AGRICULTURE

III

REGIONAL ASSOCIATION ISSUES

The following issues were jointly identified by all five Associations. They are in two catagories: A and B. Catagory A should be addressed immediately during this session. Catagory B requires more attention than time now permits, and will require thorough evaluation prior to actions. We recommend that a study group similar to last year's policy study group be created to examine catagory B issues.

ISSUE	PROPOSED ACTIONS	COMMITTEE ACTIONS NEEDED
CATAGORY A:		
1) Salmon enhancement loan fund program	a) Maintain program b) Appropriate fund c) Increase loan limit	a) Resolution b) Letter to Finance c) Bill
2) State-wide mark/tag evaluation program	a) Create program b) Appropriate fund	a) Resolution b) Letter to Finance
3) Private for profit hatcheries	a) Prohibit option	a) Bill
4) Tax revenue pass through to Associations	a) Specify timely and simplified procedures for 100% receipt pass through	a) Bill or Resolution
5) Regional planning team	a) Clarify role b) Appropriate fund	a) Bill or resolution b) Letter to Finance
6) Alaska Salmon Resource Development Program	a) Renew financial commitment to fund expanded public and private program	a) Resolution
7) Policy study group for catagory B issues	a) Create group b) Appropriate fund	a) Resolution b) Letter to Finance
CATAGORY B:		
1) Relative role of public and private aquaculture	a) Clarify for maximum cooperation and minimum duplication and competition	
2) FRED facility operation	a) Contract out to Regional Associations	
3) Adult returns to FRED facilities	a) Sale of fish to offset operational costs	
4) PNP Loan forgiveness period	a) Extend based on species life history	
5) Matching reserve fund for region with depressed and declining stocks	a) Create fund and matching formula	

ALASKA SALMON

Fishermen help to rebuild the stocks

HUMAN INSTITUTIONS often respond to challenges like other organisms — by adjusting their behavioural patterns. With institutions, such changes almost always produce some discomfort when familiar modes of operation are laid aside in order to adapt to new ones. The challenges of expanding frontiers have been among the most significant agents of change for human institutions.

As one of the last continental frontiers in North America, Alaska is proving to be no exception. The beleaguered salmon fisheries there are the focus of a striking experiment with a new concept in salmon management. A unique system is being developed that encourages fishermen and others who depend directly on salmon resources to become involved with their management.

Right — Small boat at work off the United States North-west coast. Court decisions in favour of Indian tribal fishing rights have cut heavily into salmon catching by White Americans.

