assessment that characterizes current habitat conditions, provides an understanding of the elements of "good" habitat condition, provides the knowledge of how to manage watersheds to maintain "good" habitat where it now occurs and achieve "good" habitat conditions in areas that currently are degraded.

- **Riparian Management Objectives** are being refined that call for the maintenance or restoration of: (a) water quality to a degree that provides for stable and productive ecosystems (i.e. timing and character of temperature, sediments and nutrients), (b) stream channel integrity, channel processes and sediment regime under which the ecosystems developed (e.g. timing, volume, and character of sediment input and transport), (c) instream flows to support desired riparian and aquatic habitats, stream channel stability and effective function, and ability to route flood discharges, (d) natural timing and variability of the water table elevation in meadows and wetlands, (e) diversity and productivity of native and desired non-native plant communities, (f) riparian vegetation so amount and distribution of large woody debris is characteristic of natural riparian and aquatic ecosystems, (g) habitat for populations contributing to viability of riparian-dependent communities (i.e. native and desired non-native plants, vertebrates, and invertebrates), (h) riparian vegetation for adequate summer and winter thermal regulation, (i) riparian vegetation so the rates of surface and bank erosion and channel migration are similar to the rates under which the communities developed, and (j) riparian and

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- **Watershed Restoration** efforts in key watersheds will receive priority. All restoration work will be designed at a watershed/landscape scale and will involve coordination between changes in land management activities and active restoration projects.

Implementation Process

Direction provided by the PACFISH strategy will be science based, practical, and economically feasible. It also will provide assurance to the public that we are responding seriously to the situation. Because of critical status of many of the "at risk" anadromous fish stocks and the Forest Service and BLM's need to demonstrate commitment to improved habitat conditions on lands they administer, consideration is being given to the issuance of interim direction that will apply to Forest Service and BLM stewardship of all anadromous fish habitat on National Forests and Public Lands in the West. Appendix 5K of the Report of the Scientific Analysis Team is one of the six PACFISH developed alternatives, and provides some indication of the type of interim direction being considered. Selection of final management direction will proceed with a full NEPA review of all alternatives that meet technical and legal requirements.

HJR 59

Alaska State Legislature

Representative Carl E. Moses

CHAIRMAN
HOUSE RULES COMMITTEE

CHAIRMAN
HOUSE SPECIAL COMMITTEE FISHERIES

MEMBER FINANCE SUBCOMMITTEES ON
DEPT. OF FISH AND GAME
DEPT. OF PUBLIC SAFETY

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SPONSOR STATEMENT

House Joint Resolution 59
Reduction of wanton waste in North Pacific Ocean and Bering Sea fisheries.

House Joint Resolution 59 addresses an issue of immediate concern to Alaska and its commercial fishing industry. In a May, 1993, report prepared for the Alaska Department of Fish & Game by Pacific Associates, the wanton waste of fishery resources in the North Pacific Ocean and Bering Sea fisheries was documented.

Discards of either dead or live fishery resources occur in these commercial fisheries for three basic reasons: economics, management policies and fishing practices. Discards sometimes occur because of the economic loss associated with processing the entire harvest. When species of little or no value are harvested along with the target species, there is no real economic incentive to discourage discarding.

Management induced discards occur for several reasons. There are federal regulations which prohibit fishermen utilizing certain gear types from retaining certain species. The fact that the fish may be dead or alive does not matter. This is called prohibited species catch. Groundfish fisheries in the North Pacific are managed by an open-access method with species quotas. Fishermen are interested in targeting their particular species as rigorously as possible before the allotted quota is reached. This method also lends itself to waste through discards of non-target species.

Fishing practices discards may be the result of direct action by fishermen or through a combination of management requirements and fishing practices. Some fishermen "prospect" for a closed-fishery species while targeting another species. Because they will harvest prohibited species while doing this, there is mortality associated with the non-targeted species. Technical modifications to gear to make it "legal" (e.g. modifying on-bottom trawl gear to mid-water trawl) can cause increased bycatch mortality.

HJR 59 urges Congress to either amend the Magnuson Fishery Management and Conservation Act or to enact other legislation to address the waste of fishery resources in the North Pacific Ocean an Bering Sea fisheries. Congress can utilize a variety of means to disallow fishery resource waste.

FISCAL NOTE

STATE OF ALASKA
1994 LEGISLATIVE SESSION

BILL NO. HJR 59

Revision Date:
Dept. Affected:
Title: Relating to the reduction of wanton waste
n North Pacific Ocean and Bering Sea fisheries
RU:
Component:
Sponsor: House Rules Committee
Requestor: House Rules Committee
COMPONENT SERIAL NO.

Expenditures/Revenues (Thousands of Dollars)

OPERATING EXPENDITURES	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0					
CAPITAL EXPENDITURES	0					
CHANGE IN REVENUES ( )	0					

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other						
TOTAL	0					

Estimate of any current year (FY94) cost: $ 0

POSITIONS

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

Prepared by: Cheryl Sutton, Aide, House Special Committee on Fisheries Phone: 465-6848
Division:
Date: March 2, 1994
Approved by Commissioner: Date: March 2, 1994
Agency: House of Representatives/Legislature

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE
For furth[redacted]

DISCARDS IN THE GROUNDFISH FISHERIES OF THE BERING SEA/ALEUTIAN ISLANDS & THE GULF OF ALASKA DURING 1992

prepared for

The Alaska Department of Fish & Game

by

Pacific Associates

May, 1993

EXECUTIVE SUMMARY

This paper identifies the amount and source of discards of groundfish, crab, halibut, herring and salmon resulting from the commercial groundfish fisheries in the Bering Sea/Aleutian Islands and the Gulf of Alaska during calendar year 1992. Discards related to the directed commercial fisheries for crab and halibut are not identified.

The data base used to detail the groundfish discards was generated by the National Marine Fisheries Service (NMFS), and reflects only the reports submitted to the NMFS by fishing vessel operators and/or processors, who are required by federal regulation to report their discards to the NMFS. Discard data for species other than groundfish, such as prohibited species catch (PSC), are from observer data generated by independent contract observers.

A significant variance in the amount of groundfish discards reported is found when comparing discard reports by the vessel operator and/or processor to discard reports by the independent contract observers. For example, in the 1992 Bering Sea/Aleutian Islands pollock fishery, vessel operators and/or processors reported total pollock discards of 47,772 mt while federal observers reported extrapolated pollock discards of 113,000 mt — or 237% greater than those reported by the vessel operators.

It is also noteworthy that the largely unobserved hook and line vessels in the Gulf of Alaska reported no discards of groundfish in the sablefish and Pacific cod directed fisheries in 1992.

