Kametolook River Coho Salmon Subsistence Project

Project Number:	02247
Restoration Category:	General Restoration
Proposer:	Perryville Village Council
Lead Trustee Agency:	ADF&G
Cooperating Agencies:	NONE
Alaska SeaLife Center:	NO
Duration:	6th year, 6-year project
Cost FY 97	$31.4
Cost FY 98	$14.9
Cost FY 99	$20.8
Cost FY 00	$23.2
Cost FY 01	$22.7
Cost FY 02	$30.8
Geographic Area:	Perryville/ Kametolook River/ Alaska Peninsula
Injured Resources/ Service	Subsistence

ABSTRACT

Subsistence users from the remote South Alaska Peninsula Native Village of Perryville have noted declines in the coho salmon (*Oncorhynchus kisutch*) run in the nearby Kametolook River since the *Exxon Valdez* oil spill (EVOS). The Trustee Council began funding this project in Federal Fiscal Year 1997 with the intent of restoring the coho salmon run to historic levels. This project is a continuation of an evaluative phase of the project funded through the EVOS criminal settlement (Grant Agreement Number 2168588). Although limnological, juvenile, and adult fisheries data were not available or severely limited before the salmon decline, it was determined through the evaluation phase that instream incubation boxes in conjunction with self imposed harvest limits by subsistence users were the preferred alternatives for restoration this salmon run. In 1997,

the Alaska Department of Fish and Game, Habitat and Restoration Division aided the project by providing an Environmental Assessment. In 1997, a Finding of No Significant Impact was signed for NEPA compliance.

Community involvement by the villagers of Perryville is an integral part of restoring the Kametolook River coho as a subsistence resource. Presently, no regulations prohibit fishing in the Kametolook River; however, starting in 1997 the Perryville Village Council voluntarily closed the upper half of the Kametolook River to subsistence salmon fishing in order to not interfere with spawning salmon. In the summer of 1999 and 2000, virtually no one fished in the Kametolook River for salmon. In addition, as part of the community involvement portion of the project the Perryville Village Council has hired local assistants who received training to assist ADF&G with fieldwork including: genetic and pathological sampling, incubation box installation, egg takes and incubation techniques, and year around monitoring of the boxes and environment. Also, an aquarium has been set up in the village school where students actively participate in incubating coho salmon from egg to fry stage and releasing the fry into the Kametolook River. In May 1997, 1998, and 1999, about 125 fry from the school aquarium project annually were released into the Kametolook River. In 2000 the aquarium water pump failed and all the fry were lost. In the fall of 2000, approximately 400 fertilized eggs were placed in the school aquarium however the aquarium tank was cracked sometime during the winter and the fry died.

In 1997, two production type instream incubation boxes were installed in the upper reach of the Kametolook River. These boxes replaced and were in addition to a small test incubation box that has successfully incubated eggs. In 1997, the Kametolook River coho escapement was an estimated 724 salmon, nearly four times the estimated escapement during 1996. The increased escapement is attributed to the self imposed closure of the upper river by the villagers, a commercial fishing closure in marine waters during nearly the entire coho salmon run, and a strong run of coho salmon in general to the Chignik area. In 1997, several attempts to capture ripe coho salmon have generally been unsuccessful; eggs from only seven females (four of which were partially spent) have been deployed in the incubation boxes.

In 1998, in order to increase the egg take, two salmon holding pens were installed near the coho salmon spawning region of the Kametolook and used to make the recovery of ripe salmon more efficient. Sixteen female and 15 male salmon were captured and placed in the holding pens to ripen. Seven males were used to fertilize 11 ripe females and the fertilized eggs were placed in the two incubation boxes in November, 1998. The coho salmon escapement for 1998 was an estimated 148 salmon. The decreased escapement is attributed to a weak run of coho salmon in general to the Chignik area.