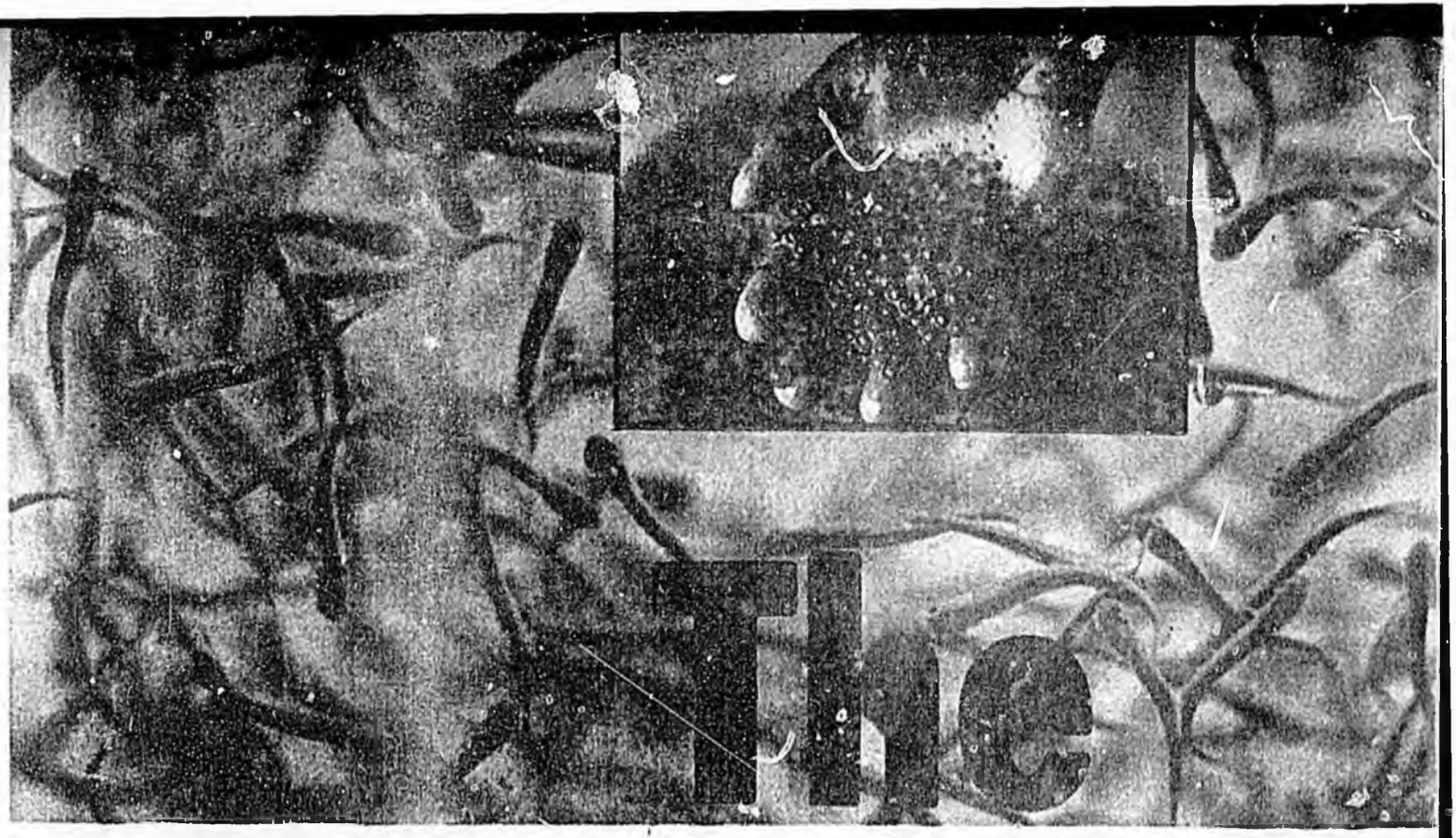
Fishing was the first European enterprise transplanted to North America. Long before the first American colonies were established, Western European fishermen were routinely crossing the Atlantic to fish on the Newfoundland Banks and were drying their catches on the rocky islets along the nearby coast. Since the challenge of developing profitable fisheries in North American waters had already been met by European fishermen by the time the first colonists arrived, there was little stimulus for changing fishing customs brought over from Europe. As the frontier advanced across the continent, the focus of fishing activity remained behind in the North-west Atlantic. Systems for fishery management were derived from European institutions that concentrated authority in a few selected government officials.

New Ocean

It was not until the 19th century, when the full impact of European civilisation reached the Pacific Coast, that European-American fishermen were confronted by a whole new ocean.

While they learned to admire many of the skills of native Americans, fishermen and others whose livelihoods depend on fishing do not share directly in the making of fishery management decisions, although indirect their influence may considerable. The extent of such influence depends on the political pressure that they can bring to bear on elected officials to whom agency staffs are ultimately responsible.

For independently-minded fishermen who spend much of their lives at sea, it is not always easy to find the time for political activity, nor for developing skills for it. The system has tended to produce an "us versus them" relationship between



The hatchery project

Regional aquaculture associations for salmon stock enhancement have been organised in Alaska for Prince William Sound Cook Inlet and for both Northern and Southern Southeast Alaska. Efforts are being made to organise one for the lower Yukon-Kuskokwim area. Comprehensive salmon plans are being prepared by the regional planning teams. Public (ADF&G), association and private (Mom and Pop) enhancement projects are being developed within the framework of the new laws.