As a result, the groundfish discard information depicted in this paper should be viewed as a conservative estimate of the actual discards which occurred in the 1992 groundfish fisheries.

The table below depicts the total groundfish harvest, the reported groundfish discards, and the prohibited species discards for the Bering Sea/Aleutian Islands and the Gulf of Alaska during 1992:

	mt	pounds
Total Groundfish Catch	1,893,074	4,173,470,940
Total Groundfish Discards	229,999	507,055,795
Percent Discarded	12%	12%

Halibut Mortality	20,035,767	pounds
Chinook Salmon	49,571	fish
Other Salmon	50,420	fish
King Crab	148,401	crab
Bairdi Tanner Crab	3,967,622	crab
Other Crab	16,360,418	crab
Herring	1,080,280	pounds

With the exception of halibut, the mortality rate for fish returned to the ocean in the Alaskan groundfish fisheries is assumed to be 100% by the NMFS. Halibut mortality rates are displayed in Table 1 (page 4) for the various fisheries.

Bering Sea/Aleutian Islands

The following findings apply to the groundfish fisheries in the Bering Sea and Aleutian Islands (BS/AI) management area.

- A total of 462 million pounds of groundfish (12% of the total harvest) were discarded during 1992 in the BS/AI, according to vessel operator and/or processor reports.
- Trawl fisheries were responsible for 93% of the groundfish discards, while fixed gear accounted for 7% of the discards.
- In trawl fisheries, 47% of the discards consisted of the species being targeted.
- In fixed gear, 2% of the discards consisted of the species being targeted.
- The mortality of halibut taken as incidental bycatch totaled nearly 14 million pounds.
- The average size of halibut taken as bycatch in the trawl fisheries was 0.94 pounds per halibut; in the pot fisheries the average size was 2.16 pounds per halibut; and, in the hook and line fishery the average size was 11.94 pounds per halibut.
- 20.3 million crab were discarded (60% of this total came from the yellowfin sole trawl fishery).
- 73,000 salmon of all species were discarded (81% of this total came from the mid-water trawl pollock fishery).
- 1 million pounds of herring were discarded.

The following findings apply to specific fisheries in the BS/AI:

Mid-Water Trawl Pollock Fishery: From a percentage perspective, this was a relatively

clean fishery as 4% of the total groundfish harvest of 2.27 billion pounds was discarded. This "mid-water" fishery, however, had a higher incidental bycatch of bottom-dwelling animals than the bottom trawl pollock fishery: 2.2 million pounds of halibut mortality and 3.2 million crab.

Bottom Trawl Pollock Fishery: The total groundfish harvest was 360 million pounds. Of this amount, 18% (64 million pounds) was discarded. The PSC discard consisted of 1.7 million pounds of halibut mortality and 2.2 million crabs.

Yellowfin Sole Trawl Fishery: The total groundfish harvest was 354 million pounds; 38% (133 million pounds) was discarded, including 58.7 million pounds of yellowfin sole. Halibut bycatch mortality associated with the fishery was 1.55 million pounds, and 12.2 million crab were taken as bycatch.

Rocksole Trawl Fishery: The total groundfish harvest was 115.5 million pounds.; 61% (70 million pounds) of the total catch was discarded, including twenty-two million pounds of rock sole and nineteen million pounds of pollock . The PSC discard consisted of 2 million crab and 1.6 million pounds of halibut mortality.

Pacific Cod Trawl Fishery: The total groundfish harvest was 146 million pounds; 36% (53 million pounds) was discarded. Halibut bycatch mortality was 3.5 million pounds.

Pacific Cod Hook & Line Fishery: The total groundfish harvest was 229 million pounds; 12% (28 million pounds) was discarded. Discards of Pacific cod accounted for less than one-tenth of one percent (618,000 pounds). Halibut bycatch mortality was 2.4 million pounds.

Pacific Cod Pot Fishery: The total groundfish harvest was 30.5 million pounds; 3% (1 million pounds) was discarded. Ninety-seven percent of the catch was the target species. 274,000 crab were taken as bycatch.

Gulf of Alaska

Discard information available for the Gulf of Alaska (GOA) management area varies significantly from that in the BS/AI. The following findings apply to the Gulf of Alaska management area.

- A total of 45 million pounds (9% of the total catch) of groundfish were discarded during 1992 in the GOA, according to vessel operator and/or processor reports.

- While the total catch in the GOA is approximately 16% of the total

catch in the BS/AI; the reported groundfish discards in the GOA are 9% of the reported groundfish discards in the BS/AI. This is likely due to greater observer coverage in the BS/AI.

- The total groundfish discard rate reported by the vessel operators in the GOA hook and line fishery is significantly less than 1%. This seems unexpectedly low.

- Trawl groundfish discard rates in the GOA are more reflective of the Bering Sea: 9% of the total groundfish harvest.

- Halibut bycatch mortality was 6.2 million pounds..

- The average size of halibut taken as bycatch was greater in the Gulf than the Bering Sea: 7.25 pounds per fish for trawl gear, 10.14 pounds per fish for pot gear, and 14.38 pounds per fish for hook and line.

- 26,500 salmon of all species were reported as discards.

The following findings apply to specific fisheries in the GOA:

Bottom Trawl Pollock Fishery: The total groundfish harvest was 53 million pounds: 6% (3 million pounds mt) of the harvest was discarded. 118,051 pounds of halibut mortality were associated with the fishery.

Mid-Water Trawl Pollock Fishery: The total groundfish harvest was 121 million pounds; 7% (8 million pounds) were discarded. Approximately 4,000 chinook salmon were taken as bycatch. Unlike the Bering Sea, there was little halibut bycatch mortality associated with this fishery.

Pacific Cod Trawl Fishery: The total reported groundfish harvest was 113 million pounds; 6% (6.6 million pounds) of the harvest was discarded. Halibut mortality associated with the fishery was 1.2 million pounds. 5,300 chinook salmon were also taken as bycatch.

Rockfish Trawl Fishery: The total reported groundfish harvest was 48 million pounds; 18% (8.7 million pounds) of the harvest was discarded. There were no discards of rockfish reported. Halibut mortality associated with the fishery was 1.1 million pounds. Over 5,000 salmon of all species were also taken.

Deepwater Flatfish Trawl Fishery: The total reported groundfish harvest was 34 million

pounds: 50% of the harvest was discarded. Halibut mortality was 1.3 million pounds.

Pacific Cod Hook and Line fishery: The total reported groundfish harvest was 32 million pounds. There were zero discards of groundfish reported; 98% of the reported harvest was Pacific cod. Halibut bycatch mortality associated with the fishery was 843,000 pounds.

