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STRATEGIC PLAN

**FISHERIES REHABILITATION
ENHANCEMENT & DEVELOPMENT
DIVISION IN THE 90s**

**Preliminary Draft
Subject To Change**

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EXECUTIVE SUMMARY

In 1988 a strategic planning process was initiated to review the division's past responsibilities and programs. This process was initiated because of external influences on our program that necessitated change. After assessing the social, political, economic, and traditional considerations, the division, after analyzing its strengths and weaknesses, realized it must maintain some of its current programs, transfer to the private nonprofit (PNP) sector others previously supported with general funds, and diversify by growing selectively into new areas. The FRED Division found that it must serve as a catalyst to identify and facilitate new opportunities from those fishery development resources available within government and the private sector. The planning process has resulted in an identification of core program elements to guide current and future programs.

This strategic plan document presents the division's direction for the 1990s and identifies the division's (1) statutory authorizations; (2) mission, (3) core program elements, (4) issues related to program elements and roles supporting these efforts, (5) descriptions of primary disciplines within the division, (6) descriptions of the regional programs, and (7) history.

Statutory Authorizations

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Develop and continually maintain a comprehensive, coordinated state plan for the orderly present and long-range rehabilitation, enhancement, and development of all aspects of the state's fisheries for the perpetual use, benefit, and enjoyment of all citizens, and revise and update this plan annually (AS 16.05.092(1)).

Encourage the investment by private enterprise in the technological development and economic utilization of the fisheries resources (AS 16.05.092 (2)).

Through rehabilitation, enhancement, and development programs, do all things necessary to insure perpetual use and increasing production and use of the food resources of Alaska waters and continental shelf areas (AS 16.05.092 (3)).

Mission Statement

To sustain and enhance Alaska fisheries through the development and application of technologies in supplemental production, natural stock rehabilitation, and aquatic farming.

Core Program Elements

1. Support and facilitate private sector aquaculture programs.
2. Provide essential technical services for departmental commercial, sport, subsistence fisheries programs.
3. Restore and enhance fish habitats.
4. Provide technological support for economic development in aquaculture.
5. Restore depleted wild fish stocks.
6. Produce fish for departmental sport and subsistence fisheries programs.

INTRODUCTION

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The strategic planning process was initiated by FRED Division in 1988 in response to a changing social and political environment. Funding constraints and philosophical changes by the legislature and administration concerning the department's role in the fisheries rehabilitation and enhancement program necessitated its reevaluation. Because these factors were directly influencing the division's ability to carry out established programs, it was becoming impossible for the division to meet statutory obligations and program responsibilities. As a result of this planning process the division will focus efforts and direct fiscal resources toward accomplishing specific program elements. As part of this planning process, the division examined current and future economic and organizational trends, and it will make every effort to evaluate the effectiveness and return on investment of all program activities.

The cornerstones of the division's program have been identified here as core program elements. In order to gain an understanding of each element, the issues and support services related to each one have been provided.

Support and Facilitate Private Sector Aquaculture Programs

Issues:

The private nonprofit hatchery program is expanding; i.e., the operation of some enhancement facilities previously operated by the state have been assumed by them. This program requires ongoing permit review procedures, technical assistance, and hatchery management planning to effectively operate.

There is a developing aquatic farming industry for shellfish and aquatic plants. The public is looking to the department for a leadership role in providing technical assistance and management of this program, and that requires ongoing permit review and coordination with the divisions within the department as well as other state and federal agencies. Focus on the department's statutory requirement for assistance in the development of comprehensive salmon plans has been directed toward north, northwest, and western Alaska in addition to the ongoing program in established regions of the state.

Services:

Conduct regional comprehensive fisheries production planning for salmon on a statewide basis. Facilitate, regulate, and manage Alaska's private nonprofit (PNP) salmon enhancement and mariculture programs.

Develop and transfer new information on aquaculture and provide applied fisheries technology and technical services, including tagging/mass marking, pathology, limnology, and genetics.

Apply existing and new techniques to evaluate biological and harvest implications of fishery enhancement programs relative to wild stocks.

Identify and implement efficient methods for cooperative operation (public/private) of hatcheries in order to make the best use of hatchery resources within the state.

Educate, inform, and involve the public in Alaska's fisheries rehabilitation, enhancement, and development programs.

Develop and maintain computerized databases of information on the program.

Provide Essential Technical Services for Departmental Commercial, Sport, and Subsistence Fisheries Programs

Issues:

The impacts of enhancement and aquatic farming programs relative to natural stocks must be evaluated and clearly understood in order to facilitate the concept of protection of natural stocks.

In order to protect wild stocks, fish health services, genetic evaluations, tag/recovery programs, and fishery management concerns associated with the enhancement and aquatic farming programs need to be continually evaluated.

Services:

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Apply existing and new techniques to evaluate biological and harvest implications of fishery enhancement and aquatic farming programs relative to wild stocks.

Assess critical areas of need and provide technical assistance necessary to implement projects for fisheries rehabilitation, enhancement, and development across the state.

Develop, implement, and evaluate technology for natural stock and habitat rehabilitation in lake, stream, nearshore, and marine environments.

Develop applied fisheries technology and provide technical services.

Provide economic evaluation of the statewide aquaculture program.

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Restore and Enhance Fish Habitats

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Issue:

There is an increasing demand on the division for habitat restoration and enhancement activities. The division will emphasize natural stock and habitat rehabilitation activities as part of the ongoing program. An evaluation of needs and requirements for these activities on a statewide basis will be part of the program.

Services:

Restore losses to fisheries caused by natural disasters and adverse impacts caused by human activities.

Develop, implement, and evaluate technology for natural stock and habitat rehabilitation in stream, lake, nearshore, and marine environments.

Develop applied fisheries technology and provide technical services.

Provide Technological Support for Economic Development in Aquaculture

Issue:

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The development and transfer of aquaculture technology and provision of technical assistance to the private sector is a legitimate government role to be emphasized by the division.

Services:

Develop and provide new information on aquaculture.

Provide economic evaluation of the existing and developing statewide aquaculture program.

Assess critical areas of need and provide technical assistance necessary to implement projects for fisheries rehabilitation, enhancement, and development across the state.

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Develop applied fisheries technology and provide technical services.

Develop, implement, and evaluate technology for natural stock and habitat rehabilitation in lake, stream, nearshore, and marine environments.

Apply existing and new techniques to evaluate biological and harvest implications of fishery enhancement (i.e., relative to wild stocks) and aquatic farming programs.

Conduct regional comprehensive fisheries production and management planning for state and PNP hatcheries and in new areas of the state.

Restore Depleted Wild Fish Stocks

Issue:

A greater emphasis needs to be placed on wild stock fisheries rehabilitation efforts. The division must direct resources to accomplish this program element.

Services:

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Provide the technical assistance, emphasizing wild stock genetic integrity necessary to implement projects for fisheries rehabilitation across the state.

Produce fish for natural stock and habitat rehabilitation in lake, stream, nearshore, and marine environments.

Apply existing and new techniques to evaluate biological and harvest implications of fishery enhancement programs relative to wild stocks.

Develop applied fisheries technology and provide technical services.

Develop and conduct sport fish rehabilitation programs.

Develop, implement, and evaluate technology for natural stock and habitat rehabilitation in lake, stream, nearshore, and marine environments.

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Restore losses to fisheries caused by natural and human-caused disasters.

Produce Fish for Departmental Sport and Subsistence Fisheries Programs

Issues:

The division has been required to transfer to the private sector the operation of state hatcheries that primarily focus on the production of fish for commercial benefit. The division will continue this effort.

Additionally, there is an increasing demand for a program to provide fish for sport and subsistence users. The division will continue to expand these efforts based on new opportunities.

Services:

Develop and conduct sport fish programs and provide fish for subsistence and personal use with departmental field projects and hatchery facilities.

Assess critical areas of need and provide the technical assistance necessary to implement projects to rehabilitate, enhance, and develop fisheries across the state.

Apply existing and new techniques to evaluate biological and harvest implications of fishery rehabilitation and enhancement programs relative to natural stocks.

Educate, inform, and involve the public in Alaska's fisheries rehabilitation, enhancement, and development program.

Implementation

It is a challenging time to deliver an effective program that satisfies the demands for change in direction while at the same time addresses the needs of aquaculture in the state; however, at a time when the state's fiscal resources for fisheries rehabilitation, enhancement and development program were declining, there continued to be an increase for technical assistance and delivery of services. The

division must make the best use of available resources in the current social and political environment.

This plan presents core program elements that will be used in setting division priorities and conducting annual program planning and budgeting. The next step in the implementation process of this plan is to identify, in greater detail, the means to guide budget preparation by fiscal year. This will constitute a major part of the division's budget planning and deliberation process, beginning in FY 93 and continuing into the future.

The plan also establishes direction for staff to assess their current and future activities in relation to core program elements. FRED division is committed to proceeding in a manner that will provide the necessary programs and services required by the elements.

This document will be distributed to the public for their evaluation and comment regarding the direction of the division's program. Legislators and constituents will also be involved in this process to evaluate the rationale for diversification and changes in program operations.

STATEWIDE PROGRAMS AND ACTIVITIES

FRED Division began to address the roles envisioned under each core program element depicted in this document while planning for fiscal year (FY) 1993 and beyond. Specific descriptions of the programs, roles, and activities to be undertaken in the early '90s are provided in the following sections.

Mariculture Program

FRED Division will continue to coordinate and administer the aquatic farming program and take the lead in this discipline for the department. The division will participate with the other agencies and the industry in developing a strategic plan for the growth and evolution of the industry. Technical services will be expanded to include operations, siting, design, species selection, and business planning assistance.

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Research will also be initiated to aid in the development of the industry. Areas identified as having high potential benefits include the feasibility of producing sterile scallops, developing shellfish and aquatic plant hatchery technology for Alaska species, researching new species for aquatic farming, site-evaluation techniques, broad-based research on determining optimal areas for aquatic farming in the state, oyster-maturation studies, broodstock development, and seedstock-collection research. FRED Division will use its technical expertise and facilities to accomplish the research and then transfer that technology to the private sector. Continual interaction with the industry will identify new areas of concern or benefit that cannot be addressed directly by the industry because of a lack of expertise, facilities, or high costs.

Technology and Development Services

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The FRED Division operates five laboratories that serve ADF&G and other agencies. The Fish Pathology Section has two laboratories (one in Anchorage and Juneau) and provides diagnostic services and broodstock evaluation for both state and PNP fisheries programs. The Limnology Section has a laboratory in Soldotna and supervises all lake-enrichment projects and analyses of water, plankton, and juvenile fish populations sampled for lake-productivity studies. The Coded-Wire Tag Processing Laboratory (CWT Lab decodes metal tags implanted in fish and supplies resultant information for hatchery and natural stock evaluation as well as for evaluation of U.S./Canada salmon interceptions. The Genetics Laboratory monitors the interaction of hatchery salmon stocks with wild hatchery salmon and employs genetic techniques for finfish and shellfish stock identification and stock improvement. In summary, these laboratories and their associated scientists provide a set of technical services in extremely strong demand by the department, regional aquaculture associations, aquatic farming industry, PNP hatchery operators, and other state and federal agencies.

Coded-Wire Tag Processing Laboratory:

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The division is seeking a new home for its CWT Lab. Working conditions at the present facility have deteriorated to the point where the state is at risk to liability lawsuits from employees that work there. Further, the workload at the lab has tripled since 1985, outstripping the space available. Monies to acquire a different lab space will be requested in the FY 95 budget. While efforts are underway by this division and others to develop new marking techniques (e.g., otolith marking,

looks very promising), the use of coded-wire tags is not going to be replaced in the foreseeable future. The CWT Lab is a vital link in the in-season management of fisheries in Southeast and Prince William Sound. Chinook salmon fisheries from California to Alaska are managed by treaty convention on the basis of coded-wire tag data. The massive returns of hatchery pink salmon to Prince William Sound is critically assessed by in-season tag data. Coastwide, this laboratory has the reputation of being the best-run operation of its kind.

Fish Pathology Laboratory:

Active laboratories will be maintained in both Juneau and Anchorage to provide continuing fish health services to salmon hatcheries, mariculture operations, other fisheries divisions, and the public-at-large. The basic function of the fish pathology discipline is to implement policies and procedures that guard against the spread of fish and shellfish diseases in Alaska. The two laboratories serve this function. Routine diagnostics and processing of transport permits for finfish and shellfish will continue as in the past. Monitoring for viral hemorrhagic septicemia virus in Pacific cod will continue. Mapping the distribution and infection rates of bitter crab disease in tanner crabs will go forward in association with the ADF&G Commercial Fisheries Division and the crab fleet. Oyster spat certification for import into Alaska will remain a significant task for the pathologists. Transport permits for aquatic farming activities will increase significantly.

Genetics Laboratory:

The primary service of the genetics discipline is to implement policies and procedures that protect and maintain the genetic uniqueness of Alaska's wild salmon stocks in the face of North America's largest salmon enhancement program. In the coming year, the department's fish genetics policy will be reexamined and updated. Routine processing of transport permits for finfish and shellfish will continue as in the past; however, contentiousness now accompanies a growing number of transport requests, and it is our intent to establish a genetic-screening program for salmon stocks so that answers to tough questions regarding the genetic implications of stock movement can be facilitated. The Genetics Laboratory is now equipped and ready to process samples that will reveal the genetic conformation of our wild salmon stocks. This compatibility has application for stock separation in mixed-stock interception fisheries, identification to the country of origin of salmon caught on the high seas, and examination of the

interaction of hatchery stocks and wild stocks. The incumbent principal geneticist is an expert on techniques employed to sterilize fish and shellfish—a concept that has great practical application in Alaska. FRED Division will work toward using sterile animals for outstocking in projects where fertile animals would have a genetic impact on indigenous wild stocks and thus prohibit such projects. The development of sterile Japanese scallop spat is an example; stocking of sterile rainbow trout for sport fishing is another example.

Limnology Laboratory:

The Limnology Laboratory and the lake-enrichment and water-quality capabilities associated with it are in great demand by cooperators across the state. This unit generally has 30-40 cooperative projects ongoing around the state during any given year. Nutrient enrichment of sockeye salmon lakes has proven to be an extremely cost-effective tool for rehabilitating depressed sockeye salmon runs, and such projects will continue into the future. Karluk Lake is an outstanding example of what can be done; in 1990, it had the largest return of sockeye salmon since good record-keeping was established in the early 1900s. This return was made up principally of late-run adults that, as juveniles in 1986, received the benefits of our initial application of fertilizer to Karluk Lake. Similar projects will continue in Southeast, Southcentral, and Prince William Sound, and new ones will be established on the Alaska Peninsula. Work will continue on marrying habitat features of lakes to forecasting adult fish returns in subsequent years. FRED scientists have pioneered this approach to sockeye salmon forecasting, and in subsequent years they will extend it to the marine environment. Water-quality studies on the Kenai River will go forward with funding from the Department of Natural Resources. The United States Environmental Protection Agency is interested in funding the laboratory to conduct water-quality studies on lakes in populated areas of Alaska. The North Slope Borough has invited limnologists to participate in borough enhancement and water-quality planning in the coming months.

Library Services:

Fishery scientists, planners, and managers in two of the department's fishery divisions (Sport Fish & FRED) are served by a centralized library managed by the FRED Division. Funding for the library is shared among them and is prorated on a user basis.

Little Port Walter Field Station:

The research station at Little Port Walter (LPW) on the south end of Baranof Island is operated by the National Marine Fisheries Service's Auke Bay Laboratory (ABL). This station plays an important role in developing new technologies for the ocean ranching of salmon, particularly chinook and coho salmon. FRED Division has, for the past 15 years, helped to financially support the operation of LPW. While the division's monetary contribution is small compared to that made by ABL, it is nevertheless very critical because it funds field travel to and from the station-- something ABL cannot do because monies for field travel were cut from its budget. The division intends to continue with this cooperative arrangement.

Private Nonprofit Hatchery Program Administration

Beginning in 1974, the Alaska State Legislature authorized the Commissioner of ADF&G to issue permits to qualified PNP corporations for the construction and operation of salmon hatcheries. The intent of the program is to allow private ownership of hatcheries that will contribute to the state's common-property salmon fisheries. The cost of constructing and operating these hatcheries is to be derived from (1) sale of a portion of the returning fish, (2) fish enhancement tax, and (3) operating loans from Alaska Department of Commerce and Economic Development and other sources.

The PNP hatchery program carries out the department's statutory and regulatory responsibilities pertaining to public and private ocean ranching in Alaska, including (1) administration of the permitting process for PNP hatcheries and scientific/educational aquaculture projects, (2) development of annual operations/management plans for all public and PNP salmon hatcheries, (3) compilation and dissemination of production data for PNP hatcheries, (4) administration and coordination of the statewide finfish transport permit system, and (5) provision and coordination of technical assistance to PNP hatchery operators.

The PNP hatchery program is continually expanding as permits for new hatcheries are issued and permit alterations for existing facilities are approved. New PNP permits for the operation of state-owned facilities by regional aquaculture associations will be needed to allow for cost-recovery harvests at these facilities.

Regional Comprehensive Salmon Planning

The Commissioner of ADF&G, in accordance with Alaska Statutes 16.10.375-470, has designated salmon production regions throughout the state. In each region, the Commissioner is responsible for the development and amendment of a comprehensive salmon production plan. Although the Commissioner has placed this responsibility with regional planning teams (RPT) that statutorily consist of representatives from ADF&G and the regional aquaculture associations, he still approves those plans developed and amended by the RPTs. The mission of the RPTs is to plan for the long-term future of the salmon resource within its region by initiating and continuing an orderly process that examines the full potential of the region's salmon-production capacity.

Emphasis on this comprehensive salmon planning process has recently been and will continue to be placed in western, northwestern, and northern Alaska in order to develop comprehensive salmon plans for approval by the Commissioner. These planning efforts are currently active in ten regions of the state. In 1990 the Commissioner appointed an RPT to initiate the development of a plan for the newly established Chignik region in conjunction with the regional aquaculture association. A draft Phase I (20 year) plan is scheduled to be completed by December 1991. In 1990 the Commissioner also appointed an RPT to begin development of a plan for the Alaska Peninsula/Aleutian Islands/Area M Region. A draft Phase I comprehensive plan is also scheduled to be completed by December 1991. Residents of Kotzebue Sound have been interested in salmon enhancement planning, and the FRED Division has established a planning core group that includes ADF&G, the National Park Service, and the Borough to develop alternative production scenarios as part of a basic management plan for the Sikusuilaq Springs Hatchery. A regional aquaculture association will probably be established in 1992, and a comprehensive salmon plan for the region should be completed in 1992.

No specific planning activity has occurred in the Lower Yukon/Kuskokwim Region since 1982; however, in response to a consensus of Yukon River fishery interests, the FRED Division has developed a Yukon Fisheries Enhancement Initiative. Residents of the region are organizing an aquaculture association and, with funding from the Legislature for the initiative, regional enhancement planning will be reactivated and expanded to include the Yukon River. A draft comprehensive salmon plan could be completed by the fall of 1992.

For the Bristol Bay Region, a plan has been completed. This plan does not concentrate on fisheries enhancement through such strategies as hatcheries; rather, it emphasizes maintenance and restoration of fish habitat and effective management practices. Commercial fishermen in the region recently turned down the idea of an enhancement tax to fund the aquaculture association and, therefore, project funding is minimal at this point.

In Kodiak, the Phase II (five-year project plan) comprehensive salmon plan was recently revised to incorporate new production objectives and new project ideas. In 1991 the RPT will establish a process for annually updating the comprehensive plan. In Cook Inlet and Prince William Sound, both regional aquaculture associations have full-time professional planners that conduct RPT activities. Therefore, the FRED Division's responsibility in these regions is one of coordination between the department and the association, and monitoring RPT activities.

In Northern and southern southeast Alaska, both RPTs are staffed by the FRED Division and are in the plan-maintenance and plan-update process. In 1991 and 1992 the regional aquaculture associations, the RPTs, and the FRED Division will be working to develop a Southeast-wide allocation plan for enhanced fish that will be presented to the Alaska Board of Fisheries as a proposal. Once approved, the board will use the plan for decisions relative to the enhancement program in southeast Alaska. Given the multiple gear groups, two regional associations, U.S./Canada Pacific Salmon Treaty implications, and the nature of the mixed-stock fishery, this will be a major undertaking.

Planning staff will also be responsible for working with the FRED Director to articulate and promote special projects planning efforts based on the identification of new opportunities and requirements that may be recommended by the current administration or the Legislature.

Economic Evaluation

Salmonid fisheries enhancement for commercial fishery markets and subsistence and recreational users has had a variety of effects on Alaska's economy. Since state, federal, and private funds are invested into hundreds of individual salmon enhancement projects, and since the state's salmon resource is common property in nature, it is important for planners and policymakers to understand the resulting economic viability and employment potential of these programs.

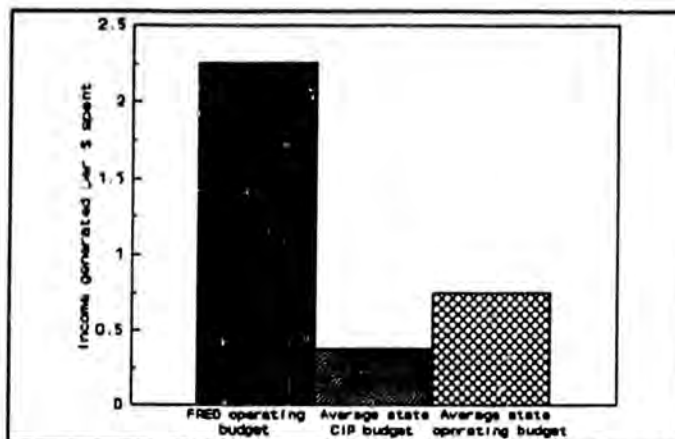


Figure 1. Income to Alaskans from an average dollar spent out of the state operating, capital budgets and fisheries enhancement program. Data from Institute of Social and Economic Research.

The economics program provides economic information to fishery interest groups; PNP hatchery operators; regional aquaculture associations; RPTs; and managers and policymakers in ADF&G, The Department of Commerce and Economic Development, and the Alaska State Legislature on the consequences of ocean ranching and aquatic farming (i.e., shellfish and aquatic plants). The economics program assists in the evaluation of investments to ensure maximum social and economic benefits are derived from Alaska's extensive application of fisheries enhancement and aquatic farming technologies. The enhancement program has achieved a proven economic return on investment. This is one of the higher, if not the highest, return ever realized from state investments (Figure 2).

Data Management

The primary function of data management in FRED Division is to gather and disseminate information about the statewide enhancement program; there are several databases already in use that maintain historical production records. These data are used in scientific reports and economic analyses. Data are provided to the legislature, governmental and nongovernmental agencies, and the media; data are also used to prove compliance with Federal Aid standards. As enhancement projects are more carefully scrutinized and the program held more accountable for

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its actions, data management will play an increasingly important role in verifying the value of the enhancement program in an auditable manner.

Tools to make the gathering and use of reliable information easier are being developed. Technological advances in networking (i.e., wide area, local area) have allowed easy data sharing. As these networking technologies grow, so will their applications; for example, personnel and expenditure tracing and budget preparing systems. As such, these databases will be used to streamline many of our basic administrative duties.

SOUTHEAST REGIONAL PROGRAMS AND ACTIVITIES

Northern Southeast Alaska

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Snettisham Hatchery:

There are three primary elements involved in the program at Snettisham: (1) the production of fish for sport fisheries, (2) the development and application of new fisheries technology, and (3) the production of fish to fulfill the U.S./Canada Pacific Salmon Treaty obligations.

The production of chum salmon was one of the initial programs at the hatchery. This program was transferred to the private sector in 1991. In a cooperative program with both Douglas Island Pink and Chum, Inc. (DIPAC) and the Northern Southeast Regional Aquaculture Association (NSRAA), FRED Division reared and released 12.5 million juvenile chum salmon at Limestone Inlet in 1991. The release site at Limestone Inlet will be transferred to DIPAC in 1992. In the summer of 1991, the resources used to produce chum salmon at Snettisham were redirected toward sockeye smolt production.

Sockeye Salmon Smolts. In 1991 the division will initiate a pilot program for the production of sockeye salmon smolts and presmolts at Snettisham. Development and application of sockeye smolt and presmolt enhancement strategies by FRED Division was discontinued with the transfer of Main Bay Hatchery to the private sector. The physical facility at Snettisham resembles Main Bay. Reapplying the resources used to produce chum salmon at Snettisham provides an opportunity to continue developmental work with sockeye smolts and presmolts. Developmental work will focus on answering questions about size of smolts at release, time of release, and the relative merit of freshwater and saltwater rearing prior to release. The first smolt release may take place as early as 1993. As many as 400,000 adult sockeye could be produced annually by these programs at Snettisham.

Sockeye Salmon Fry, Snettisham Central Incubation Facility (CIF). This proposed facility should be completed in 1992 or 1993. The facility will be constructed with federal U.S./Canada enhancement funds and produce fish associated with U.S./Canada treaty mitigation on transboundary rivers. The isolation modules may also be used for local rehabilitation projects in areas such

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as upper Lynn Canal. The capacity of the permanent CIF will be from 15 to 30 million eggs. The CIF projects could produce as many as 250,000 adult sockeye per year.

Chinook Salmon at Deep Cove. The Deep Cove project is funded with U.S./Canada funds. The project will begin with the release of 500,000 smolts in the summer of 1992. In 1993 the program will move to full production with a release of 2.5 million smolts. This release should produce as many as 75,000 adult chinook salmon. The fish returning to Deep Cove in 1996 may be used to fund the program from that time forward.

Northern Southeast Alaska Area Biology:

The primary role of the Northern Southeast Alaska area biologist is to enhance area sport fisheries, support local public and private hatcheries, and to rehabilitate fisheries habitat. The Juneau recreational fisheries program; Snettisham Hatchery; habitat restoration (in Haines, Yakutat, and Juneau); and support for local private hatcheries (DIPAC facilities, Burro Creek Hatchery, Skagway City Hatchery), NSRAA, the U.S. Forest Service (USFS), and Upper Lynn Canal chinook planning all come under this program. The most important accomplishment of the area biologist is the successful translation of the diverse needs and desires of the user groups into meaningful rehabilitation and enhancement programs.

Central Southeast Alaska

Crystal Lake Hatchery:

The primary roles of the programs at the Crystal Lake Hatchery are to aid in fulfilling U.S./Canada treaty obligations, produce sport fish, and assist in fisheries rehabilitation projects. Crystal Lake Hatchery is the cornerstone of the southeast Alaska chinook salmon program. The facility is presently being upgraded with U.S./Canada enhancement funds. In 1991, 850,000 chinook smolts were released at Crystal Lake; beginning in 1992 and continuing indefinitely, 1.3 million chinook smolts will be produced annually. The adult chinook salmon from these releases will make significant contributions to both sport and commercial fisheries. In addition, Crystal Lake Hatchery is the single most important source of chinook salmon eggs in southeast Alaska; each year 5 to 8 million chinook eggs are moved from Crystal Lake to private and public hatcheries across southeast Alaska.

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Steelhead Trout. The division has not done the research necessary to develop the parameters for steelhead trout production in southeast Alaska. This work, which began at Crystal Lake in 1991, is designed to examine different strategies for the rearing and releasing of these fish. The work will be evaluated by both Sport Fish and FRED Division biologists.

Coho Salmon. Smolts and fry are also released from Crystal Lake Hatchery. This small but important local program produces 100,000 smolts and 250,000 fry. There is a small isolation facility at Crystal Lake that is used to provide fry for enhancement and colonization projects, such as those planned for the Harding and Farragut Rivers. It may be possible to expand these facilities at Crystal Lake as the demand for these modules increases.

Central Southeast Alaska Area Biology:

The primary role of the area biologist is to enhance and rehabilitate fisheries and support the programs at Crystal Lake Hatchery. The Farragut River project involves moving chinook fry above a barrier in the river system to utilize rearing habitat that would otherwise be unavailable to these fish. Each release of 200,000 fry above the barrier is expected to generate from 2,000 to 4,000 adult chinook salmon. After five years (in 1997) the field of operations may be transferred to NSRAA.

The Harding River project is a joint effort between FRED Division and the U.S. Forest Service to improve upstream access for adult salmon and recolonize the unutilized section of the river. The FRED Division has obtained 5 years of U.S./Canada enhancement funding to take 100,000 chinook salmon eggs in the lower river and return 80,000 fry above the barrier. The project is expected to generate up to 3,000 adult chinook salmon annually, once the upper watershed is fully utilized by chinook salmon.

The area biologist continues to work with the U.S. Forest Service in Petersburg and Wrangell to develop fishpass projects. The U.S. Forest Service works primarily on fishpass design and construction, while the FRED Division performs the bioenhancement. The isolation facility at Crystal Lake is a vital component of this work. Proposed bioenhancement involves work on Mitchell and Portage Creeks on Kupreanof Island and Eagle River in Bradfield Canal.

Southern Southeast Alaska

Deer Mountain Hatchery:

This small urban salmon and trout hatchery role in fish-culture research and development has been increasing. The hatchery is being used to test special treatments for salmon, such as the production of triploid fish. The hatchery programs are also being developed to assess and refine current fish culture methods. The work accomplished at Deer Mountain will continue to be used in establishing fish culture standards and practices throughout the state.

Deer Mountain Hatchery produces chinook and coho salmon and steelhead trout primarily for the local sport fisheries. The hatchery produces at least 3,000 adult chinook salmon, 10,000 adult coho salmon, and 200 steelhead trout each year.

Deer Mountain Hatchery is located in the Ketchikan City Park; it is a primary tourist destination in Ketchikan. More than 200,000 people tour the facility each year. In addition, the staff at the hatchery have developed educational programs in cooperation with the local school, and numerous students can be found working (learning) at the hatchery daily.

Beaver Falls Hatchery:

Beaver Falls Hatchery is used primarily in cooperative sockeye salmon projects with the local regional aquaculture association. Most of these projects have been designed to enhance natural populations of sockeye salmon in rehabilitation and mitigation projects. The hatchery will eventually be used at its full capacity (20 million eggs). The potential annual production of the hatchery at this capacity is at least 170,000 adult sockeye salmon. In order to reduce the costs of providing sockeye salmon to the fishermen of southeast Alaska, the Beaver Falls facility will be operated by the Southern Southeast Regional Aquaculture Association, although FRED Division will be cooperatively involved in directing these enhancement efforts throughout the region.

Klawock Hatchery:

The intent of the work at Klawock Hatchery is primarily to develop subsistence and personal-use fisheries, fisheries restoration and habitat rehabilitation projects,

and sport fish production. The FRED Division, Commercial Fisheries Division, local fishermen, local native organizations, and the BIA have cooperatively initiated an effort to restore the Klawock River sockeye and chum salmon runs from their present depressed state. This work involves the combined efforts of the FRED Division Limnology Section, the FRED area biologist, and the hatchery staff. In addition to Klawock River fisheries restoration, the hatchery staff is involved with the U.S. Forest Service in several rehabilitation projects on Prince of Wales Island.

There are also successful coho salmon and steelhead trout programs at Klawock. Between 700,000 and 1,100,000 coho salmon are released each year. At this production level, the program annually produces about 68,000 adult coho salmon. Although some of these fish are harvested in sport and personal-use fisheries, the majority are harvested in the commercial fisheries. Up to 70,000 steelhead trout smolts are released in the Klawock River each spring.

The staff at Klawock Hatchery has recently submitted several project proposals suggested by Native groups and the BIA that would involve local people in the hatchery program. The objectives of the work would be to (1) improve traditional Native fisheries and (2) train selected individuals in fisheries enhancement work. In addition the staff at the hatchery has initiated a program with the local school system to develop fisheries and resource-related curriculum; the program brings professionals into the classroom and students into the hatchery.