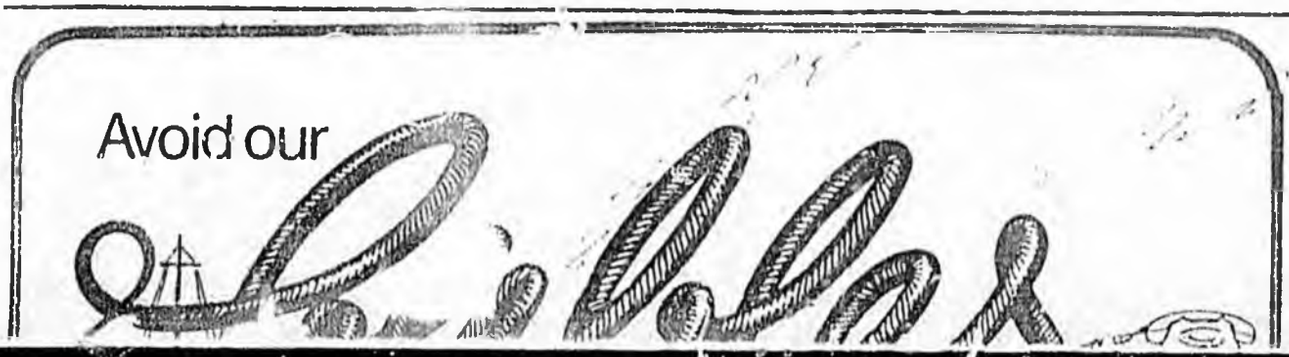
An association, having qualified as a regional, non-profit corporation, may request the Commissioner of Commerce to establish areas in which a royalty assessment shall be levied on the sale of one or more species of salmon caught by persons holding limited entry permits in the area in which the assessment is to be levied.

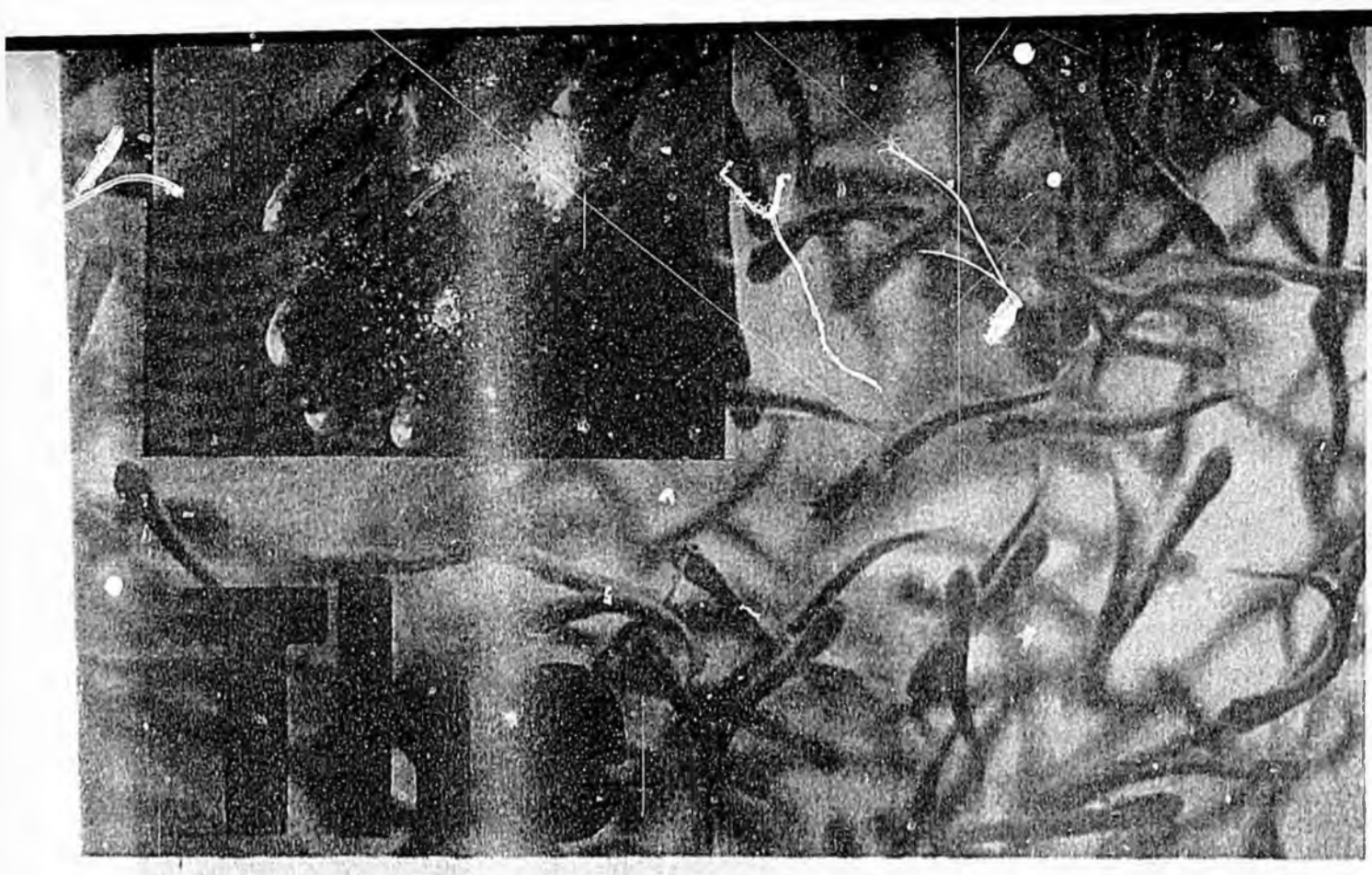
The assessment is for providing revenue for the association and may be equal to two or three per cent of the fair market value of the fish, but may not exceed three per cent.