Sablefish Hook and Line Fishery: The total reported groundfish harvest was 47.4 million pound; 93% of the total reported harvest was sablefish. Less than 2% of the total groundfish catch was reported as discard. Halibut bycatch mortality associated with the fishery was 1 million pounds.

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The data used in this paper, drawn exclusively from the NMFS 1992 records, is attached in appendices at the end of this paper.

HJR

61

WESTERN ALASKA FISHERIES DEVELOPMENT ASSOCIATION

Coastal Villages Fishing Cooperative • Norton Sound Economic Development Corporation
Bristol Bay Economic Development Corporation • Yukon Delta Fisheries Development Association

725 Christensen Drive, Suite 5 • Anchorage, Alaska 99501 907-279-6519 Fax 907-258-6688

April 7, 1994

The Honorable Carl Moses
Alaska House of Representatives
State Capitol
Juneau, Alaska 99901-1182

Dear Representative Moses:

The members of the Western Alaska Fisheries Development Association wish to thank you for introducing House Joint Resolution No. 61, "Relating to the Western Alaska Community Development Quota Program and the North Pacific Fishery Management Council Comprehensive Rationalization Program".

WAFDA strongly supports HJR 61. We appreciate your efforts to put the Alaska Legislature on record in support of fair and equitable Community Development Quota allocations as a part of any comprehensive rationalization plan that the North Pacific Fishery Management Council prepares.

In approximately one-and-a-half years of existence, the CDQ program has demonstrated phenomenal success. Hundreds of western Alaska residents have found employment in the Bering Sea fishing industry. New fisheries-related development projects have been implemented in communities throughout western Alaska. More of the Bering Sea fisheries resource value has been captured for Alaska. A sense of hope has spread through communities that previously were mired in despair.

Despite all the accomplishments, we are concerned that the CDQ program could expire on December 31, 1995 with the council taking no action to extend or expand it. HJR 61 would be very helpful in showing that the CDQ program enjoys widespread support and in convincing the council that CDQs should be renewed as a part of the comprehensive plan.

Again, thank you for your support. Please do not hesitate to contact me if I can provide you with further information about the CDQ program and its positive impact on Alaska.

Yours truly,

John Jemewouk

John Jemewouk
Chairman

cc: CDQ corporations

JJ/ko

Alaska State Legislature

Representative Carl E. Moses

CHAIRMAN
HOUSE RULES COMMITTEE

CHAIRMAN
HOUSE SPECIAL COMMITTEE FISHERIES

MEMBER FINANCE SUBCOMMITTEES ON
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SPONSOR STATEMENT

House Joint Resolution 61

Relating to the Western Alaska Community Development Quota Groups and the North Pacific Fisheries Management Council's Comprehensive Rationalization Plan

House Joint Resolution 61 asks the North Pacific Fisheries Management Council (NPFMC) to allocate groundfish and crab to the Western Alaska Community Development Quota Groups.

Currently, the NPFMC is developing a comprehensive rationalization plan which would involve a license limitation program for groundfish and crab. This action by the Council does not abandon the Individual Fishing Quota (IFQ) option as a potential management solution in the future.

Options under consideration by the NPFMC for groundfish include no allocation to the CDQ groups; CDQ set-asides of up to 15% of the total allowable catch (TAC) with no sunset provisions; and, CDQs in the form of **additional,** non-transferrable licenses. For Bering Sea and Aleutian Island king and tanner crab, the suggested options include no allocation to CDQs; an initial allocation of up to 15% of the guideline harvest level (GHL) by species with consideration of other criteria and with no sunset provisions; and, CDQs in the form of **additional**, non-transferrable licenses.

HJR 61 specifically asks the NPFMC to allocate fairly and equitably to the CDQ groups as a vital part of the fishing economy in western Alaska. The successes of the CDQ groups to date have set an example of economic development for others in western Alaska. Adding groundfish and crab to their economic activities should assist the coastal communities they represent in an even greater measure.

FISCAL NOTE

STATE OF ALASKA
1994 LEGISLATIVE SESSION

BILL NO. HJR 61

Revision Date:
Dept. Affected: Dept. of Fish & Game
Title: Western Alaska Community Development Quota Program
BRU: Division of Commercial Fisheries
Component:
Sponsor: Rules by req. of House Econ. Task Force
Requestor:
COMPONENT SERIAL NO.

Expenditures/Revenues (Thousands of Dollars)

OPERATING EXPENDITURES	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING						0
CAPITAL EXPENDITURES						0
CHANGE IN REVENUES ( )						0

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other						
TOTAL						0

Estimate of any current year (FY94) cost: $ 0

POSITIONS

FULL-TIME						0
PART-TIME						0
TEMPORARY						0

ANALYSIS: (Attach a separate page if necessary)

Prepared by: Karen Brandt, Fisheries Committee Staff
Phone: 465-6848
Division: House Special Committee on Fisheries
Date: March 16, 1994

Approved by Chairman: Representative Carl E. Moses, Chair
Date: March 16, 1994
Agency: House Special Committee on Fisheries

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE

For fu[illegible]

North Pacific Fishery Management Council

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#1-94 NEWSLETTER 01/25/94

North Pacific Fishery Management Council Meeting Summary

Discussion of comprehensive rationalization of the groundfish and crab fisheries dominated the agenda for the Council's January meeting held in Anchorage. The Council directed staff to concentrate on a license limitation management system for those fisheries at this time. Analyses of individual fishing quotas have not been completely abandoned but will be pursued more slowly. The Council also approved a regulatory amendment which will establish an early season "set-aside," with trip limits for halibut Area 4B. Superexclusive registration was also approved for the Norton Sound red king crab fishery. In addition, the Council received recommendations from its Halibut Charter Working Group on management measures for the halibut sports charter industry, and initiated an analysis of measures to monitor the high bycatch of chum salmon in the Bering Sea/Aleutian Islands groundfish fisheries. Details of these and other actions are included in this newsletter.

The Council will meet next the week of April 18 at the Hilton Hotel in Anchorage, Alaska. A draft agenda for that meeting should be available by April 1st. It is expected that issues on the agenda will include: final action on proposed management measures for the scallop fisheries, final action on proposed trawl closures around the Pribilof Islands, final details on the Sablefish/Halibut IFQ program, further discussion of a potential moratorium on entry to the halibut charter boat fisheries, potential increases in observer requirements to monitor chum salmon bycatch, a report on total weight measurement in the groundfish fisheries, and, further discussion of progress on the comprehensive rationalization program.

IN THE NEWSLETTER

SSC Elections Held

The Scientific and Statistical Committee elected Terry Quinn as Chairman and Keith Criddle as Vice Chairman for 1994. Dr. Quinn, Professor of Population Dynamics at the Juneau Center for Ocean Sciences, University of Alaska, has been a member of the SSC for seven years and served as vice chairman for three years. Dr. Criddle, a Professor of Economics with the University of Alaska-Fairbanks, was appointed to the SSC in December of 1992.