In early November 1999, the two salmon holding pens were used again. Nine female and 20 male salmon were captured and placed in the holding pens to ripen. On November 17th, eggs and milt were collected from the ripe salmon in the holding pens. Standard delayed fertilization techniques used and the fertilized eggs were placed into the two egg incubation boxes. Kidney, ovarian, and genetic samples were also collected. There was

an attempt to estimate the Kametolook River coho escapement, however turbid waters made it impossible to determine.

In 2000, 4 female and 8 male coho salmon were captured and placed into the holding pens in early November. On November 16th milt from 7 of these coho were used to fertilize two of the ripe females. The fertilized eggs were placed into the egg boxes. About 200 eggs were held back from the egg boxes and were transported to the Perryville school for use in the school aquarium. Because the kidney pathology sample was complete and only two female salmon were used in the egg take, no ovarian or genetic samples were collected. Additional eggs for the rehabilitation project were desired; however, the escapement was estimated to be extremely low, only 85 total coho salmon in the Kametolook River system.

Due to the continual low escapement of coho salmon into the Kametolook River system, the project will be unable to achieve the goal of restoration of the coho salmon run within two life cycles of the fish. In 2001, we are proposing to expand the project to investigate nearby coho stocks as potential brood sources for rehabilitation of the Kametolook coho run. An expanded project would collect genetic and pathology samples from nearby streams for testing. If after ADF&G genetic and pathology approval, we will propose transporting coho salmon eggs and/or juvenile fish from nearby streams, but outside of the Perryville valley, to aid in restoration of the Kametolook coho run (if fish transport permits allow).

INTRODUCTION

This subsistence project is designed to restore coho salmon subsistence opportunities in the Alaska Peninsula village of Perryville. The project was initiated during community workshops held by the Subsistence Restoration Planning Team. Workshops in Perryville took place in September 1994 and May 1995. The project was subsequently endorsed by the Perryville Village Council. The project was also discussed and endorsed by the Chignik Regional Planning Team in the spring of 1995 and again in December 1996. Alaska Department of Fish and Game, Division of Commercial Fisheries, westward region staff assigned to the Chignik and Alaska Peninsula regions and the Division of Subsistence, have been involved in the planning and development of the project. In addition, an ADF&G biologist in the Norton Sound Region has provided technical expertise regarding the use of both instream incubator boxes and recirculating water incubators, which have been successful in the Norton Sound Region. Alaska Department of Fish and Game, Division of Habitat and Restoration staff have also been involved with the project, especially with the development of an Environmental Assessment.

In 1996, funding for the evaluation phase of the project was provided through a grant to the Native Village of Perryville by the Alaska Department of Community and Regional Affairs, using EVOS criminal settlement funds. During consultation about this grant, the State members of the Trustee Council requested that a proposal to the full Trustee Council be prepared to support the implementation of the project in subsequent years. This was accomplished and the Trustee Council began funding this project in Federal Fiscal Year 1997. The Environmental Assessment was approved and the resulting FONSI for this project was received by the Trustee Council in May, 1997.

It has been determined by the assessment team (PI's, Habitat and Restoration, and Perryville Village Council) that local salmon stock instream incubator boxes are the best method to help restore Kametolook River coho salmon runs. Applications for ADF&G fish transport permits are reviewed annually and a general habitat waterway/waterbody application has been granted for this project. In 1997, an environmental assessment was completed with a Finding of No Significant Impact signed for NEPA compliance. Samples of adult coho salmon will continue to be collected for genetic and pathology data until sufficient numbers are obtained. The assessment team will work with the Principal Geneticist, Principal Pathologist and Area Management Biologist to have the most safe and satisfactory project possible to help restore coho salmon in the Kametolook River to historic levels.