Southern Southeast Alaska Area Biology:

The area biologist is responsible for three major areas of work: (1) rebuilding natural stocks, (2) hatchery-related research, and (3) fish colonization projects.

Natural stocks are being rebuilt in areas (primarily on Prince of Wales Island) impacted by subsistence, land-based sport fisheries, or habitat disturbances (e.g., logging, mining, construction, etc.) by stabilizing disturbed habitat (e.g., stream rehabilitation) and restoring natural salmonid production. In some instances, fish produced in hatcheries are used to enhance threatened stocks.

The program at Deer Mountain continues to evolve toward research. One current project involves the production of 40,000 triploid chinook salmon from the 1991 brood at Deer Mountain. Because they have been neutered, these triploid fish will

grow faster and live longer; however, there is a question as to their homing abilities.

The FRED Division area biologist will continue enhancement projects in cooperation with the U.S. Forest Service fishpass construction program. Sockeye and coho salmon fry from hatcheries will be used to colonize barren habitat. The effectiveness of these projects will be monitored with the evaluation of coded-wire-tag recoveries. Although the number of fish produced by any one of these projects will probably not be impressive, their cumulative effects will be significant. The value of preserving, restoring, and enhancing natural stocks of fish and their habitat as well as producing information through hatchery research is immeasurable.

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SOUTHCENTRAL, WESTWARD, AND AYK REGIONAL PROGRAMS AND ACTIVITIES

Overview

Region II includes Prince William Sound, Cook Inlet, Kodiak, Alaska Peninsula, Bristol Bay, North and Northwest Alaska, and the Interior. The regional program currently includes area offices at Cordova, Homer, Wasilla, Nome, and Kodiak and hatcheries at Gulkana, Main Bay, Tutka, Crooked Crook, Big Lake, Fort Richardson, Elmendorf, Clear, Pillar Creek, Kitoi, Russell Creek, and Sikusuilaq. The program also includes dozens of projects across the region, including the following: (1) evaluation of enhancement programs, (2) stream rehabilitation work in Anchorage and Nome, (3) sport fish enhancement projects in Cook Inlet, (4) the Alaskan Rainbow Trout Broodstock Development Center, (5) Lake survey, stocking and fertilization projects in Prince William Sound, Cook Inlet, Kodiak, and the Alaska Peninsula, (6) Sockeye salmon restoration work at English Bay, and (7) technical support for development work for Nelson Island, Chevak, Elim, and the Yukon River.

The FRED Division program for Southcentral, Westward and Arctic-Yukon-Kuskokwim Region is supported by an office located in Anchorage. Within the region, there are a number of initiatives that have been undertaken by the FRED Division.

Regional Initiatives

Northwest Alaska Initiative:

In FY 92 FRED Division established a full-time biologist position in Nome to facilitate initiation of fisheries restoration and development activities in northwest Alaska. This position provides technical support for the development of projects from the Kuskokwim River north to Kotzebue Sound.

Northwest Alaska has been previously supported by the Anchorage or Fairbanks offices. With the recent surge of interest in fisheries enhancement programs and development of new projects there, it became clear that it would be more

economically viable for staff to support these operations from ADF&G's Nome office.

Work funded by the FRED Division includes support for feasibility studies for potential fisheries enhancement projects in the Nelson Island/Chevak area. In cooperation with local villages and the Bering Sea Fishermen's Association, additional funding has been requested from the Bureau of Indian Affairs (BIA) and National Coastal Resources Research and Development Institute.

FRED Division provides technical support to the Norton Sound Economic Development Corporation to assist in the development of a new fisheries enhancement program at Elim. Supplemental support for fisheries enhancement work in Norton Sound is being sought by the North and Northwest Mayors' Conference through their Norton Sound Economic Development Initiative. This initiative was developed in February 1991 and presented to the Economic Development Forum of the Alaska Department of Commerce and Economic Development, where it is currently being considered.

FY 92 funds have been allocated to support the Northwest Alaska Initiative. These funds, which were derived from reduced middle-management staff in the Anchorage regional office, support a full-time position and projects at Nelson Island, Chevak, and Elim.

Anchorage Stream Rehabilitation Initiative:

FRED Division is solidifying the Anchorage area stream rehabilitation program by establishing a full-time position to develop and initiate stream rehabilitation projects there. The program will serve to restore fish habitat that has been damaged by development and enhance existing fish stocks; it provides funding for staff time and limited operational support. FRED Division will look to private and corporate donations of labor, materials, and equipment to implement specific stream rehabilitation projects throughout the year. Work will be conducted in cooperation with the City of Anchorage, sport fishermen's associations, Boy Scouts, and Anchorage School District. Additional funding is being received from the Alaska Science and Technology Foundation (ASTF). This ASTF project has been initiated with the cooperation of the City of Anchorage and the Anchorage School District. ASTF funding will allow FRED Division to solidify stream rehabilitation technology and practices to the benefit of similar projects throughout

the state. The City of Anchorage and the Anchorage School District are also working with FRED Division staff to solidify a cooperative approach to fisheries development and education. The City of Anchorage has requested funds for this program through Streams, Kids, and Fish (SKIF). For FY 92, monies have been reallocated from the Anchorage Regional Office staffing to the Anchorage Stream Rehabilitation Initiative.

Yukon River Enhancement Initiative:

In cooperation with Yukon River fishermen and communities, a Yukon Fisheries Enhancement Initiative was developed in January 1991. The initiative was considered by the Governor's Office and the Legislature. With the prospects of a U.S./Canada Treaty for the Yukon River, fisheries enhancement represents a very viable mitigation tool.

King Crab Initiative:

In cooperation with fishermen and the Kodiak Island Borough, a King Crab Initiative was developed in February 1991. Additional funding for this program is being requested from the Alaska Science and Technology Foundation (ASTF) who has proposed to help fund the examination of shellfish rehabilitation projects in other countries and states to help us solidify this initiative. King Crab rehabilitation research was begun in March 1991 with program development and solidification based on various funding packages.

Railbelt Sport Fisheries Initiative:

FRED Division will be working to solidify an Anchorage and Railbelt Sport Fisheries Enhancement Program. In cooperation with the City of Anchorage and Sport Fish Division, staff are currently developing an initiative to provide additional water to the Fort Richardson Hatchery to allow FRED Division to reduce electrical costs and thereby provide the opportunity to double production. Funding for this has been requested as a high priority on the city's CIP request. An engineering feasibility analysis for this project has been funded by Anchorage Electric Light and Power. The Anchorage Economic Development Corporation has evaluated the economic development potential associated with this proposal at the request of the Mayor's Office. In addition to these efforts concerning the Fort

Richardson Hatchery water supply, supplemental general fund monies were allocated to sport fish projects in FY 92.

Regional Program Elements

Commercial fisheries enhancement programs at Cannery Creek, Trail Lakes, Gulkana, Main Bay, Pillar Creek, Tutka, Kitoi, Big Lake, and Crooked Creek Hatcheries were affected by budget reductions from FY 88 to FY 91. Funds for sockeye salmon evaluation and lake survey work associated with Gulkana and Kodiak sockeye salmon were similarly impacted by the FY 91 veto by Governor Steve Cowper. As a result of these budget impacts, the FY 92 budget did not include funding for any production-scale, commercial fishery oriented hatchery programs in Region II or evaluation and lake survey work for the Copper River and parts of Kodiak.

Several area staff are cooperatively supported (50:50) by FRED and Sport Fish Divisions, and their responsibilities reflect this funding distribution. Fort Richardson, Elmendorf, and Clear Hatcheries continue to solidify successful sport fishery enhancement programs. Russell Creek and Sikusuilaq Springs Hatcheries continue broodstock development programs to ultimately provide for their contracting to the private sector in 1999.

Major Items for FY 93

In FY 93 FRED Division will continue to solidify Northwest Alaska, Yukon, King Crab, and Sport Fishery Development initiatives. Based on anticipated development and growth in fisheries enhancement programs in northwest Alaska, we expect that it will be necessary to establish an assistant area biologist position (FB I/II) in the Bethel office to work with feasibility studies, demonstration projects, and enhancement program development in the Kuskokwim, Nelson Island, Nunivak Island, Chevak, and Hooper Bay areas. This position will coordinate closely with ADF&G Commercial Fisheries Division staff in Bethel under the supervision of the northwest area biologist in Nome.

The Yukon Initiative, if funded, would provide stepped-up program efforts beginning in FY 94. Field surveys of fisheries enhancement and restoration opportunities in the Yukon River drainage will be introduced in the summer of

1993, while chinook and chum salmon restoration programs will be incorporated with egg takes in the fall of 1993 in anticipation of the completion of Clear Hatchery expansion.

The Anchorage Stream Rehabilitation Program will become fully operational in the summer of 1993 with the initiation and completion of a minimum of 5 cooperative stream rehabilitation projects with sport fishermen's associations, local schools, and the Boy Scouts. Based on funding from ASTF and/or SKIF, programs will be broadened in either the technical or educational arenas, respectively.

King Creek rehabilitation will be expanded in 1993 if the necessary research is funded. Combined with funding from the Alaska Science and Technology Foundation, this research will allow the dimensions of the program to be broadened considerably.

In the summer of 1992, development of Anchorage area sport fisheries enhancement programs will continue with the Sport Fish Division. Pending funding of the Fort Richardson Hatchery water supply development, the direction of this program will advance significantly.

The Alaska Peninsula/Aleutian Islands/Area M Regional Planning Team has requested that an area biologist be stationed in their area to oversee and facilitate the development of enhancement opportunities there. This position has been endorsed by the Alaska Peninsula/Aleutian Islands/Area M Regional Planning Team and Aleutians East Borough. The position would work closely with the ADF&G Commercial Fisheries Division staff in the area.

General Fund monies for area offices will be retained for Cordova, Kodiak, Homer, Wasilla, and Nome. General Fund dollars at Big Lake and Crooked Creek Hatcheries will be focused 100% at sport fish, subsistence, and northwest Alaska production priorities. Fort Richardson, Elmendorf, and Clear Hatcheries and the Broodstock Development Center will continue to solidify priority sport fisheries enhancement programs in close cooperation with the Sport Fish Division. Russell Creek and Sikusuilaq Springs Hatcheries will continue broodstock development programs to ultimately provide for their contracting to the private sector.

BACKGROUND INFORMATION

Historical Perspective

The 1971 Alaska State Legislature and Governor created the Fisheries Rehabilitation, Enhancement and Development (FRED) Division of the Alaska Department of Fish and Game (ADF&G) when the people of Alaska expressed support for an enhancement program that would revitalize the ailing salmon fishing industry (Figure 2).

The division was given** broad statutory authority for this program.

Since

inception, technical and professional disciplines developed

include biology, engineering, fish culture, mariculture, pathology, limnology, genetics, economics, and planning. To date, the program has been extremely successful. Some of the public enhancement program's past and recent accomplishments are listed below:

1. Built the largest enhancement program in North America in the midst of abundant wild stocks;
2. Established the infrastructure, diverse technical expertise, and operational efficiency within 15 years to bring the program to its current status;
3. Developed technology to lead the world in culture of sockeye salmon, Arctic grayling, Arctic char, and lake production;
4. Established state-of-the-art laboratories in pathology, genetics, limnology, and tag processing to serve aquaculturists and fishery managers;

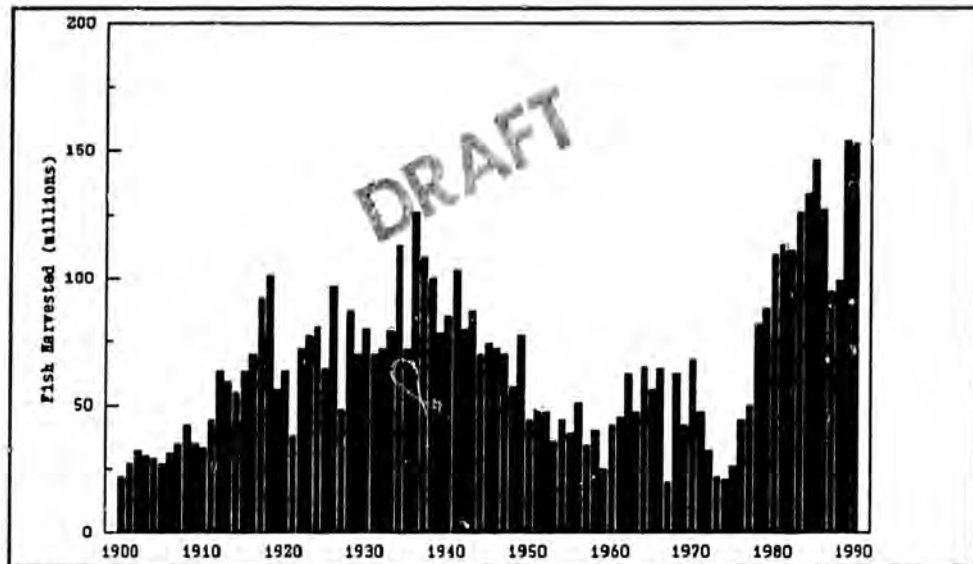


Figure 2. The FRED Division was created in 1971 during a time of record low harvests

5. Built a balanced enhancement program that serves all user groups;
6. Evolved lake ecosystem models that forecast salmon production which, in turn, guide enhancement planning and escapement goal setting; and
7. Achieved a proven economic return on investment—one of the higher, if not the highest returns ever realized from state investments.

Constraints in Present Environment

In spite of its many accomplishments, the major factor limiting FRED Division's full-production programs in the

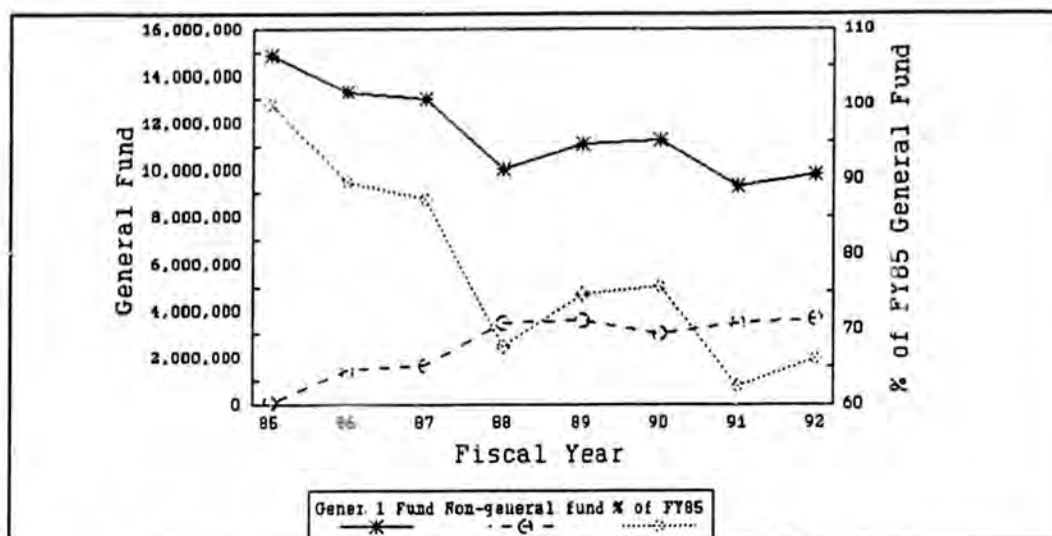


Figure 3. Comparison of FRED budgets, FY 85 through FY 92.

1980s and challenging the public fisheries enhancement program in the 1990s is the lack of fiscal support. In the past, FRED Division has been heavily invested in the commercial fish production-hatchery business. However, the current social policy from the Administration and the Legislature is that the constituents receiving economic benefits from this production should be more responsible for providing funding for its continuation.

In order to comply with this "user pays" philosophy, FRED Division has been directed to move away from some of its traditional activities, such as hatchery operation for production of pink, chum, and sockeye salmon for commercial users. This transition has already been initiated, and it will continue in a practical and logical fashion. The "user pays" philosophy has become a social policy mandate. Another method of complying with it has been to transfer (i.e., by contractual agreement) the operational responsibilities of state facilities to the private nonprofit (PNP) sector.

The enhancement program has experienced budget fluctuations caused primarily by lack of support and a decline in state revenues (Figure 4). With this inconsistent state support, the division has been forced to rely on other funding sources and to either close state hatcheries or contract their operational responsibilities to the PNP sector. In the present sociopolitical environment, general fund support for commercial fish production facilities is rapidly declining, and FRED Division is actively seeking to contract the operational and fiscal responsibilities of several hatcheries to the PNP sector without creating negative economic impacts.

People have incorrectly concluded that since salmon harvests are in a boom cycle, there is no need to maintain public investment. Examination of the historical catch will verify that the harvest of salmon is characterized by reoccurring boom-and-bust cycles. As prudent investors recognize, it is wise to maintain capital assets in order to realize the return on these investments during periods of adversity.

Public Hatcheries

To comply with the "user pays" philosophy of funding hatchery facilities, FRED Division began to cooperate with the PNP sector by allowing them to recover project costs by selling returning salmon. This enabled the PNP sector to maintain hatchery operations and production capabilities. Legislators supported these cooperative efforts, and the joint ventures allowed several hatcheries that had been scheduled for closure to continue fish production. The operations of 3 state hatcheries were contracted to the PNP sector in June 1988, including Hidden Falls to Northern Southeast Regional Aquaculture Association (NSRAA), Cannery Creek to Prince William Sound Aquaculture Corporation (PWSAC), and Trail Lakes to Cook Inlet Aquaculture Association (CIAA); cost recovery was the primary financing mechanism. The Kitoi Bay Hatchery in Kodiak was also contracted to the Kodiak Regional Aquaculture Association; fiscal support came from the association while FRED Division continued to operate the facility. These contracting scenarios proved to be effective, whether financed and operated by regional aquaculture associations or publicly operated by FRED Division but financed by regional aquaculture associations.

With the FY 91 budget reduction of \$2 million in hatchery support mandated by the Executive Branch in July 1991, the public and PNP aquaculture communities were forced into a crisis-funding mode to avoid wholesale closure of public hatcheries. The FRED Division was successful in continuing the operation of the Beaver Falls Hatchery by developing a cooperative agreement with the Southern Southeast Regional Aquaculture Association (SSRAA) that allowed them to operate

the facility for one year using federal U.S./Canada Pacific Salmon Treaty enhancement funds. No long-term solution for funding this facility has been achieved. FRED Division was successful in contracting with the CIAA to continue sockeye salmon production programs at the Big Lake and Crooked Creek Hatcheries. FRED Division was also successful in completing a 1-year cooperative agreement with the PWSAC to continue with the Gulkana sockeye salmon production program. FRED Division was unable to negotiate any contractual arrangements for the operation of Main Bay Hatchery in Prince William Sound and Tutka Hatchery in Cook Inlet. As a result, they requested supplemental funding in the amount of \$900,000 for FY-93 to cover the shortfall.

On the following three pages, Table 1 details a plan for the transfer of operational responsibilities of state-operated hatcheries to regional aquaculture associations. This information represents FRED Division's current understanding of this subject. The following information is provided for each facility: (1) location, (2) species produced, (3) program intent in terms of planned beneficiaries, (4) comments regarding the facility, (5) FY 92 operating costs by funding source, (6) operation plan by fiscal year and operator, and (7) estimated contributions to user groups.

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Table 1.

Alaska Department of Fish and Game-FRED Division
Public Hatchery Strategic Plan

Hatchery	Location	Species	Program * Intent	Comments	Operating Costs	FY92 Funding Source	Oper. Plan FY	Plan Agenc	Percent ** Subsistence	Percent Sport	Percent Commercial
1 Beaver Falls	Ketchikan	Sockeye	CF	Contracted to SSRAA			92	SSRAA	***	0%	100%
2 Big Lake	Big Lake	Sockeye Coho	CF, PU SF, CF, PU	Major production of enhancement fi for Anchorage area.	\$50.0 \$342.4	CIP GF	92	FRED	14% 5%	1% 65%	85% 30%
3 Cannery Creek	Whittier	Pink	CF	Operated by PWSAC			89	PWSAC			100%
4 Clear	Clear	Arctic char Arctic grayling Lake trout	SF SF SF	Major sport fish production facility Vital to US/Can chum and chinook programs	\$22.8 \$313.6 \$92.5	GF D.J/WB F&G	92	FRED		100% 100% 100%	
5 Crooked Creek	Soldotna	Sockeye Coho Steelhead Chinook	CF, PU SF, PU SF SF	Sockeye contracted to CIAA Contributes substantially to sport fish program through eggtakes for other facilities.	\$49.8 \$348.3	CIAA GF	92	FRED CIAA	3% 5%	2% 95% 100% 100%	95%
6 Crystal Lake	Petersburg	Chinook CL rel. Chinook remote Coho Steelhead	US/C, SF, CF US/C, CF SF, PU, CF SF	Large US/Can capital investment including Harding River, Deep Cove, and Farragut River. Provides 5-7 million chinook eggs in addition to its own needs primary stream rehab work from unique isolation modules.	\$602.6 \$15.0	GF PgR	92	FRED		44% 1% 17% 100%	56% 99% 83%
7 Deer Mountain	Ketchikan	Chinook C o Steelhead	RES, SF, CF SF, PU, CF SF	Fisheries technology development results supplied to other state and private programs. Prime tourist facility, over 250, 000 annually. Major role in public education.	\$142.9 \$144.2	GF ANAD	92	FRED	*** ***	40% 17% 100%	60% 83%

Table 1. (Continued)

Hatchery	Location	Species	Program * Intent	Comments	Operating Costs	Funding Source	Operational Pla FY	Percent ** Agen Subsistence	Percent Sport	Percent Commercial
8 Elmendorf	Anchorage	Chinook Coho	SF	Major sport fish production facility	\$112.8	F&G	92 FRED	1%	90%	9%
			SF	High visibility tourist attraction	\$385.2	DJ/WB		3%	87%	10%
					\$67.7	GF				
9 Ft Richardson	Anchorage	Chinook	SF	Major sport fish production facility	\$143.9	GF	92 FRED		88%	13%
		Coho	SF		\$596.0	DJ/WB			90%	10%
		Rainbow	SF, RES		\$181.6	F&G			100%	
10 Gulkana	Glennallen	Sockeye	CF, SUB	The most cost effective sockeye facility in the world. 35 million sockeye salmon egg take annually. FY92 contract for one year, potential long term contract.	\$41.2	GF	92 FRED/ PWSAC	8%	2%	90%
		Chinook	CF, SF, SUB					20%	30%	50%
11 Hidden Falls	Sitka	Chinook	CF	\$2.5 million chinook expansion with US/Can funds. Operated by NSRAA.			89 NSRAA			100%
		Chum	CF							100%
12 Kitoi Bay	Kodiak	Pink	CF	Operated by state with funds provided by KRAA.			92 FRED/KRAA			100%
		Chum	CF							100%
		Coho	SF, CF						50%	50%
		Sockeye	CF							100%
13 Klawock	Klawock	Sockeye	SUB	BIA funds to address local projects. GF used in projects to rehabilitate POW in post-logging years.	\$434.7	GF PgR	92 FRED	100%		
		Coho	CF, SUB					***	7%	93%
		Steelhead	SF						100%	
		Chum	SUB, CF					50%		50%
14 Main Bay	Whittier	Sockeye	CF	Operated by PWSAC			92 PWSAC		1%	99%
15 Pillar Creek	Kodiak	Sockeye	CF	Primarily operated with funds provided by KRAA. Some GF involved.	\$37.9	GF	92 FRED/KRAA	***		100%
16 Russell Creek	Cold Bay	Chum	CF	FY92 PgR from Aleutian's East Borough. Fisheries developmental facility to be contracted in FY99	\$420.0	GF	99 Reg. Assoc.			100%
		Pink	CF		\$52.8	PgR			1%	99%
		Coho	SF, CF						50%	50%

Table 1. (Continued)

Hatchery	Location	Species	Program Intent *	Comments	Operating Costs	Funding Source	Operational Pla FY Agen	Percent ** Subsistence	Percent Sport	Percent Commercial
17 Sikusillaq	Kotzebue	Chum	CF, SUB	Developmental facility for fisheries technology. Potential for subsistence harvest. To be contracted in 1999.	\$390.8	GF	99 Reg. Asso	20%		80%
18 Snettisham	Juneau	Sockeye CIF	US/C, CF, RE	Tremendous involvement in US/Can projects, \$1.35 million plus 5 year operational funding for Deep Cove. Applied technology development for sockeye smolt. Major sport fish production in Juneau recreation project.	\$581.4	GF	92 FRED	***		100%
		Sockeye (smolt)	US/C, CF		\$108.0	IA		***		100%
		Chinook (Deep)	US/C, CF						6%	94%
		Chinook (juvenile SF)							34%	66%
19 Trail Lakes	Moose Pass	Coho Sockeye	SF, CF CF	Operated by CIAA			89 CIAA	***	75%	25% 100%
20 Tutka	Homer	Pink Chum Sockeye	CF CF CF	Contracted to CIAA		CIP	92 CIAA	*** ***	2%	98% 100% 100%

* - Legend- subsistence (SUB), sport fish(SF), commercial fish(CF), research (RES), US/Canada (US/C)

** - Includes personal use

*** - Thought to contribute to subsistence but as yet unquantified

**** - SSRAA -Southern Southeast Regional Aquaculture Association

PWSAC- Prince William Sound Aquaculture Corporation

CIAA - Cook Inlet Aquaculture Association

NSRAA - Northern Southeast Regional Aquaculture Association

REG. ASSOC.- as yet unknown aquaculture association.

Pg.R. - program receipts

FISH TRANSPORT PERMIT

ALASKA DEPARTMENT OF FISH AND GAME FRED DIVISION

Explanations

These procedures are to implement Chapter 41 of Section 5 of the Alaska Administrative Code, governing the transportation, possession, and release of live fish and their reproductive products.

Permit applications must be made and submitted to the office of the Alaska Department of Fish and Game (ADF&G), Fisheries Rehabilitation, Enhancement and Development (FRED) Division by the person, organization, government organization, educational facility, or private nonprofit hatchery requesting to transport, possess, export from or into the state, or release into the waters of the state any live fish or eggs. Submit the completed application to:

Salmon Rehabilitation and Enhancement Coordinator
Alaska Department of Fish and Game
FRED Division
P.O. Box 25526
Juneau, AK 99802-5526

A separate form must be completed for each species, stock, and release location.

Prior to the taking of any fish and/or eggs, the ADF&G, Division of Commercial Fisheries area biologist must be notified.

The entire top section of page 1 beginning with applicant name, including Project Summary and Permit #, must be completed by the applicant. The entire pages 11 and 12 must be also be completed by the applicant. Please note the following instructions for completion of pages 11 and 12 of the fish transport permit (FTP) form.

Page 11:

1. Effective Period: The length of time that an FTP is valid; i.e., number of years necessary to complete the project or length of time the project is permitted. There must be a beginning and ending date.
2. Transport Date(s): Should include the date of the fish and/or egg take and all applicable transport dates.
3. Maximal Number Allowed: Number of fish and/or eggs to be taken and transported. This amount must not exceed the permitted project allowances.
4. Incubation and Rearing Location(s): Identification of hatchery, Scientific/Educational facility, or Central Incubation Facility, if applicable. If instream, be specific about the location. If there will not be incubation or rearing required, so state.
5. Release Location: Be specific. Identify the river, creek, stream, lake, etc. Do not use terms indicating an entire system, drainage,

rearing habitat, geographical area, or region.

6. Purpose and Benefits: The projected benefits of this project and the purpose for undertaking it.
7. Evaluation: Methods employed to evaluate the success or failure of this project. Is a report required?
8. Native Stocks Present: Refers to stocks naturally present at both origin and release sites. Include the anticipated effects of the take and/or release on these stocks.

Page 12:

9. History of known transport of this stock: All known transport of this stock, either by your organization or others.
10. Disease History: Complete listing of disease incidence testing, as conducted by the Pathology Section, ADF&G, FRED Division, or other qualified fish pathologists. The following information should be included: date of testing, age of fish, and the results of the test. Note the following example:

2/6/81	Adult	0/60	(0%) BKD
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11. Description of proposed egg-take methods: How do you plan to conduct the egg take, what methods will be used?
12. Isolation measures planned to control disease during transport, including description of container, water source, and method and plan for transport: How will the fish or eggs be transported, describe the container, etc.
13. Source of water for rearing and proposed effluent discharge location: Will water source for rearing be a city water system, a river system, a local stream? Will effluent be discharged into a city sewer system, back into the water source, and will it be treated or untreated?

This permit is issued by the Commissioner of ADF&G or his authorized designee. The FTP authorizes only that operation specified in the permit. The person or organization using the permit must be in compliance with all conditions of the FTP and any other project-enabling permit or contract.

A copy of this FTP must accompany the fish or egg transport and be available if a Department of Fish and Game or Department of Public Safety employee wishes to examine it.

Effective 09/10/91

FISH TRANSPORT PERMIT

Applicant

Organization

Mailing Address

Phone

Species

Stock Origin/Original Donor Stock

Proposed Stocking Location

Project summary - Summary statement of precisely what is being proposed.

Permit#

For Department Use Only

State Fish Transport Permit

FTP Number

Consistent with facility/project plans

Yes ___ No ___

Private Nonprofit Hatchery Fish Transport Permit

Consistent with PNP permit

Yes ___ No ___

Requires Permit Alteration prior to review

Yes ___ No ___

Continuation of project

Yes ___ No ___

New Project

Yes ___ No ___

Other -

Yes ___ No ___

Status

Forms Complete

Yes ___ No ___ Date ___

Disease History Complete

Yes ___ No ___ Date ___

In review process

DATE ___

Returned to applicant

DATE ___

5 AAC 41.005. PERMIT REQUIRED. (a) No person may transport, possess, export from the state, or release into the waters of the state, any live fish unless the person holds a fish transport permit issued by the Commissioner of his authorized designee.

The Fish Transport Permit (FTP) is the single document, approved by the Commissioner of Alaska Department of Fish and Game (ADF&G), that allows for movements of fish and eggs on an interstate and intrastate basis.

SIGNATURE PAGE

Comments

Agree

Disagree

Date

Comments
Provided
Yes No

1. Regional Supervisor - FRED

Signature _____

Incomplete

2. Fish Health Services Pathologist - FRED

Incomplete

3. Principal Geneticist - FRED

4. Regional Supervisor - Comm Fish

5. Regional Supervisor - Sport Fish

6. Chief - Technology and Development - FRED

7. Director - FRED

8. Commissioner

Approval

Disapproval

Date

COMMENT SHEET

1. Regional Supervisor - FRED

Comments

Signature _____

Date _____

Phone 907-465-4230 _____

COMMENT SHEET

2. Fish Health Services Pathologist - FRED

Comments

Signature _____

Date _____

Phone 907-465-3577 _____

COMMENT SHEET

3. Principal Geneticist - FRED

Comments

Signature _____

Date _____

Phone 907-267-2385 _____

COMMENT SHEET

4. Regional Supervisor - Comm Fish

Comments

Signature _____

Date _____

Phone 907-465-4250 _____

PERMIT NO. _____

COMMENT SHEET

5. Regional Supervisor - Sport Fish

Comments

Signature _____

Date _____

Phone 907-465-4270 _____

PERMIT NO. _____

COMMENT SHEET

6. Technology & Development Chief - FRED

Comments

Signature _____

Date _____

Phone 907-465-4160

PERMIT NO. _____

COMMENT SHEET

7. Director - FRED

Comments

Signature _____

Date _____

Phone 907-465-4160 _____

PERMIT NO. _____

COMMENT SHEET

8. Commissioner

Comments

Signature _____

Date _____

Phone 907-465-4100

FISH TRANSPORT PERMIT

Permit No. _____

Applicant/Organization: _____

Date: _____

Project Leader: _____

Telephone No. _____

Effective Period: _____

Species: _____

Transport Date(s): _____

Stock Origin/Original Donor Stock: _____

Maximal Number Allowed: _____ Lifestage _____

Incubation and Rearing Location(s): _____

Release Location: _____

Purpose and Benefits: _____

Evaluation Plans: _____

Is release site landlocked? _____

Native Stocks present, their status, and effects of the proposed action on them:

Permit No. _____

History of previous transports of this stock: _____

Disease history of stock to be transported: _____

Description of proposed egg-take methods: _____

Isolation measures planned to control disease during transport, including description of container, water source, and method and plan for transport: _____

Source of water for rearing and proposed effluent discharge location: _____

some people

use FTP to kill already approved project.