Sablefish/Halibut IFQ Program

The Council was scheduled to discuss details of the sablefish/halibut IFQ program at the January meeting, but postponed this agenda item until the April 1994 meeting due to lack of time. The unresolved details will not affect the application and appeals process currently underway, and will be addressed by the Council in April.

Comprehensive Rationalization Program (CRP)

The Council devoted considerable time at the January meeting to the CRP issue, spending nearly four days discussing the specific elements and options for both Individual Fishing Quota (IFQ) and License Limitation alternatives. The specific alternatives and subalternatives identified by the Council at this time are detailed in Attachment 1 to this newsletter. A major directional decision was made by the Council concerning the timing and priority of the potential alternative management systems. The Council adopted a recommendation of its Advisory Panel, which voted 17-2 to identify License Limitation as the priority management system for both groundfish and crab. This action does not abandon IFQs as a potential management solution in the future, but does, at a minimum, indicate a step-wise process whereby License Limitation would be a necessary first step. There were several reasons the AP advanced this recommendation to the Council. First, a license system would bound the fleet and would be more straightforward and faster to implement; second, any form of IFQ system would be very complex and require extensive analysis and implementation time; and, third, the sablefish/halibut IFQ system will not be up and running until 1995. The original timeline for comprehensive planning assumed that IFQs for sablefish and halibut would be implemented earlier than 1995 and allow for observation of changes brought about to the fisheries. Many industry members are wary of moving ahead too quickly with IFQs for all fisheries until IFQ-related changes in the sablefish and halibut fisheries are more closely studied.

Over the next several months the Council staff will devote the majority of their time toward an analysis of the various License Limitation alternatives identified by the Council in Attachment 1. Some of the groundwork for these analyses, such as data bases and economic models, will be similar to those which may be used in a detailed analysis of IFQs in the future. The current workplan developed by the Council does not include a formal analysis of IFQs against License Limitation. Again, the charge of the Council is to develop, as expeditiously as possible, a License Limitation program for the groundfish and crab fisheries. Such a system could be up for initial review in June 1994.

As part of the License Limitation analysis, the Council also directed staff to begin examining two proposals related to the Full Utilization issue. Full retention of all groundfish as well as a 'Harvest Priority' proposal will be looked at as possible management measures to be implemented in conjunction with a License Limitation program. The Harvest Priority proposal would grant harvesting priorities to those operators who demonstrate low bycatch rates.

Council Documents Available for Public Review

Draft Scallop Fishery Management Plan
Deadline for Comments: April 6, 1994
Council will consider final decision at their
next meeting the week of April 18.

Analysis of Proposed Trawl Closure around Pribilof Islands
Deadline for Comments: April 8, 1994
Council will consider final decision at their
next meeting the week of April 18.

Norton Sound King Crab

In September, the Council initiated an analysis of a proposal to establish the Norton Sound red king crab area as a superexclusive registration area, under Council authority as a Category 1 management measure in the crab fishery management plan (FMP). That fishery has the smallest biomass and quota of the Bering Sea/Aleutian Islands crab fisheries, and has proved difficult to manage. Three alternatives were examined: status quo, an FMP amendment to make the Norton Sound king crab area a superexclusive registration area, and recommending to the Board of Fisheries that Norton Sound be designated an exclusive king crab registration area. The Council initially reviewed the analysis in December and released it for public review.

At the January meeting, the Council recommended amending the plan to establish Norton Sound as superexclusive. Vessels that participate in that fishery cannot participate in other BSAI king crab fisheries, such as Adak, Bristol Bay, Dutch Harbor, Pribilof, St. Lawrence, or St. Matthew, during the same registration year. Norton Sound will be the only superexclusive registration area authorized and will remain so unless amended. Rulemaking should be complete by the July 1, 1994 opening date for the fishery.

Halibut Charter Issue

The Council will continue to evaluate options to manage the guided sport halibut fishery in Alaska. The original proposal to set a cap on charter catch specified that action was needed because recreational halibut catches were increasing, halibut abundance was declining, and less halibut would be available to the directed commercial fishery. The sport catch, along with mortality from waste, bycatch, and personal use, are taken off the top of the overall halibut annual quota, and the directed setline fishery is allocated the remainder.

Last September, the Council considered this issue and received public testimony. Information indicated that the charter industry has grown and may be fully capitalized and that some type of limited entry program might be appropriate. A control date of *September 23, 1993* was set to notice the industry that a moratorium on the guided sport fishery may be implemented. The Council also established the Halibut Charter Working Group comprised of three commercial fishery representatives, one non-guided sport fishing representative, and six charter vessel representatives to examine traditional management tools and identify potential alternatives for managing this fishery.

The Working Group reported in January and recommended that the Council evaluate regional management areas and a logbook program for charter vessels, expand the creel survey, and evaluate individual annual catch limits (4 to 12 halibut per fisherman per year) for all recreational halibut fishermen. The legality of restricting the amount of recreational caught halibut that can be exported out of state will also be examined. The Council requested the Working Group to provide additional detail on these recommendations for the April meeting. The Council also tasked the Working Group to provide a clear description of regional charter operations and to develop suitable elements and options for a regional or statewide moratorium on new entry of halibut charter vessels instead of further considering a cap on the charter boat catch. The Working Group will report back to the Council in April.

Halibut Management

The Council took final action on a proposal by the Atka Fishermen's Association to set an early season set-aside with a trip limit in Area 4B (western Aleutian Islands). The objective of the proposal is to establish fishing opportunities for small local vessels by allowing multiple openings of short duration. In 1993, 10% of the Area 4B quota was reserved for early season openings (with no trip limit), resulting in 21, 12-hour openings. For 1994, the Council recommended that 15% of the Area 4B quota be set aside (reserved) for 12-hour halibut periods prior to a general opening in August, and that a 10,000-pound trip limit apply to the early season openings. These openings will be set at the International Pacific Halibut Commission meeting January 24-27. In 1995, 20% of the annual halibut quota is scheduled to be available for the halibut community development quota (CDQ) program to communities in Area 4B if the Council's halibut/sablefish IFQ program is implemented.

Chum Salmon Bycatch

As requested by the Council in December, a report on the status of Arctic-Yukon-Kuskokwim (AYK) chum salmon was presented by ADF&G. Commercial and subsistence harvests of chum salmon in the AYK region were reviewed relative to conservation concerns. A report on chum salmon bycatch in the Bering Sea and Aleutian Island groundfish fisheries was presented by NMFS. In 1993, the BSAI groundfish fisheries incidentally caught 245,000 chum salmon, a large increase over historical levels (4,000 to 72,000 chum salmon). Most of the 1993 bycatch occurred in the 'B' season pollock fishery that opened August 15. Both historical and recent data indicate that most chum salmon bycatch consists of age 3 fish and occurs northwest of Unimak Pass, in the Catcher Vessel Operational Area (CVOA) and Federal Reporting Area 517.