NEED FOR THE PROJECT

A. Statement of Problem

Since Perryville was founded in 1912, the Kametolook River has provided the community with much of its supply of subsistence coho salmon. Since the *Exxon Valdez* oil spill, Perryville residents have noted that there are fewer and fewer coho salmon in the

river. It has become such a problem that many families must travel further away from Perryville to find sufficient amounts of salmon. Their use of these other areas has put additional pressure on fish stocks used for subsistence by the neighboring villages of Ivanof Bay, and the three Chignik villages.

Salmon are very important for Native people of Perryville, and are relied on greatly for their subsistence as well as economic livelihoods. Commercial fishing is the mainstay of Perryville's cash economy, where many residents travel to fish camps in Chignik Lagoon and Chignik Bay in the summer months to commercial fish, as well as to put up fresh sockeye salmon for smoking, canning or freezing. Those people who spend summer months in Chignik return to Perryville in the fall to put up coho salmon that are also smoked, as well as dried. Many other Perryville residents, however, do not commercial fish and stay in Perryville year around. Gradually throughout the summer, they travel to the Kametolook River to catch their year's supply of subsistence salmon that are primarily coho, pink, and chum salmon. (Sockeye, estimated at fewer than 100 adults annually, also spawn in the Kametolook River.)

Division of Subsistence personnel first did research in Perryville in 1984. Starting in 1990, the division has documented concerns by local residents that coho salmon availability in the Kametolook River is far below historical levels. Fish and Game biologists working in the Chignik region believe coho salmon stocks in the Kametolook River might be depressed, but have little data regarding historic or present escapement levels for this small, remote river.

B. Rationale/Link to Restoration

Salmon runs to the Kametolook River have been declining in recent years. Members of the village of Perryville requested the EVOS Trustee Council to fund a restoration project and they asked ADF&G to assist with this project. The cause of the decline in salmon numbers is unknown. A restoration project cannot be successful unless the cause of the decline is understood and the project is "fixing" the "right problem". An appropriate salmon restoration project will hopefully increase Kametolook River coho salmon relied on for subsistence by Perryville people back to historic levels. If more fish are available for subsistence, it will not only provide people with more coho salmon, but it will also take pressure off of other subsistence resources that were hurt by the spill, such as other salmon species, clams, seals and sea lions, as well as recent declines of local caribou.

C. Location

The remote Native village of Perryville is located approximately 500 air miles southwest of Anchorage on the Pacific side of the Alaska Peninsula. Veniaminof Volcano overlooks the village that is situated directly along the Pacific Ocean coastline with beaches of volcanic black sand. The Kametolook River is located four miles northeast of Perryville, and is easily accessible from the community via ATV, foot, or boat.

COMMUNITY INVOLVEMENT AND TRADITIONAL ECOLOGICAL KNOWLEDGE

The Trustee Council's goal of achieving additional local public involvement in the restoration process is addressed in that Perryville will be a partner with ADF&G personnel in this project. This project has been discussed and endorsed by the Chignik Regional Planing Team and the Perryville Village Council. Through project funds, the Perryville Village Council is responsible for hiring local assistants, and providing necessary logistical support for the operation of this project. The community has also contributed much in terms of local knowledge of the environment, including: historic to contemporary salmon run timing and numbers, subsistence harvest levels over time, identifying physical changes to the Kametolook River over time, helping ADF&G identify spawning and rearing areas, and identify potential characteristics of the river, such as where winter freeze over or spring and fall flooding might occur.

Several residents of Perryville have worked with ADF&G during assessment and implementation phases of the project. In addition, local assistants will monitor the project throughout the year, when ADF&G personnel will not be present. Local assistants through hands-on involvement have been trained by ADF&G personnel to monitor temperature and water level stations, to monitor the egg incubation boxes, participate in egg takes for seeding the incubation boxes, transporting eggs to the classroom incubator, and will transport fry to nearby lakes or adjacent rivers (depending on what the current review of the Fish Transport Permits allows).