FTP - should be only ^{to} actual choice of Boardstock.
used to create projects.

90% of FTP's - no unanimous approval
is approval -

up to comr. - what is best interest of state.
corporate instrument -

evolution of permitting process -
more convenient & more immediate way of
approving or killing a project.

Dave Daisy - English Bay sea ed permit.

lockeys - com fish -

com fish maps - personalities, not conf info.
or geologists - they're all human, too.

~~not~~ black & white, judgment call.

to get around in future - boardstock only.

in sign off page - staff sign it. -

at times, have outside people comment on it.

time & money to do planning & get out front.

projects now being created than FTP project.

should be in annual mgmt. plan. - RPT process.

not enough ~~plan~~ money in pre-project wing to
provide conf. info.

Li Ed permits ~~=~~ being no planning & review.
mesopogits - 3 m egg capacities

in reality permitting process not designed for this -
now developing Fish Voucher Ed Permits
sets limits on # of eggs,
if ↑, has more hoops to go thru.

Draft out for review -

get some control over FTP

RPT

new areas - 3 new regional planning teams
Jackson River
Notion Sound

re-programming operational #'s.



existing facilities -

commercial impact - no cost recovery vehicle

no clear cut candidates.

Shettisham - getting into sorcery - maybe in 5 yrs.
NSRAH

MEMORANDUM

STATE OF ALASKA DEPARTMENT OF FISH AND GAME

TO: Carl L. Rosier
Commissioner

DATE: November 20, 1991

FILE NO:

DRAFT

THRU:

TELEPHONE NO: 465-4160

SUBJECT: Fish Resource Permits (formerly
scientific or educational (sci/ed)
permits).

FROM: Jeff Koenings
Director
FRED Division

Attached is an outline for a new policy on Fish Resource Permits (FRP). The FRP was previously called a scientific/educational (sci/ed) permit. The fisheries divisions have been working on developing new procedures for these permits since October 1990.

In October 1990, the Commissioner's Office directed that a new policy and regulations be written for scientific or educational (sci/ed) permitting. Several employees involved in writing these permits were aware that there were problems with the process because of a lack of standards that would apply equally to all applicants to enforce the Alaska Department of Fish and Game Policy Requirements for Scientific and Educational Collecting Permits (1-11-83). The Commissioner's Office recognized potential problems that could arise without having regulations in place. Deputy Commissioner Norman Cohen considered elevating the sci/ed permitting problem to the commissioner's office, then decided the divisions could do the drafting.

Representatives from the Commercial Fisheries, FRED, Sport Fish, and Wildlife Conservation Divisions met and began to draft regulations. This effort slowed at the time of the administration change, and Wildlife Conservation dropped out of the effort. Interest in developing regulations was rekindled when Stephen M. White, Assistant Attorney General, cited a need for such regulations. Commercial Fisheries, FRED, and Sport Fish Divisions met September 23, October 3, and October 28, 1991, to develop the attached outline for the new policy.

Alaska Statutes have only brief references to scientific and educational activities. It is clear that legislators expected such activities and intended to allow them to be conducted. It is not clear what sort of projects they envisioned. The following statutes are used to currently write permits and are used to write the attached outline.

AS 16.05.020 (2) manage, protect, maintain, improve, and extend the fish, game and aquatic plant resources of the state in the interest of the economy and general well-being of the state.

AS 16.05.050 (6) to capture, propagate, transport, buy, sell, or exchange fish or game or eggs for propagating, scientific or stocking purposes.

AS 16.05.050 (17) to permit and regulate aquatic farming in the state in a manner

that ensures the protection of the state's fish and game resources and improves the economy, health, and well-being of the citizens of the state.

DRAFT

AS 16.05.340 (b) The commissioner of fish and game may issue without cost a permit to collect fish and game, including fur animals, subject to limitations and provisions that are appropriate, for a scientific, propagative, or educational purpose. The commissioner also may issue a permit for the collection of bivalve spat for use in connection with an aquatic farm. . . .

AS 16.05.920 (a) Unless permitted by AS 16.05 -- AS 16.4 or by regulation adopted under AS 16.05 -- AS 16.40, a person may not take, possess, transport, sell, offer to sell, purchase, or offer to purchase fish, game, or marine aquatic plants or any part of fish, game or aquatic plants, or a nest or egg of fish or game.

AS 16.05.930 (a) This chapter does not prevent the collection or exportation of fish and game, a part of fish or game or a nest or egg of a bird for scientific or education purposes, or for propagation or exhibition purposes under a permit which the department may issue and prescribe the terms thereof.

Interest in permits for propagation purposes is growing. FRED Division wrote 30 finfish permits in 1987, 32 in 1988, 33 in 1989, 38 in 1990, and 80 in 1991. (Mariculture permits were 4 in 1988, 5 in 1989, 8 in 1990, and 9 in 1991). Applications for calendar year 1992 are already being received.

We believe we have satisfied the bulk of the departmental concerns received during initial reviews. We believe "Fish Resource Permits" is a more appropriate title for the attached permit classification scheme. These results are submitted for your review. If you approve of this outline, we will write a department policy to develop permits. The policy will serve as a guideline for writing new regulations.

Attachment

cc: Fred Bergander
John Burke
Jim Cochran
Tom Kron
Denby Lloyd
Steve McGee
Jeri Museth
Norval Netsch
Herman Savikko
Mark Schwan

Fish Resource Permits (FRP) are issued with the stipulation of (1) no commercial activities, (2) no human consumption, and (3) no sale of the species.

- I. Collecting permits: issued by Commercial Fisheries Division (salt water) and Sport Fish Division (fresh water) to collect species of fish and shellfish from salt and freshwater. The specimens will be killed at the collection site, or caught and released unharmed at the collection site.
- II. Holding permits: issued by Commercial Fisheries Division (salt water) and Sport Fish Division (fresh water) to allow people to exhibit live saltwater or fresh water specimens, or to export live specimens from the state.
- III. Propagation permits: issued by FRED Division (all species) for educational, vocational/research, or scientific purposes.

Further classification of these permits:

- I. Collecting Permit.
 - A. Scientific.
 1. Habitat assessment/manipulation
 2. Resource assessment/impact analysis
 3. Research
 - B. Educational.
- II. Holding Permit (This permit will serve to transport and hold alive species to be contained in aquaria. Species are not to be released. This permit will fulfill the requirements of 5 AAC 41, Transportation, Possession, and Release of Live Fish. Carcasses will be disposed in a manner described by the department. Open aquaria systems will require pathology review, closed systems will not.)
 - A. Exhibition.
 1. Museum
 2. Aquaria
 3. Education
 - B. Scientific.
 1. Research
 2. Export
- III. Propagation Permits.
 - A. Mariculture site suitability (Pathology review required. The permit will fulfill FTP requirements as specified under 5 AAC 41).
 1. Limited to one year, no renewal;
 2. Limited to 10,000 organisms with no release;
 3. No commercial use;
 4. Does not establish any rights to the site.

- DRAFT**
- B. Scientific/Educational (This permit will serve to transport and hold alive species and will fulfill FTP requirements as specified under 5 AAC 41. Pathology review may be required. Sockeye salmon will not be used for these projects).

1. No release.
 - (a) Less than or equal to 500 eggs or one spawning pair;
 - (b) Wild stock or hatchery eggs;
 - (c) Shellfish and aquatic plant projects related to aquatic farming.
2. Small number releases.
 - (a) Less than or equal to 500 eggs or one spawning pair;
 - (b) Release at place of origin or a departmental approved landlocked lake required.

C. Vocational/research

1. Up to 50,000 eggs or equivalent in spawning pairs.
 - (a) Pathology inspection and genetic review may be required;
 - (b) RPT review and recommendations at a regularly scheduled meeting required;
 - (c) If a RPT or fisheries management plan does not exist for the area, the department's three fisheries divisions will review the application. Public participation will be solicited through a newspaper advertisement paid for by applicant;
 - (d) An FTP for brood stock selection is required.
2. Up to 500,000 eggs of non-smolt species (e.g. pink or chum salmon) or 100,000 eggs of smolt species (e.g. coho, sockeye, or chinook). These amounts should result in less than or equal to 5,000 returning adults.
 - (a) Pathology inspection and genetic review may be required;
 - (b) A management feasibility analysis is required;
 - (c) RPT review and recommendations at a regularly scheduled meeting is required;
 - (d) If a RPT or fisheries management plan does not exist for the area, the department's three fisheries divisions will review the application. Public participation will be addressed through a newspaper advertisement paid for by applicant;
 - (e) An FTP for brood stock selection is required.
3. Amounts over category C 2, above, require a private nonprofit permit (regulated in 5 AAC 40).

FTPs are used for brood stock selection for planned and permitted projects. The project planning is accomplished with cooperative agreements, hatchery permits and permit alterations, hatchery annual management plans, five-year stocking plan, fish resource permits, etc. Plans must be reviewed and permits approved before an FTP is circulated for review.

DRAFT

Fish Resource Permits

Preliminary Draft Subject To Change

Fish Resource Permits (FRP) are issued with the stipulation of (1) no commercial activities, (2) no human consumption, and (3) no sale of the species.

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 2. Export
- III. Propagation Permits.
 - A. Mariculture site suitability (Pathology review required. The permit will fulfill FTP requirements as specified under 5 AAC 41).
 1. Limited to one year, no renewal;
 2. Limited to 10,000 organisms with no release;
 3. No commercial use;
 4. Does not establish any rights to the site.

- B. Scientific/Educational (This permit will serve to transport and hold alive species and will fulfill FTP requirements as specified under 5 AAC 41. Pathology review may be required. Sockeye salmon will not be used for these projects).
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 - (a) Less than or equal to 500 eggs or one spawning pair;
 - (b) Wild stock or hatchery eggs;
 - (c) Shellfish and aquatic plant projects related to aquatic farming.
 2. Small number releases.
 - (a) Less than or equal to 500 eggs or one spawning pair;
 - (b) Release at place of origin or a departmental approved landlocked lake required.
- C. Vocational/research
1. Up to 50,000 eggs or equivalent in spawning pairs.
 - (a) Pathology inspection and genetic review may be required;
 - (b) RPT review and recommendations at a regularly scheduled meeting required;
 - (c) If a RPT or fisheries management plan does not exist for the area, the department's three fisheries divisions will review the application. Public participation will be solicited through a newspaper advertisement paid for by applicant;
 - (d) An FTP for brood stock selection is required.
 2. Up to 500,000 eggs of non-smolt species (e.g. pink or chum salmon) or 100,000 eggs of smolt species (e.g. coho, sockeye, or chinook). These amounts should result in less than or equal to 5,000 returning adults.
 - (a) Pathology inspection and genetic review may be required;
 - (b) A management feasibility analysis is required;
 - (c) RPT review and recommendations at a regularly scheduled meeting is required;
 - (d) If a RPT or fisheries management plan does not exist for the area, the department's three fisheries divisions will review the application. Public participation will be addressed through a newspaper advertisement paid for by applicant;
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FTPs are used for brood stock selection for planned and permitted projects. The project planning is accomplished with cooperative agreements, hatchery permits and permit alterations, hatchery annual management plans, five-year stocking plan, fish resource permits, etc. Plans must be reviewed and permits approved before an FTP is circulated for review.

**Preliminary Draft
Subject To Change**

ALASKA DEPARTMENT OF FISH AND GAME
POLICY AND REQUIREMENTS FOR
SCIENTIFIC AND EDUCATIONAL COLLECTING PERMITS

General

The Department of Fish and Game is the custodian of the fish and wildlife resources of the State. Permits are required for all collection of fish, game and aquatic plants not covered by existing harvest regulations. This includes utilizing methods and means (gear) for taking fish or game in numbers, locations or seasons outside of existing sport and commercial regulations and the possession and/or transportation of live specimens in any stage of their life cycle. Such permits are a privilege and will be issued only to those organizations and individuals who meet Department requirements as specified in this policy.

A Scientific or Educational Permit is required to collect, possess, import, or export all species of game, including those over which the Federal Government has primary jurisdiction (migratory birds, endangered species, marine mammals).

A Scientific or Educational Permit is required to collect and possess all species of fish and aquatic plants.

A Fish Transport Permit is required for the transport, import or export of all live fish or their eggs (5 AAC 41.005).

Note: The terms "fish" and "game" include birds and mammals, including all feral domestic animals (domestic birds and mammals excluded), fish, invertebrates and amphibians, in any stage of their life cycle found or introduced into the State. "Aquatic plant" means any species of plant growing in a marine aquatic or intertidal habitat excluding the rushes, sedges and true grasses.

Individuals who may receive a collecting permit must be involved in legitimate research or collecting for an established scientific, educational or aquaculture organization. This includes educational institutions collecting specimens for classroom study or museum display and special in-State display of live fish and game by recognized organizations. Collected specimens may not be used for commercial purposes or personal consumption.

Applications for permits to collect mammals and birds are to be made to the Division of Game, P.O. Box 3-2000, Juneau, Alaska 99802.

Applications for permits to collect specimens in freshwater or in designated on-shore areas are to be made to the Division of Sport Fish, P.O. Box 3-2000, Juneau, Alaska 99802.

Applications for permits to collect specimens in marine waters are to be made to the Division of Commercial Fisheries, P.O. Box 3-2000, Juneau, Alaska 99802.

Applications for fish propagation and private non-profit hatchery operations, and for the import, export or relocation of live fish or their eggs are to be made to the Division of Fisheries Rehabilitation, Enhancement and Development (FRED). Permits as may be issued for such purposes will be prepared by the FRED Division and reviewed or approved by all fishery divisions before submittal for Commissioner's approval.

A 30-day review period will be required for all applications.

Each application must be accompanied by the following information:

1. Study Plan - A written Operational Plan must accompany each application for a collecting permit. The Plan must identify the purpose and need for the desired collections. Approval for a Scientific Collecting Permit will be determined by the substantiality of the Study Plan. In addition to purpose and need, the application for a Scientific/Educational permit should specify research objectives and procedures.
2. Times and specific locations where collections are to be made.
3. Specific numbers, by species and life stage of specimens required to meet the objectives of the project. Both common and scientific names should be provided when necessary.
4. Eventual disposition of specimens taken.
5. Specific methods and/or gear to be used in the collection of specimens. Use of hook and line gear will require the possession of the appropriate Sport Fishing license for each person.
6. The names of those person(s) who will be assisting in the field activities, if other than the applicant or chief investigator. The permit or a copy must be carried by an approved investigator when collections are occurring.

The application must identify the primary employer or contractor of the study.

Marking or tagging of fish or game is closely regulated by the State to prevent conflict with other programs, thus specific approval is required for any marking or tagging project. The number of each species to be marked and the location and type of marks or tags to be used must be specified.

Special requirements may be implemented, depending on the complexity of the overall project for which specific application is being made. Each project will be evaluated independently and subsequent applications modified as appropriate.

If species to be taken are those under primary jurisdiction of the Federal Government, applicant must first obtain a Federal permit and submit a copy when applying for a State permit. State permits may be more restrictive, but not more liberal than the Federal permit.

Unless otherwise specified all permits terminate on December 31 of the year of issue. To continue a project past that date a new permit application must be submitted and approved. New permits will be issued only after receipt of reports of the previous years activities. Allow 30 days for review of the request for renewal.

Redelegation of Authority

No redelegation of authorities granted under terms of a collecting permit is allowed, unless specifically provided for in the permit. Specific written approval is required should conditions warrant the inclusion of additional personnel during approved activities. This approval may be requested at any time prior to collecting or sampling. Permits to agencies will be made to the highest practical level individual in each agency.

Restrictions

Permits issued shall indicate the number of specimens that may be taken by species and life stages. Sampling must stop when the maximum allowable sample size is obtained. All live animals captured in excess of the number specified on the permit must be released at the capture location. Unless explicitly specified, NO transportation of live animals is permitted. Extraction of reproductive products taken from dead or live animals, for the purpose of reproducing the species is prohibited.

All traps, nets and similar capture devices must be labeled with the collector's name and permit number.

Reporting

A report must be submitted to the Commissioner within 30 days after the permit's expiration date. The report shall include: numbers of each species collected, date and place taken, and, if applicable, sex, life stage/age and breeding condition, lengths and weights of fishes, and disposition of the specimens.

Within six months of the expiration of the permit, a report detailing the results and findings of the data analysis for which the permit was issued must be submitted to the Department. Data from such reports may be used for Department internal use to evaluate issuance of future permits. Permit reports will be held confidential at the request of the permittee until their report is published or for one year after expiration of the permit, whichever is less.

It is the responsibility of the individual or organization originally sponsoring the work to submit appropriate reports. Permits will not be re-issued to the agency or designated investigator until outstanding reports are submitted.

Holding Fish and Game

Permits for collecting, propagating and holding live specimens will be granted only to zoos, a public, scientific or educational institution, or individuals holding an appropriate propagation license or permit. Issuance

of a permit will be dependent upon the applicant's qualifications and abilities to care for the desired species. A permit will be issued only after the facilities and the qualifications of the applicant have been approved by the Department.

Importing Fish and Game

A Scientific/Education permit is required to import any live game. If approved, the imported species must be accompanied by a health certificate, as specified by the Department, issued at the point of origin, and confirmed by the Department according to State law and regulation. A special permit is required for the import of live fish or their eggs; contact the FRED Division for details.

Exporting Fish and Game

A Scientific/Education permit is required for the export of live game and may be issued upon receipt of documented approval by the wildlife management authorities of the state of country to which they are destined. A special permit is required for the export of fish or their eggs; contact the FRED Division for details.

Transporting Fish and Game

A Scientific/Education permit is required for the transport of all live game within the State. A special permit is required for transporting live fish or their eggs; contact the FRED Division for details.

Permits will not be issued for the collection of fish or game for propagation purposes, unless the applicant has the appropriate current license, or permits, from the Department of Fish and Game.

Use of chemicals, especially poisons other than chemical baits and lures, or explosives for collection purposes is prohibited.

Permits will not be issued to any individual with a record of violation of fish and game regulations.

Specimens taken under the authority of a permit issued under this policy may not be sold or bartered.

The local area management biologist as identified in the permit must be contacted before collections or sampling are made.

APPROVED:


Commissioner

1-11-83

Date

REGULATIONS GOVERNING THE ALASKAN PRIVATE NON-PROFIT HATCHERY PROGRAM

By John McMullen, Special Projects Manager

Have you wondered how Alaska's non-profit salmon enhancement program originated, and what limitations are placed on the activities of organizations such as the Prince William Sound Aquaculture Corporation? If so, you should be interested in this summary of the pertinent regulations, and the precautions taken by the State of Alaska to ensure that proper planning precedes the approval of each and every salmon enhancement project in the state.

Alaska state law in 1974 authorized private ownership of salmon hatcheries by qualified non-profit corporations for the purpose of contributing, by artificial means, to the rehabilitation of the state's depleted and depressed salmon fisheries. The group of local commercial fishermen who formed the Prince William Sound Aquaculture Corporation (PWSAC) as a private non-profit corporation in 1974 immediately applied for and received a hatchery permit under this state statute.

In addition to state statutes, private aquaculture corporations in Alaska must comply with the requirements of permits, policies, and procedures of the **Alaska Department of Fish & Game**, which includes the **Alaska Board of Fisheries** and the **Regional Planning Team (RPT)**. The ADF&G Commercial Fisheries Division also manages the salmon which return to the hatcheries, including brood stocks.

The **Alaska Board of Fisheries** allocates wild and hatchery salmon stocks to user groups, including hatcheries. In February, 1991, the Board adopted a salmon management plan for Prince William Sound, which provides for the long-term balance of the seine and gill net fisheries.

The **Regional Planning Team (RPT)**, which is composed of ADF&G and PWSAC representatives, is responsible for the development of a regional comprehensive salmon plan which defines salmon production goals by species, area, and time. The management plan adopted by the Board of Fisheries provides for the implementation of this regional comprehensive plan.

The RPT also reviews applications for hatchery permits, and requests for alterations in the production at existing hatcheries; its recommendations are forwarded to the ADF&G Commissioner.

ADF&G FISHERIES POLICIES

Several policies guide the development and ADF&G approval of hatchery basic and annual management plans, hatchery permits, permit alterations, and fish transport permits. These include specific policies regarding genetics, fish disease, fish stocking and fish transport.

The **Genetics Policy** protects the genetic integrity of important wild stocks and increases productivity of enhancement programs through brood stock selection and defined egg-take procedures.

ADF&G's **Fish Disease Policy** is a series of regulations that prevent dissemination of infectious diseases within or outside the borders of Alaska through diagnosis of wild stocks intended for hatchery use, and through utilization of disease prevention and treatment measures in hatchery stocks. Alaska is a leader among states with its fish disease prevention and treatment program.

The **Fish Stocking Policy** protects wild stocks as a first consideration in managing enhancement programs.

The state's **Fish Transport Policy** prohibits possession, transport, or release of live fish into the waters of the state without a permit issued by the ADF&G Commissioner. The permit holder must be in compliance with the conditions of the permit.

HATCHERY PERMITTING PROCESS

A hatchery permit application is submitted to the analysis of the Department of Fish and Game, and reviewed by the Regional Planning Team. The RPT then makes a recommendation to the ADF&G Commissioner, who alone may grant the permit to build and operate a hatchery.

Management Feasibility Analysis of a Proposed Hatchery: The ADF&G staff determines the desirability and compatability of the proposed production with existing fisheries, and may provide recommendations to assist hatchery permit applicants.

Review of Applications for Permits and Permit Alterations: The Department has the responsibility to assess the technical feasibility of the proposed operations. It also estimates the impacts of hatchery production on wild stock management.

The Regional Planning Team also has responsibilities. The RPT must determine the compatability of proposed operations with the goals of the Regional Salmon Plan. Also, the RPT determines if the proposed operations provide protection for wild stocks.

In addition, the RPT must provide for public comment on the proposals, then forward its recommendations to the ADF&G Commissioner. The hatchery permit applicant, in collaboration with ADF&G staff, must then develop a basic management plan -- an overview plan for hatchery production and for the management of returning fish. The basic management plan is presented at a public hearing, which provides guidance for the Commissioner's decision to issue a hatchery permit.

HATCHERY OPERATIONS AND REVIEW

Once a hatchery is operational, it must submit an **annual management plan** to the Department of Fish and Game. The plan must describe the annual production goals of the facility, and contain a statement of the number of returning fish needed for brood stock and cost recovery.

The hatchery management plan is prepared jointly by ADF&G and the hatchery operator, and requires the approval of the ADF&G Commissioner.

A **hatchery permit alteration** is required for changes in planned production or release locations of hatchery fish. Approval is based on past performance of the hatchery, and compatibility of the change with wild stock protection and the fishery management program. Each hatchery permit alteration must be approved by the ADF&G Commissioner.

A **hatchery performance review** is a process in which the ADF&G reviews hatchery operations to ensure adequacy of all phases of hatchery production, ranging from brood stock development to hatchery contributions in the fisheries.

Standard performance measures for egg and fish survivals in hatcheries are used to evaluate adequacy of fish culture methods.

EVALUATION OF PWSAC ENHANCEMENT PROGRAM

PWSAC cooperates with ADF&G and the University of Alaska Fairbanks to evaluate, through fish tagging and oceanographic studies: (1) ocean survival of hatchery fish, (2) performance of hatchery fish in the fisheries, (3) interactions between wild and hatchery salmon, and (4) utilization of food sources available to juvenile salmon.

Program evaluation will be the subject of an article in a later edition of the Sound Quarterly.

MEMORANDUM

STATE OF ALASKA DEPARTMENT OF FISH AND GAME

TO: Carl L. Rosier
Commissioner

DATE: February 3, 1992

FILE NO:

THRU:

TELEPHONE NO: 465-4160

SUBJECT: Fish Resource Permits (formerly
scientific or educational (sci/ed)
permits).

FROM: Jeff Koenings
Director
FRED Division

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In October 1990, the Commissioner's Office directed that a new policy and regulations be written for scientific or educational (sci/ed) permitting. Several employees involved in writing these permits were aware that there were problems with the process because of a lack of standards that would apply equally to all applicants to enforce the Alaska Department of Fish and Game Policy Requirements for Scientific and Educational Collecting Permits (1-11-83). The Commissioner's Office recognized potential problems that could arise without having regulations in place. Deputy Commissioner Norman Cohen considered elevating the sci/ed permitting problem to the commissioner's office, then decided the divisions could do the drafting.

Representatives from the Commercial Fisheries, FRED, Sport Fish, and Wildlife Conservation Divisions met and began to draft regulations. This effort slowed at the time of the administration change, and Wildlife Conservation dropped out of the effort. Interest in developing regulations was rekindled when Stephen M. White, Assistant Attorney General, cited a need for such regulations. Commercial Fisheries, FRED, and Sport Fish Divisions met September 23, October 3, and October 28, 1991, to develop the attached outline for the new policy.

Alaska Statutes have only brief references to scientific and educational activities. It is clear that legislators expected such activities and intended to allow them to be conducted. It is not clear what sort of projects they envisioned. The following statutes are used to currently write permits and are used to write the attached outline.

AS 16.05.020 (2) manage, protect, maintain, improve, and extend the fish, game and aquatic plant resources of the state in the interest of the economy and general well-being of the state.

AS 16.05.050 (6) to capture, propagate, transport, buy, sell, or exchange fish or game or eggs for propagating, scientific or stocking purposes.

AS 16.05.050 (17) to permit and regulate aquatic farming in the state in a manner

that ensures the protection of the state's fish and game resources and improves the economy, health, and well-being of the citizens of the state.

AS 16.05.340 (b) The commissioner of fish and game may issue without cost a permit to collect fish and game, including fur animals, subject to limitations and provisions that are appropriate, for a scientific, propagative, or educational purpose. The commissioner also may issue a permit for the collection of bivalve spat for use in connection with an aquatic farm. . . .

AS 16.05.920 (a) Unless permitted by AS 16.05 -- AS 16.4 or by regulation adopted under AS 16.05 -- AS 16.40, a person may not take, possess, transport, sell, offer to sell, purchase, or offer to purchase fish, game, or marine aquatic plants or any part of fish, game or aquatic plants, or a nest or egg of fish or game.

AS 16.05.930 (a) This chapter does not prevent the collection or exportation of fish and game, a part of fish or game or a nest or egg of a bird for scientific or education purposes, or for propagation or exhibition purposes under a permit which the department may issue and prescribe the terms thereof.

Interest in permits for propagation purposes is growing. FRED Division wrote 30 finfish permits in 1987, 32 in 1988, 33 in 1989, 38 in 1990, and 80 in 1991. (Mariculture permits were 4 in 1988, 5 in 1989, 8 in 1990, and 9 in 1991). Applications for calendar year 1992 are already being received.

We believe we have satisfied the bulk of the departmental concerns received during initial reviews. We believe "Fish Resource Permits" is a more appropriate title for the attached permit classification scheme. These results are submitted for your review. If you approve of this outline, we will write a department policy to develop permits. The policy will serve as a guideline for writing new regulations.

Attachment

cc: Fred Bergander
John Burke
Jim Cochran
Tom Kron
Denby Lloyd
Steve McGee
Jeri Museth
Norval Netsch
Herman Savikko
Mark Schwan

Fish Resource Permits

Fish Resource Permits (FRP) are issued with the stipulation of (1) no commercial activities, (2) no human consumption, and (3) no sale of the species.

- I. Collecting permits: issued by Commercial Fisheries Division (salt water) and Sport Fish Division (fresh water) to collect species of fish and shellfish from salt and freshwater. The specimens will be killed at the collection site, or caught and released unharmed at the collection site.
- II. Holding permits: issued by Commercial Fisheries Division (salt water) and Sport Fish Division (fresh water) to allow people to exhibit live saltwater or fresh water specimens, or to export live specimens from the state.
- III. Propagation permits: issued by FRED Division (all species) for educational, vocational/research, or scientific purposes.

Further classification of these permits:

- I. Collecting Permit.
 - A. Scientific.
 1. Habitat assessment/manipulation
 2. Resource assessment/impact analysis
 3. Research
 - B. Educational.
- II. Holding Permit (This permit will serve to transport and hold alive species to be contained in aquaria. Species are not to be released. This permit will fulfill the requirements of 5 AAC 41, Transportation, Possession, and Release of Live Fish. Carcasses will be disposed in a manner described by the department. Open aquaria systems will require pathology review, closed systems will not.)
 - A. Exhibition.
 1. Museum
 2. Aquaria
 3. Education
 - B. Scientific.
 1. Research
 2. Export
- III. Propagation Permits.
 - A. Mariculture site suitability (Pathology review required. The permit will fulfill FTP requirements as specified under 5 AAC 41).
 1. Limited to one year, no renewal;
 2. Limited to 10,000 organisms with no release;
 3. No commercial use;
 4. Does not establish any rights to the site.

- B. Scientific/Educational (This permit will serve to transport and hold alive species and will fulfill FTP requirements as specified under 5 AAC 41. Pathology review may be required. Sockeye salmon will not be used for these projects).
1. No release.
 - (a) Less than or equal to 500 eggs or one spawning pair;
 - (b) Wild stock or hatchery eggs;
 - (c) Shellfish and aquatic plant projects related to aquatic farming.
 2. Small number releases.
 - (a) Less than or equal to 500 eggs or one spawning pair;
 - (b) Release at place of origin or a departmental approved landlocked lake required.
- C. Vocational/research
1. Up to 50,000 eggs or equivalent in spawning pairs.
 - (a) Pathology inspection and genetic review may be required;
 - (b) RPT review and recommendations at a regularly scheduled meeting required;
 - (c) If a RPT or fisheries management plan does not exist for the area, the department's three fisheries divisions will review the application. Public participation will be solicited through a newspaper advertisement paid for by applicant;
 - (d) An FTP for brood stock selection is required.
 2. Up to 500,000 eggs of non-smolt species (e.g. pink or chum salmon) or 100,000 eggs of smolt species (e.g. coho, sockeye, or chinook). These amounts should result in less than or equal to 5,000 returning adults.
 - (a) Pathology inspection and genetic review may be required;
 - (b) A management feasibility analysis is required;
 - (c) RPT review and recommendations at a regularly scheduled meeting is required;
 - (d) If a RPT or fisheries management plan does not exist for the area, the department's three fisheries divisions will review the application. Public participation will be addressed through a newspaper advertisement paid for by applicant;
 - (e) An FTP for brood stock selection is required.
 3. Amounts over category C 2, above, require a private nonprofit permit (regulated in 5 AAC 40).

FTPs are used for brood stock selection for planned and permitted projects. The project planning is accomplished with cooperative agreements, hatchery permits and permit alterations, hatchery annual management plans, five-year stocking plan, fish resource permits, etc. Plans must be reviewed and permits approved before an FTP is circulated for review.

Tom Mears

#

* ← P. Program Evaluation Mrs. Dept of Fisheries & Oceans
Toews June lead role in design of review.
Peter Co
Internal Audit & Program Evaluation Branch.
Corporate Rights in Ottawa.
tempn

becoming
private consultant
in 1 wk.

'85 - evaluation of program
conclusion - not enough production & biological
to carry out program evaluation

evaluation framework -

Design optimum framework.

what data is needed.

all of data - intended to provide another review

biological

production

economic benefit.

through a comprehensive review
fourty by facility
starting this year.

production levels not increased in certain areas. gag me
↓ in wild stocks.
interaction between wild & enhanced stocks

review - took @ 1 yr.
completed in March '93.