Although the high bycatch in 1993 may have had only a minimal impact on 1993 AYK escapement, the Council remains concerned about the health of AYK chum salmon populations and associated social and economic impacts on the region. Towards that end, the Council urged NMFS to move ahead quickly with analysis of a regulatory amendment that would (1) expand current observer coverage to improve data collection, and (2) evaluate use of hotspot authority as a measure to reduce bycatch. The following observer changes would be made for the "B" pollock season that starts August 15, 1994:

1. 100% observer coverage for all trawlers under 125' in the BSAI CVOA (south of 56°N latitude between 168° and 163°W longitude) and Area 517.

2. Two observers on all trawlers over 125' in Area 517.

The Council will take final action in April and may vary the observer requirements based on the analysis provided.

Upcoming Meetings

February 9, 1994, 9:00 a.m.
Pacific Northwest Crab Industry Advisory Committee
Alaska Fisheries Science Center
7600 Sand Point Way N.E., Bldg 4, Room 2039
Seattle, Washington
Contact: Ami Thomson, 206-547-7560

February 18, 1994, 8:30 a.m.
NPFMC Crab Consultation Committee
Old Federal Building, Room G45
605 W. 4th Avenue
Anchorage, Alaska
Contact: Clarence Pautzke, 907-271-2809

LICENSE SYSTEM FOR GROUNDFISH

NATURE OF LICENSES

A groundfish license system would not apply to longline sablefish, halibut, or demersal shelf rockfish.

Alternatives include:

Option A: A single groundfish license applying to all species/areas.
Option B: Licenses for each species.
Option C: General license with endorsements for each species/area.

Suboption A: separable endorsements
Suboption B: non-separable endorsements

In addition to the options above, the Council is considering the following suboptions:

Suboption A: Separate licenses for catcher and catcher/processor operations.
Suboption B: Licenses for three catcher vessel size categories <60', 60' to 125', and >125'.
Suboption C: Licenses would be designated inshore or offshore based on 1993 activity.

Additionally, the Council is considering the following option, which is related to the IFQ alternatives described separately:

Licenses for BSAI Pacific cod fixed gear fishery only; would apply to 45% (or historical split) of the TAC set aside for fixed gear.

WHO WILL RECEIVE LICENSES

Alternatives include:

Option A: Current vessel owner is defined as date of final Council action and must be a U.S. citizen pursuant to Title 46.

Suboption A: Vessel owners at the time of landings.
Suboption B: Permit holders.

These two suboptions are only relevant if license is not attached to vessel.

Additionally, the Council is considering the two-tier skipper license program. (Under this option, at least one skipper license holder must be onboard the vessel when fishing.)

CRITERIA FOR ELIGIBILITY

Alternatives include issuing a license to any vessel (or person) who made landings between:

Option A: January 1, 1978 and December 31, 1993.
Option B: January 1, 1990 and December 31, 1993.
Option C: Vessel must have fished in the three-year period before June 24, 1992 and/or the three-year period before the date of final Council action. If a vessel is lost during this period, owner at time of loss is still eligible.

In addition to the options above, the Council is considering the following:

Suboption: Must have made at least 2 landings (per area/species combination) or made total groundfish landings of 5,000, 10,000, or 20,000 pounds (3 options) in any one year. (In addition to #1 or #2 above).

TRANSFERABILITY AND OWNERSHIP

Alternatives include:

Option A: Licenses could be transferred (sold or leased) only to "Persons" (as defined by Title 46), i.e., U.S. citizens or U.S.-owned corporations.
Option B: Vessels must be transferred with license.
Option C: License may be transferred without vessel (can apply to "new" vessel).

Suboption A: Non-transferable across size categories identified above (Nature of Licenses).
Suboption B: Licenses may be combined in a manner similar to that described in the Pacific whiting fishery.

Methods for effective license caps will also be examined.

BUYBACK PROGRAM (OPTIONAL)

An industry funded buyback program, using funds collected through a fee assessment of exvessel of groundfish, run by NMFS/RAM, will be initiated to govern all transfers of licenses. This program will have first right of refusal on licenses to be sold. All licenses purchased by the program may be permanently retired to adjust participation levels.

COMMUNITY DEVELOPMENT QUOTAS

Option A: No CDQ allocations.

Option B: CDQ set-asides of up to 15% (range of 0% to 15%) of any or all groundfish TACs, but only for BSAI communities meeting current CDQ eligibility requirements, patterned after current pollock CDQ program, with no sunset provisions.

Option C: Would grant CDQs in the form of additional, non-transferable licenses (3%, 7.5%, 10% and 15% of initial licenses).

LICENSE SYSTEM FOR BSAI KING AND TANNER CRAB FISHERIES

NATURE OF LICENSES

Alternatives include:

Option A: A single crab license applying to all species/areas.
Option B: A separate license for each species.
Option C: Separate licenses (permits) for each species and each area.
Option D: A general license with endorsements.

The following two suboptions (to be applied to the above) are being considered:

Suboption A: Separate licenses for catcher and catcher/processor operations.
Suboption B: Licenses for three catcher vessel size categories <60', 60' to 125', and >125'. (These can be matched with pot limits.)

WHO WILL RECEIVE LICENSES

Current vessel owners as of Council final action. ("Persons" are defined as in Title 46.)

Suboption: Permit holders: Each permit holder not receiving a permit, could receive a fractional share of a license. Only full shares may be fished, and these must be utilized on a "moratorium qualified vessel."

Additionally, the Council is considering the two-tier skipper license program. (Under this option, at least one skipper license holder must be onboard the vessel when fishing.)

CRITERIA FOR ELIGIBILITY

A vessel must have made landings between:

Option A: January 1, 1978 and December 31, 1993.

Option B: June 28, 1989 and June 27, 1992. (This corresponds to the existing fall/winter crab seasons in the BSAI, and includes the 1989/90, 1990/91 and 1991/92 registration years.) A vessel (person) must have made at least 1 landing in the red and blue king crab fisheries, (3 landings in each of the brown king crab, C. opilio (snow crab) and C. bairdi Tanner crab) fisheries during the qualifying period.

The qualifying period for the Dutch Harbor red king crab fishery would be June 28, 1980 and June 27, 1983.

The qualifying period for the Pribilof blue king crab fishery would be June 28, 1985 and June 27, 1988.