Perryville residents have been kept informed about the progress of the project through the Village Council and village meetings. During these meetings residents have been informed about salmon run strengths, harvest levels, and rearing and habitat issues. The community has been encouraged to come up with ways that they can contribute toward restoring the coho run. Presently, no regulations prohibit fishing in the Kametolook River; however, starting in 1997 and continuing through 2000, the Perryville Village Council voluntarily closed the upper half of the Kametolook River to subsistence salmon fishing in order to not interfere with spawning salmon. A subsistence salmon household survey in Perryville for both the 1999 and 2000 seasons determined that virtually no one fished the Kametolook River for subsistence salmon, because people were concerned about the fish populations.

School children have had opportunities to learn, understand and appreciate the complexities of the growth cycle of salmon through the use of a classroom aquarium that is raising coho salmon from egg to fry stages. Fish resource permits have allowed the release of these fry into the Kametolook River (1996-2001). In addition, when allowed by the teachers and parents, older school children have accompanied ADF&G personnel to the Kametolook River and nearby lakes to assist with minnow trapping and biological and habitat sampling. This portion of the project has been in operation every winter since 1997, and expected to continue through 2002 and possibly beyond if the school continues to support the program.

PROJECT DESIGN

The primary goals of the project are to increase the coho salmon runs to the Kametolook River and to include the people of Perryville through involvement in the project and education. The method(s) used to accomplish this have been determined in 1996 and 1997 by a team of ADF&G specialists, and local Perryville residents. Funding for the first portion of the project was provided through a grant to the Native Village of Perryville from the criminal settlement funds. Beginning in Federal Fiscal Year 1997 funding has been provided by the Trustee Council. Personnel involved with the project have determined that the most appropriate rehabilitation method is through the use of instream incubation boxes. The team has acquired all the necessary permits (with the exception of the school aquarium Fish Transport Permit that is submitted to ADF&G for review annually). The Environmental Assessment and a Finding of No Significant Impact by the US Fish and Wildlife Service was approved in May of 1997. This project has the potential to make restoration of coho salmon in the Kametolook River possible. Similar projects in other regions of Alaska have proven to be successful.

In addition to school and village meetings where salmon life cycle processes were described instream incubation boxes have been determined to be the preferred restoration method. A test incubation box was positioned in a head water tributary of the Kametolook River to use the natural flow of water from the stream to incubate coho salmon eggs. This portion of the project has been successful; swimup fry were produced during April 1997. In the production phase of this project, genetic integrity of the Kametolook River coho salmon will be assured under the guidance of the department's Principal Geneticist. The potential incubation site has water temperatures consistent with natural spawning sites to insure that fry development and emergence occur at the same time as naturally occurring fry. The small scope of this project is not expected to noticeably add any coho salmon to other common property harvest groups (i.e. commercial fisheries).

From similar projects in Norton Sound, it has been found that improved returns were noticeable in about five years. If the number of coho salmon spawners is sufficient to allow an egg take, instream incubators will be employed. (Fish Transport Permits will require a minimum of 60 naturally spawning pairs before an egg take can occur and then 50% of the escapement above the 60 spawning pairs will be available for an egg take.) In 1998 and beyond, the use of salmon holding pens will be used to make the recovery of ripe salmon easier. The incubators are expected to operate annually from 1997 through 2002 (or longer if there is a need and funding available). Since a major expense is in the boxes (materials and installation), and establishing an incubation site, the annual cost of operation and maintenance is not significant.

Other restoration methods evaluated included a recirculating water incubation facility in the village, potential habitat manipulation to create or provide access to better spawning and rearing habitats, and a remote incubation facility. All of these alternative methods were rejected in favor of the instream incubators.