* program evaluation staff - only 3
work is contracted out.

want external & objective people
university & consulting firms.

federal funds - \$1/2m for program evaluation
carry out 3-4 major projects each year -
mostly for consultants.

STATUS OF THE PRINCE WILLIAM SOUND SALMON FISHERIES PROGRAM

Between the years 1960-1979, the commercial salmon fishery in Prince William Sound landed an average of less than five million fish per year, including about 3.3 million pinks. Salmon catches during the next eight years (1980-1988) averaged nearly 22 million fish including about 18.5 million pinks. In recent years, as wild stocks have again declined, enhanced salmon have sustained the fishery.

There are 842 salmon permit holders who fish commercially in Prince William Sound. Of these, 270 are seiners, 542 are drift gillnetters, and 30 are setnetters. About half of the permit holders claim residency in Prince William Sound, while about 160 and 170 reside on the Kenai Peninsula and in upper Cook Inlet, respectively. Only 126 of the 842 permit holders are nonresidents.

INTEGRATED FISHERIES PLAN

The 1988 salmon fishery in Prince William Sound, and particularly the mixed gear fishery which occurred at the Wally Noerenberg (Esther) Hatchery, placed the issue of salmon allocation before the Board of Fisheries. The Board responded by directing PWSAC to develop an enhanced salmon allocation plan that would fairly and equitably distribute fish among user groups.

Salmon Allocation Policy

In response, PWSAC formed an Allocation Policy Task Force, which, through the public participation process, wrote a policy verifying PWSAC's intent to provide balanced economic opportunity for all user groups.

Fisheries Management and Salmon Allocation Plan

At the same time, the Prince William Sound/Copper River Regional Planning Team (RPT) began a revision of an existing salmon enhancement plan which is intended to integrate enhanced salmon production, allocation, and management.

The RPT followed the intent of PWSAC's Allocation Policy as a planning guideline, and received the support of the ADF&G Commissioner's office for the development of a salmon management plan. The Alaska Board of Fisheries adopted the plan in February, 1991 after hearing supportive testimony by the leadership of all Prince William Sound commercial fishermen's organizations.

PWSAC Production Plan

In June, 1990, the PWSAC Board of Directors approved the formation of a Production Planning Committee (PPC). Using the RPT salmon management plan as a template, the PPC employed an extensive computer model to evaluate the economic opportunities provided by various production options, while being guided by the intent of the Allocation Policy. Options for salmon production include those at PWSAC-operated hatcheries as well as those at hatcheries now operated by the state, but for which PWSAC is expected to soon assume operational and financial obligations.

The salmon production projects recommended in the production plan propose to allocate salmon in a manner that achieves equity between the seine and gillnet fisheries by the late 1990's. At that time the annual value to the commercial harvest will range from about \$130 million upward, depending on which projects are funded.

The production plan has a capital construction price tag of \$35 million for expansion and modification of five hatcheries. In addition, another \$15 million is included for the longer range construction of a new pink and chum salmon hatchery. The plan features seven (7) hatchery expansion projects which are described in tables attached to this report.

Alaska Department of Fish & Game Approvals

Each PWSAC enhancement project will be developed in accordance with knowledge gained through the evaluation of previous projects. This is a necessary procedure, for all salmon enhancement projects in Alaska must be approved by the Commissioner of the Alaska Department of Fish & Game based on favorable review by ADF&G staff members and the appropriate regional planning team.

FUTURE FISHERIES

The integrated fisheries plan for Prince William Sound is an economic development plan which will provide for more than increased numbers of fish. It will also provide for the harvest and processing of those fish over a longer period of time each year through the use of a wider range of salmon stocks in the hatcheries. Some examples are;

- * The gillnet fisheries will operate from mid-May to mid-September on the Copper River Flats and throughout the Coghil and Eshamy Districts. Three hatcheries will produce sockeyes, early-run chums, cohos, and some pink salmon for the gillnet fisheries.

- * The seine fishery is directed on early and late-run pink salmon, will operate from late June to early September, and will be served by four hatcheries.

- * The seine fishery will diversify with the addition of early and late-run chum salmon, many of which will be released in remote, terminal harvest areas, as will early and late-run pink salmon. Terminal harvest areas including those at hatcheries are of particular importance in years when small returns of wild stocks require that fishing not be allowed in the general fishing districts.

Commercial Fisheries Uses, 1991.

The Alaska Department of Fish & Game issued a projection of commercial catches in the Prince William Sound/Copper River salmon fisheries for 1991. PWSAC's contributions to these fisheries, in numbers of fish, are expected to be;

Pink Salmon.....22,960,000
Chum Salmon.....1,255,000
Coho Salmon.....291,000

Non-Commercial Fishery Uses

Sport, subsistence, and personal use fisheries in the Sound and on the Copper River will also improve as they grow in numbers of users and numbers of fish harvested. Chinook, coho, and pink salmon fisheries are either being developed or are proposed for development at Cordova, Valdez, and Whittier. The Copper River and its salmon stocks will become one of the major sport fisheries in Alaska. That and the subsistence and personal use fisheries on that river are already being served by the Gulkana Hatchery, which is capable of increasing its contribution of sockeyes to the river's production.

Salmon Processing Opportunities

The Prince William Sound salmon enhancement program has been designed to serve the economic needs of the region. Last year, PWSAC alone sold to 13 companies who processed those fish at Valdez, Cordova, Seward, Kodiak, Cook Inlet, and Anchorage.

Processors to which PWSAC sold fish in 1990 are;

Chugach Fisheries	Peter Pan Seafoods
Cook Inlet Processing, Inc.	Sea Hawk Seafoods
Great Pacific Seafood	Seward Fisheries
Inlet Salmon	St. Elias Ocean Products
John Cabot Company	Trident Seafood Corp.
Nautilus Fisheries	Wards Cove Packing Company
North Pacific Processors	

Processors at Valdez, Cordova, and Seward have expanded their operations in response to the increased numbers of salmon which are available each year in Prince William Sound. The returns of hatchery fish have removed much of the uncertainty from the fisheries, which is expected to smooth out price fluctuations and draw the interest of processors which deal in other than canned products.

The PWSAC Board Chairman has named a marketing committee for the purpose of finding new sales outlets for cost recovery fish. The PWSAC Board is, for the first time, willing to consider long term sales contracts in addition to the daily competitive bid sale process that has been used in past years.

' Cannon '

3824

assr. and up w/ policy,
not a plan.

RPT - came up w/ plan -

PWS - ^{re-allocate production}
↑ moving fish around
or ↑ fish.

RPT - policy & dept management plan,
everyone agreed on allocation - 50/50,

how urgent it there now -

reel production plan -

re-defining fishing in PWS

and how it will work.
incorporated it into a Phase II of plan.

**PRINCE WILLIAM SOUND
AQUACULTURE CORPORATION**

**ALLOCATION TASK FORCE
REPORT ON
ENHANCED SALMON**

**REPORT NUMBER FIVE
PUBLIC TESTIMONY &
FINAL POLICY RECOMMENDATIONS**

Allocation of Enhanced Salmon

**Synthesis of information gathered at public hearings
and
final policy revisions**

**Report Number Five
Public Testimony & Final Policy Recommendations**

May 1990

**Allocation Task Force on Enhanced Salmon
Prince William Sound Aquaculture Corporation
P.O. Box 1110
Cordova, Alaska 99574
907/424-7511**

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EXECUTIVE SUMMARY

"Report Five, Public Testimony and Final Policy Recommendations", culminates the comprehensive research and public involvement phases of the enhanced salmon allocation policy project. What remains is delivery of the final policy recommendations to the Prince William Sound Aquaculture Corporation's Board of Directors, under whose authority it rests to adopt the allocation policy as corporate policy.

These policy recommendations are intended to provide guidelines to assure that regional enhanced salmon planning and production addresses allocation issues and other issues identified as policy objectives. It has been a long and demanding public process to acquire the comprehensive data and public guidance that forms the essence and validity of this policy.

Those of you that participated in the Allocation Task Force (ATF) interviews, GMA Research survey, public workshops, public hearings, or contributed written or telephonic comment to the ATF, should take pride in your part in the formation of policy which is intended to guide the development of the Area E fishery. This policy represents your general wishes, be you among the commercial, sport, subsistence, personal use, sport charter operators, processors or fishery managers.

It has been a challenging and enriching opportunity to have worked with the ATF and the public users towards defining this policy. You are all to be commended for your willingness to work together in trying to create a win-win approach to resolving fishery issues, as well as your accomplishments in both project process and policy product for Area E. I thank you and the ATF for this opportunity to work on this project and hereby offer these final policy recommendations to Prince William Sound Aquaculture Corporation. I would also like to recognize the Board of Directors for their foresight in accepting the challenge to establish the Allocation Task Force.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ralph Lohse", with a stylized, flowing script.

Allocation Task Force
Ralph Lohse
Chairman

INTRODUCTION

Purpose of this Report

"Public Testimony and Final Policy Recommendations: Report Five", synthesizes information and testimony gathered at the public hearings on the second draft allocation policy. This report also presents the final allocation policy recommendations.

Allocation Project

The Allocation Task Force (ATF) on Enhanced Salmon was seated in September, 1989, by Prince William Sound Aquaculture Corporation (PWSAC) to investigate fishery issues related to enhanced salmon in Area E. Through user input, issues and concerns were identified (**"Report One: Briefing Papers"** and **"Report Two: Trends and Conditions"**). These issues and concerns were addressed in the form of a draft allocation policy (**"Report Three: Policy Objectives and Recommendations"**).

Policy Workshops

The preliminary draft policy was taken to the public for review and comment. Public workshops were held in Homer, Valdez, Cordova and Anchorage, Alaska as well as Bellingham and Seattle, Washington. The comments provided at these workshops were compiled for ATF review and consideration in the process of policy revision. Policy revisions (**"Report Four: Revised Policy Objectives and Recommendations"**) were subsequently issued to all commercial permit holders for review.

Public Hearings

Public hearings were held at the same locations as the public workshops. The hearings provided users the opportunity to formally testify on the second draft allocation policy recommendations. These testimonies were recorded and presented to the ATF in text form for review in preparing the final policy recommendations. Testimony transcripts are available for inspection at the PWSAC offices in Cordova, AK. Written testimony was accepted through May 10th and is also available at PWSAC.

Outcome

In June 1990, final policy recommendations will be presented to the PWSAC Board of Directors for review and possible adoption as corporate policy. Should the policy be adopted, policy recommendations will provide the guidelines for enhanced salmon planning and production to assure equitable user group fishing opportunities as outlined in the policy.

HEARING FINDINGS

Attendance and User Group Affiliation

Six public hearings were held. Location and attendance are listed in Table 1. In addition, those attending the hearings were identified as to their user group affiliation. In total, 65 individuals attended the hearings. Table 1 indicates that 14 individuals identified themselves as being affiliated with users "other" than commercial; 3 individuals gave "no" response. Clearly identified were 48 commercial users, or 74% of the total attendance.

Overall, commercial participation represents approximately 6% of the total commercial user group. A break-down by gear type indicates approximately 10% of the seine group, 5% of the drift gillnet, 7% of the set gillnet and 8% of the dual permit holders attended.

TABLE 1

WORKSHOP FINDINGS

ATTENDANCE AND USER GROUP AFFILIATION

Location	Total	Seine	Drift	Dual	Set	Processor	Other	No Response
=====	=====	=====	=====	=====	=====	=====	=====	=====
Homer	6	5	1	0	0	0	0	0
Valdez	4	3	0	1	0	0	0	0
Cordova	19	1	2	6	0	0	9	1
Anchorage	15	3	5	0	2	0	5	0
Bellingham	11	4	7	0	0	0	0	0
Seattle	10	1	7	0	0	0	0	2
=====	=====	=====	=====	=====	=====	=====	=====	=====
TOTALS	65	17	22	7	2	0	14	3

Testimony Transcripts and Final Revisions

Hearing testimonies were formally recorded and transcribed by a contracted court reporter. The complete text of these testimonies, and written testimonies received through May 10th, were reviewed by the ATF in considering final revisions to the allocation policy.

Testimony transcripts are available for inspection at PWSAC offices and will be made available to the PWSAC Executive Committee along with the final policy recommendations.

Final Policy Recommendations and Objectives

Based on testimony and draft policy review, the final policy recommendations are provided below.

FINAL POLICY RECOMMENDATIONS

A. INTRODUCTION

This allocation policy is a corporate policy. The Prince William Sound Aquaculture Corporation allocation policy is not a Board of Fisheries policy, or an authorizing statement from, or for, the Alaska Department of Fish & Game (ADF&G). PWSAC is not a government agency engaging in state action.

This policy is production oriented. It will be used to guide PWSAC into the future for Area E enhanced salmon production. This policy does not prescribe any actions to provide immediate short term resolution to user concerns about, or perceptions of, enhanced salmon allocations or fishing opportunity.

PWSAC is a private nonprofit corporation representing users of the regional enhanced salmon resources. Although PWSAC is not a government agency, annual PWSAC production and management plans, once reviewed and approved by the elected PWSAC Board, must be forwarded for review to ADF&G - Cordova, and the Area E Regional Planning Team (RPT), which recommend actions to be taken by the Commissioner.

B. POLICY INTENT

It is the intent of the PWSAC allocation policy to state a clear position on the allocation of Area E enhanced* salmon. In so doing, the policy provides goals which give future direction to PWSAC in developing and implementing programs.

Flexibility is crucial. Variables within the natural environment, market place and political and regulatory arenas may affect the ability to implement and manage to achieve specific goals. Since a responsibility of the elected Board of PWSAC is to insure policy compliance, deviations from long term projections will be assessed and may trigger planning and production responses. PWSAC will, if necessary, propose to the Board of Fisheries regulatory changes to fulfill the policy.

It is emphasized that all PWSAC allocation adjustments will be achieved at the planning and production phases and will not lead to in-season fishery adjustments.

* **Enhanced salmon has replaced hatchery salmon within the policy recommendations. Due to user response supporting salmon rehabilitation projects in addition to hatchery production, the ATF definition of equating enhanced salmon to hatchery salmon is no longer valid. Enhanced salmon is now to be defined as: Salmon resulting from hatchery production and rehabilitation projects.**

C. POLICY OBJECTIVES

REDUCE CONGESTION IN THE FISHERY. With increased opportunity and reasonable diversification, harvesters will have more options over area and time to conduct fishing activities, thereby reducing congestion, interference and conflict.

MINIMIZE IMPACT ON WILD STOCKS. It is vital to the fishery to maintain the genetic integrity and viability of the wild stocks. ADF&G is recognized and supported for its mandated authority to manage for wild stock escapement. PWSAC will encourage protection of the fishery by minimizing aquaculture's impact on wildstocks, and will continue to interact with agencies, etc., and the holders of real property for the purpose of protecting the natural environment.

PROMOTE HIGHEST POSSIBLE FISH QUALITY. Management strategies and fishery plan implementation will be integrated to provide opportunities to harvest the highest possible quality fish. It is recognized there is responsibility in fishery planning and fishery management to protect and develop the resource. There is also concurrent responsibility to assure access to the resource and to every reasonable degree assure that the resource is not diminished in quality due to management strategies or planning.

MAXIMIZE PRODUCTION. Enhancement opportunities will be identified and implemented to achieve policy goal. In addition, planning and management will pursue a course of fisheries development to increase the enhanced production of the region and expand the fisheries opportunity. In so doing, there will be proportional increases between the users in compliance with policy. The intended recipient of proposed production will be clearly designated.

MINIMIZE IMPACT TO HISTORIC AND TRADITIONAL FISHERIES. PWSAC will promote and reasonably plan enhancement activities that pose minimal disruption to historic and traditional fisheries on wildstocks that have existed since statehood.

DEVELOP AND SUPPORT IMPLEMENTATION OF STRATEGIES TO ACHIEVE POLICY GOAL. PWSAC will encourage an integration of allocation, production and management planning to maximize the positive benefits of any implementation schemes. Planning will be promoted to identify, develop and implement strategies to assure policy compliance and fisheries development. Diversification and expansion of fishing opportunity will be developed through strategies including, but not limited to, remote releases, species diversification and run timing selection. Policy goals and intents will be achieved through application of ongoing and future enhancement activities. PWSAC will encourage cooperation of the Alaska Department of Fish and Game and the Regional Planning Team (RPT) to assure policy compliance, and as necessary, increase management and enforcement functions and solicit user input.

SUPPORT SUBSISTENCE, SPORT AND PERSONAL USE NEEDS. PWSAC will continue to respond to subsistence and personal use needs as well as recreational opportunities within the enhanced salmon fisheries. PWSAC will provide information concerning the enhancement efforts in Area E and the significant financial contributions to the program made by the commercial fleet.

ENCOURAGE AND SUPPORT RESEARCH. Continued development of the fishery, preservation of wild stocks, the success of proposed projects and the protection of habitat rest on a foundation of knowledge and understanding. To acquire the tools critical to manage for local and region-wide enhancement, PWSAC will support research.

RECOGNIZE HEALTHY COMPETITION. Part of the mystique of fishing is the opportunity to compete, succeed, or fail in the enterprise. Healthy competition will be maintained to continue the flavor and spirit vital to a productive fishery and sustained life style.

D. ALLOCATION POLICY

It is the policy of PWSAC to equitably allocate enhanced salmon resources in Area E among all users through long-term planning, production and dedication of financial and human resources.

Subsistence, sport and personal use needs will continue to be addressed within planning and production strategies.

Pertaining to commercial fisheries, enhanced salmon allocations will be based upon the long-term historic economic balance that existed since statehood and prior to significant hatchery returns, as determined by ADF&G ex-vessel value records.

This balance will be utilized in planning and production as a long term approximate projection goal anticipated to achieve equitable value in returning salmon to drift gillnetters, seiners and set gillnetters; excluding brood stock and cost recovery salmon.

**PRINCE WILLIAM SOUND
SALMON MANAGEMENT PLAN

PROPOSAL REPORT**

FEBRUARY 9, 1991

PREFACE

This document culminates a task which originated with the Alaska Board of Fisheries in December of 1988. The task was issued following many hours of public testimony concerning fishery proposals addressing the allocation of hatchery fish and gear group conflict in Western Prince William Sound. Rather than take a shot in the dark the Board of Fish opted to take no action on any of the proposals. However, the Board did direct the fishing community in Prince William Sound to solve the problem by the next Board of Fisheries meeting or they (the Board) would solve the problem for us. Most directives of this nature generally mean "you will be better off solving your own problems because if we have to do it you probably won't like what we do".

The fishing community rose to the occasion and we now have components of an integrated fisheries plan that includes allocation, production and management. No one group, agency, entity or individual is solely responsible for any one component. Hatchery operators (Prince William Sound Aquaculture Corporation), the Alaska Department of Fish and Game, fishing gear group organizations, and individual fishermen have all contributed to the formulation of this public policy.

We (Prince William Sound/Copper River Regional Planning Team) went to great extremes to gather input from all commercial fisheries permit holders for development of the "PLAN" as the fisheries management plan came to be known. We are sure that many of the people who provided input felt that we totally ignored what they had to say. Everyone who testified or provided written testimony was heard. In the search for middle ground of a highly polarized issue it is impossible to address all concerns and heed all suggestions. We, the Regional Planning Team, did the best job we could to achieve a fair and equitable compromise to the issues at hand. Other issues arose during this process which we chose not to address because we felt they did not fall into the scope of our task. We encouraged people concerned with those issues to pursue their resolution.

This report is intended to document our path for development of this proposal. It is important that everyone interested in the Prince William Sound Management and Salmon Enhancement Allocation Plan acquaint themselves with the development process we followed as well as the proposal itself. It is our belief that this proposal is the best compromise plan we could develop which is acceptable to the majority of all users.

Prince William Sound/Copper River Regional Planning Team.

Members:

ADF&G	Larry Peltz, Chair; F.R.E.D. Division Ken Florey, Commercial Fisheries Division Tim McDaniel, F.R.E.D. Division Kevin Delaney, Sport Fish Division
PWSAC	John McMullen, PWSAC Board appointee to RPT Armin Koernig, PWSAC Board appointee to RPT Tom Namtvedt, PWSAC Board appointee to RPT
Staff:	Howard Ferren, PWSAC Planner Shelley Tennant, Assistant

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**PRINCE WILLIAM SOUND/COPPER RIVER
REGIONAL PLANNING TEAM REPORT**

MANAGEMENT PLAN

1.00 INTRODUCTION

Regional planning teams (RPT) are established under Alaska State Regulation 5 AAC 40.300 "...for the primary purpose of developing comprehensive salmon plans for various regions of the state." Specific responsibilities outlined under 5 AAC 40.340 call for regional planning teams to:

"...prepare a regional comprehensive salmon plan, for the appropriate region, to rehabilitate natural stocks and supplement natural production, with provisions for both public and private nonprofit hatcheries. Each regional planning team shall consider the needs of all user groups and ensure that the public has had opportunity to participate in the development of the comprehensive salmon plan. Each regional comprehensive plan must define regional production goals by species, area, and time."

The Prince William Sound / Copper River Regional Planning Team (PWS/CR RPT) has prepared this report and attached management plan proposal as a specific assignment under direction of the Commissioner of the Alaska Department of Fish and Game (**APPENDIX 1**). The management plan will become a specific chapter within the Phase 3 PWS/CR Comprehensive Salmon Plan.

Historically, RPT regional comprehensive plans focused on production opportunities. Both the 20 Year Plan and the 5 Year Plan (phase 1 and 2 planning) produced by the PWS/CR RPT presented salmon production opportunities in Prince William Sound and the Copper River drainage basin. Fishery and enhancement objectives established in the 20 and 5 Year Plans have either been achieved or modified.

Reactions at the 1989 Board of Fisheries meeting held in Cordova indicated the salmon fishery had reached a new dimension of development. It was obvious that for the fishery to fully develop, user conflicts over enhanced fish allocations would have to be addressed.

The Board of Fisheries Chair requested that Prince William Sound Aquaculture Corporation (PWSAC), as regional association, develop an "enhanced salmon allocation and harvest management plan" as a foundation for enhanced salmon allocations and a basis for regulatory decisions. Responding to this request, PWSAC developed a corporate allocation policy. This policy was also formally adopted by the PWS/CR RPT and was recommended by PWSAC to the Board of Fisheries to be utilized in their decisions concerning salmon fishery regulations. PWSAC also produced a corporate production plan as directed by the policy which calls for long term planning and production as a means to achieve the allocation balance supported by users of the salmon resource.

In conjunction with the allocation policy and production plan, PWSAC requested the Commissioner consider permitting the PWS/CR RPT undertake this special assignment focused on management planning. This step was necessary for without a long term stable and planned management strategy, the PWSAC production plan could not be implemented to its fullest degree. Hence the goals and objectives mandated by the allocation policy and production plan could not be achieved.

The integration of production, allocation and management was viewed as essential to achieve allocation and production goals and to fulfill fishery development objectives. Specific objectives targeted by the policy and RPT comprehensive plan include:

- * wild stock management;
- * reduced congestion;
- * minimized impacts to historical and traditional fisheries;
- * high quality production, and
- * enhancement of salmon fisheries in underdeveloped or underutilized area and time.

It was with this vision for an integrated plan and comprehensive fishery that the PWS/CR RPT accepted this challenge. This report outlines the steps taken to assure development of the management plan proposed to integrate with production and allocation plans. Adoption of this plan will thereby provide management the regulatory guidelines for managing the fishery in support of the production and allocation objectives.

2.00 WORKPLAN

A seven (7) phase workplan was prepared to carry the project through planning concept to formal proposal and presentation to the Board of Fisheries (February 1991, Cordova, AK.). The project phases included:

1. Orientation to planning process;
2. Develop purpose and goals;
3. Develop data base;
4. Revise draft management plan;
5. Revise second draft;
6. Prepare final draft;
7. Present plan to PWSAC Board of Directors;
8. Present plan to Board of Fisheries.

Throughout the project public opinion was the guiding force for plan development and revision. When concepts of the plan were introduced to the public at the September 1990 PWS/CR RPT meeting in Cordova, public comment helped formulate the project goal.

3.00 GOAL

The integrated planning concept was brought to the floor at the September 20/21 PWS/CR RPT meeting in conjunction with allocation policy, management recommendations and public process discussions. The goal that was formulated and adopted by the PWS/CR RPT states:

"The Prince William Sound / Copper River Regional Planning Team will have developed with assistance from the users of the PWS/CR salmon fisheries, a management plan proposal for PWS for presentation to the Board of Fisheries in February, 1991, so that the BOF will be guided to adopt regulations that will reduce user conflict and allow for the orderly development of salmon enhancement planning and production within the guidelines of the allocation policy."

It is this goal that lead the RPT to completion of the proposed management plan.

4.00 MANAGEMENT PLAN CONCEPTS

Enhanced salmon production in PWS has been remarkably successful. Yet, allocation policy and production plans require expansion of the enhancement effort.

To assure a management environment of stable, long term regulation while providing opportunities for hatchery operations to meet allocation policy objectives, specific PWS *management concepts* are required.

The first formal draft issued by the PWS/CR RPT and publicly distributed outlined these concepts. Specific regulatory language focused on:

1. Management priority for wild stocks.
2. Creation of a Perry Island Subdistrict.
3. Establishment of a migration corridor through the Southwest District prior to mid July for salmon stocks allocated to the gillnet fisheries in the Eshamy and Coghill Districts.
4. Closure of the Coghill District to seining prior to mid July to provide for the allocation of wild and enhanced Coghill sockeyes and enhanced early chums to the drift and set gillnet fisheries.
5. Management for wild or enhanced pink and chum salmon from mid July to the end of the season in the general seine districts and the Coghill District, except that the Esther Subdistrict of the Coghill District will close to seining at the end of August to provide for the allocation of enhanced cohos to the drift gillnet fishery.

5.00 MEETINGS AND PUBLIC PROCESS

During the September 20/21, 1990 PWS/CR RPT meeting held in Cordova, RPT members outlined and discussed with the public the management planning goal and draft concepts. Subsequent RPT meetings were scheduled and a public participation process outlined to secure user input and direct the course of plan development.

Following this first meeting, all Area E commercial salmon permit holders were mailed the draft plan. The Commercial Fisheries Entry Commission (CFEC) mail list was used for distributing the draft. Each mailing also identified subsequent RPT meetings scheduled to discuss the plan. Following each draft revision, a complete mailing was once again conducted.

To assure a broad awareness of the process and developing plan, revisions were also issued to advisory committees, representatives of major PWS/CR communities involved in the PWS salmon industry, fishing organizations, legislators and native organizations (**APPENDIX 2**).

Four (4) additional PWS/CR RPT meetings were scheduled to discuss and revise the proposed management plan. Attendance, user group representation and numbers of users testifying are provided in **APPENDIX 3**.

User groups and advisory committees throughout the region were notified of the process and project. These groups were encouraged to establish meetings to discuss the proposed plan. If meetings were to be scheduled, the PWS/CR RPT requested invitation to allow timely assignment of one or more RPT member(s) to attend the meeting, discuss the plan and bring back group comments concerning the plan.

5.10 SCHEDULED PWS/CR RPT MEETINGS

Five (5) PWS/CR RPT meetings were scheduled between September, 1990, and January, 1991. Meetings were scheduled to coincide with the close of the salmon fishing season, provide ample time between meetings for users to receive mailed drafts and organize travel to subsequent RPT meetings, coordinate around holidays and target the Pacific Marine Expo dates for scheduled RPT meetings in Seattle. The January RPT meeting was scheduled to prepare the final proposal language and distribute it to users well in advance of the Board of Fisheries meeting expected to begin in Cordova on February 9, 1991.

In total, the PWS/CR RPT listen to 81 individuals testifying either on their own behalf or as representatives of fishermen's organizations. The RPT also reviewed 73 written statements received during the course of the project.

Culminating the January 15/16 meeting was a joint presentation by four (4) representatives from fishermen's organizations (**TABLE 1**). This joint testimony provided negotiated positions and language presented in the final plan proposal (**APPENDIX 4**).

TABLE 1

<u>Fishermen Organization</u>	<u>Permit Holders Represented</u>
CDFU SEINERS	81
CDFU GILLNETTERS	194
PW ALLIANCE	170
PWS SEINERS	130

5.20 USER GROUP MEETINGS

In addition to regularly scheduled RPT meetings, RPT members emphasized to user groups that individual RPT members would commit to attending user group meetings if possible, to discuss the draft plan and carry back to the RPT any comments pertaining to plan concepts and/or language. As a result of this commitment, RPT members were able to attend the following meetings:

1. PWS Seiners Association, Cascade Chapter (Sept)
2. CDFU Seine Division (October)
3. CDFU Gillnet Division (October)
4. PWS Setnetters Association (November)

5.30 ADVISORY COMMITTEE MEETINGS

Throughout the planning project advisory committees were informed of the public process and draft plan content. Each draft revision was forwarded to advisory committee representatives. Advisory committees contacted include the Copper Basin, Copper River/PWS, Paxon, Seward, Tok Cutoff/Nebesna Road, Valdez and Whittier Advisory Committees.

During the course of the project RPT representatives were able to meet with the Cordova Advisory Committee (October, January) to discuss the draft plan.

6.00 REVISIONS

Four drafts of the proposed plan were produced as a result of public testimony and written comments. Revisions to the plan adopted at the January RPT meeting were issued as the "Final Proposal" (**APPENDIX 4**).

7.00 FINAL PROPOSAL

The final plan proposal represents a long term commitment to the PWS salmon fishery by users, producers, planners and managers. The essence of the original

plan concepts are embodied in the western corridor, continued management for wild stocks and negotiated gear groups positions on area and time management.

In context with the regional allocation policy and production plan, the management plan proposal represents the management framework necessary to implement allocation and production strategies.

The public process through which this plan was developed is highlighted for it exemplifies the willingness with which various interest groups are prepared to come to the negotiation table for the long term benefit of the Area E salmon fishery.

For those who have participated there has been a growing understanding and commitment to work towards an integrated fishery. Goals and strategies put in place for allocation, production and management must be designed to achieve the comprehensive effect of fisheries development. Conflict will continue in the presence of indecisiveness and lack of comprehensive and integrated planning.

Users of the resource have worked for 1-1/2 years to tackle an agreement for allocating salmon resources and producing the additional resources necessary to meet the economic and allocation needs of the fishery. This last element, the **MANAGEMENT PLAN**, is required to provide the remaining tool necessary to achieve the regional production and allocation goals.

APPENDIX 1
COMMISSIONER'S LETTER AUTHORIZING ACTION

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

OFFICE OF THE COMMISSIONER

STEVE COWPER, GOVERNOR

P.O. BOX 3-2000
JUNEAU, ALASKA 99802-2000
PHONE: (907) 465-4100

September 13, 1990

Larry Peltz, Chairman
PWS/CR RPT
Box 669
Cordova, AK 99574

Dear Mr. Peltz:

Larry

E.J. Cheshier, Chairman of the Board of the Prince William Sound Aquaculture Corporation (PWSAC), has requested my support and approval to have the Prince William Sound/Copper River Regional Planning Team (PWS/CR RPT) engage in a special project to draft an integrated fisheries management plan covering salmon production, management, and allocation.

Early in 1989, the Alaska Board of Fisheries requested that PWSAC develop an "allocation and harvest management plan" to guide the corporation's program. PWSAC responded by formulating a corporate allocation policy. PWSAC now has initiated a production planning effort that is guided by the allocation policy, both of which must be integrated with a fisheries management plan for Prince William Sound.

The charter for the RPT's includes the authority both for the preparation of a comprehensive salmon enhancement plan for Prince William Sound and the Copper River and the subsequent review of enhancement programs consistent with the plan in the region. In this particular case where planning needs are particularly significant and as requested by PWSAC, I do find that it is appropriate for the PWS/CR RPT to undertake this special purpose planning effort. Guided by public participation, the PWSAC and ADF&G membership on the RPT can contribute to the fulfillment of the Alaska Board of Fisheries' request for an allocation and management plan. The integrated plan which results from the efforts of the RPT will form the basis for a proposal to the Board of Fisheries during the upcoming regulatory meetings. This integrated plan, if adopted by the board, can also provide the basis for an update to the PWS Comprehensive Salmon Plan. Once this update is completed and approved by me, the RPT will be able to use it in reviewing pending enhancement applications.