(NOTE: a fish ticket is considered a landing. During longer seasons, Tanner or brown king crab catcher processors fill out weekly fish tickets).

TRANSFERABILITY AND OWNERSHIP

Alternatives include:

Option A: Licenses could be sold only to "Persons" (as defined by Title 46), i.e., U.S. citizens or U.S.-owned corporations.

Option B: Vessels must be transferred with license.

Suboption: Replacement/upgrades will be restricted as per the language in the moratorium regulations.

Option C: License may be transferred without vessel (can apply to "new" vessel).

Suboptions:
(a) Non-transferable across size categories identified above.
(b) Transferable across size categories.
(c) Species/area licenses will be non-transferable.
(d) Transfers of vessel license may occur only within the classification of the vessel (Catcher vessel v. Catcher processors). Catcher vessel licenses may be traded to catcher vessels, catcher processor licenses to catcher-processors, catcher processor licenses to catcher vessels (as a catcher vessel only), but not catcher vessel licenses to catcher processors for catching and processing.
(e) Replacements/upgrades will be restricted as per the language in the moratorium regulations.

POT CAPS

Alternatives include:

Option A: No caps on the total number of pots.

Option B: Caps are established on the total number of pots.

An Individual Transferable Pot (ITP) quota is initiated, such that the number of pots equates to the existing pot limit relative to the number of vessels with licenses for each fishery. An ITP would allow stacking of pots to occur, where a person owning multiple vessels could combine pots and vessels as they wished. Effort reduction could occur in each fishery, if necessary, by reducing some percentage of the number of individual pots over time until an optimal fishery pot cap is obtained.

BUYBACK PROGRAM (OPTIONAL)

An industry funded buyback program, using funds collected through a fee assessment of ex-vessel of crab, run by NMFS/RAM, will be initiated to govern all transfers of licenses. This program will have first right of refusal on licenses to be sold. All licenses purchased by the program may be permanently retired to adjust participation levels.

COMMUNITY DEVELOPMENT QUOTAS

Option A: No allocations to CDQs.

Option B: Initially allocate 3%, 7.5%, 10% or 15% of the GHL by species and CDQs: may apply to any or all crab species, but only for BSAI communities meeting current CDQ eligibility requirements, patterned after current pollock CDQ program, with no sunset provisions.

Option C: Would grant CDQs in the form of additional, non-transferable licenses (3%, 7.5%, 10% and 15% of initial licenses).

IFQs - GROUNDFISH AND CRAB

SPECIES FOR INCLUSION

Option A: All species under Council jurisdiction, including PSCs, excluding demersal shelf rockfish.

Option B: Under Option A, a percentage (either 45% or historical split) of BSAI Pacific cod would be set aside for a fixed gear License Limitation program.

AREAS

IFQs for all species and PSCs will be awarded based on current management areas.

CRITERIA FOR INITIAL QS QUALIFICATION

Initial QS will be awarded to vessel owners as of the date of final Council action, based on the catch history of their vessel(s). In addition, the Council is considering the following:

Suboption: For GOA fixed gear fisheries, allocate initial QS to owner at time of landing.

The Council also is considering the following recent participation requirement for QS qualification:

Vessel must have fished in three-year period before June 24, 1992 and/or 3-year period before date of final Council action. If vessel is lost during this period, owner at time of loss is still eligible.

COMMUNITY DEVELOPMENT QUOTA (CDQ) CONSIDERATIONS

In addition to allocating QS to current vessel owners, the Council may make initial allocations to CDQs as shown below:

Option A: No allocations to CDQs.

Option B: Initially allocate 3%, 7.5%, 10%, or 15% (options range up to 15%) as CDQs; may apply to any or all groundfish/crab species, but only for BSAI communities meeting current CDQ eligibility requirements, patterned after current pollock CDQ program, with no sunset provisions.

SKIPPER CONSIDERATIONS

The Council is also considering the following options for including skippers in the IFQ program.

Option A: No allocations to skippers.

Option B: Initially allocate 3%, 5%, or 10% (options range up to 10%) to 'bona fide' skippers (based on landings attributable to each skipper, or based on time spent in a given fishery).

Suboption A: For the purposes of initial allocations a 'bonafide skipper' is any skipper who ran a vessel and landed groundfish or crab in a relevant fishery.

Suboption B: QS allocated under Option B shall form a separate QS pool. Subsequent transfers of QS in this pool shall be restricted to 'bona fide skippers.' For the purposes of subsequent transfers, a 'bona fide skipper' is any individual who received an initial skipper pool QS allocation **or** any individual who meets an industry approved 'professionalization qualification scheme.' (The intent is to provide for an entry-level access mechanism and to promote safety through professionalization. The qualifications cannot be overly restricting so as to create a closed class.)

PROCESSOR CONSIDERATIONS

The following options are being considered relevant to processors:

Option A: Assign separate processor QS (2-pie system). See separate description for elements of this program.

Option B: Require a minimum percentage of harvest IFQs to be delivered shoreside (% will be based on last two years' average for each species for BSAI & GOA separately).

Option C: Direct allocation of harvesting QS to catcher boats, catcher-processors and shorebased processors (1-pie system).

Note: The analysis will include the impacts of providing no protection to onshore processors.

INITIAL QS CALCULATION

The following primary options are being considered for calculating QS of qualified recipients (all options will be analyzed on the basis of retained (when available) and reported catch):

Option A: QS based on catch of vessel from 1976 to **either** June 24, 1992 **or** date of final Council action (pre-1984 JV catch assigned based on average by fishery, by year, for vessels which participated).

For Option A, the following suboptions are being considered for weighting factors:

Suboption A: No weighting by sector.

Suboption B: Weight DAP 3.5:1 JV.

Suboption C: Weight DAP 2:1 JV.

Suboption D: For JV before 1986 and for DAP before 1989, weight at 2:1.

Option B: QS based on catch of vessel from date of full DAP (by species) to **either** June 24, 1992 **or** date of final Council action.

Option C: QS based on catch of vessel from 1993 only.

Option D: Analyze QS based on catch for 1990-91-92.

Option E:

(1) To qualify, vessel must have fished in 1991, 1992, or 1993.

(2) Owner chooses best year from 1991, 1992, or 1993 as base for QS calculation (BSAI and GOA separately.)

(3) QS credit then weighted based on length of involvement of vessel in each fishery since 1983. Base QS would be multiplied by length of involvement to determine total QS credit.

Suboption: The length of the involvement period multiplier may be further modified for the BSAI longline cod fishery to account for the relatively recent opening of that fishery. (Using 1983 as the base, each year in the fishery may be multiplied by 1.0, 1.5, or 2.0.)

In addition to the options shown above, the Council is considering the following possible alternatives which are specific to Pacific cod in the BSAI. If either of the options below is chosen, the calculation alternatives shown above would still apply for the remaining fisheries.