A. Objectives

There are two main project objectives: the first is community involvement described above, and the second is to restore the coho salmon returns to the Kametolook River and provide local subsistence salmon opportunities. The species of interest for this project is coho salmon. Phase 1 of the project included a complete assessment of the creek and river habitat in proximity to Perryville and interviews to determine salmon run strength, run timing and physical changes to local drainages. Phase 2 (1996) included installation and testing of a streamside incubation box, continuation of the classroom aquarium and education programs for adults and high school students. Phase 3 so far has included installation (August/September 1997) of large capacity streamside incubation boxes, installation and use of the school aquarium, education programs, and biological sampling for pathological and genetic testing. Phase 3 will continue through the end of the project with biological testing (until required amount necessary are obtained for genetic and pathology tests), annual egg takes for the incubation boxes and the school aquarium, continued education and habitat and harvest monitoring. Phase 4 will be implemented in 2001. Due to continual low escapement of coho salmon into the Kametolook River system, an expansion of the project will investigate potential genetic and pathology brood stock concerns for the transport of coho salmon eggs and/or juvenile fish from nearby streams to the Kametolook River. River systems outside of the Perryville valley (other than the Kametolook, Three Star, and Long Beach Rivers) will be investigated and if fish transport permits are granted the transport of eggs and/or juvenile coho salmon will occur.

B. Methods/ May 1996 - September 2000

May 1996 through September 1996/ This phase of the project was funded through the Criminal Settlement/ Project Perryville 96-1.

May 1996- Three ADF&G assessment team members traveled to Perryville and joined with local assistants to assess the Kametolook River in order to make recommendations for the best restoration efforts. A small instream test incubator box (2 foot square plywood box) was installed at the headwaters of the river. The incubator box was also equipped with a thermograph to aid in determining the potential of the incubation site. Thermographs were also installed at three other habitat-monitoring locations along the Kametolook River. Perryville guides showed the ADF&G team the different stream reaches; at this time, there was no evidence of blockages to adult or smolt migration. Blockage and breaching events apparently occur on a scale of about 2-10 years. ADF&G personnel were given the impression that the river has relatively unstable spawning areas with current upstream spawning sites improved from prior years. Young-of-the-year and fingerling coho were observed in several slough habitats and small ponds. Several ponds, deep main-stem pools, side-channel sloughs and spring areas apparently do not freeze solid and would provide over winter rearing habitat. During this trip preliminary investigations were also undertaken for possible stocking of rainbow trout or coho salmon into two landlocked lakes (Sandy and Sicken Lakes) in proximity to Perryville. At the high school ADF&G personnel discussed potential education projects such as a

classroom salmon aquarium and recirculating egg incubators. (A detailed field trip report is available.)

Project 97247 (October 1996 - September 1997)

October 1996- Three ADF&G assessment team members traveled to Perryville and joined with local assistants to expand the habitat surveys of drainages adjacent to Perryville, to place fertilized eggs in the experimental stream side incubation box and to initiate a cooperative educational program in the Perryville school. Local guides showed us much of the historic and potentially productive reaches of the Kametolook, Three Star and Long Beach Rivers. Long Beach River, although historically productive, presently had no quality spawning or rearing habitat. Three Star River, smallest of the three drainages, had some stable reaches but about half of the discharge had changed course and currently flows into Long Beach River. Some potential rearing habitat is present while spawning habitat appeared to be limited. Kametolook River currently showed the most salmon spawning and rearing potential. However, this system is dynamic and habitat quantity and quality may change annually.

Minnow trapping was conducted in all three drainages. Rearing and spawning habitat in Long Beach River appeared to be negligible. Three Star River had limited high quality slough habitat and supported juvenile coho salmon and Dolly Varden; spawning habitat appeared to be limited to several short stream reaches. Rearing habitat for juvenile coho salmon in the Kametolook River appeared to be quite abundant while upper stream reaches seemed able to support relatively good numbers of spawning salmon. Several high school students assisted with coho fingerling data collection efforts.