Larry Peltz, Chairman

- 2 -

September 13, 1990

The PWS/CR RPT may move forward with the assurance that this office supports the integrated planning process in Prince William Sound. This effort satisfies the intent of the Board of Fisheries that PWSAC, the ADF&G, and user groups share in establishment of a production, allocation, and harvest management plan for that region.

Sincerely,



Don W. Collinsworth
Commissioner

APPENDIX 2

PWS/CR RPT MAILING LISTS 1, 2 & 3 (10 OCT 90)

MAILING LIST 1: RECEIVES AGENDAS, MINUTES AND HANDOUTS. (PLEASE BRING PERTINENT DOCUMENTS TO MEETINGS. TO LIMIT EXPENDITURES, DUPLICATES WILL NOT BE PROVIDED.)
ADF&G/PWSAC members, staff, alternates and hatchery managers

Carter, Tony
Clarke, Dave
Delaney, Kevin
Ferren, Howard
Florey, Ken
Henderson, Tom
Jensen, Herb
Koernig, Armin
McDaniel, Tim
McMullen, John
Namtvedt, Tom
Pellissier, Rene
Peltz, Larry
Roberson, Ken
Somerville, Mark
Tennant, Shelley
VanBrocklin, Bob
Whitmore, Craig

MAILING LIST 2: RECEIVES AGENDAS AND MINUTES
Ex Officio Members

Brady, James
Madden, Jerry
McCollum, Paul - VFDA
Schmid, David - USFS
Stratton, Lee - ADF&G
Suzumoto, Bruce - PWSAC
Wedemeyer, Kate - USFS

MAILING LIST 3: RECEIVES AGENDAS
Organizations and Individuals

ADF&G ADVISORY COMMITTEES:

Copper Basin AC – Don Horrell
Copper River/PWS AC – Mike Glasen
Paxson AC – Will Luebke
Seward AC – Willard Dunham
Tok Cutoff/Nabesna Road AC – Bill Ellis
Valdez AC – Roy Alley
Whittier AC – Bo Kendall

MAILING LIST 3 CON'T.

CITIES: (MAYORS AND CITY MANAGERS)

Cordova: Bob VanBrocklin, Nancy Gross
Glennallen: (Chamber of Commerce President) Donna Tollman
Seward: William Noll, Darryl Schaefermeyer
Valdez: Lynn Chrystal, Doug Griffin
Whittier: Georgia Buck, Roger Jenkins

FISHING ORGANIZATIONS:

CAMA -- Bob Blake
CDFU -- Jack Lamb
Chitna Dipnetters -- Byron Haley
Chugach Alaska Fisheries -- Steve Meuter
Cordova Sporting Club -- Ed Zeine
CRFC -- Bill Lindow and James Schomer
North Pacific Processors -- Ken Roemhildt
Peter Pan Seafoods -- Jim Poor
PW Alliance -- Mike Heimbuch (KENAI)
 Dan Lowell (ANCH)
 Kathy Halgren (SEA)
 Steve Little (OR)
 Kent Herschleb (BLLNGHM)
 John Bocci (CDV)
PWS Seiners Assn. -- Dave Clarke
PWS Setnetters Assn. -- Mike Owecke
Sea Hawk Seafoods -- Raymond Cesarini
Seward Fisheries -- Jeff Poole
St. Elias -- Bill Terhar

INDIVIDUALS:

Vining, Len
Woodruff, John

LEGISLATORS:

Rep. Curt Menard
Rep. Gene Kubina
Senator Jay Kerttula
Senator Mike Szymanski

ORGANIZATIONS

AHTNA -- Ken Johns
Blue Star, Inc. - Bill Gleason
Chenega Village Council -- Charles Selanoff
Chugach Alaska Corp. -- Michael Chittick
Cook Inlet RPT -- Tom Walker
Copper River Native Assn. -- Les Southerland
Eyak -- Steve Renberg
Tatitlek Village Council -- Gary Kompkoff

APPENDIX 3

PWS/CR RPT MEETING ATTENDANCE

Meeting Date	User Group					# Testified	Total Signed-in	Written Testimony
	Seine	Drift Gillnet	Dual Permit	Set Gillnet	Other			
Sept. 20/21	* no sign-in sheets were provided at this regular meeting.							
Oct. 24/25/26	6	5	3	2	4	16	20	30
Nov. 15/16	4	6	4	0	3	14	17	17
Nov. 30, Dec. 1	33	44	7	0	6	43	98	--
Jan. 15/16	* See 1/ below.					8	* 1/	26
TOTAL	43	55	14	2	13	81	135	73

1/ Sign-up sheets for this meeting were incomplete. A visual count of the audience indicated 24 attendees.

APPENDIX 4

PROPOSAL

5 AAC 24.3xx. PRINCE WILLIAM SOUND MANAGEMENT AND SALMON ENHANCEMENT ALLOCATION PLAN.

Preamble

Enhanced production of pink salmon contributes as much as 90% of the commercial catch in Prince William Sound. Hatchery production for other salmon species may dramatically increase in the near future with the result being these species may be dominated by enhanced returns as well.

The success of the salmon enhancement program has not been without costs. Historic fisheries have been altered to avoid the overharvest of wild stocks of salmon while attempting to catch large hatchery returns. Conflicts have developed between gear groups by having to fish together in small, crowded terminal harvest areas. Enhancement planning has also suffered due to lack of a management plan that will define a framework for future allocations of enhanced salmon.

The Board recognizes the need to adopt an allocation plan giving clear direction to fishery managers and enhancement planners that will:

- MINIMIZE IMPACTS ON WILD STOCKS
- MINIMIZE IMPACTS TO HISTORIC AND TRADITIONAL FISHERIES WHILE MAINTAINING HISTORIC HARVEST VALUE PERCENTAGES
- PROMOTE THE HIGHEST POSSIBLE QUALITY FISH
- REDUCE CONGESTION IN THE FISHERIES
- MAINTAIN THE DIVERSITY OF USES OF THE SALMON RESOURCES IN PWS INCLUDING SUBSISTENCE, SPORT AND PERSONAL USE

Intent

With these objectives in mind, it is the intent of the Board of Fisheries to allocate the natural and enhanced salmon stocks in Prince William Sound in such a manner as to maintain the long term historic balance between competing commercial users that existed since statehood and prior to any significant production from enhancement programs. It is also the Board's intent to maintain to the maximum extent possible the historic fishing areas and gear types and not allow development of new gear types in non-traditional areas.

To guide future production planning in P.W.S., the Board endorses the ALLOCATION POLICY adopted by PWSAC in May of 1990 and directs both the Department and PNP operators to plan their enhancement production using the policy as a guideline.

By implementation of this plan, the Board recognizes and preserves pink salmon as the primary species of importance to the purse seine gear type in Prince William Sound. It is the intent of this plan to provide an opportunity for development of enhanced returns of early timing chum, sockeye and chinook salmon to the gill net districts of Prince William Sound for the explicit benefit of the gill net gear users. It is also the intent of this plan to provide an opportunity for development of coho salmon returns after August 25th for the gill net fleet. The Board recognizes that enhanced species returning to the gill net districts during the primary seine fishery in western Prince William Sound, (July 18 to September 1st), will be subjected to considerable seine interception and can not be explicitly targeted to the gill net fleet.

The Board recognizes that wild stock management has the highest priority in determination of fishery openings in the general waters of Prince William Sound.

District Management

It is the intent of the Board of Fisheries that the commercial fisheries in Prince William Sound be managed in the following manner:

- 1) EASTERN, NORTHERN (except Perry Island Subdistrict), SOUTHEASTERN, NORTHWESTERN, and MONTAGUE DISTRICTS:
 - a. Shall be managed by emergency order for the purse seine fishery with season openings and closures based on traditional management of wild and enhanced stocks. The Board recognizes the importance of flexible management in these areas to protect wild stocks, maximize utilization of hatchery stocks and promote fish quality.
- 2) SOUTHWESTERN DISTRICT:
 - a. Prior to July 18: The Southwest District will be closed. During this time period this area will be used as a migratory corridor to permit stocks moving through these waters to reach the gill net fisheries in the Eshamy and Coghill Districts.
 - b. Seines may be operated in the Southwest District on or after July 18 during emergency order fishing periods based upon the strength of the wild pink salmon stocks. The Southwestern District is recognized as containing a mixture of wild and enhanced stocks, many of which are destined for other areas in the Sound. The Department will manage the general waters of this district based upon its assessment of the prevailing wild stock management concerns.
- 3) PERRY ISLAND SUBDISTRICT of the Northern District:
 - a. Prior to July 21: The Perry Island Subdistrict will be closed. During this time period this area will be used as a migratory corridor to permit stocks moving through these waters to reach the gill net fisheries in the Eshamy and Coghill Districts.
 - b. Seines may be operated in the Perry Island Subdistrict on or after July 21 during emergency order fishing periods based upon the strength of the wild pink salmon stocks. The Perry Island Subdistrict is recognized as containing a mixture of wild and enhanced stocks, many of which are destined for other areas in the Sound. The Department will manage the general waters of this subdistrict based upon its assessment of the prevailing wild stock management concerns.
 - c. The Perry Island Subdistrict of the Northern District shall be closed concurrently with the Esther Subdistrict when attempting to achieve corporate escapement goals and/or brood stock needs at the Wally Noerenberg Hatchery.
- 4) ESHAMY DISTRICT:
 - a. Shall be managed by emergency order for the gill net fisheries based on the surplus of wild and/or enhanced stocks returning to this district.
- 5) COGHILL DISTRICT:
 - a. During the salmon season drift gill nets may be operated during all fishing periods established by emergency order in all or any portion of the district.
 - b. Commencing on July 21: purse seines may be operated during fishing periods established by emergency order in all or any portion of the district.
 - c. Commencing on August 25: purse seines may only be operated in the waters of Lake and Quillian Bays during emergency order openings.
 - d. Commencing on September 5: purse seines may only be operated in the waters of Lake and Quillian Bays if the harvestable surplus in this area is predominately pink salmon.

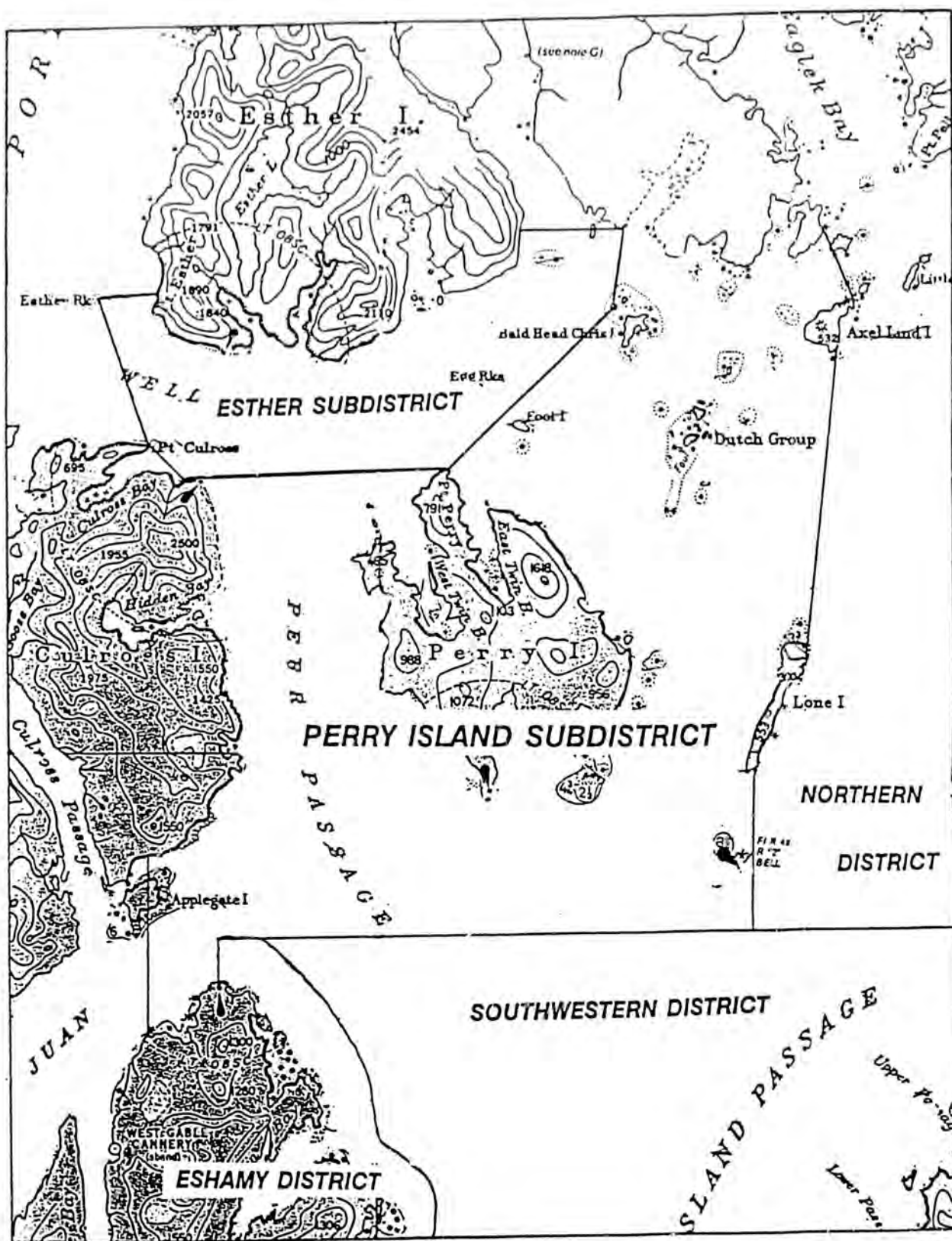
5 AAC 24.200. FISHING DISTRICTS, SUBDISTRICTS AND SECTIONS.

(d) Northern District: waters of the northern mainland shore from Point Freemantle to a point at the southern entrance of Esther Passage at 60°49'22" N. lat., 147°51' W. long., and waters outside of the Coghill district and along the eastern shore of Culross Island and east of a line from a point on the southern shore of Culross Island at 148°8.5' W. Long., N. lat. to a point approximately 1.5 miles west of Nellie Juan Light at 148°8.5' W. Long., N. lat. to the Eshamy District Boundary at Nellie Juan Light, including Glacier Island, Fairmount Island, Perry Island and adjacent islands and the Naked Island group, excluding waters of Unakwik Inlet north of 61°01' N. lat.

(1) Perry Island Subdistrict: all waters of the district west of a line from the western entrance to Eaglek Bay at N. lat. W. Long., to the northern most tip of Axel Lind Island and from the southern most tip of Axel Lind Island to the northern tip of Lone Island, and from the southern tip of Lone Island to the northern tip of the Eshamy District.

(g) Northwestern Districts: all waters south and west of a line from Point Pigot (60°48'15" N. lat., 148°20'47" W. long.) to Point Culross (60°45'37" N. lat., 148°08'37" W. long.) to a point west of Culross Light at 60°45'12" N. lat., 148°07'45" W. long. and from a point on the southern end of Culross Island at N. lat., W. long. to a point approximately 1.5 miles west of Nellie Juan Light at 148°8.5' W. Long., N. lat. to the Eshamy District Boundary at the light on the south shore of the entrance to Port Nellie Juan, including ~~all waters within one nautical mile of~~ Culross Passage [Island] and all waters of Culross Bay;

5 AAC 24.368. WALLY NOERENBERG (ESTHER ISLAND) HATCHERY MANAGEMENT PLAN. (a) The department, in consultation with the hatchery operator, shall manage the Esther Subdistrict and the Perry Island Subdistrict to achieve the corporation's escapement goal for the Wally Noerenberg salmon hatchery.



Proposed Perry Island Subdistrict - October 30, 1990

Attached to the following Fish-Rap

Good info for
Fisheries Management
& PNP groups

May want to ask all the
Aqua. Associations in state to put
Fisheries Committee on their newsletter mailing
list for next 6 or 8 mos.



Fish-Rap

Volume IX, No. 1

Spring 1991

LEONARD W. PETERSON

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Two-Year Effort Begins

Task Force to Develop Allocation Plan

They've been given an enormous task, and they don't know where the money is going to come from.

But Dave Pitcher says they're going to give it their best shot.

Pitcher, a Ketchikan troller, is the chairman of a six-member task force that is supposed to come up with an allocation plan for enhanced salmon in Southeast Alaska. The committee includes three representatives from both NSRAA and its sister organization, the Southern Southeast Aquaculture Association.

The Alaska Board of Fish, during its February-March meetings at the Baranof Hotel in Juneau, asked the two Southeast aquaculture associations to try to come up with an allocation plan by March of 1993.

The hope is that a proposal can be crafted which would equitably divide hatchery-reared salmon among trollers, gillnetters and seiners — since each of the three groups has two members on the task force — and thus solve conflicts about who should get to catch which fish.

The Board of Fish made the assignment this winter after adopting a similar plan that was developed in Prince William Sound, which was initiated by the Prince William Sound Aquaculture Corporation.

However, a number of officials have conceded, the task could be more difficult in Southeast, since it involves two associations rather than one, and because there are also a number of hatcheries run by other government or private entities. By contrast, PWSAC currently runs all but three of the hatcheries in its region, and by the end of the year will take over one of those, a state-owned facility. Also, in Southeast, fish migration patterns and traditional fishing practices are considered more complex.

Members of the task force from NSRAA include troller Earle Johnson of Sitka, gillnetter Jim Becker of Juneau, and seiner Rick McCay from Petersburg. SSRAA representatives include Pitcher, gillnetter Rich Andrews of Ketchikan, and seiner Bryan Benkman from Seattle.

The group held its first meeting at the NSRAA office on March 29.

"I think the people were willing to tackle the job," said Pitcher afterward. "I'm not sure when we all sat down at the meeting that we realized how big of a job it could be."

"I felt we made a little bit of progress, but we sure have a long way to go. It was a good beginning, but that's all it was — a beginning."

At that meeting, one of the first orders of business was election of a chairman. Then the panel received a presentation from Howard Ferren, the planner for PWSAC, detailing how that group went about tackling the



Members of a joint NSRAA-SSRAA enhanced salmon allocation task force, which met for the first time this spring, are, front row, from left,

Dave Pitcher, Earle Johnson and Bryan Benkman. Back row: Rick McCay, Jim Becker and Rich Andrews.

job.

He pointed out that PWSAC and the Regional Planning Team ended up developing three documents: an allocation plan, a production plan and a management plan, all of which have to work together. There were scores of meetings and public hearings, and PWSAC alone spent more than \$200,000.

Said NSRAA General Manager Peter Esquiro, who with SSRAA General Manager Don Amend, attended the first meeting:

"I think that there is a good chance this group can come up with some kind of a plan. It's going to take a whole lot of talking and discussion. There are a lot of things that have to be agreed to."

For instance, said Esquiro, the committee has to agree on which data to use, time periods and future fish production.

"There's a lot of elements that go into this that the group has to iron out."

The Southeast task force asked NSRAA and SSRAA personnel to be-

gin collecting data on actual and projected fish returns for all facilities and projects in Southeast, as well as developing a draft work schedule and budget by the next meeting. The committee will meet again in Ketchikan on Sept. 26, when everyone is done fishing for the summer. The exact time and location will be announced at a later date.

Esquiro related that he and Amend have already written a number of letters, asking for the cooperation of the commissioner of the Alaska Department of Fish and Game, the U.S. Forest Service and director of the state's Division of Fisheries Research and Enhancement. They have also written to the privately operated hatcheries in the region, and have invited them to choose one non-voting member to the allocation task force.

Esquiro said he and Amend plan to meet in May to develop a draft work schedule by which the task force would attempt to complete its work, as well as a proposed budget.

The NSRAA general manager said he believes that the two aquaculture

associations will have to jointly contract with somebody to coordinate the task force's work.

"I think they found out in Prince William Sound this is pretty much a full-time effort for awhile for somebody," said Esquiro. PWSAC's Ferren reported that after he was hired, he worked exclusively on the Prince William Sound plan for the first year.

The task force has made a request for legislative funding, but may be out of luck this year. An aide to Senate President Dick Eliason, R-Sitka, said the request probably will not make the state operating budget this spring, since subcommittees had pretty much completed their work by the time the request was received. However, she said, there is a chance it could get into the capital budget, depending upon how much funding is available.

Esquiro made a "very rough guesstimate" that the first year's work would cost \$75,000.

If there is no legislative funding, he said, "we have to bite the bullet and pay for it ourselves."

Continued on page 8

General Manager's Notes

By Pete Esquiro

A Cautious Approach Makes Sense

The past few years have been years of continued improvement and expansion of NSRAA facilities. Just concluding is the chinook expansion at Hidden Falls, and in process is the chum expansion of Hidden Falls, as well as the chinook-rearing expansion at Medveje Hatchery.

Fortunately, all of these expansion projects were funded under the U.S.-Canada treaty mitigation program. Over the past three years, we have seen about \$5.5 million in capital improvements made at our hatcheries. This, of course, has been very good for NSRAA, because we have been able to bring our hatcheries to their full capacities without incurring debts in the form of loans. We have, however, increased our annual cost of operating by the amount needed to support these increases in production.

I feel we will be able to meet those long-term operational needs at our present levels of production without putting strain on the long-term financial health of the association. Present levels of production referred to here include anticipated costs associated with the Redoubt Lake project. We must, however, be very careful as we plan for future expansion or consider assuming the operational responsibility for new projects. We must work up realistic stock production schedules, accurate capital and operational budgets, and realistic cost recovery plans whenever we consider a new project. We have been fairly successful in doing this so far, and we must continue to do this into the future.

I bring this to your attention because I have heard that the long-term plan for the operation of a chinook smolt release at Deep Cove (southeast Baranof Island) being developed by the F.R.E.D. division, utilizing U.S.-Canada treaty mitigation funds, includes transferring the responsibility for operations beyond five years to NSRAA. If we are to consider an arrangement like this, we have to be involved all along the way.

Our staff recommendation to our board of directors on whether or not to become involved will be based upon a close and realistic examination of all the operational and financial facts relating to the project, and our assessment of the long-term affects the project will have on the financial health of NSRAA as a whole. The same examination must be made of all new undertakings. To fail to do so, invites future financial problems.



Pete Esquiro

Miller Re-Elected President

Board of Directors Has New Members

Three new members were voted on to the NSRAA board of directors this winter, but the slate of officers is the same.

The new board members are Dennis Eames of Angoon, who fills the rural seiner seat; James A. Lange of Port Alexander, who fills the rural hand troller seat; and Sitka attorney Brian Hanson, who will complete the final year of a three-year "interested person" seat.

Fifteen of the 25 board members are elected by NSRAA fishermen members, and they chose Eames and Lange, along with four incumbents.

The board in turn votes on the other 10 appointments, and it chose Hanson along with three other incumbents.

All seats on the NSRAA board are for three years.

After the election of directors, the board conducted its election of officers when it met in March.

Sitka troller Grant Miller was re-elected president of the NSRAA board, and Sitka troller Earle Johnson was re-elected vice president. Mel Seifert, who is affiliated Sheldon Jackson College's hatchery, was re-elected secretary-treasurer.

Ballots were mailed to NSRAA members in January, and had to be filled in and returned by mid-February.

Incumbents who were re-elected to three-year terms include Jeff Hendricks of Juneau, at-large gillnetter; Jim Becker, Juneau gillnetter; Johnson, Sitka power troll member; and Mike McNeil of Petersburg, crew member.

Eames succeeds Raymond Dick of Hoonah, and Lange succeeds Garfield George of Angoon. Neither Dick nor George ran for another term.

Of the 10 seats that the board fills by making appointments, three terms were expiring, and a fourth opening came due when an incumbent could

not complete his term.

The three members whose terms are expiring were all reappointed. They include Bob Ellis of Sitka, to fill the conservation seat; Sitka charter boat operator Bill Foster, to fill the sport fish seat; and John Carter of Douglas Island Pink and Chum in Juneau, to fill seat that goes to an "interested person."

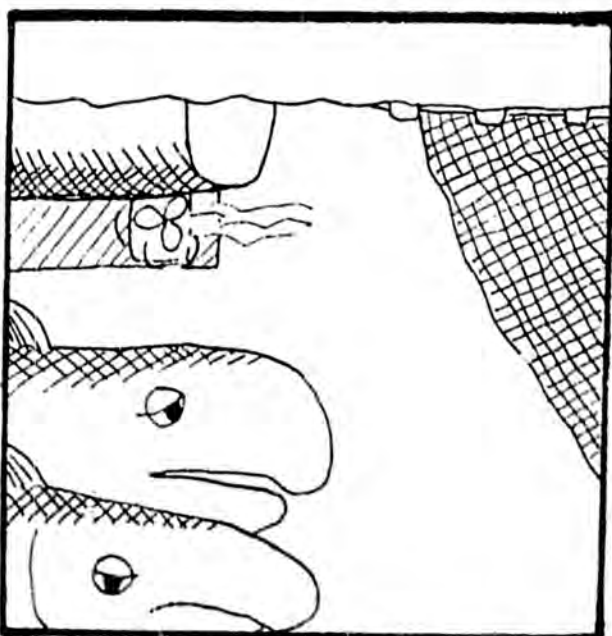
The board of directors is responsible for overseeing the finances and policies of the aquaculture association.

The board will conduct its fall meeting November 13 to 15. The two-day session will be held at the NSRAA office building at 1308 Sawmill Creek Road in Sitka.

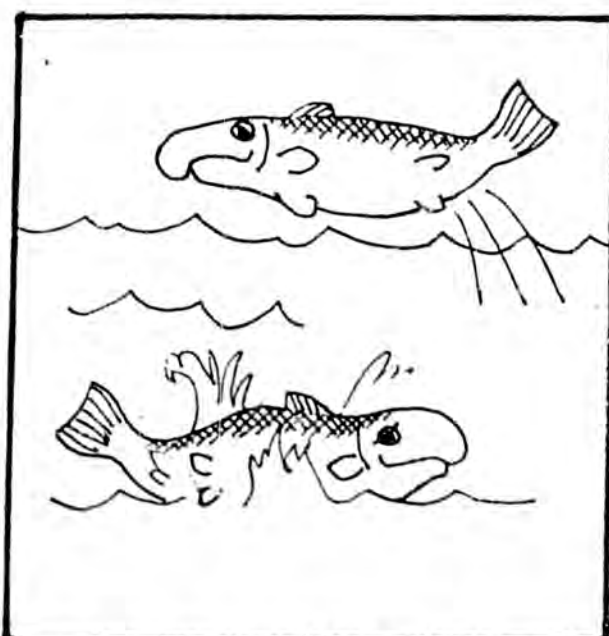
As always, NSRAA encourages fishermen to contact board members with questions and concerns. A complete list of board members, along with their telephone numbers, follows.

Jim Becker.....	586-1900
Gregg Bigsby.....	206-378-5042
Brian Blankenship.....	747-6739
Dennis Eames.....	788-3371
Bob Ellis.....	747-8950
Bill Foster.....	747-6711
James Lange.....	568-2207
Jeff Hendricks.....	789-3250
Ernest Hillman.....	586-1512
Earle Johnson.....	747-8016
Dale Kanen.....	747-8251
Carl Kerr.....	747-8231
Ann Love.....	747-8023
Rick McCay.....	777-3591
Sigurd Mathisen.....	772-3056
Mike McNeil.....	772-4862
Grant Miller.....	747-5982
Dave Nanney.....	766-2763
Carl Peterson.....	345-8102
Adam Ross Jr.....	206-851-2276
Mel Seifert.....	747-5255
Harold Thompson.....	747-5609
Bob Veach.....	747-8929
Walter Wilcox.....	766-2865
Brian Hanson.....	747-6753

UNCLE RINCUS By R. Rose



O.K., REMEMBER WHAT WE LEARNED AT THE HATCHERY—WHEN IN DOUBT DIVE FOR THE BOTTOM



THEIR CHIROPRACTIC TECHNIQUE WASN'T UNDERSTOOD UNTIL MUCH LATER

Gillnetters To Join Action at Deep Inlet

Gillnetters are going to get in on the action in Deep Inlet . . . when the chums return in large enough numbers for a commercial harvest again, that is.

In recent years, the NSRAA board of directors has been seeking new programs to benefit the area's gillnetters. Besides trying to launch fish enhancement projects that would accomplish this, the board has also sought to have more fish allocated to gillnetters, said NSRAA General Manager Peter Esquiro.

The fish that return to Deep Inlet, just across Eastern Channel several miles south of Sitka, are mostly the result of NSRAA rearing programs.

So when the association has enough chums for cost recovery and broodstock, the inlet is opened for commercial fishing. Traditionally, or'y seine and troll gear could be fished in management District 113, which is the area that includes Deep Inlet. In recent years, trollers have been catching significant numbers of chums in Eastern Channel before the fish entered the inlet.

"We submitted a proposal to the

Board of Fish, which would allow the use of gillnet gear in the special harvest area, which is Deep Inlet," said Esquiro.

And in March, the Board of Fish approved the proposal.

In the future, NSRAA will continue to contract with boats to harvest chums on its behalf for cost recovery — fish that are sold to pay the operating cost of the program.

Once the association determines it will meet its cost recovery and broodstock goals, and if it appears there are still adequate chum salmon around, it will advise Fish and Game that a commercial opening can be called.

Fishermen will be given notice. First, gillnetters will be allowed to fish for two days. And then seiners will get to fish one day. And then gillnetters for two days. And seiners for one. And so on.

There could be some pauses in the schedule to allow the fish run to build again, noted Esquiro. Gillnetters get more time in part because their nets and boats are smaller, so they generally cannot take as many fish in a day as a

seiner.

"The goal is to try to bring everybody's harvest share more in line with what our allocation policy is," said Esquiro.

That's the good news for gillnetters. The bad news is that there may not be a commercial opening in the inlet this year. The return was so low a year ago that there was not an opening, and Esquiro said that may be the case again this year, although adding, "of course, we could be pleasantly surprised."

NSRAA staff is projecting a return of 70,000 to 122,000 chums this year.

Some 25,000 are generally caught by trollers before the fish reach the inlet, and NSRAA needs a minimum of 55,000 for cost recovery, in order to meet its budget requirement.

A small percentage of chums return after three years, although most return as 4-year-olds. Since the return of last year's 3-year-olds was down, Esquiro said he anticipates the same for this year's 4-year-olds.

Chum returns have been down throughout Southeast, for both hatchery fish and natural stocks, he

pointed out, causing him to believe something is causing a low survival rate at sea.

"It's something that's happening out at sea," Esquiro said. "Everybody speculates, but nobody really knows."

"It's not just been us. It's been all up and down the coast. Hidden Falls (where NSRAA manages a hatchery) last year was one of the few bright spots, and it wasn't up to par."

"It's something we don't understand."

Esquiro said his "gut feeling" is that it's part of a naturally occurring cycle of up and down years.

"We just happen to be in a down one here. It'll come back, I'm sure. It always has."

NSRAA is anticipating just one percent of the fish released four years ago to return this summer. By contrast, in 1985 through 1987, it had been around five percent.

"When we get back to seeing those survival rates, we're talking about seeing 700,000 to 1.2 million fish, perhaps," said Esquiro.

And then, gillnetters will get in on the action.

Chinook Facilities Getting Improvements

NSRAA's chinook salmon production is being boosted through new facilities under construction at both the Medveje and Hidden Falls hatcheries.

At Hidden Falls, staff are installing saltwater net holding pens, which will allow the hatchery to double its chinook production to more than 2 million smolts a year, said Operations Manager Bruce Bachen.

