

H

B

3

8

9

A PROPOSAL FOR
THE BETHEL SCIENTIFIC/EDUCATIONAL
HATCHERY PROGRAM

The Lower Yukon Kuskokwim Aquaculture Association (previously AVCP Fisheries Development Corporation) has been operating the Bethel Scientific/Educational Hatchery Program for three years under state contracts #3852 (FY'78), #79-316 (FY'79), and #80-957 (FY'80).

The programs main objective is to promote fisheries education, specifically aquaculture and fisheries enhancement as a resource tool in the Lower Yukon Kuskokwim region. As the sixth Regional Aquaculture Association to be recognized by the state of Alaska under AS 16.10.380, we must recognize that as the largest of the six regions and the most dependent per capita on the fisheries resource, there exists no means by which a local person can get an education of what amounts to the single most valuable resource in the entire region. Without fisheries education how can we get our local people into management, research, or aquaculture positions?

There are many complex fisheries problems in this area which stem from the lack of available knowledge of basic fisheries biology, management principles and fundamental marketing concepts. In the past the people of this region did not have the means to substantially jeopardize their fisheries resource. They had to harvest as many fish as possible just to get by. In a relatively short amount of time their culture has been turned upside down and they are forced without option to the modern day world which is so completely based on a cash flow economy. With the added "advantages" of modern technology (ease of transportation, better harvest gear etc) they are for the first time in a position where their resources must be carefully managed to insure future generations the availability of the fisheries resource.

Before a respectful and significant input into fisheries issues can exist within this region there must first be developed an awareness and understanding not only of the resource itself but of the changing times and probable impacts on the region.

With fisheries education being so desperately needed in our region, we feel that our Scientific/Educational Hatchery in Bethel can play a key role in the educational development of this vital resource. We have been plugging away at fisheries education for three years now and feel that we are on the verge of a breakthrough. We have written up two fisheries courses for the Vocational Education Department at the Lower Kuskokwim School District which they are using in the reorganization of the Vocational Education Department and one for the college. We worked with the Alaska Native Foundation in obtaining a grant from the Department of Education for the "Foxfire" fisheries program. We have been and will continue to work with this

program (Lynne Hale, Fisheries Specialist, ANF). The High School Fisheries class which we helped get started has been holding field trip classes on a once a week basis which is where the main value of this program is best demonstrated. Its one thing to teach the students about fisheries from books and the teachers knowledge, yet quite another when those students can work directly with the life cycle of salmon right near their classroom.

Aquaculture has a very real and significant potential in this region. We do not however want to shove it down peoples throats before they have even had the chance of being educated in fisheries.

We have a man lined up named James Akaran (resume enclosed) who is interested in the Regional Biologist position that would assume the primary role in this project. Our fisheries Technician III, John David, has already proven his worth and has been a major asset to this Scientific/Educational Hatchery.

One of the main objectives of this project will be to get the college and the high school to actually "take over" the hatchery project next year along with full commitments to fisheries education. We have been butting our heads with the college over fisheries with the argument that educational institutions most especally a "community college" are obligated to fulfill the most relevant needs of the populous they serve on a priority basis. We strongly contend that fisheries is a number one priority in this region.

The future economic and subsistence security of this area depends not on this project alone but on the end product of this and other projects. If funded we will continue to work with other agencies and the people of this region not only to show what staggering potential the fisheries resource has here, but to insure that they establish and maintain complete control of the development of such a fragile resource. The exploited fisheries elsewhere in the state and indeed the world give startling evidence of the so typical pattern of the almighty dollar overshadowing responsible management of a resource. This region is fortunate enough to have the chance to be different.