Such a royalty assessment may be terminated: (1) on request by the regional association when all financial obligations relating to the assessment have been met; or (2) on a majority vote among qualified members in the area, either before cial obligations relat the assessment have incurred, after have been m

In place of or in a to, the royalty asse an association of holding limited ent mits and consisting least 51 per cent holders of such who actively partic the fishery to be b may voluntarily le collect an assessme among its members purpose of securing enhancement authorised by state la

Seed money for





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In place of, or in addition to, the royalty assessment, an association of persons holding limited entry permits and consisting of at least 51 per cent of the holders of such permits who actively participate in the fishery to be benefited, may voluntarily levy and collect an assessment from among its members for the purpose of securing fishery enhancement loans authorised by state law.

Seed money for organisational and planning purposes can be granted by the state to qualified regional associations in amounts up to 100,000 dollars per region plus an additional 100,000 dollars (on a 50-50 matching basis) for those regional associations having authorised royalty assessments.

Loans, at rates not to exceed 9½ per cent, are available from the state to cover total costs for hatchery projects, providing that the Commissioner of Commerce determines that the applicant has sufficient resources for a share [illegible]

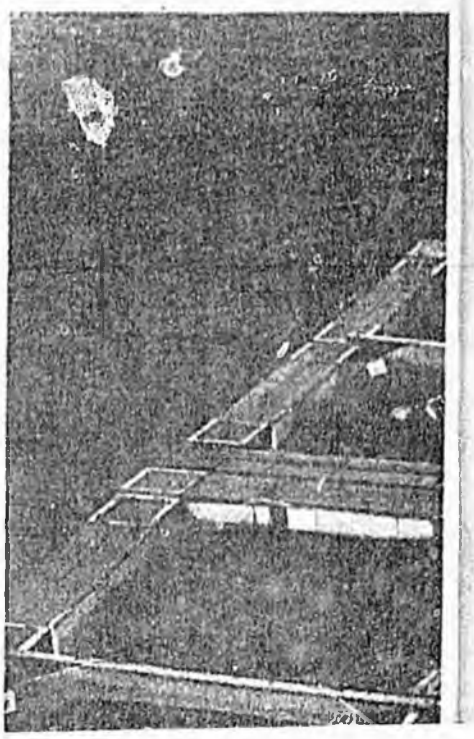
ing in the project equal to ten per cent of the loan within six years, either through a royalty assessment or other means approved by the Commissioner.

The way the system has been set up, an initial 100,000 dollars put up by the membership of a qualified regional association can produce, over a six-year period, six million dollars in matching state grants and loans. When other sources of matching funds (Sea Grant, EDA, etc.) are factored in, the overall annual yield on such an investment approaches 20 to 1!

Stimulated

Stimulated by these generous financial incentives, user-operated, non-profit salmon enhancement projects are proliferating in Alaska.

As with any rapidly growing organism, there are growing pains. In Cook Inlet, for example, disgruntled fishermen, unhappy with mandatory royalty assessments, have challenged them in court.



SALMON:

In Homer, a group of fishermen have threatened to pull out of the association.