The number of chinook fry incubated at Medveje will not be increased. But with the addition of more freshwater rearing troughs, hatchery staff anticipate being able to reduce disease mortality of smolts by 75 percent, thus boosting the number that is released to sea each year.

Both projects come from what is commonly referred to as U.S.-Canada treaty mitigation funds. When the United States and Canada entered into a salmon protection treaty several years ago, the number of salmon Southeast Alaskan fishermen could harvest declined. To offset this, the federal government has been providing about \$4 million a year for fish enhancement programs. Congress appropriates the money to the Alaska Department of Fish and Game, which then chooses which projects to fund and actually makes the monetary awards.

This year, NSRAA has received \$1.01 million for four projects.

The Hidden Falls chinook project is being funded with a \$70,000 grant, and the association received \$60,000 for the Medveje project. (See separate stories for other projects.)

Hidden Falls net pens

Chinook production at Hidden Falls is being increased from about 350,000 smolts in recent years to 2.2 million.

About half of those smolts will be reared in eight 40-foot-square saltwater net pens, four of which have been installed. The project will include a floating building, where food and rearing equipment will be stored.

The other half of the smolts will be reared in fresh water tanks, which are already in place.

"It's good to have a mix," said Bachen of the use of freshwater and saltwater rearing methods. "We're still looking at which fish are going to do the best. There are problems with both. It makes sense to achieve some sort of balance."

One of the pluses of the saltwater pens, said Bachen, is that more fish can be reared than otherwise possible, since there is less need for the limited freshwater. Also, the smolts tend to grow larger, perhaps because the saltwater is warmer than freshwater, over the winter months.

The drawback to saltwater pens:

"One sea lion could come through and tear up a net pen in one night.

There are risks. They're small, but they're there."

NSRAA began incubating the higher volume of chinook eggs last fall. The fish will be reared for 13 months, until they are released as smolts in May of 1992. They would begin returning and contributing to the fishery as 4-year-olds in 1994.

If chinook should achieve the Southeast average survival rate of 3 percent, it would mean an increase of some 60,000 adult king salmon in four years, NSRAA staffers have pointed out. Some would have to be taken by NSRAA for brood stock and cost recovery.

Still, if just 30,000 additional chinook were taken by fishermen, it would increase the current Southeast king salmon quota of 270,000 by a little more than 10 percent.

Medveje troughs

NSRAA signed a contract, through which it received the funds, with Fish and Game in January. By mid-March, four 35-foot-long fresh water rearing troughs were erected.

"That's pretty fast, when you think about it," said Bachen. "Everyone involved really rushed to get them in place to help this year."

Plans call for eight more rearing ponds to be added over the summer.

Due to not enough rearing space for all of the hatchery's programs,

Bachen explained, NSRAA staff has had to take several-month-old chinook and put them into salt water holding pens in July, when they are 3 to 4 grams.

But with the new rearing space, they will be held in fresh water until about September, when they reach a size of about 12 grams.

The 450,000 smolts that have been placed into saltwater in July have had about a 20 percent mortality rate — or 90,000 dead fish — before they were released to sea, said Bachen. This is because of a higher disease rate when they enter salt water in July, brought about by their smaller size and the warmer temperature of the water.

By waiting until September before they go into saltwater holding pens, continued Bachen, biologists anticipate the mortality will be reduced to just five percent.

The bottom line, said Bachen, is that due to lower mortality, biologists should be able to release an approximately 70,000 additional smolts each year. Based on the average 3 percent marine survival rate, this would mean about 2,100 additional adults will be available for harvest by commercial fishermen.

"The units we have are good quality," said Bachen of the new holding troughs. "They seem to be functioning well."

Hidden Falls Hatchery Getting New Personnel

There will be a new look at the Hidden Falls hatchery this summer, as most of the staff changes at the same time the facility is embarking upon two major expansions.

Tim Linley, who has managed the hatchery for NSRAA since the association took over operation of the state-owned facility in 1988, reported that by end of the summer, four of the six staff members will be new.

Besides Linley, the only other remaining holdover will be maintenance man Greg Buel.

Frank Kolschfsky moved from Montana to Hidden Falls in April, to

succeed Mark Ortega as assistant manager. Ortega, who has been at Hidden Falls for three years, is moving to Gustavus to pursue business interests.

"He's (Kolschfsky) been working for the State of Montana for a salmon and trout hatchery down there," said Linley. "He's got a lot of hands-on fish culture experience."

Kolschfsky is a graduate of the University of Montana, with a degree in wildlife biology with an aquaculture option.

The husband-and-wife fish culturist team of Bill Arnold and Marcia

Eimers-Arnold are leaving to join the Valdez Fisheries Association.

One of their successors will be Ritch Phillips, who has been manager of the Port Armstrong hatchery. He will become NSRAA's senior fish culturist at Hidden Falls in June, adding his expertise to the challenges brought about by the expansions. He attended a highly regarded two-year aquaculture program at Mount Hood Community College in Oregon.

Al Edsel, who is currently employed at NSRAA's Medveje hatchery, will also come to Hidden Falls as a fish culturist in August. He will

transfer to Hidden Falls for one year, before returning to Medveje.

Chris Bartlett will be hired to work at Medveje during the year that Edsel is at Hidden Falls. Bartlett will then become the 9-month fish culturist at Hidden Falls. He has worked for NSRAA as a temporary employee for more than a year, and prior to that worked for Ocean Products, an Atlantic salmon farming operation in Maine.

A newly created culturist-maintenance position at Hidden Falls will be

Continued on page 5

NSRAA to Build New Sockeye Hatchery

Commercial fishermen will one day be catching sockeye salmon that will originate from a hatchery that NSRAA plans to build in Silver Bay, just south of Sitka, during the next two years.

The NSRAA board of directors, in a split vote, decided to accept a \$495,000 grant during its mid-March meetings in Sitka.

Board members initially hesitated at accepting the funding, due to two unanswered questions. One was the uncertainty over whether gillnetters or seiners would get the fish. The other is whether the commercial fishery at nearby Redoubt Bay — one of the sites that may benefit from the hatchery — might be reopened again some day.

NSRAA officials reported that their tentative plans are to begin designing the hatchery this fall, and to have it constructed in either the summer of 1992 or 1993.

The fry-rearing capacity would depend upon whether it was used to raise fry for release into Redoubt Lake, or whether to rear smolts for release from saltwater net pens at other sites, or both.

If the plan is to release newly hatched fry into Redoubt Lake, the hatchery could probably produce some 30 million fry a year, said NSRAA operations manager Bruce Bachen.

"The capacity is really large, because it doesn't take much water to incubate eggs," said Bachen.

But if NSRAA were to rear the fry until they become smolts that can be released at other remote sites, the hatchery capacity would only be about 2 million or so.

One of the challenges for planners, he said, will be to develop flexibility into the hatchery — perhaps even using heated water to accelerate the growth of smolts.

"Those are the questions we're going to look at this summer," said Bachen.

He said the association tentatively would like to develop the hatchery on City of Sitka property that is about one-half mile from the city's Green Lake hydroelectric facility. NSRAA staff has conducted preliminary discussions with city officials, but no decision has been made.

The area has a level building site, since buildings were located here during construction of the hydro plant, before they were later removed. Also, the close proximity to the hydro plant would provide the hatchery with a freshwater source.

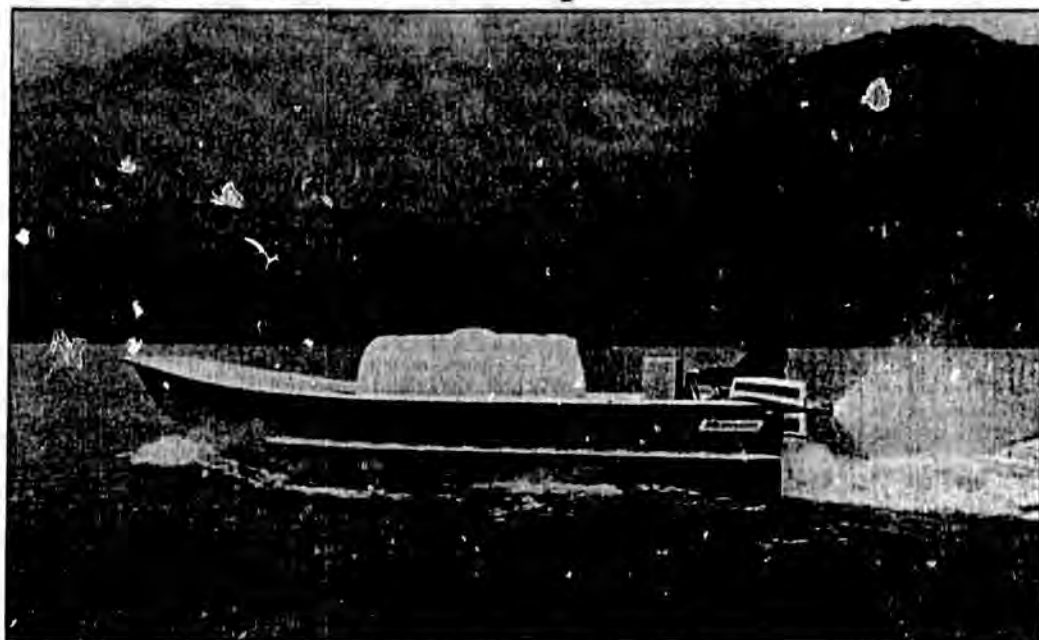
Other advantages to the area, said Bachen, are access to city power, close proximity to Redoubt Lake, easy access to town via a road along Silver Bay, and close proximity to NSRAA's Medveje hatchery in Silver Bay, which would make it easier for NSRAA personnel to work at both facilities.

The grant covers the construction cost, but not the day-to-day operations. The association will need to develop an ongoing funding basis, with one of the options being a cost recovery program such as those used at other hatcheries, said Bachen.

Project background

Sockeye runs at Redoubt have been increased substantially in recent years through a joint fertilization project involving the U.S. Forest Service, the Alaska Department of Fish and Game's Division of Fisheries Research and Enhancement, and NSRAA.

More than a century ago, Redoubt Lake had a run of tens of thousands of



Al DeMartini, a technician with the Alaska Department of Fish and Game, applies fertilizer from a boat on Redoubt Lake, as part of a lake enrichment project that has helped sockeye numbers rebound in recent years. NSRAA has accepted a grant to build a new hatchery in nearby Silver Bay, by which sockeye could be released either into Redoubt to further boost the project, or at another remote site. (Photo courtesy of David Barto, Alaska Department of Fish and Game's Division of Fisheries Enhancement and Development)

sockeye a year. But by 1982, the escapement had plummeted to 440.

Under the joint project, tons of nutrients — a combination of ammonium nitrate and ammonium phosphate — are sprayed onto the lake from a boat. The nutrients are consumed within hours by microscopic green plants, called phytoplankton. These grow rapidly and, in turn, are consumed by tiny crustacea, called zooplankton. These are the food source of the salmon fry.

By last summer, the escapement had climbed back to 72,000 sockeye.

Grant politics

The sockeye hatchery grant comes from the federal government through what is commonly referred to as U.S.-Canada treaty mitigation funds.

NSRAA staffers have said they feel sport, commercial and subsistence fishermen can all benefit from an increased sockeye run.

"In political jargon, it's a win-win situation," said field project manager Steve Reifensstuhl.

Nevertheless, since NSRAA's main constituency is commercial fishermen, the board does not want to become involved in a project where there is no hope for a commercial fishery. So during its March meetings, the board held an evening public hearing to try to find out whether there would be any substantive opposition to reopening a commercial fishery, assuming that the sockeye return increases enough to allow this.

The decision to reopen the fishery would be made by Fish and Game, and not NSRAA. Still, the association wanted to try to find out whether there would be any vocal opposition that might be lobbying Fish and Game.

Pete Esquiro, general manager of NSRAA, reported that only four citizens attended the hearing, and said the

turnout was too low to determine how the public feels about reopening the fishery. Those who did come tended to speak about the benefits of both commercial and subsistence use, he said.

The allocation issue involves whether a commercial fishery should benefit seiners, who traditionally fished the area, or gillnetters, the gear group for whom NSRAA has been trying to develop more projects.

The board decided to accept the grant and proceed with the hatchery without resolving the allocation issue, particularly since a committee is studying a possible region-wide allocation plan for all of Southeast. The panel includes representatives of the board of directors of NSRAA and its sister organization, the Southern Southeast Regional Aquaculture Association.

HF Chum Facilities to Expand

NSRAA has received \$385,000 in U.S.-Canada treaty mitigation funds for a project to increase the incubation capacity of chum salmon at the Hidden Falls hatchery, on the east side of Baranof Island, by another 16.5 million eggs.

Now, NSRAA staff is trying to select a remote site to place net pens, until the fish can be released.

They thought they had one: Thomas Bay north of Petersburg.

But the Regional Planning Team — which consists of regional supervisors of several divisions of the Alaska Department of Fish and Game, three fishermen and a non-voting member from the U.S. Forest Service — voted to recommend that the commissioner of the Alaska Department of Fish and Game not grant a release permit for Thomas Bay. The team felt it was too far to transport the fry, said NSRAA operations manager Bruce Bachen.

"It's kind of a curve that wasn't expected," he continued.

"The staff felt that Thomas Bay would be a good release site because the release of enhanced fish would be relatively isolated from wild stocks,

and the site could be fished by either net group. It looks like we will have to identify a release site closer to Hidden Falls."

However, based on genetic studies of chum salmon stocks in Southeast Alaska by the National Marine Fisheries Service, the team felt that large-scale release of the Hidden Falls stock would adversely impact wild stocks in the Thomas Bay area, explained NSRAA field project manager Steve Reifensstuhl. The state's new principal geneticist explained at the RPT meeting that research has shown that island chum stocks are genetically distinct from mainland chum stocks. The geneticist conveyed that the state will be taking a more conservative approach when considering moving salmon stocks in the future.

Bachen reported that the additional 16.5 million chum eggs will be incubated at Hidden Falls beginning this fall. This is expected to result in 15 million fry, which will be placed in net pens at a still-to-be-determined remote site next spring.

Tentative plans are that in two years, NSRAA will be incubating an

additional 35 million chum eggs a year, and placing 31 million fry into remote site net pens. If so, this would represent an increase of approximately 50 percent over Hidden Falls' current hatchery capacity of 68 million chum eggs and 63 million fry.

As a result of the new project, a small number of chums will begin migrating back to the remote site in 1994. But most will not return until they are 4 years old, beginning in 1995.

Generally, between 75 percent and 4 percent of the fry will eventually return as catchable adults. Thus, once the project reaches full capacity, it should provide between 230,000 and 1.25 million chums annually, in what will be a brand new fishery.

The association will install the additional incubators at Hidden Falls this summer. Tentative plans call for 10 pens to be put in place at a remote site next spring.

The chum fry would be held in net pens for about six weeks, from about early April until mid-May. Two NSRAA employees would be on site during that time.

Association Recommends New Strategy

NSRAA Trying to Improve Chum Quality

NSRAA is recommending a new strategy this year which officials hope will allow commercial fishermen to take more chum salmon at Hidden Falls while the quality of the fish is at its best, resulting in a better price.

The down side is that if there should be a low run of chums, the association might not be able to meet its cost recovery and broodstock goals, needed to keep the program going.

A year ago, chums rebounded to more normal return levels, with commercial fishermen able to harvest 250,000 fish, compared to only 50,000 in 1989.

The quality of the harvested fish was lower than it might have been, however, due to a delay before the fishery could be opened under the old system.

Historically, the commercial fishery is postponed until NSRAA is able to meet both its cost recovery and broodstock goals. Then, when enough additional chums return for a commercial opening, NSRAA advises the Alaska Department of Fish and Game, which actually opens a fishery.

Generally, a few days of lead time is needed. And during this wait, said NSRAA Operations Manager Bruce Bachen, fish can begin to darken and the meat loses some of its desired color, resulting in a drop in the price per pound paid to fishermen.

So this year, said Bachen, NSRAA is recommending that Fish and Game call two openings — which are usually about 12 hours each — on June 30 and July 7, without first waiting to see how strong the run is. The idea is to let commercial fishermen get a jump on catching the fish while their quality is the best.

"The whole purpose of the program is for fishermen to catch fish, and we want the quality as high as possible," said Bachen.

The risk with the new strategy is that should the run be down, the early take by the seine fleet could mean there would not be enough fish left for NSRAA to take for cost recovery or broodstock.

"The net result would be some additional demand on our (financial) reserves or not meeting the egg take goals," said Bachen.

"The problem with these chum returns is we have no forecasting mechanisms that work."

Even if the returns are low early in the summer, it does not necessarily mean a low run. It could mean a late run, pointed out the NSRAA official.

Besides the early June 30 and July 7 openings, NSRAA has adopted one other strategy to help fishermen get higher quality fish. NSRAA will increase the number of boats hired to take fish on the association's behalf, for cost recovery and broodstock, from three to four. The sooner NSRAA can take all the fish it needs, the sooner the remaining fish can be turned over to commercial fishermen, explained Bachen.

If NSRAA can get the bulk of the fish it needs during the peak of the run, which is projected from July 8 to 12, it might then be possible to have two commercial openings a week, related Bachen.

"I think it's important to have high quality," said Bachen. "To do that, we've got to take advantage of every day we can to get (the broodstock and cost recovery) goal met and over with as soon as possible."

Bachen estimated that NSRAA will take some 175,000 fish for cost recovery this summer. Another 95,000 will be needed for broodstock, which is 10,000 more than a year ago. The increase is for an expansion of the Hidden Falls chum incubation program by some 16½ million eggs, which are to be fish eventually released from a remote site (see related story).

Despite the difficulty in forecasting, NSRAA officials are projecting a return of 675,000 chum this summer to Hidden Falls and nearby Takatz Bay, said Bachen. This would be an increase from a total return of 480,000 a year ago.

Chum returns have been down throughout Southeast, although Hidden Falls fared better than most sites last summer, as the numbers of fish began to increase there.

"We're just hoping its cyclical and we've seen the bottom," said Bachen. The marine survival rate of the

chums that returned in 1990 was 1.2 percent, compared to 0.7 percent the previous summer. By contrast, during the first several years the hatchery was in production, the survival rate was 3 to 3½ percent, before the fish began a mysterious disappearing act while they were on the high seas.

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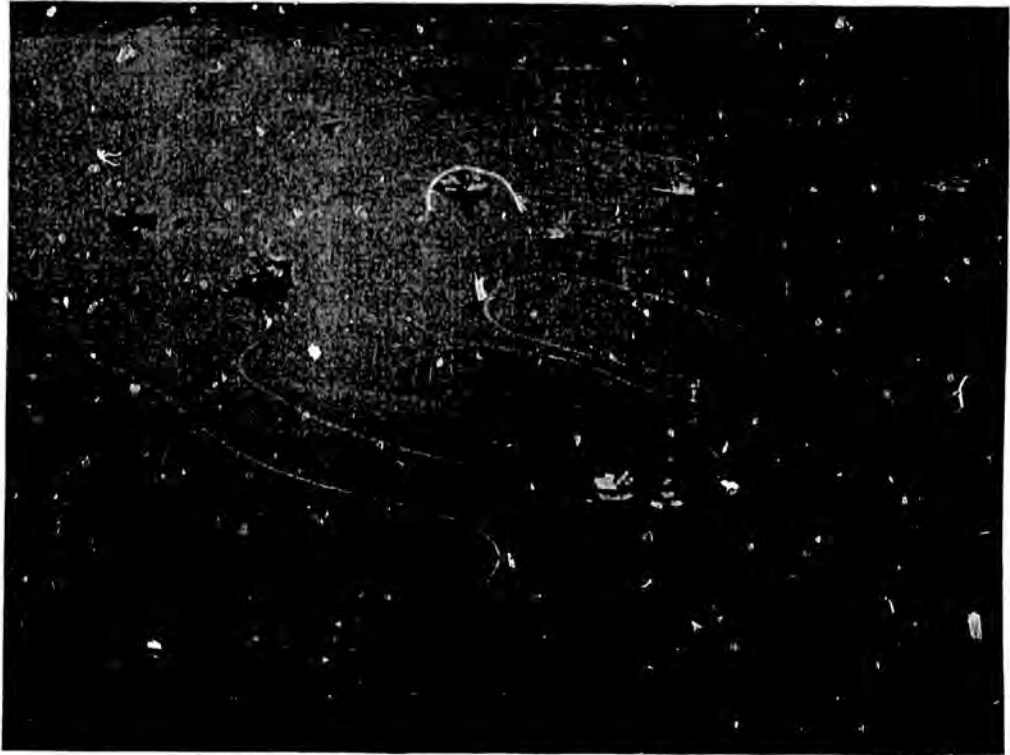
HF Personnel...

Continued from page 3
filled by Angoon resident Larry Chudewic, who comes on board in June. He is a machinist and capable mechanic, and will be helping Buel with the many projects and maintenance duties at the hatchery.

"It's going to be a very challenging year, to say the least," said Linley. He pointed out that the staffing changes come as Hidden Falls expands its chinook and coho rearing

program from about 350,000 smolts in recent years to about 2 million, and as chum production is boosted so 15 million fish can be released from a new remote site. (See related stories about these projects.)

Nevertheless, Linley is optimistic about the future of the programs. "I think the staff we are bringing in is very experienced," he said. "I think we're going to have a very successful year."



This is a birds-eye view of fishermen seining for chum salmon at Hidden Falls. (Photo courtesy of Bob DeJong, Alaska Department of Fish and Game)



The fishing vessel Sabrina makes a set for chum salmon at Hidden Falls.

Coho Project Has Success and Challenges

The fertilization of Deer Lake seems to have lessened a naturally occurring phenomenon which sometimes thwarts the reproduction of coho salmon — the effect of a deadly tapeworm parasite.

Meanwhile, NSRAA biologists are trying a new tactic this summer to counter another potential problem may have developed — smolts staying in the lake an extra year, so that they begin to feed on the next crop of fry.

But regardless of the outcome, the results of the project so far are encouraging, based on figures a year ago in which the number of returning coho skyrocketed.

Project history

By adding liquid inorganic fertilizers to Deer Lake, biologists have significantly increased the number of returning adult coho salmon taken by commercial fishermen.

Biologists started planting coho fry into Deer Lake in 1985, prior to the start of the fertilization part of the program. The introduction of the salmon fry by itself created a coho run where there had been none before.

Natural runs had been prevented by the barrier created by a thundering waterfall along the short stream, through which the lake empties into Mist Cove. The bay takes its name from the spray, visible for miles, where the huge waterfall hits the rocks below.

As part of the planning program, a trap-and-pipeline system was built at the lake to allow the smolts to emigrate to sea without having to tumble over the waterfall.

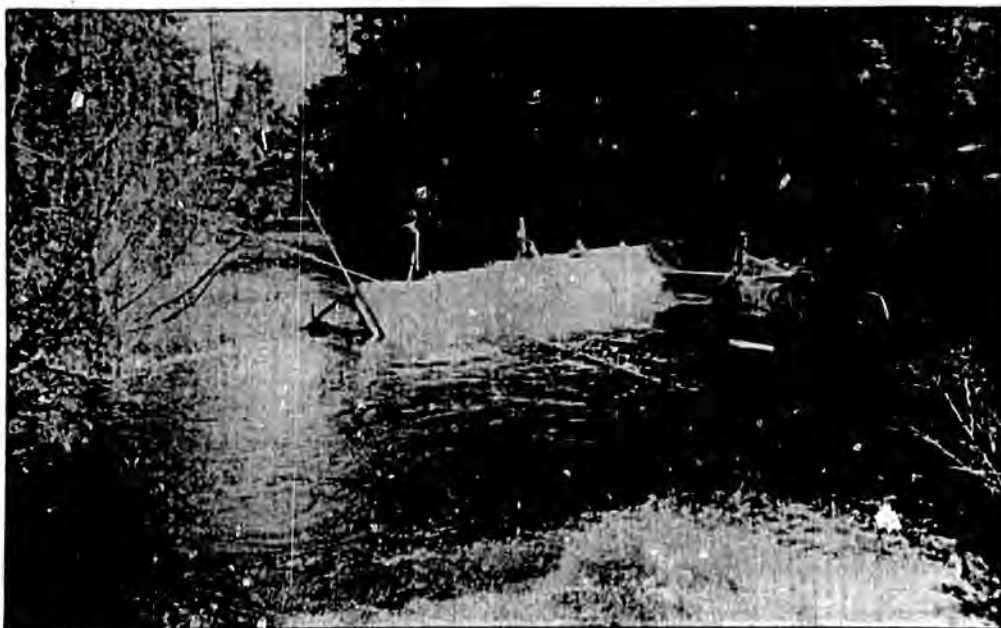
In 1987, 843,000 coho fry were stocked in Deer Lake, which resulted in a run of 26,000 adult fish in the summer of 1989.

In 1988, less fry were planted — 475,000 — but for the first time nutrients were added to the lake. This resulted in a doubling of the 1990 return, more than 50,000 adult fish.

The lower number of fry stocked in the lake might have contributed toward the increased growth of the 1988 fry, said Dick Crone, project leader for the NSRAA, one of three organizations that has been involved with the effort. Nevertheless, he said, he is certain the fertilizers played a major role in the increased salmon production as well.

"I think it's real promising," said NSRAA biologist Chip Blair. "It's pretty amazing that you can grow so many more fish in the same acreage."

Biologists point out that when mature salmon do not return to a lake to spawn and die, there are no rotting



Plans call for this fish weir at Deer Lake to be replaced with an improved structure this summer. The weir channels coho smolts into a pipeline sys-

tem that will carry them down to sea, so they do not have to tumble over a waterfall.

carcasses to provide nutrients for microscopic plant forms, which in turn are consumed by tiny animal life forms that become the main food source of salmon fry. The fertilizers are added to the lake to give a boost to the lower end of the food chain.

At Deer Lake, the Forest Service and NSRAA have done the field work and applied the nutrients. The Alaska Department of Fish and Game's Fisheries Research and Enhancement Division has processed water samples and made recommendations on fertilizer levels.

Originally, NSRAA stocked fry in Deer Lake every other year in order to let the food source for the tiny salmon rebound before the next stocking.

Forest Service biologist Bill Lorenz explained that in 1988, Deer Lake was not supposed to be stocked. That year, NSRAA had some 475,000 fry at its Medveje hatchery in Silver Bay, and they were to be planted in another lake in a wilderness area. But as spring rolled around, said Lorenz, the Forest Service's regional forester said he preferred that further stocking programs take place in non-wilderness lakes.

As an alternative, said Lorenz, "We proposed we would fertilize Deer Lake to boost the food source, if they would take a chance on putting

those fish in there."

It was a gamble of sorts for both parties, said Lorenz. If it did not work, NSRAA might not be able to stock Deer Lake the following summer, as scheduled, throwing off its two-year rotation. And if it did not work, the Forest Service "would be spending a lot of money for nothing."

But the experiment panned out, continued Lorenz.

"The fish grew faster than they ever had before, and the fish had a greater survival than they had ever had before."

Since then, the amount of fry stocked in the lake has been increased each year, to 1.74 million in 1990.

Holdover fish

Biologists say they did not really know what challenges might arise when they undertook the unique project.

One problem was that some fry from the 1989 stocking reached the smolt stage last summer, but did not go to sea as expected. Instead they stayed in the lake and began to prey upon the newly planted fry.

"The conditions were just too good for the fish to leave the lake," said Blair.

The percentage of "holdover" smolts actually was quite small, but still large enough to have an adverse affect.

So in 1990, biologists cut back on the amount of fertilizers that were applied, said Crone.

And this year, as a further precaution, NSRAA will try to delay the stocking of new fry about 10 days later than the normal target of June 20, with the hope that if there is less forage in the lake, the smolts will be more inclined to leave.

"The later we can stock the new fry, the better off we will be," Crone said.

To delay the stocking is actually more involved than it may sound, he said. To retard the growth of the fry and adjust them to a later release, the water temperature at the Medveje hatchery must be chilled. Otherwise, once they reach a certain size, they have to be released.

Tapeworm effect

Meanwhile, Crone explained how the fertilization may have helped biologists solve a potential tapeworm

problem sometimes found in coho in other lakes.

One member of a group of small animal life forms eaten by coho, called copepods, carries the tapeworm. He related that prior to fertilization, there appeared to be a slight increase in the appearance of the worms in coho at Deer Lake. While the volume of worms was still small, "I didn't like the trend."

But the fertilizers have caused a boom in a different type of small animal life forms, called cladocerans, which do not carry the tapeworm.

Consequently, said Crone, "The fish are eating many more cladocerans than they used to, and are not eating as many copepods as they once did."

The bottom line is that biologists are now finding fewer worms in the coho. Also, Crone said, this discovery could enable biologists to resume stocking other lakes, where such programs were discontinued because of problems with tapeworms.

Resource utilization

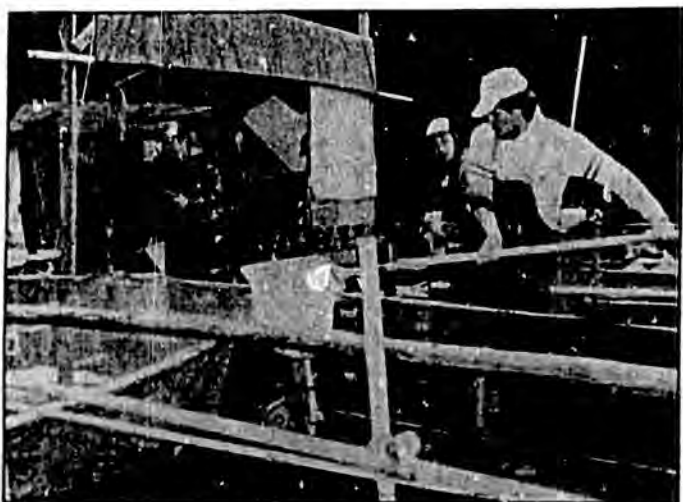
Through coded tag studies, biologists have been able to determine that commercial fishermen harvested an estimated 29,000 coho from Deer Lake in 1990. Based on average weight and price figures provided by a local seafood processor today, the run provided more than \$300,000 to commercial fishermen.

Still another 22,000 coho were harvested last year by NSRAA as "cost recovery." The association contracts with fishermen to harvest an allotment which it sells to help fund its operating budget.

USFS to continue

Lorenz explained that when the Forest Service first became involved with the Deer Lake fertilization project, it planned to do so for four years. This is the fourth and final summer, but Lorenz said the agency probably will continue to assist the project for at least one more year, making a gradual withdrawal, and would continue to let NSRAA use Forest Service equipment, such as a boat, tanks and pumps.

This summer, said Lorenz, the agency plans to help NSRAA replace the existing fish weir at Deer Lake, which directs fish into the pipeline system which carries them down to Continued on Page 8



Workers gather eggs for the coho-rearing project at Deer Lake.

Fish and Game Lists Troll Fisheries

On May 10, the Alaska Department of Fish and Game announced a revised chinook salmon troll fishing schedule for the month of June.

Officials said the schedule is still considered tentative, due to the lack of a final Pacific Salmon Treaty agreement with Canada. Both parties were scheduled to meet to sign the treaty in Vancouver, B.C., during a meeting that was set for May 14 through 16.

However, Fish and Game said, although the times and areas for chinook are considered tentative until the Pacific Salmon Treaty is signed, the final treaty agreement is expected to have little effect on the schedule.

Fish and Game officials said a news release with the final fishing schedule, regulatory guides and management plans will be available May 22.

Following is the schedule as of May 10, provided by Fish and Game.

CHINOOK SALMON Experimental Fisheries

The following experimental fisheries, to target on Alaskan hatchery produced chinook salmon, will be open in 1991: Medveje, Hidden Falls, Little Port Walter, Cape Fanshaw, North Shore Kupreanof, Stikine Passage, Clarence Strait and Gravina Island.

These fisheries will be open at the following times:

— June 2 and 3 (12:01 a.m. Sunday to 11:59 p.m. Monday).