PROPOSED BUDGET
BETHEL SCIENTIFIC/EDUCATIONAL
HATCHERY

PAYROLL

\$74,950.00

Executive Director	10 months	@ \$1,675/per=	\$16,750.00
Regional Biologist	12 months	@ \$2,600/per=	\$31,200.00
Fisheries Tech III	10 months	@ \$2,000/per=	\$20,000.00
Office Mgn (1/2 time)	10 months	@ \$ 700/per=	\$ 7,000.00

OFFICE SUPPLIES & EQUIPMENT

\$ 2,000.00

TRAVEL & PERDIEM

\$ 7,000.00

Air Charter (egg takes, etc)	\$ 5,000.00
Staff Travel & Perdiem	\$ 1,000.00
Administrative Travel & Perdiem	\$ 1,000.00

RENT & UTILITIES

\$ 9,000.00

Electricity	@ \$350/month x12=	\$ 5,000.00
Fuel	@ \$100/month x12=	\$ 1,200.00
Rent (lease)	@ \$300/month x12=	\$ 3,600.00

CONSULTANT FEES

\$ 2,000.00

PRINTING

\$ 263.00

TELEPHONE & POSTAGE

\$ 1,460.00

Telephone	@ \$80/month x12=	\$ 960.00
Postage & Freight	@ \$50/month x10=	\$ 500.00

AMOUNT DUE CALISTA LOAN

\$18,327.00

TOTAL FUNDING REQUESTED

\$115,000.00

This project would include three principle hatchery or enhancement site evaluations. The project would result in a preliminary hatchery application for each of the three areas. The areas to be investigated are:

A. Proposed Kisaralik Dam Site

The investigating team will analyze the physical data of the Kisaralik River along with the proposed plans for the hydroelectric site. The team will submit a preliminary hatchery proposal at the end of the project addressing the following issues:

1. Possible incorporation of a hatchery into hydro project.
2. Probable mandatory inclusion of a highly effective fish pass system.
3. Legal considerations
4. Resident species affected by hydro project and projected impacts.
5. Spawning criteria
6. Water quality (existing and projected)
7. Temperature (effects on fish)
8. Sedimentation
9. Effects on migrational movement.
10. Special considerations for project site and individual species of fish.

This investigation would be of a preliminary nature and aside from a hatchery site proposal it would include in the final report of findings and recommendations, a detailed outline of special conditions which need to be addressed if and when the hydroelectric project is initiated.

B. Nyac Mine

We have been discussing the possibility of a hatchery project near Nyac on the Tuluksak River with Mike Scott of the U.S. Bureau of Land Management (Anchorage Regional Office) and Nyac Mine owner/operator (Clark Awe. Because of the interest and help we could get from the Bureau and preliminary data already reviewed, we feel that the investigating team will have no problem in securing the necessary on site criteria for a preliminary hatchery site application.

C. Goodnews Bay

The Goodnews Bay area has some very promising site locations which should be looked into. The investigating team will perform on site research to determine the best locations for a hatchery or enhancement site in the area. The Lower Kuskokwim School District has one of its best Fisheries Vocational Education programs in Goodnews Bay. The students could be incorporated into the evaluation program with the extra advantage of follow up studies by resident students should the preliminary application be accepted by the state and a final application initiated. A set of standards of selection criteria for hatcheries and enhancement projects will be supplied on request.

PROPOSED BUDGET
LOWER YUKON/KUSKOKWIM
HATCHERY INVESTIGATION

<u>PAYROLL</u>		\$30,000.00
Fisheries Biologist 6 months		
@ \$3,000.00/per=	\$18,000.00	
Fisheries Technition III 6 months		
@ \$2,000.00/per=	\$12,000.00	
<u>OFFICE SUPPLIES & EQUIPMENT</u>		\$ 6,500.00
Analytical Field Equipment	\$ 6,500.00	
<u>TRAVEL & PERDIEM</u>		\$11,800.00
Air Charter 70 hours		
@ \$140/per=	\$ 9,800.00	
Boat Charter or Rental	\$ 2,000.00	
<u>CONSULTANT FEES</u>		\$ 2,300.00
Lab Work	\$ 500.00	
Accounting & Secretarial Expenses	\$ 1,800.00	
<hr/>		
TOTAL FUNDING REQUESTED		\$50,600.00