Option A: Allocate Pacific cod QS at 45% for fixed gear recipients/55% for trawl gear.

Option B: Allocate Pacific cod QS by gear types based on historical split. We will examine: (1) back to 1976, (2) back to date of full DAP for Pacific cod, and (3) 1993 only to determine historical split.

Unless otherwise directed, same initial QS calculation options apply to divide QS among participants in each sector.

TARGET/BYCATCH CALCULATIONS

For the QS calculation alternatives described above, the following species will be considered target species:

BSAI	GOA
pollock	pollock
Pacific cod	Pacific cod
Atka mackerel	deepwater flats
yellowfin sole	shallow water flats
other flatfish	Atka mackerel
rockfish	rockfish
squid (fixed gear only)	
rocksole	
turbot	

Whichever option is chosen, QS amounts for each species will be calculated based on catch, then adjusted based on average bycatch rates (or industry-derived bycatch rates) to achieve initial 'bundles' of target/bycatch species **and PSC species.** The Council has discussed the issue of basing QS calculations on retained, as opposed to reported, catch. As noted earlier, options will be analyzed on the basis of retained, when available, and reported catch.

TRANSFERABILITY PROVISIONS

Any or all of the following options may apply:

Option A: No restrictions.

Option B: Two year restriction on sales only (could lease).

Option C: For groundfish only, non-transferable between fixed and mobile gear categories.

Option D: For crab fisheries only, non-transferable across catcher vs. catcher/processor categories.

Option E: IFQs will not be tied to a particular gear type after initial issuance.

NOTE: Normal legal gear regulations will still apply, i.e., unless the Council changes its regulations, trawl gear could not be used to harvest crab.

Option F: Restriction on QS transfers between inshore and offshore sectors. Range (of duration) for analysis to include 5 years, 10 years, and no transfers. This applies to both groundfish and crab.

With regard to PSC QS/IFQ, 3 options are being considered:

Option A: PSC QS/IFQ are tied to initial bundles and are not transferable.

Option B: PSC QS/IFQ are tied to initial bundles and must be transferred with bundles.

Option C: PSC QS/IFQ are transferable separately from the initial bundles.

USE/OWNERSHIP PROVISIONS

The following options are being considered relative to accounting under the IFQ program. These options will affect an operator's ability to match IFQs to catch, and also relate to the ability to manage the program effectively within the overall TACs.

Option A: Must control IFQs to cover expected catch before fishing.

Option B: Overage program as with sablefish and halibut program.

The following use/ownership provisions may also be considered by the Council:

Option A: Require a percentage of harvest IFQs to be delivered shoreside (% will be based on last 2 years' average for each species). This option was also included under 'PROCESSOR CONSIDERATIONS'.

Option B: Ownership caps would be set at .1%, 1%, 5%, 10%, or any number in that range and would apply to the BSAI and GOA separately. Same caps would apply to the skippers' quota share pool. Skippers' shares keep their identity after initial distribution. Initial allocants would be grandfathered.

GENERAL PROVISIONS

- Allocations represent a use privilege; however, the Council could alter or rescind the program without compensation.
- Council should pursue some level of administrative fee extraction to fund program, if Magnuson Act is amended.
- The U.S. ownership definitions used in the Halibut/Sablefish IFQ regulations should be used in analyzing both the initial issuance and the subsequent transfer of QS/IFQs. Would examine the implications of foreign ownership including an analysis of the Pacific Council's foreign ownership provisions.
- An analysis of the impact of various fee collection levels and mechanisms is required. This analysis will differentiate between administrative fees and rents.

PROCESSOR QUOTAS - GROUNDFISH AND CRAB

SPECIES FOR INCLUSION

Option A: All species for which IFQs are issued, except longline sablefish, halibut, demersal shelf rockfish, and PSCs.

AREAS

Processor shares/individual processor quotas (PS/IPQs) are not area specific.

CRITERIA FOR INITIAL PS QUALIFICATION

Initial PS will be awarded to current processor (shorebased or at sea) owners as of the date of final Council action, based on the processing history of their processor(s). In addition the Council is requiring that a processor must have processed groundfish/crab in the three-year period before June 24, 1992 **and/or** the three-year period before the date of final Council action. If processor is lost during this period, owner at time of loss is still eligible.

Option A: PS designated by inshore and offshore sectors.

Option B: PS is not designated by inshore/offshore sectors.

In addition, the Council is considering the following suboption:

Suboption: For all GOA fixed gear fisheries, allocate to processors at the time of processing.

COMMUNITY DEVELOPMENT QUOTA (CDQ) CONSIDERATIONS

In addition to allocating PS to current processor owners, the Council may make initial allocations to CDQs as shown below:

Option A: No allocations to CDQs.

Option B: Initially allocate 3%, 7.5%, 10%, or 15% (options range up to 15%) as CDQs; may apply to any or all groundfish/crab species, but only for communities meeting CDQ eligibility requirements patterned after the current BSAI pollock CDQ program, with no sunset provision.

PROCESSOR QUOTAS - GROUNDFISH AND CRAB

INITIAL PS CALCULATION

The following primary options are being considered for calculating PS of qualified recipients. Whichever option is chosen, PS amounts for each species will be calculated based on fish tickets and weekly processor reports, then adjusted based on average bycatch rates to achieve initial 'bundles' of target/bycatch.

Option A: PS based on activity by processor from 1984 to **either** June 24, 1992 **or** date of final Council action.

Option B: PS based on activity by processor from date of full DAP (by species) to **either** June 24, 1992 **or** date of final Council action.

Option C: Based on retained catch rather than reported catch, where data available.

TRANSFERABILITY PROVISIONS

Any or all of the following options may apply:

Option A: No restrictions.

Option B: Two year restriction on sales only (could lease).

Option C: Non-transferable between fixed and mobile processors.

Option D: Transferability between inshore and offshore processors to be limited such that inshore processing is not less than the current inshore proportion of total processing ("current proportion" to be based on last two years' average processing activity by species, for BSAI and GOA separately).

PROCESSOR QUOTAS - GROUNDFISH AND CRAB

USE/OWNERSHIP PROVISIONS

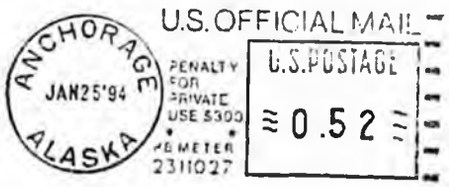
Option A: Must control IPQs to cover expected processing before activity.

Option B: Overage program as with sablefish and halibut program.