— June 10 and 11 (12:01 a.m. Monday to 11:59 p.m. Tuesday).

— June 16 and 17 (12:01 a.m. Sunday to 11:59 p.m. Monday).

— Either June 24 and 25, or June 25 and 26. (Monday and Tuesday, or Tuesday and Wednesday).

Terminal Fisheries

The following terminal fisheries, to target Alaska hatchery produced chinook salmon, will be open in 1991:

— Carroll Inlet, 12:01 a.m. on May 28 through 11:59 p.m. on June 29.

— Wrangell Narrows, 12:01 a.m. on June 2 through 11:59 p.m. on June 29.

Hatchery Access

The first hatchery access fishery is scheduled for June 5 to 7 (Wednesday to Friday). Portions of districts 101, 102, 105, 106, 107, 109, 110, 112 and 114 will be open all three days, while the open portions of districts 103 and 113 will be open only on June 5 and 6.

A second opening will take place beginning June 20, if the catch in the first period does not exceed 25,000 non-Alaskan hatchery produced chinook. In addition, there is a total catch ceiling of 40,000 chinook salmon for all June troll fisheries combined. The opening date and duration of the second hatchery access opening will be announced on June 13 or 14.

Preliminary maps of experimental troll and hatchery access fishing areas

will be available at area offices during the week of May 13.

PINK AND CHUM

The troll fishery for pink and chum salmon in Cross Sound is scheduled for three days each week, beginning Monday, June 10. The fishery will open each week at 12:01 a.m. Monday and continue through 11:59 p.m. each Wednesday.

At the spring 1991 Board of Fish meeting, the area was enlarged as follows:

"the waters of 14-A west of the longitude of Point Dundas, south of the latitude of Point Dundas, and east of the longitude of the southern tip of Taylor Island to 58 degrees, 10' N. latitude, then east to Althorp Rock Light, then north to the light at the entrance to Elfin Cove."

The fishery will close when 500 non-Alaskan chinook salmon are harvested.

Southeast offices

Fishermen wanting more information can contact Fish and Game area offices in Southeast. Telephone numbers are 465-4250 for Juneau, 747-6688 for Sitka, 225-5195 for Ketchikan, 772-3801 for Petersburg and 874-3822 for Wrangell.

CHINOOK TROLL AREAS

Following are the descriptions of the experimental areas that will be open to harvest chinook salmon returning to Alaskan hatchery facilities

in 1991. Some changes may occur due to the U.S.-Canada treaty. Fish and Game officials reminded.

Ketchikan area

For the harvest of returns to the Carroll Inlet chinook salmon release site, those waters of Carroll Inlet north of the latitude of California Head and south of the latitude of Negelius Point.

For the harvest of returns to the Neets Bay and Whitman Lake hatcheries, those waters of District 2 within one nautical mile of the Cleveland Peninsula north of the latitude of Niblack Point and south of the latitude of Lemecur Point and in the waters of Section 1-F north of a line from Cone Point to Harbor Point to Survey Point to Point White and then west to the District 2 boundary at the latitude of Point White, except the waters of Carroll Inlet, except that:

— salmon may not be taken in the waters of George Inlet north of the latitude of California Head;

— salmon may not be taken in the waters of Tongass Narrows north of a line from Mountain Point Light to Gravina Point;

— salmon may not be taken in Section 1-F in the waters of Clarence Strait, Vallenar Bay, and Behm Canal north of the latitude of South Vallenar Point;

Salmon may be taken in the waters Continued on page 8

NSRAA Charts Projections for 1991

The following chart lists projections for salmon returns that NSRAA biologists are expecting at the association's various fish enhancement sites this summer.

The chart lists the projected return for each species, along

with the anticipated high and low ends of the range. It also lists the projected take by commercial and sport fishermen, as well as the fish needed for NSRAA's cost recovery and brood-stock programs.

Project	Species	1991 Projected Return		Projected Catch / Use:				
		Projected Return	Range	Commercial	Sport	Cost Recovery	Brood Stock	
Medveje Hatchery	chinook	4,800	2,500 - 6,000	2,400	100	1,100	1,200	
Hidden Falls Hatchery	chinook	3,100	2,000 - 4,600	1,400	100	200	1,400	
* Earl West Cove	chinook							
Total Chinook		7,900	4,500 - 10,600	3,800	200	1,300	2,600	
Medveje Hatchery	chum	12,000	10,000 - 18,000				12,000	
Deep Inlet Release Site	chum	92,000	70,000 - 122,000	25,000		55,000	7,000	
Subtotal: MCIF		104,000	80,000 - 140,000	25,000	0	55,000	19,000	
Hidden Falls Hatchery	chum	506,000	252,000 - 1,262,000	236,000		175,000	95,000	
Takatz Bay Release Site	chum	169,000	84,000 - 421,000	169,000				
Subtotal: H. Falls		675,000	336,000 - 1,683,000	405,000	0	175,000	95,000	
Haines Spawning Channel	chum	8,000	4,000 - 10,000	3,000			800	
Port Camden Incub. Boxes	chum	4,000	2,000 - 6,000	3,000			1,000	
* Boat Harbor Release Site	chum	36,000	18,000 - 54,000	36,000				
Haines Incubation Boxes	chum	5,000	2,500 - 7,500	1,500			5,000	
Subtotal: Projects		53,000	26,500 - 77,500	43,500	0	230,000	114,000	
Total Chum		832,000	442,500 - 1,900,500	473,500	0	230,000	114,000	
Medveje Hatchery	coho	12,000	4,800 - 14,400	7,000	1,000	3,900	100	
* Coho Lake Rearing	coho	70,000	34,000 - 102,000	37,400	300	28,500	1,800	
Hidden Falls Hatchery	coho	4,300	3,100 - 5,600	2,200	50	1,850	200	
* St. John Creek Stocking	coho	460	330 - 660	230				
* Slippery Creek Stocking	coho	0						
* Earl West Cove	coho							
Total Coho		86,760	42,230 - 122,660	46,830	1,350	34,250	2,100	
* Redoubt Lake Incubation	sockeye	unknown						
Total Sockeye		unknown						

* Cooperative Projects



Howard Ferren, left, the planner for the Prince William Sound Aquaculture Corporation, gave the Southeast committee a presentation on the process Prince William Sound fishermen used to

develop allocation and production plans for their area. "What we learned may be helpful to you," he told the Southeast fishermen. Seated beside him are Earle Johnson and Bryan Benkmann.

Task Force . . .

Continued from page 1

"We don't have the choice of doing it or not doing it. We are going to do it."

Task force background

Laird Jones, the director of the state Division of Boards, outlined the events which prompted the Board of Fish to ask the two Southeast aquaculture associations to jointly develop an allocation plan.

About three years ago, there were gear group conflicts in Prince William Sound, and a number of allocation proposals were presented to the board.

Finally, related Jones, during the debate, representatives of PWSAC basically said, "Give us until the next time you're in town to let us develop an allocation plan."

So the association appointed a task force which went to work, using what Jones called a "very extensive public outreach" effort through which fishermen were able to follow what was going on and provide comment in a series of meetings held in several communities.

Jones noted the effort was "very expensive," but added, "They felt it was important to the future."

Meanwhile, a year later in early 1989 during Board of Fish meetings in Petersburg and Juneau, members were deluged with issues that basically dealt with allocation of hatchery fish in Southeast Alaska, related Jones.

"Everyone was feeling one way or the other they were getting short-changed."

Finally, after dealing with Southeast issues for four weeks, the board moved on to meetings in other parts of the state without resolving some of this region's allocation conflicts.

During this time, the planning effort was continuing in Prince William Sound. First, PSWAC developed allocation policy that was approved by its board and the Regional Planning Team, which included representation from both the association and Fish and Game. Then PWSA developed a production plan, while the Regional Planning Team developed a management plan.

Finally, this February, the Board of Fish adopted the management plan. "Didn't make one change to it," said Jones.

And in so doing, the board also endorsed the allocation plan, since it was included in the management plan.

Jones related that some fishermen had complaints with specific parts of the plan. But overall, he continued, the plan had "tremendous support."

Echoed Ferren:

"There are, of course, always individuals who are opposed to various aspects. But the actual management plan was established with representatives of the three primary fishing organizations in this region. So it did indeed have the support of those associations."

Thus, as a result of the apparent success in Prince William Sound, the Board of Fish sent a letter to the Southeast aquaculture associations this winter, asking them to take up a similar effort.

"It's a little more complicated in Southeast, because in Prince William Sound there was only one association," said Jones. "And down here, you've got such varied ownership (of hatcheries)."

Some are owned by NSRAA or SSRAA, some by the State of Alaska, one by the federal government, and some by other non-profits such as Douglas Island Pink and Chum.

PSWAC effort

When the Southeast allocation task force met for the first time in March, PWSAC's Ferren flew to Sitka to give a report on the effort in Prince William Sound, so the Southeast committee could decide if it wants to use some of the same ideas.

"I'm not here to say what to do in Southeast," said Ferren, who also called development of an allocation plan "more complex" in this region than in Prince William Sound.

But, he continued, "At least we went through a lot of hoops in getting the process going, so we could walk through this sensitive matter. What we learned may be helpful to you."

The committee consisted of five commercial fishermen, one retired management biologist and one sport fishing representative, plus an alternate who is a commercial fisherman.

So far, hundreds of sheets of paper have been compiled in the Prince William Sound's allocation, production and management plans. The management and production plans are to

ensure that the goals of the allocation plan are met.

The next step is to implement the plans and consider long-term adjustments, as necessary, to achieve the policy objectives. No in-season adjustments are to be considered.

Ferren noted "significant negotiations" occurred between seiners and gillnetters, in particular, who were "at one another's throats" a year ago.

Now, said Ferren, "the fishermen are talking," and were cordial at the Board of Fish meetings this winter.

"Where conflict previously existed, people started to see what opportunities could be created," said Ferren.

The steps that the Prince William Sound allocation task force used in developing an allocation plan, said Ferren, included the following:

1. Orientation.
 2. Identify and analyze issues.
 3. Prioritize issues.
 4. Investigate historic fisheries to determine what was fact, since different gear groups had different perspectives.
 5. Develop preliminary draft policy.
 6. Conduct public workshops, which were informal give-and-take sessions with fishermen.
 7. Revise draft.
 8. Hold formal public hearings.
 9. Complete final draft.
 10. Present draft to PWSAC board of directors for its approval.
- While identifying issues, said Ferren, the committee conducted 42 interviews with representatives of various gear groups or other organizations, and also hired an independent marketing firm to conduct a survey.
- Workshops and public hearings were held in six different towns: Cordova, Valdez, Homer, Anchorage, Bellingham and Seattle.
- "The committee put in immeasurable amounts of time," said Ferren.
- "What we have achieved at this point seems good for Prince William Sound."

Meeting Set

The NSRAA board of directors will conduct its fall meeting November 13 to 15.

The two-day session will be held at the NSRAA office building at 1308 Sawmill Creek Road in Sitka.

Troll . . .

Continued from page 7

of Section 1-E within one nautical mile of Revillagigedo Island south of the latitude of Brow Point and north of the latitude of Indian Point only during period; established by emergency order when the demonstrated availability of chinook salmon returning to Neets Bay Hatchery is high.

Petersburg area

For the harvest of returns to the Crystal Lake Hatchery, salmon may be taken:

— in Wrangell Narrows only in those waters of Section 6-A south of 56 degrees, 45' N. latitude and north of the latitude and east of the longitude of the northern tip of Woewodski Island;

— in Frederick Sound only in those waters of District 10 within two nautical miles of Kupreanof Island and west of the longitude of Boulder Point;

— in Stephens Passage only in those waters within two nautical miles of the mainland shore north of the latitude of Cape Fanshaw and south of the latitude of Fort Point.

For the harvest of returns to the Earl West Cove release site, those waters of District 6-D within one nautical mile of Eiolin Island north of the latitude of Point Harrington.

Chatham Strait area

For the harvest of returns to Little Port Walter Hatchery, those waters of Section 9-A south of the latitude of Patterson Point and north of 56 degrees, 15' 50" N. latitude (located immediately south of Graveyard Cove), including all waters of Patterson Bay, Deep Cove, Port Herbert, Port Walter, Port Lucy and Port Conclusion.

For the harvest of returns to the Hidden Falls facility, those waters of District 12 within two nautical miles of the shore along Baranof Island south of a range marker at South Point (located at the southern entrance to Kelp Bay) and north of a range marker at 57 degrees, 67' 22" N. latitude (located at the southern entrance to Takatz Bay) except that all waters of Kelp Bay will be closed.

Sitka area

For the harvest of returns to the Medveje Creek Hatchery, those waters in Silver Bay and Eastern Channel east of a line from Silver Point to Luce Island to Tsarita Rock Buoy to the red buoy at Rocky Patch to Marshall Island, except that salmon may not be taken in the waters of Bear Cove east of 135 degrees, 09' 42" W. longitude.

Coho . . .

Continued from page 6

the ocean. Forest Service personnel helped design the new weir, and will contribute toward the materials and transportation to get them there.

Lorenz said Forest Service policy is to help develop projects with the intention that they eventually become self-supporting, such as through NSRAA's cost recovery program. The intent, said Lorenz, is to eventually free Forest Service funds so they can be used on still other new projects, in order to further increase overall salmon numbers in Southeast.

He related that the agency will stay in the Deer Lake project awhile longer because it has an interest in helping to solve the "technical" questions, such as the smolt holding over in the lake for an extra year.

"We think it's a tremendous project," said Lorenz. "We don't want to abruptly end our involvement because of the (financial) strain it would put on NSRAA."

Kevin Duffy
Steve McGee
Barnaby Dow
M. M.
Gunny Fay

7/11/91

in statute -

define regional salmon planning process.
15 yrs in comprehensive plan. process
75

comfish
spot fish
FRED

3 aqua. assoc.
nominated by brd. - interests represented.
(most represent specific gear groups)

municipal
processors
spot fish
interests

Kodiak Ry. Aqua Assoc - whether villages are
adequately represented
ended up taking no action. - fair representation
problems w/ transportation to meetings
CI - gear groups, spot fish assoc.
no action taken.

spot fish groups - ^{some} feel can be more effective on the
outside than inside.

funds used for:

RRT process - aqua assoc. - ^{tend to} represent gear groups.
- advisory to coms.

in SE - US Forest Service are ex-officio

Ketchikan - US FWS is ex-officio

PWS - Ulday Fish Develop Assoc is ex-officio.

Chignik - ^{have} aqua assoc - Chignik Village ^{subsistence} - ex-officio

Area M - AK Per - & Aleutians - no assoc. - RPT - Aleutians East Br
if no assoc ^{formed} - RPT is different ^{covered area M village.}

Norton Sound - Bob Forte is forming aqua. assoc.

Yukon -

transportation costs is very high.

Planning Staff - Kevin is ft
Sid Morgan } entry level planner

PWS & CI - hired own planners.

f.g. - tend to monitor instead of take lead

early 70s 250K a year to do comprehensive planning

50K a year to each reg. assoc to hire planner to

~~for~~ designated grants,

work on it.

RPTs met 4 X a year.

1984 - 85 - maintenance annual update process.
funding reduced.

RPT charter -

DCED - Div of Investments -

originally + planning grant - once a year.
\$100,000 - 1 time grant. assets

certified by com.

Chignik just receiving theirs.
Norton Sound will ask for it. Paul Fuhs is pushing
for it.

original ^{designated} grant money - have contract detailing
what will be done,

commerce workplan - f + g has no oversight -
a lot of assoc. have used money to have
enhancement tax vote.

Chignik - approved 290.

B Bay - vote failed.

fishermen didn't support group - don't support
enhancement + rehabs.

Chignik - more interested in funding research
not so interested in ^{enhancement} big projects projects

enhancement - habitat improvements, beaver dam removal
lake enrichment + fish fertilization.

changing environment - new plans will differ -
financial constraints -

Kevin - not time or stopping to look at big picture

Steve - Kevin staffs RAT -

PWS & CI - full time planners

→ watershed effort - efforts still approved by cmas.

RPT plans - for rehab & enhancement

PWS - phase 3 planning - combines production planning w/ fishery mgmt & allocation aspects.

80-90: RPTs told to stay out of allocation issues.

confish - how each project will affect mgmt. in area.

→ But said - since PWSAA - creating all of the plans, you decide how to allocate.

PWSAC - 50% to senior
50% to gillnetters.

then RPT - took 50/50 policy & worked in w/ mgmt plan - openings, closings, which districts to affect gear groups.

RPT got cmas. approval. - But approved it.

now take ~~plan~~ allocation plan & change production plan.

take this concept - & try to apply to another situation like SE -

changing ermin - SE has 5 species.

in SE - relatively few hatchery fish.

Gulneters sued f.g. - said haven't been getting their fair share
+ not fair share of hatchery fish.

Hidden Falls - series, worked

Swetisham - gulneters, but didn't work

* check on fish enhancement tax - where caught or
where landed.

split between NSE and SSE -

wrote phase I plan jointly.

Lynn Carol - always said haven't got fair share.

jt meeting each spring w/ S + N SE RPTs.

Board of Fish Division - basically telling agency
error. to do more planning.

new projects -

past history - you are not the banker, you are not the
economist.
that's commerce's job.

Steve - obligation - biologically & economically feasible.
does
proposals -

at least reasonably sound that proposal is

"feasible" -

RPT has respons. on whether it makes sense.

3-4 yrs ago, legislative intent - you f'g will do this
economic analysis - commerce - loan program.

f'g took it seriously -

- make several proposals

Real economic analysis of every loan
proposal -
at least a cost/benefit analysis -
take 2% of the loan fund.

stalled by commerce -

f'g will meet w/ commerce once a year - to develop
priorities.

prioritization process for loans

oper. loans for existing facilities will have
priority over new projects.

* 84-85 - moratorium on pinks

investigate -

prices rebounded so no longer an issue.

state facilities - fishermen did not trust f'g
to do cost recovery w/ state facilities

no guarantee of getting fish back for cost recovery - disagree
for broodstock -

permitting analysis - for broodstock & cost recovery -

implicit assumption - managed as terminal fishing -

hidden, costs of transferring hatcheries - agency still
has title to facility, still have majority of contract
to run it.

④

no overall salmon review

salmon enhancement authority - dropped off books
by committee

goals & objectives in each region delineated in
each plan - based on historic levels

biological carrying capacity -

de facto statewide - only do what region can carry.

PWS - wanted to exceed area -

^{looked at}
what fishermen's income generated, rather
than carrying capacity.

reached & surpassed original goals -

more is better -

fishermen in area heavily capitalized.

some kind of overall state planning -

people didn't think enhancement would work.

individual PNP operators

Agave. Assoc.

RPT members - Flory
Sport Fish Div.

Chignik - Chuck McCallum

comfish mgrs - Kotine Pete Ponsness.

Kodiak planning process.

Dave Cantillon

Jim Shufan

Steve Penneyer.

— Van Houtley

PWSAC - *Arman Kolmny.
lives in Colorado.

Penroyer - wrote RPT charter.

REGIONAL PLANNING TEAM CHARTER
COMPREHENSIVE SALMON PLANNING
ALASKA DEPARTMENT OF FISH AND GAME

THE REGIONAL PLANNING TEAMS ARE AN IMPORTANT PART OF THE SALMON ENHANCEMENT EFFORT IN THE STATE OF ALASKA. THE FOLLOWING STATEMENTS CONSTITUTE THEIR MISSION, STATUS, AND OPERATIONS AND CONFIRM ROLES AND TASKS THAT, AS A MATTER OF PRACTICE, HAVE BECOME RECOGNIZED AS APPROPRIATE.

MISSION STATEMENT

The mission of a regional planning team (RPT) is to plan for the long-term future of the salmon resource within its region. The team's primary responsibility is to initiate and continue an orderly process that examines the full potential of the region's salmon production capacity.

LEGAL REFERENCE

Pursuant to AS 16.10.375-470, the Commissioner of the Alaska Department of Fish and Game (ADF&G) has designated salmon production regions throughout the state. In each such region, the Commissioner is responsible for the development and amendment, as necessary, of a comprehensive salmon production plan.

The RPT, which consists of representatives from ADF&G and the appropriate Regional Aquaculture Association, develops and amends the plan for the Commissioner. The team has ex-officio members as considered necessary by the individual RPTs. The RPT is ultimately responsible to the Commissioner. Any staff funded by the ADF&G to assist the RPT with planning may be administratively monitored by the association but will be supervised by the RPT in planning matters.

The RPT is the only statutorily-created planning group with legally-mandated ADF&G and private sector participation.

State statute defines certain duties of the RPTs. They are:

1. Plan development and amendment.
2. Review of private nonprofit (PNP) hatchery permit applications and recommendations to the Commissioner.
3. Review and comment on proposed permit suspensions or revocations by the Commissioner.

HISTORICAL PERSPECTIVE

The underlying premise of regional planning is to provide a means whereby private-sector user groups, represented through regional aquaculture associations, and the public sector, represented by ADF&G, may establish and maintain a cooperative, working relationship.

This relationship would facilitate and enforce the efforts being made in each region to contribute to the maintenance and enhancement of the salmon resource.

The major, initial role of the RPT is to develop a Comprehensive Salmon Plan. Comprehensive salmon planning has evolved since 1977 into three basic components: (1) Phase I Planning - a Comprehensive Plan; (2) Phase II Planning -- project specific planning; and (3) plan maintenance.

The RPT reviews PNP permit applications, as mandated by the statutes. The RPT review and comment on an application is based upon the objectives of the Comprehensive Plan. To conduct these reviews, the RPT must have current knowledge of private and public-sector proposals and operations. Public-sector hatcheries are to be included in the development of the Comprehensive Plan, pursuant to AS 16.10.375. The RPT reviews and comments on public-sector hatchery operations as well.

PLANNING, REVIEW, AND COMMENT PROCESS

Phase I Planning

The process begins with the development of a long-range Comprehensive Plan for salmon production in a region.

The Comprehensive Plan is a 20-year, strategic, regional plan that is generally consistent with the plan content outline that has been adopted by the Commissioner's Office. Since opportunity and need for salmon resource enhancement vary by region, variations within the outline categories may be necessary to address regional differences. While a 20-year time span was determined to be reasonable for long-term salmon development planning, amendments necessary to keep the plan current require shorter time frame planning. This is referred to as Phase II planning.

Phase II Planning

Phase II of the planning process occurs after the comprehensive plan is approved and addresses the plan's statutory update and amendment requirements. The Phase II plan develops detailed project descriptions and provides information for project implementation. The product of this effort may be a separate document or may be additional information or revisions incorporated into the comprehensive planning process through annual reports or plan updates.

Prior to Commissioner approval of the Comprehensive Plan, Phase II; Northern Southeast (NSPII) the future role of the RPT had not been defined. Chapter 9 of the NSPII addresses this matter:

"...since the beginning of the process, it has been recognized that the plan must not be considered fixed or static but, rather, constantly evolving; that, therefore, the RPT would have a continuing role in aquaculture planning. This continuing planning effort must relate actual events to the plan and make the plan responsive to new knowledge and ideas and changing conditions."

The Commissioner, in approving NSPII, sanctioned the process used to develop that document as a guide for the plan amendment process. Chapters 9 and 10 of the NSPII provide one format to accomplish the amendments and to respond to plan maintenance needs.

Plan Maintenance

The RPT will meet at least once a year to update the Comprehensive Plan. These updates may include identification of new projects, and assessment of progress of ongoing projects toward achievement of the goals and objectives of the Comprehensive Plan. Some vehicles that provide the RPT with necessary information to accomplish the update include PNP Annual Reports and FRED and PNP Basic and Annual Management Plans.

Update of the annual report should be a process involving both the RPT and the implementing agencies. The RPT will seek the best biological advice available from those agencies and formulate recommendations. The updates will be submitted to the Commissioner as an annual report. The Commissioner or his representative will consider the report recommendations.

Review and Comment

To execute legally mandated review and comment responsibilities and to arrive at recommendations for permit approval, revocation, or suspension, the RPTs require criteria that can be applied equitably to all permit applications and ongoing operations. The Commissioner and the RPTs have arrived at a general consensus that the review, comment, and evaluation criteria, designated and elaborated on in Chapter 9, pp. 76-86, NSPII, will "...be consistent with the language and charge provided in AS 16.10.400 (a), (f), (g)..." and will serve as a model to conduct reviews and make recommendations. RPT participation will not be limited solely to these criteria.

BASIC OPERATIONAL DUTIES

The Regional Planning Team (RPT) will:

1. Develop a Comprehensive Salmon Plan for the region it represents and submit the draft document to the Commissioner of the Alaska Department of Fish and Game (ADF&G) for review and approval.
2. Develop and submit for ADF&G Commissioner review and approval, a Phase II planning process or document to serve as a vehicle for the implementation and amendment of the Comprehensive Plan.
3. Establish and implement a maintenance program that is at least inclusive of items #6 through #14 below.
4. Review private nonprofit (PNP) hatchery permit applications and make recommendations to the Commissioner.
5. Review and comment to the Commissioner on PNP permit suspensions or revocations proposed by the Commissioner.
6. Review and comment on both PNP and ADF&G Annual Hatchery Management Plans, Annual Reports, and, at Commissioner's discretion, proposed permit alterations. This review could provide information for conducting performance analysis and evaluation for plan amendment purposes.
7. Apply regional criteria modeled in Chapter 9, pp. 76-86, Comprehensive Plan, Phase II, Northern Southeast Alaska to all review, comment, performance evaluation, and analysis activities.
8. Meet at least once annually, but as many times as necessary, to discuss:
 - A. Ongoing, enhancement and rehabilitation projects.
 - B. New projects being considered for implementation.
 - C. New opportunities which may be investigated as potential projects.
9. From the meeting or meetings addressed in paragraph #8, the RPT will prepare an annual report or plan update which will address the following items in relation to the Comprehensive Plan:
 - A. Summarize the basic conditions of the Comprehensive Plan.
 - B. Present events and trends of the immediate, past five years with comparisons and contrasts to basic conditions.
 - C. Present major events of the immediate past season with comparisons and contrasts to basic conditions.
 - D. Project events for the coming five years and relate them to immediate goals and objectives of the Plan.
 - E. Summarize conditions at the end of the year with reference to all goals and objectives of the Comprehensive Plan, current year's accomplishments, and relevant RPT commentary.

10. Provide the general public an opportunity ^{for} review and comment on current Phase II projects and to suggest new projects.
11. Consider and incorporate, where appropriate, the public comments on suggested revisions to the Phase I and Phase II Plans.
12. Annually transmit to the Commissioner the draft report, resulting from the above considerations, for review and approval.
13. Incorporate the Commissioner-approved annual report into the Phase II planning process.
14. Make periodic recommendations to the Commissioner concerning potential changes in the Charter and perform such other tasks as are deemed advisable and desirable by the Commissioner.

CONCLUSIONS

The RPT is the instrument of active cooperation between the regional aquaculture associations and the ADF&G and its various divisions. To accomplish that cooperation, regular exchange of information and discussion of objectives are necessary. A regular meeting schedule is important to maintain the relationship. The work of the RPT should support the best interest of the resource and be based on the best professional fisheries information. It should also recognize the interests of the salmon users. To this end, regular participation from the users should be solicited, and those groups should be advised concerning the decisions and recommendations of the RPT. This dialogue is a key element of the regional planning process.

THEREFORE, REGIONAL PLANNING TEAMS ARE, BY MEANS OF THIS DOCUMENT, CHARTERED TO PERFORM THE BASIC OPERATIONAL DUTIES WITHIN THE GENERAL PLANNING FRAMEWORK OUTLINED ABOVE AND TO REGULARLY REPORT THEIR PROGRESS TO THE COMMISSIONER OF THE ALASKA DEPARTMENT OF FISH AND GAME.

GLOSSARY

ADF&G -- Acronym for Alaska Department of Fish and Game.

Annual Report -- Summary of results of plan update.

Commissioner -- Principal executive officer of the Alaska Department of Fish and Game.

Commissioner approval -- Formal acceptance of a salmon development plan or other RPT products by the Commissioner.

Comprehensive Plan, Phase II, Northern Southeast Alaska -- Document produced by Northern Southeast Regional Planning Team and approved by the Commissioner on December 6, 1982.

Comprehensive Salmon Production Plan -- A statutory-mandated, strategic plan, spanning 20 years, for perpetuation and increase of salmon resources on a regional basis.

Criteria -- Accepted measures or rules for evaluation of program and project proposals and operations.

Five-year action plan -- The section of Phase II which recommends projects for implementation within the next five years (Chapter 10 of NSPII).

NSPII -- Acronym for Comprehensive Plan, Phase II, Northern Southeast Alaska.

PNP -- Acronym for private nonprofit.

Phase II Plan -- An analytical document or process that addresses salmon production development by geographic unit, project, and site and makes recommendations concerning both long and short-range opportunities (usually 20 and 5-year time frames).

Plan amendment -- Analyzing and evaluating a planning document with the option of changing the plan.

Plan content outline -- A document that defines topics and gives guidance and shape to comprehensive salmon plans.

Plan development -- Composing, drafting, revising, and finalizing a planning document.

Plan maintenance -- Process through which the RPT reviews and comments on existing plans to preserve, continue, and expedite planned salmon production.

Plan, The -- Comprehensive Salmon Plan.

Plan update -- The process and results of RPT review and changes of a plan document.

Private nonprofit -- Legal and/or operational status of a private sector organization without a profit motive.

Private nonprofit hatchery permit application -- A request presented by a private nonprofit corporation to the Department of Fish and Game for a permit to operate a private nonprofit hatchery.

Private sector -- That group active in salmon resource development which is not employed by government.

Production -- Perpetuation or increase of the salmon resource through maintenance, rehabilitation or enhancement programs and techniques. The Salmon Production Plan addresses stock perpetuation and increase through appropriate balance and integration of program and techniques.

Project -- A unit of work having a beginning, middle, and end that functions according to defined performance criteria.

Public sector -- That group active in salmon resource development that is employed by government.

RPT -- Acronym for Regional Planning Team.

Regional Aquaculture Association -- A statutory-based, nonprofit corporation comprised of representatives of fisheries user groups and organized for the purpose of producing salmon.

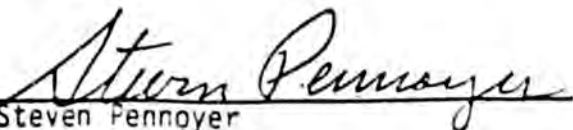
Regional Planning Team -- A statutory-mandated planning group, comprised of Department of Fish and Game staff and Regional Aquaculture Association representatives, designated to develop the Comprehensive Salmon Plan.

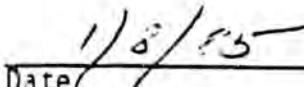
Review and comment process -- A collection of accepted procedures to solicit and generate examination and remarks.

Revised plan -- A document resulting from incorporation of Commissioner-approved material into a plan.

Uniform procedures -- Those practices that have been accepted by planning participants as appropriate for conducting or accomplishing a task.

APPROVE:


Steven Pennoyer
Deputy Commissioner


Date

KToll - you dir. SE series
Dave ~~Stout~~ - purse series SSAARAA

DS 1) some of problems - turnover in state personnel
FRED dir., PNP director - tough to get continuity.
Kevin Duffy is excellent.

2) funding - out of cons. budget, hasn't been
funded well. finally - 1 more staff member -

1 mtg a year, now 2 mtg a year, but not adequate.

have staff we need.
in allocation issues - need

SSAARAA - Gary Freitag is our planner.

3) focus & direction - not a priority for cons.
when RPT makes recommendation on permit,
cons already made up mind.

Now - just reviewing permits - good forum for that,
but other issues - policy questions -

- contribution to common property fisheries

- cost recovery
but can't provide it -

RPT

if RPT could address policy issues separate
from permits -

review annual plan, but not enough time

KT - constrained by 5-7 criteria for permits -
any policy discussion - not part of criteria.