A total of 32 adult coho salmon were collected from the Kametolook River during this trip. Few other adult salmon were seen. Genetic and kidney samples, otoliths and scales were taken from each salmon. All observed coho salmon appeared to be recent arrivals to the river and were not ripe; seeding fertilized coho eggs into the incubation box was not possible. High school students, in addition to assisting with fingerling sampling, also explained the field trip experience to their fellow students. Each presented some aspect of the field studies and the ADF&G team participated by asking questions and explaining details. ADF&G personnel also demonstrated scale reading techniques and presented representative samples of all species collected from the minnow traps. Plans were developed with the science teacher to install and permit a classroom aquarium incubator for coho salmon eggs. (A detailed field trip report is available.)

November 1996- Two ADF&G assessment team members traveled to Perryville and joined with local assistants to capture and spawn one pair of coho salmon for the incubation box in the Kametolook River. Gillnetting captured about 20 salmon including 4 sockeye, 13 male coho and 3 female coho salmon. Following standard delayed fertilization techniques, the eggs were fertilized and seeded into the incubation box. A thermograph was deployed in the substrate near the largest group of spawning salmon. Although only a one time event, a survey to enumerate spawning coho was conducted. About 75% of all observed coho were located within 1 mile downstream of the

incubation box; the remaining 25% were scattered in small groups throughout the remainder of the drainage. The total observed coho escapement was about 100 salmon with no ocean bright salmon observed. The subsistence harvest continued, and the observed escapement might have been higher than the actual spawning escapement. (A detailed field trip report is available.)

At the high school the ADF&G team assembled the aquarium incubator. When the eggs reach the eyed stage, about 250 eggs from the stream side incubator were transferred to the classroom incubator (January ADF&G field trip). (A detailed field trip report is available.)

January 1997- Two ADF&G team members traveled to Perryville. While waiting in King Salmon for the flight to Perryville they met with the Alaska Peninsula/Becharoff National Wildlife Refuge staff to discuss the Kametolook project and review the draft Environmental Assessment. In Perryville, they joined local assistants and checked the thermograph and staff gauge sites, shocked the incubating eggs, discarding dead eggs, and sorted out about 250 eggs which were transported to the school aquarium. An approved Fish Transport Permit allowed 250 eggs to be raised in the school aquarium and the release of any resulting fry back into the Kametolook River. With the assistance of five high school students the team measured physical characteristics of two landlocked lakes as potential coho fry or rainbow trout release sites and collected gravel for alevin habitat in the aquarium. A slide show of the restoration project and discussion of the life cycle of salmon was presented to all Perryville students. ADF&G personnel also attended a meeting sponsored by the Village Council where they presented a similar slide show. At the village meeting the restoration project and the school aquarium were discussed as well as the life cycle of coho salmon, the 1996 coho salmon escapement, and potential production from the escapement. (A detailed field trip report is available.)

March - May 1997- ADF&G personnel drafted an Environmental Assessment of the Kametolook River Coho Salmon Restoration Project. A FONSI was developed and in May was signed for NEPA compliance. A Habitat Permit was reviewed and accepted which allows the instream incubation boxes to be deployed. Fish Transport Permits were drafted for review to insure that management, genetic, and pathology concerns are addressed. Approximately 125 coho salmon fry were released into the river of origin (Kametolook) from the school aquarium project (Fish Resource Permit P-97-021).

June - July, 1997- Received appropriate fish transport permits from ADF&G for harvesting salmon eggs and releasing fry from incubation box and school aquarium for the 1997/98 season. Purchased materials for two incubation boxes and constructed them for later use. Met with the Chignik Regional Planning Team, Chignik Regional Aquaculture Association and public to development a Western and Perryville Districts coho salmon management plan.

August 1997- Transported incubation boxes to Chignik Bay (ADF&G M/V Resolution) and local Perryville resident transported them to Perryville via fishing boat.

September 1997- Two Perryville personnel were trained (2 weeks) at Pillar Creek Hatchery (Kodiak) in spawning and incubator maintenance techniques. Two ADF&G staff attempted to travel to Perryville to install the two incubation boxes in Kametolook River, sample salmon and trout for age, length and abundance data, however weather prevented them from traveling beyond Chignik Lake. In late September, two Perryville assistants transported two egg boxes and other necessary equipment up Kametolook River to the installation site.