GENERAL PROVISIONS

- Allocations represent a use privilege; however, the Council could alter or rescind the program without compensation.
- Council should pursue some level of administrative fee extraction to fund program, if Magnuson Act is amended.
- The U.S. ownership definitions used in the Halibut/Sablefish IFQ regulations should be used in analyzing both the initial issuance and the subsequent transfer of PS/IPQs. Would examine the implications of foreign ownership including an analysis of the Pacific Council's foreign ownership provisions.
- An analysis of the impact of various fee collection levels and mechanisms is required. This analysis will differentiate between administrative fees and rents.

NORTH PACIFIC FISHERY
MANAGEMENT COUNCIL
P.O. BOX 103136
ANCHORAGE, AK 99510



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Signature of Camera Operator

11/6/97
Date

02-519 (REV 8/78)

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I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

Signature of Camera Operator

11/6/97
Date

02-519 (REV 8/78)

SSTA Comm. Reports

Alaska State Legislature

Session:
State Capitol
Juneau AK 99801-1182

REPORT ON
CONFIRMATION OF APPOINTMENTS

Interim:
716 W 4th Avenue
Anchorage AK 99501-2133

March 4, 1994

The Honorable Rick Halford
President of the Senate
State Capitol
Juneau. Alaska 99801-1182

Dear President Halford,

In accordance with AS 39.05.080. the Senate State Affairs Committee reviewed the following with regard to confirmation of the Governor's appointment:

State Commission For Human Rights

Fred Dyson - Eagle River
Term Began 2/10/94 expires 1/31/99

There were no stated objections to the confirmation of the named individual by committee members. This does not reflect an intent by any of the members to vote for or against him during any further sessions.

Respectfully,

Senator Leman, Chairman

Senator Miller, Vice Chair

Senator Taylor

Senator Duncan

Senator Ellis

Alaska State Legislature
Senate
Office of the Secretary

OFFICIAL BUSINESS

STATE CAPITOL
JUNEAU, ALASKA 99801-1182
(907) 465-3701
FAX: 465-2832

February 15, 1994

M E M O R A N D U M

TO: Senator Leman, Chair
State Affairs Committee

FROM: Nancy Quinto NQ
Secretary of the Senate

SUBJECT: Governor's Confirmations

Pursuant to AS 39.05.080, President Halford has referred the following name for legislative confirmation to your committee for a hearing, recommendation and report:

State Commission for Human Rights
Fred Dyson - Eagle River
Appointed: 02/10/94; Expires: 01/31/99

NQ/hv

Resume attached

RESUME - FRED DYSON

BACKGROUND - 29 year Alaskan resident with wide experience in community affairs - Owner of Masterwork Technical an Alaskan firm specializing in research and technical writing. Former Anchorage area Assembly Member for 6 years 1985-91.

EDUCATION - 5 1/2 years at University of Washington majoring in Mechanical Engineering - Numerous post graduate courses in; Technical Writing, economics, negotiating, arctic engineering, supervision, project management, history, computer software applications.

PUBLICATIONS -
Technical Writing-

"On Board Asbestos Maintenance Manual" for Alaska Marine Highway System
"Environmental Protection Manual-Blair Lakes Clean up Project" Department of Defence
"Alyeska Oil Clean up Vessel Safety Manual" for Piquniq Management Corp
"Kodiak Coast Guard Base Operations Manuals" for heating plant, water and waste water treatment plants, building and grounds maintenance, and snow removal
"Mat-Su Mapping Project" Technical paper
"Asbestos in Schools" reports on asbestos in 6 Alaskan Schools for State of Alaska
"Waste Heat Recovery" 5 reports from Alaskan villages on using power plant heat in schools

Media Publications

Alaska Magazine- "Resurrection of a Dead Sail Boat", "Honeymoon in a Ghost Town"
Anchorage Times- "Assembly Comments" for 6 years, "Boating Alaska" 40 columns, plus assorted editorials, "Alaska on Wheels" 10 columns,
Anchorage Daily News- "Alaska Boating" 14 columns current contract
Seattle Post Intelligencer- "Seattle's Old Man River"
Athletes in Action - Editor for 1 1/2 years
Right On - founder and editor 9 months

EMPLOYMENT HISTORY

1985 to present - Owner of Masterwork Technical, a research and technical writing firm
1989 to present- operation of marine research vessels
1976 to present- Commercial fisherman in Bristol Bay
1971-1984 - Supervisor for British Petroleum - Sr. Mechanical Engineer. Responsible for 100 person work force. Designed the BP waste treatment plant. Rebuilt Naikuk Island. Owners rep on the Base Camp and CC 1&2. Designed the company wide computer record system for 100,000 pieces of equipment.
1964-1971 - editor "Athletes in Action" magazine - Publisher

of "Right On" newspaper - Temporary Manager of Seattle Truck and Tractor

COMMUNITY SERVICE

Eagle River Community Council - 7 years
Eagle River Road Board - 3 years
Anchorage Assembly - 6 years
Anchorage Library Board - present
SKIF (Streams, KIds and Fish)/Aquatic Resources Commission- 1988-present
Alaska Cares for Africa 1984-present
Chugach State Park Citizens Advisory Committee- 2 terms in 80's

Alaska State Legislature

Session:
State Capitol
Juneau AK 99801-1182

Interim:
716 W 4th Avenue
Anchorage AK 99501-2133

REPORT ON CONFIRMATION OF APPOINTMENTS

March 4, 1994

The Honorable Rick Halford
President of the Senate
State Capitol
Juneau, Alaska 99801-1182

Dear President Halford,

In accordance with AS 39.05.080, the Senate State Affairs Committee reviewed the following with regard to confirmation of the Governor's appointment:

Alaska Public Offices Commission

Julie Benson - Fairbanks
Reappointed 1/18/94 expires 2/1/98

There were no stated objections to the confirmation of the named individual by committee members. This does not reflect an intent by any of the members to vote for or against her during any further sessions.

Respectfully,

Senator Leman, Chairman

Senator Miller, Vice Chair

Senator Taylor

Senator Duncan

Senator Ellis

OFFICIAL BUSINESS

Alaska State Legislature
Senate
Office of the Secretary

STATE CAPITOL
JUNEAU, ALASKA 99801-1182
(907) 465-3701
FAX: 465-2832

February 9, 1994

M E M O R A N D U M

TO: Senator Leman, Chair
State Affairs Committee

FROM: Nancy Quinto NQ
Secretary of the Senate

SUBJECT: Governor's Confirmations

Pursuant to AS 39.05.080, President Halford has referred the following name for legislative confirmation to your committee for a hearing, recommendation and report:

Alaska Public Offices Commission
Julie Benson - Fairbanks
Appointed: 05/17/93; Reappointed: 01/18/94; Expires: 02/01/98

NQ/hv

Resume attached