DS specific fisheries

direction - in terms of what contribution
cost recovery by PNPs - what sort of impact.

look at permit application -

x # of fish

look at comprehensive plan -

does proposal fit into plan,

but no reflection on cost recovery, who will get fish

Annette 2. - reservation - no requirements, bound by
2 hatcheries and expanding -
don't have to follow guidelines. Concern.

~~cross~~ direct RPT to provide policy directions.

KT - recommendations of RPT may be contrary to staff -

D S Dept of Commerce - represented on RPT - not voting -
RPTs should assess loans - capital & operating -
pressuring PNPs to make repayment.
commerce - a lot of influence on cost recovery.

^{base income}
commerce - rate of return analysis - don't take
into account fish quality & timing, ^{harvest} pressure,

commerce doesn't scrutinizing closely pro formas -
on survival rate.

RPT - better ask to review loan application.

location - most critical in hatchery success.

genetics - what fish you can release at what site.

people thought mostly @ water sources, not a
lot of thought @ location.

→
KT - ~~SE~~ allocation group - PNP staff - Steve McGee.
Fish Bors directed that 3 representatives from ^{Northeast} ^{Southeast}
1 from each group - series ^{appointed by}
^{gillnetters} ^{agve. assoc.}
^{trawlers}

given 3 years -

treaty - factors in from funding perpetuate mitigation money for hatcheries -

Good idea for statewides if limitations events out of SE impacted SE a lot. time is now to address some of these problems. pink cost recovery in PWS has importances. couldn't allocate how much fish production to every region - pinks, sockeye -

- policy aspect -

Regions are different, policies should be different.

KT -

1 of triggering mechanisms for statewides review -
is production level affecting 1) carrying capacity
2) ~~statewides review~~ markets

no

between Cms of f & g and commerce -

big production plans, not small ones. - especially before making state loans.

DS - who's going to make the call - need to know,

wish we would

don't we look at hatcheries in terms of what fishermen want.

* Meyers - Chuck - state wants to terminate it
no real provision for allowing permit to be revoked.
Meyers Chuck - doing everything wrong.

appeal process -

should have performance criteria - percent contribution to common property fishing, develop new fishing for fishermen

→ Impact - if have loans - big impact.
hatcheries - make small contribution to common property
still not getting ~~common property~~ cost recovery.
DIPAC hatchery } same as above.
Burnett Inlet } poor survival rates.
still providing operating funds.

KT - if strictly totally private - no public money out
if didn't affect other fisheries.

common denominator - all share the market.
more in

DS. - we're stuck - big bundles, some pups not
successful in terms of raising fish -
+ failure at cost recovery - impacting us.

these things are a cancer

KT - Dave putting things in pretty mild terms,
state is bankrupt + regulator of resource that
gaps the bank.

need to have a check + balance.
common pressures f + g to adjust lines for
better cost recovery.
need to expand role of RPT.

some forum for statewide review w/ creating
another bureaucracy
RPT, ASME, Commerce + F&G - met
once a year.

DS. - if allocation gap is successful, RPT could
use those guidelines when reviewing hatchery
plans + permits -



Peter Light planning + economics.

Russel Mulchrist - SEP, economic models
604-666-~~1111~~ ⁶⁵⁷⁰
planning +

fisheries + oceans - Vancouver.

SEP salmon enhancement program
B.C. enhancement. (very little privatization).

Planning + econ - under fisheries + oceans
like a think tank.



5 yr intensive reviews.

Lee
Laid

AK Squam Assoc.



Cymen talk to BSEA Foundation

Molloy

maybe some hatcheries won't be cost effective -
might be best to cut your losses.
live within your plans.

can ^{know} a foreign market haven't expanded
for this extra production.
some economic criteria.

- how they plant to market
- import on market
- criteria for success

helpful to have statewide review, especially in
light of Dept of Commerce comments - to pay off 10 years

want stabilized salmon production within
reasonable limits.

would favor limits -

UMP plan - useful as guide. needs to be tuned up
annually.

* currently reaching 20 yr production
* Goal in 1st 10 years - need to figure out what
our goals are.

Dale Kelley 9/4/91

Planning

ATA
ex dir AK Trollers - last 2 yrs.

attends RPT meetings; trolls are on it, but she's not.

gaps in analysis of big picture region-wide + stat
due to staffing problems. wid.
only 2 individuals work w/ 9 teams.

used to have more money for planning.
PWSAC + CIAA - funded by associations now.

lacking
in-depth analysis on hatcheries' annual plan -
just not possible

now wild + hatchery stocks interrelate,

randomly place ries & have them
in a vacuum - of in fisheries, lots of
year group. Goals need to be more firmly laid out.
who benefits.

not a clear cut directive, issues develop - don't
know goals or objectives,

production statewide - impacts on other commercial
fleets. FRED

increased opportunities, but not hurt wild runs,
should work on industry's behalf -

FRED - what kind of impact on

board should not be involved in regional ^{hatchery} allocation
issues.

our associations are responsive to our needs -

associations should work out allocation issues.

statewide planning -
every region is unique

annual FRED report - confusion on their mission.
where do hatchery fish fit in - very gray.

some real interesting science concepts - but should they
be one.

Brian Hiller - very production oriented.

Jeff Koenigs - more rehab, red oriented -
^{more} understanding of wild stocks.

different emphasis

VSFS - lots of fish rehab money -
^{husband}
but FRED - more production oriented in past.

FIG - often don't have data to know impacts
of ↑ hatchery production.
prohibits real good quality analysis of permit.

who should pay -

SE fishermen never anticipated cost recovery -
37% enhancement tax -
user paying twice.

state has to make commitment to fund things each
year.

rpt process
assoc bond
public process

} lots of fishermen involvement

don't manage hatchery runs over wild runs.

Dale Kelly

Marketing * PWS - fishermen loved all the fish being produced. Told they were glutting the market.
PWSAEC tried to do some mktg - with value added - never any clear cut directive on marketing.

some review of marketing in planning process.

don't believe a whole new staffing scenario.

Are hatchery fish just the same as wild stock?

Weak Stock management -
stock groupings

hatcheries started after earthquakes -
ruined a lot of spawning habitat.

know there are good years & bad years, good prices
and bad prices - that's why you have a bankruptcy.

WAC -

Armand Koenig - sp?
terminal harvest areas -

8/5/91

by phone

1974- PWS -

special comm of ? marketing assoc. - chairman

Dec. 74 - incorporated into PWSAC - pres. until 83
also chairman of brd + gen mgrs.

on brd exec. comm.

RPT since 76

low fish runs in PWS in 72-74.

Existence of 74 PNP -

Wally Nienberg - PWS biologist FI and F&C -
dependent on available technology

Prospectus - salmon culture program - 75 -
green cover -

organ

old site - many sites not available.

will work numerous
small streams produce large runs if OK conditions

to stabilize fishing - dept knew that needed
escapement + good mgmt.

marketing

understanding w/ FRED that state + private
sector share job - state build 2-3 structures
PWSAC 2-3

Main Bay
Churney Creek -

looked at water sources together, done cooperatively.

RPT- '76 - pushed by regional assoc.

need for comprehensive planning for state & private facilities.

74 act - bad act. no idea how it would work -
2 diff approaches - 73 private profits - not sustainable
(like Oregon)

UPA & PWS - wanted to make sure common property
manipulation isn't
compromise -

only a few ^{non-POP} hatcheries ^{outside} - UFA & DIPAC -

started in '76 - PPT -

Basic law is quite vague.

regulation - RPT charter, spells out purpose & authority
deals w/ salmon production, also have to
deal w/ mgmt, but not really spelled out.

amendment by Bd in 89 - to do integrated
planning production, mgmt & allocation
comes closer to truth -

allocation policy - fisheries development policy -
marketing
economic
research }

*

amend the law - clarify what they're doing now.
state doesn't have fisheries development policy.

'83 taskforce.

✦ statewide plan
in a way yes, countries - but conditional - state
is very diverse *
allow areas to develop what is best for their situation

* get copy of Shippell task force -
entirely different biological, economic conditions

only way some regions could develop -
B Bay - natural system of storage is great
waters - wild stocks

new approach.

bought place in our area.

 actual allocation - done by Fed
we write the proposal.

•  areas should have own planners, 'but FREED'
com fish should assist w/ info from other areas.

state planners - not knowledgeable enough of local area -
understaffed.

FRED - should be re-defined, state doesn't seem
willing to produce fish for private consumers.

control, scientific, biological function
need to reorganize, re-group

need a watch dog - so private guys can't go
overboard.

1 of PWSAC policies - managing, optimizing production -

what is optimum we don't know.
competition between husbandry & wild stocks.

PNP Act - constraints to state's depleted policies w/o impacting wild stocks

other extreme - 7/10 of world's food ~~to~~ must come from ^{land}.

focus has shifted - making more fish for comm. ^{fish} farming -
- some pressure - from wild salmon farming -
other factors in world drive food production values.

simple solution - if you can't sell it, can't produce it.
this shouldn't drive it.

decide what we can produce, then what we can sell.

some hatcheries & releases - due to water, but if ~~too~~ difficult to manage - need to be moved.

our planning process much further than B.C., OR & WA.
can't compare to Japan.

need to write down goals & objectives, then can see what needs to be done.

changes

integrated planning approach should be stressed in all regions.

state should make effort to recognize different regions & look at them statewide -

making good -

if mismanaged - doesn't mean we should stop
if can't sell, should take a new look.

regional
coordination

~~Trade-offs~~

no real sport fish interests -
use enhancement for all user groups & balance
things out. -

— Jerry Madden - former f+g. 8/6/91 ^{personal} interview,

state-run hatcheries planned as single-site projects,
not a regional plan as the PNPs were.

in the beginning - site inspections & selections -
overall comprehensive plan -

seems to be a higher failure rate for the state-run hatcheries
Snake River - D'ham
- Sitka

Russell is still questioning

Snellisham - mgmt problems;

species problems

chum compete w/ DIPAC

in last
few years -

1st hatcheries - all production oriented,
pressure from private sector - research, sport fish,
88-89 strategic plan -
swing in division away from production.

2 options - close hatchery or contract it out, but no
cost recovery

private sector

- 1) reluctance of state to continue funding for comm. fish.
- 2) aqua. assoc. want to be primary producers of fish.

changing attitude - against govt. run facility, not just
against fishermen.

state hatcheries - are viable.
Sockeye - also marginal.

RPT. & comprehensive plans

Bristol Bay - management problems, - then when those were solved - huge rains + fishermen felt no need for enhancement.

D'Nam Hatch - state-failed.

Y-K: doomed being enhancement on big rivers, almost impossible.

D'Nam - Snake River - IHM virus - couldn't be controlled - Sockeye - technology - hadn't learned enough.

B Bay plan - not ^{enhancement} production/oriented - more protection of habitat.
fed govt didn't want enhancement either.

clear in statute - Cmsr has overall responsibility - implicit if not explicit.

cmsr office - never actively supports RPT process -

has been efforts - meetings, time, etc. -

need a statewide plan now more than ever - losing resources -

some of us are over-capitalized - can't pay for what they have - prices down.

Mom + Pops - no public board

RPT should provide public process -

public input on release sites -

permitting process - snowball effect, pretty hard to stop by the end.

issues - mainly near populated areas.

500,000 for planning - ⁱⁿ '82 + staff.

used for contracting planning w/ AA

in '90 - no money for contracting - @ \$50-180,000

budget cuts have really impacted public outreach.

State has lost control of planning - can't have effective RPT meeting twice a year. count on assurances to have their own planner + hold meetings.

gap - no statewide process -

impacting policies of state notaries also.

brd - has some authority

what is Dept's?

what is Donds?

over production and allocation -

tried to clarify - board will make no decisions on PNP's until permitted, then can alter permit by reg.

neither Shroy nor Collinworth - took active interest in FRED unless a crisis.

believe should be
w/ common on new associations formed, new hatcheries.

restate
permits for limnology & lake stocking
unless on federal lands.

release sites -

state released fish - but no one thought @
who would catch them.

so they in CI - Trail when Big Lake.

Should state ^{be allowed to} cost recover?

state hatcheries - can be built w/o permits,
don't need to go thru RATS.

require state to go thru same public process
as PNP's - w/ hatcheries & permit releases.

Planning

exper dis. since '82, ^{another} 77-82 biologist before then?

Tom Meas - CIAA 8/21/91

Tom Walker - staff to RPT for 11 yrs.
wrote comprehensive plan * since '80

Tom Walker - 1 yr grants from state -
team had been working since 78 or so on it -
was at a standstill -
was someone in planning capacity before -
RPT - up & functioning 3-dept
3-assoc., but no staff,
no progress
@ 78-79 - legis. appropriated money for staff
CIAA hired staff person -
individual - Fred being involved in fishermen's politics
no animosity, but no one to pull it together.

TW - Given past history, getting them to realize they could
agree on having & then move on.
fishermen - optimistic view; dept - more cautious
view. trying to reconcile these two was often ^{stupidly}
what ultimate goal for production would be -
different perspectives.

TM in early days - dept said "another plan" - didn't take it
seriously - assoc. ^{fishermen} people took it more seriously.

TW - means of measuring this was dept performance
seriously.

TM over time, dept guys have seen there is benefit
to plan.

CI
enhancement projects - mixed stock fishery - require
substantial continue monitoring & evaluation
FRED does it, if at all, then state
state should spend more on monitoring & evaluation

require marking & tagging -

state doesn't do it for own projects -

CI - the permitting process required that
a.a. be responsible for marking & tagging.

cost recovery - not big part of discussion

CI - upper & lower

lower - some fishing in terminal fisheries
simple to do cost recovery

upper - 1 large mixed stock fishery
to do cost recovery - on ext'n mgmt. schemes,
will take whatever gets through - after average
exploitation rate & escapement.

RP - what people envisioned as viable
projects in 80. absolute immediately.

2-3 years ago - started on smaller area plans -
more precise on preferences for smaller units.

- fishing efficiency.
- gear group operations -
-

process is important - more than the document,
continuing forum - forced interaction on
relatively neutral ground, existence of team
as forum -

TW difference between specifics & general philosophy

TM - fishermen thought they'd get a blueprint,
but never have -

st

TM - dumb to have statewide plan makes me crazy. Nothing is statewide about this state. Every project & fishery is local thing - has local constituency - few are what goes on elsewhere. SE series - didn't get - enhancement - emergence of farmed fish has changed everyone's market - best?

TM - get into squabbling between regions over who gets the production. will try to politically manipulate process to their advantage. even within a region - its a problem for a penny a pound - they'll kill each other

TW - agree on possibility of meaningful statewide plan. difference: state agency endorsement of process, dept encourage region to do better - support has diminished over last decade -

dept have more public hearings & advertising better.

TM - permitting - dept responsibility to do public notice, but don't do a very good job

planning - whenever an actual plan - attempt to put it out for public review. problem is people won't get excited about plans & planning process, don't get much public review.

TW - talked @ smaller plans, told dept didn't have enough money to print & distribute so public

level of public input - sufficient for planning
document

another level - to meet legal requirements -
state feels ^{public} more is necessary to make it legally
defensible.

early years - 1 user group felt not getting
enough access to RPT - they chose not to be CAAA
board members. - sport fishermen.

TM public has all kinds of access thru permitting
process.

TM - in PWS - Fish Bd said this awful problem,
you should figure it out.
not a similar situation in CI
watching it carefully - look at basin split
between lower & upper. doing it right now -

still don't see some problems in CI
managed on basis of wild stocks

Bart Watson

8/23/91

Armstrong - Keta
southern end of Baranof Island.
4 mi. from Port Alexander.
independent - NSARA area.

fishermen are members of NSARA -
3% tax.

only proceeds come from ~~off~~ est recovery.

Richard Matthews

5 acre inholding in USFS -

F&G considered a prime site.

formed a non-profit corp.

primarily a trolling area - Port Alexander residents.

started w/ money from Fish Enhancement Loan
Fund.

started in

1981 - loans made available for initial capital
phase.

originally envisioned very small - way to
support himself out there. not a good administrator
Matthews

bd of directors - kicked Matthews out.

As

wanted late chum run - come after trolls
stroke from late fall run - never returned -

but had good pink run - originally just for cash
flow,
then phase out.

still bright when come into bay, no conflict.
Chums - darker sooner, have to fish outside.

of pinks have grown:

10 m chums - equivalent 50 m pinks.

changed permit several times -
2-3 yrs ago - thru RPT -

FRED
com fish
sport fish
gear groups

asked for 55m pink capacity -

what's common property contribution

request to also produce 55m for remote release
for common property.

j+g doesn't have pink Recovery Program -
would be expensive.

in SE - j+g mgmt driven by pink salmon.
outside sein fisheries - would wipe out wild or
hatchery stocks.

could easily put tags on pinks.

[DIPAC tagged pinks, but on Hook Inlet fishing]
otolith process - 100% marking -
tagging pinks - more difficult.

DNP should be responsible for tagging.
Recovery - who pays for it?

loan payments starting to come due -
critical that finances in order -

PWSWAC -

who benefits -

not a good time to produce pinks - but cyclical.

dependent on ^{pink} fish for cost recovery / live series in contract
but if series don't within special harvest area.
want them, why do
pink permits release.

Chinooks easy to tag.

want to produce Coho instead. have tagging
survey program.

Coho + Chinooks - need to keep for a while year.

Part - on bud since 81,

now exec. dir since '87.

if hatchery not beneficial - would be first
to say we shouldn't do it.

Production doing great.

Part - marketing collaboration being supplies so volatile
hatcheries should take leadership role in marketing -
long term contracts with median price -
new markets - not compete w/ canned salmon mkt.

farmed salmon - more of competition w/ chinook + coho -
oversupply - real strong runs.

not role of RPT to stabilize production & marketing.
no processor or marketer on RPT

big push to form PNP hatchery assoc. - ^{for cooperative effort}
SSAARA + NSAARA + VCI said no -

series - all time record runs, don't need
hatchery fish now.

% ^{pick} produced by hatchery - is 2% of natural harvest.
wild run is all-time record.

SE 60m picks -

fishermen sell to ~~whomever~~ who has highest price -
drives others out of business, then offer lower price -

RPT - good, rigorous process -
shaking out of ideas from various viewpoints of
gear groups.
comprehensive plan - not a major factor.

annual mgmt plan then com fish biologist in Sitka ^{Bob DeYoung} -

RPT - how does this impact our fishermen
advisory to com.

concerned @ overall lack of support for hatcheries -

in PWS -

bid of fish gear area biologist mandate to
manage for hatchery and wild returns.

Armstrong - data - no science on bid, haven't
been willing to be in it.

NIS SE - bid of fish told them to decide allocation,
tougher to do here - should be 1 aqua assoc -
3 gear groups instead of 2,
reduce conflicts - just initiated last spring -
meetings this fall.

1st serious meetings in Sept.

meeting of independent PNPs - non-voting status -
John Carter - DIPAC - PNP observer

concerned @ survival - no tax money -
depend on cost recovery.

will make loan payments but probably not
operating costs - need loan for that.

if legislature dries up loan funds - will be not
of luck.

major factor - strongest SE natural resources.

like way FRED handled us -
careful, protection of wild fishery &

Lord Macaulay

8/23/91

early to mid 70s -

was prepared for only industry opposition.

original cement - get more fish

marketing of fish - missing element - finished products,

permitting - public process, - ^{could value-added} achieve it simpler -
but probably wouldn't work.

rpt - duplication

public hearing - 2 sets.

every remote release site - had to have public
part of original purpose. ^{regs.}

Anchorage Harbor - no new public info.

St. James H. - want new.

wouldn't do it again -

result of govt wanting to regulate
our lives.

no statewide process - those who already have
will set the pace & hold industry in their hands
won't allow for free market enterprise.

~~body~~ wouldn't take care of bad years of when no fish.
might better deal w/ glut years.

large assoc. - react more as governmental agency.

smaller guys - put pressure on larger groups -
can respond to technology changes - smaller
investment, more efficient -

50% - bond

50 - 30% - cost recovery
70% - fishermen's common property

— 60% of production — in remote release sites —

central incubation —

no question @ #s of fish they get.

what managed for investment

allocation before bid of fish **f** **A**
we want return on our investment.

enhancement tx — shouldn't have to pay below*
certain level.

dept — policy decisions

board — backed them up.

No more fishing in Bay St.

Chatham — the Seiners Lynx Canal — gillnetters.
enhanced fish started coming back —

old tract — fishery —

dept chose to say — not include any enhancement fish —
unless bid told them.

first emphasis on chums — for gillnetters
but known for pinks.

sockeye production $\uparrow$
for Lynx Canal.

shouldn't require tagging —

but enhancement info should be given to
bid of fish, dept wouldn't

can't ignore enhancement info ^{even} if managing
for wild stocks.

could were tagging
otolith

Thermal Marking -

dept has ^{recovery} pay analysis -
much cheaper -
statistically take fewer fish -

have matching pay for recovery in good years -
want to see it in your budget.

shouldn't require paying for cost recovery
if have to borrow operating funds from
state to do it.



DS money - sport fish →
more sport fish money - especially for
king / coho production ~~fish~~

use - DS money - for PNPs independents and
aquaculture assoc. -

would rather see money go towards marketing.

KRAA

Urry Malloy - ~~Kodik~~ Reg Aqua.
expendir. Assoc.

8/28/91

since Mar 91

formerly ADF & G - 20 yrs - in Kodik area
retired last Nov.

area management biologist, mostly
w/ com fish - salmon & herring.

returns are excellent
rec'd sockeye - ~~not~~ last year's catch.
near record things (incidental bycatch)

pinks - broad & butter species

@ 70% of area's catch historically;
near record catch.

all wild stocks.

except @ 10% are hatcheries.

chum - significantly
above average.

coho - since 79, stocks are up
could be near record.

@ 22m fish - 24 $\frac{1}{2}$ m
100 yr average - 6.6m

89- part of normal fishery, @ 26m fish

Kitoi - pink - @ 10% of area's catch; rest up 30-40% being
chum - 5% eventually 40-50% wild stocks.
coho - sport fish & subsistence down in
sockeye - 8% eventually 20% even years.

Pillar Cr. - sockeye invasion

early 80s - not directly involved

local f+g advisory com. was active -
fishermen worried @ hatcheries -

1) loss of genetic pool

2) hatchery fish - would lose fishing opportunities
time + area

Kitoi - established in 53-54

red salmon research facility.

state looking at 6 other hatcheries in ^{area in} ~~early~~
mid-70s.

locals - wanted to stabilize wild stocks,
not get heavily into hatchery

comprehensive RPTs - early 80's
Regional plan - 83-2002

participants - didn't want hatcheries, but felt
obligated to project production -
didn't envision #'s.

KRAA - funding 80-90% of FRED project.

2% tax

Fy 87 - initial waterway at Kitoi

KRAA + FRED + Comfish - work pretty well

good line of communication - don't have allocation
problems like PWS - thought @ management issues.

when natural runs belly up - helped us out
then they love them.

in high years - don't need hatchery production -
competes w/ individual permit holders - broodstock
& cost recovery.

early ranchmans } extend fishing times.
late ranchers }

fewer FRED planners -

Kodiak fishermen like this cooperative
relationships - like state planner -

Jerry Madden - now Kevin Dugby
very helpful -

worried
that PNTs will compete w/ individual permit holders
in common property fishing.
3 PNT applications denied.

no set % of contribution to common property
fishing.

no evaluation of hatchery -

yes, working example in PWS -

no way to prioritize

no ones talking @ original intent of
hatcheries - enhance common property fishing

other entities - not as formal - yet get loans
forgiven, extended

new ones - must
comply w/ intent of law - put a percentage
on it - & planning - wait have to close a lot of
geographical areas. priority of wild stocks over
hatchery fish.

ADF&G FISHERIES POLICIES

Several policies guide the development and ADF&G approval of hatchery basic and annual management plans, hatchery permits, permit alterations, and fish transport permits. These include specific policies regarding genetics, fish disease, fish stocking and fish transport.

The **Genetics Policy** protects the genetic integrity of important wild stocks and increases productivity of enhancement programs through brood stock selection and defined egg-take procedures.

ADF&G's **Fish Disease Policy** is a series of regulations that prevent dissemination of infectious diseases within or outside the borders of Alaska through diagnosis of wild stocks intended for hatchery use, and through utilization of disease prevention and treatment measures in hatchery stocks. Alaska is a leader among states with its fish disease prevention and treatment program.

The **Fish Stocking Policy** protects wild stocks as a first consideration in managing enhancement programs.

The state's **Fish Transport Policy** prohibits possession, transport, or release of live fish into the waters of the state without a permit issued by the ADF&G Commissioner. The permit holder must be in compliance with the conditions of the permit.

HATCHERY PERMITTING PROCESS

A hatchery permit application is submitted to the analysis of the Department of Fish and Game, and reviewed by the Regional Planning Team. The RPT then makes a recommendation to the ADF&G Commissioner, who alone may grant the permit to build and operate a hatchery.

Management Feasibility Analysis of a Proposed Hatchery: The ADF&G staff determines the desirability and compatability of the proposed production with existing fisheries, and may provide recommendations to assist hatchery permit applicants.

Review of Applications for Permits and Permit Alterations: The Department has the responsibility to assess the technical feasibility of the proposed operations. It also estimates the impacts of hatchery production on wild stock management.

The Regional Planning Team also has responsibilities. The RPT must determine the compatability of proposed operations with the goals of the Regional Salmon Plan. Also, the RPT determines if the proposed operations provide protection for wild stocks.

In addition, the RPT must provide for public comment on the proposals, then forward its recommendations to the ADF&G Commissioner. The hatchery permit applicant, in collaboration with ADF&G staff, must then develop a basic management plan -- an overview plan for hatchery production and for the management of returning fish. The basic management plan is presented at a public hearing, which provides guidance for the Commissioner's decision to issue a hatchery permit.

HATCHERY OPERATIONS AND REVIEW

Once a hatchery is operational, it must submit an **annual management plan** to the Department of Fish and Game. The plan must describe the annual production goals of the facility, and contain a statement of the number of returning fish needed for brood stock and cost recovery.

The hatchery management plan is prepared jointly by ADF&G and the hatchery operator, and requires the approval of the ADF&G Commissioner.

A **hatchery permit alteration** is required for changes in planned production or release locations of hatchery fish. Approval is based on past performance of the hatchery, and compatibility of the change with wild stock protection and the fishery management program. Each hatchery permit alteration must be approved by the ADF&G Commissioner.

A **hatchery performance review** is a process in which the ADF&G reviews hatchery operations to ensure adequacy of all phases of hatchery production, ranging from brood stock development to hatchery contributions in the fisheries.

Standard performance measures for egg and fish survivals in hatcheries are used to evaluate adequacy of fish culture methods.

EVALUATION OF PWSAC ENHANCEMENT PROGRAM

PWSAC cooperates with ADF&G and the University of Alaska Fairbanks to evaluate, through fish tagging and oceanographic studies: (1) ocean survival of hatchery fish, (2) performance of hatchery fish in the fisheries, (3) interactions between wild and hatchery salmon, and (4) utilization of food sources available to juvenile salmon.

Program evaluation will be the subject of an article in a later edition of the Sound Quarterly.

Steve McGe

1-22-92

1) statewide planning process
not opposed to it, in some respects would be healthy
question is how you do it.

if 1 rep from each of regions - if done by consensus,
does everyone have veto power over other projects,

at least
pull together -

statewide plan - that at least addressed the total,
the facts & status.

another position.

- other areas interested in enhancement - how do they
get in?

- where are common threads - maybe production goals
tagging
evaluation
shouldn't be.

if we've kept to historic production - not as much of
but PWS didn't do that - did it
by \$ that fishermen want to harvest,
so, went from 5m fish to 40m fish.

PNP production PWS - 8.8 - ^{not recovery} 33m fish - 1991 \$2.6m ^{not}
10.3m fish ^{not recovery} 38m fish - 1990 \$10m ^{not} cost ^{recovery}

more fish in '90, no problems in harvesting
less fish in '91, problems w/

People envisioned these kinds of #1's as their goal.



Closest thing is annual report.

getting to magnitude that what someone does in 1 region impacts another region.

2. Funding & support for planning.

now have 1 1/2 ~~1 lower grade planner~~ ~~sit~~ ~~man~~ and 1 at lower range.

Kevin - 1/2 time

\$ lower grade person 1 1/2 -

at least 1 more full-time: new areas & projects.
if statewide effort - 1 more staff.

current ~~plans~~ ^{areas} - used to get grants to support regional planning effort

SE, Kodak, Chynk - don't have planners.

annual update approach.

RPT - 2 days 2x a year.

PWS + CT

hire own planner - paid for RPTs to meet
dept made sure they were at meetings.

Steve - no conflict if association has own planner
Tom Walker & Howard Farnen - try to serve
as staff to RPT - and RPTs work for comm.
^{might have} ~~idea~~ that these guys have too much
influence.

even when state paid for planners in N & S SE -
they were all housed at associations, just the
money came from outside.

PWZAC doing own internal corporate planning -
Howard ^{Faxon} is doing that also.
could be argued that it is a conflict.

MFA

3. Management feasibility analysis

would to have 2 stage application process
prelim - site id, scope, species, timing, no detail
cursor review by dept.
final -

in 1985 -

then CZM review process came in - told they
couldn't have 2 stage process, only a final
application - can be expensive to fully develop.

MFA - to replace prelim. application, initial
review

where
species
timing
magnitude of production.

Prelim. view of yes or no - from management decision
↓ complete
spot fish
required to do before hatchery application

even if MFA says its a bad idea, doesn't
stop someone from applying for project,

red flags or no red flags

in application process -

MFA - species & run timing specific.

often use MFA to modify proposal.

then should we require a new MFA, ~~not~~ ^{new} consistent policy. ask mgmt divisions if MFA is needed.

once application is deemed acceptable -

then sent out for departmental review.
^{opportunity} to comment.

for most part - managers don't have as many concerns.

~~PWS~~ -

Hawk Inlet - not really a mgmt problem; problem is when DIPAC wants them to do something different.

a lot of questions - ability to ID hatchery fish in mixed stock fishery.
given magnitude of hatchery production.
mud tool.

PWS - 40m pinks, nothing new, working towards this for at least 10 yrs.

every time a new hatchery proposed - ^{used} same procedures - never permitted a hatchery that managers didn't say could be handled.

#s were always there.

managers always had way to manage - they would go to terminal style mgmt. as production got higher.

wasn't problem w/ quality. PWSAC got higher price for terminal caught fish than fishermen getting for them.

Alec Brindle - ^{said} quality problem to them, & we don't like these terminal fisheries.

[Kroening hatchery - asked for special sub district for terminal harvest area.

1 year - run is late, all come in at once, processing capacity couldn't handle it.

never been PNP hatchery permitted that managers didn't agree they couldn't be managed.

sometimes - have required more marking, see them going more towards that.

also - will have to pay for at least part of recovery.

existing production - never required.

4. FRED - no PNP style permits
historically - if they wanted to change something,
FRED just did it.
did not work well.

commitment, annual management plans for
all facilities - go into RPT process. they
all look critically at state production; ^{probably even} more so.
annual mgmt plan - what is proposed, before
they do it.

significant change in mission - from
chum to storage facility.

fishermen have expressed this as a problem.
there is a double standard.

PNP permits, state doesn't.
but in reality, whether state can do something
I don't think it exists.

CZM process applies to state projects.

FTPs - apply to everyone.

in past dept sponsored FTPs that allowed
state to do things wouldn't allow PNPs to do.

taken group from ^{old-time} dept people.

some people - we don't have private rules,
we are the state,
those attitudes have been dispelled.
since Brian Allee & Jeff Koenigs -
not us against them - we are all in this
together.

people within other divisions - that FRED Din
should have permits like PNPs.

Steve - don't see that it would be a whole lot of good,
might formalize the process.
have something similar for FRED - more formal
rules.

most of complaints - from old guard biologists in
other divisions.

 generic ^{by} ~~Wendy~~ ^{Region}