And sportsmen have been critical of the flow of state grants to the association.

The opposition is highly vocal. It comes mainly from sincere people with legitimate reasons for their concerns. The new system still has a long way to go before it becomes sufficiently functional to fulfill the management objectives for which it is designed. Yet, in view of this observer, the broadened base for decision making and for innovation provides it with that most valuable of all attributes for survival in a competitive environment: the flexibility to adapt to local differences and to changing environmental and economic conditions.

This flexibility should provide room for adjusting to difficulties such as those being experienced by the Cook Inlet Regional Aquaculture Association. The associations do provide a forum for airing differences and machinery for resolving them.

Although still in its infancy, the new system is already making notable progress. The Prince William Sound Aquaculture Corporation's successful hatchery project at Port San Juan is being expanded to make it the largest pink salmon rearing facility in the United States. It will have a capacity for rearing 69 million pinks and chums.

In March 1980, a review draft for the Comprehensive Salmon Plan for Southeast Alaska was completed by a joint planning team representing the two associations in that region.

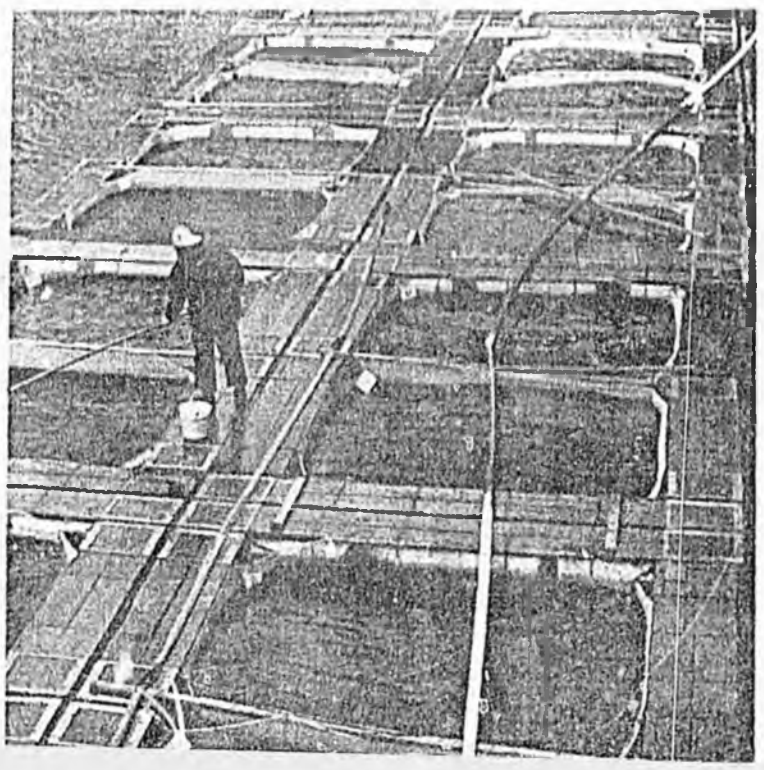
The draft reflects solid groundwork, logical thinking and realistic goals. For example, a survey conducted by the Northern Southeast Regional Aquaculture Association (NSRAA) revealed that 71 per cent of the fishermen in the region favoured small facilities and that 79 per cent considered risk a major concern. Their greatest fear was the development of an unbalanced salmon restoration programme with heavy emphasis on production hatcheries and relatively little emphasis on improvements in management technology and enhancement of natural productivity.

To meet these concerns, the joint planning team formulated the following project development guidelines for the NSRAA:

1. Over the long-term, the Association should have a primary purpose of developing self-perpetuating, rather than artificially-sustained salmon stocks.
2. Projects should be cost effective (pay their own way).
3. Association investments should focus on projects that can be stopped without incurring major financial losses if they should fail.
4. In broodstock development, native stocks should receive first priority; stocks transplanted to incubation or rearing stations should be released back to the native streams; and release of stocks in non-natal streams generally should be discouraged.

Using these guidelines, the joint Southeast Alaska planning teams developed a set of goals and objectives that, by the year 2000, are calculated to restore and maintain chinook, sockeye and pink salmon catches at the level of the highest 30-year average catch, the coho catch at a level 150,000 fi greater and the chum catch at twice the level of the highest 30-year average.

Another indication of progress is that bright, highly-trained, competent young people are being attracted to management positions in the regional aquaculture associations.



ALASKA'S RANCHERS

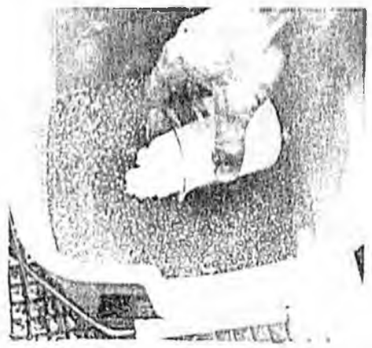
Fishermen join fish farmers to boost Pacific salmon runs

Above: Biologist Rogar Boydun (left) uses an electro-shocker to stun spawning pink salmon so that Greg Young (centre) and an assistant can net the fish for hatchery broodstock. Picture by Mark Kelly.

For left: Rick Focht activates milt in the fertilised chum eggs by adding fresh water. The sperm become active in fresh water but remain so for only about 15 seconds while they enter the egg.

Left: Greg Young removes chum eggs from a "zip loc" bag prior to fertilisation. The eggs were taken at a remote site on Montana Creek, transported to the hatchery in the bags and placed in the ice chests.

Below: Eggs are fertilised with milt from the male salmon. This and other pictures by Diana Kalm.



WHEN SALMON ranching projects have been proposed in the countries fringing the North Pacific, some of the most bitter opponents have been commercial fishermen who fear that the enhancement schemes will eventually eliminate traditional methods of hunting the natural runs.

But in Alaska, fishermen, farmers, researchers and administrators have been working together to set up unique non-profit companies whose aim is to restore the state's depleted salmon resources with government help.

Under an Act passed by the Alaska legislature in the 1970s, salmon hatcheries may be owned by qualified non-profit companies "for the purpose of contributing, by artificial means, to the rehabilitation of the state's depleted and depressed salmon fishery."

The Act further stipulates that the programme has to be carried out without adversely affecting natural stocks of fish in the state, under a management policy which allows reasonable segregation of hatchery-reared salmon from natural stocks.

Regional associations were to be created to develop comprehensive salmon plans and rules were set out for the formation of an association.

Thus in one stroke long overdue in North America the Alaska Legislature opened the door to the state government for sharing the responsibility for managing the salmon resource with users directly concerned with it.

Keeping a management system functional while diffusing the responsibility across a broad base presents a challenge of great complexity. In their development of a system of shared salmon management, Alaskans are rising to that challenge.

Regional aquaculture associations for salmon enhancement have been organised for Prince William Sound, Cook Inlet and for both Northern and Southern Southeast Alaska. And efforts are being made to set up an organisation for the lower Yukon-Kuskokwim area.

Seed money for organisational and planning purposes can be granted by the state to qualified regional associations in amounts up to 100 000 dollars per region, plus an additional 100 000 dollars (on a 50-50 matching basis) for associations having authorised royalty assessments on the sale of one or more species of salmon caught by persons holding limited entry permits in the area.

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Stimulated by these generous financial incentives, non-profit salmon enhancements projects are proliferating in Alaska. And, although still in its infancy, the system is already making notable progress.

For example, the Prince William Sound Aquaculture Corporation's hatchery project at Port San Juan is being expanded to make it the largest pink salmon rearing facility in the United States.

A survey conducted by the Northern Southeast Aquaculture Association among fishermen in its region helped it to prepare project development guidelines. From these, both the Southeast associations are working to a set of goals and objectives that, by the year 2000, are calculated to restore and maintain chinook, sockeye and pink salmon catches at the level of the highest 30-year average catch, the coho catch at a level 150 000 fish greater, and the chum catch at the level of the highest 30-year average.

Another indication of progress is that bright, highly-trained young people are being attracted to management positions in the regional associations.

These pictures illustrate activities connected with the Northern Southeast Association's hatchery which was opened north of Juneau in the summer of 1980.

The hatchery is incubating three million pink and chum eggs with plans to add coho in a year. □

An Analysis of Selected Elements of the Alaskan Salmon Resource Development Program

A Report to the Aquaculture Policy Study Group of the Alaska Legislature

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