Project 98247 (October 1997 - September 1998)

October - November 1997- The Perryville Village Council voluntarily closed the spawning areas of the Kametolook River to fishing (October 3). One ADF&G personnel traveled to Perryville October 31 through Nov. 6. On this trip ADF&G personnel 1) set up the school aquarium for incubation of coho salmon from egg to fry stages, met with the teachers and this year's upper class members and instructed them on classroom salmon incubation techniques; 2) discussed with the local assistants the placement of thermographs for the fall/winter/spring period of 1997-1998; 3) estimated the total coho salmon escapement to the Kametolook and Three Star Rivers; 4) with help of three local assistants, installed two production type salmon incubation boxes in the Kametolook River; 4) attempted a coho salmon egg take for the incubator boxes and the school aquarium 5) took samples of adult coho salmon for genetic and pathology data. Only two ripe and no spawned out fish were caught and added to one of the egg incubation boxes. Because of the lack of success finding ripe and spawned out salmon, it was decided that four local Perryville assistants would attempt additional egg takes through November. (A detailed trip report is available.)

Local Perryville assistants took 10 additional trips at different stream locations and several sets per day to capture ripe coho for the incubation boxes without much success (total catch: 7 females, 4 of which were partially spent) which were added to the incubation boxes. The problem was not in catching fish, but in catching ripe ones. Samples were taken for pathology and genetic testing from males and females harvested for sampling. They reinstalled and deployed thermographs at designated sites.

December 1997- The assessment team decided to install fish holding pens in 1998 to aid in capturing ripe salmon for egg incubation boxes. Perryville assistants traveled to egg incubation boxes and removed approximately 300-eyed eggs that were put inside the school aquarium. (A detailed trip report is available.)

January - March 1998- Perryville assistants took monthly monitoring trips to Kametolook River to check thermograph sites and egg boxes. Approval to release fry in Kametolook was denied by ADF&G Pathologist due to low number of females harvested; however, approved was granted to release them in local landlocked Sicken and Sandy Lakes in late April or May. The Perryville teacher communicated with ADF&G regarding status of eggs in aquarium. Survival fry from school incubation box will be transported and released in the Kametolook River in late April or May. Two net holding pens were acquired, and prepared for transport to Perryville in May. Present staff attended the State Board of Fisheries meeting

and gave staff report regarding the project. They also attended Chignik RPT meeting and provided a project status report. The RPT continued to support project. A fish transport permit request was submitted to ADF&G for review.

Project 99247 (October 1998 - September 1999)

October 1998- Jim McCullough participated in a field trip on 21 through 27 October 1998, to Perryville, Alaska. The purpose of the trip included: 1) to install temporary ripening pens for coho salmon, 2) foot survey of salmon in the Kametolook River, 3) capture and place in holding pens adult coho salmon, 4) clean the instream incubation boxes, 5) clean the school salmon egg incubation aquarium, and 5) collect and down load remote thermographs. (A detailed trip report is available.)

October 23, 1998- Jim McCullough along with the assistance of Jerry Yagie and Bruce Phillips installed holding pens for ripening coho salmon in a side pond of the Kametolook River. The Kametolook River was also surveyed for adult salmon. Approximately 70 coho and 25 sockeye salmon were observed in the main upriver spawning area located about ¼ mile below the incubation boxes. An additional 4 coho salmon were counted in the main stem of the river below the main spawning site and an additional 15 sockeye salmon in Candlefish Slough. The indexed escapement count for the Kametolook River is 148 coho salmon and 40 sockeye salmon. The indexed count for coho is twice the observed count (sockeye estimate not expanded). Although the river was somewhat turbid below the main spawning area, it was also obvious that there were few salmon present.

October 24, 1998- 16 female and 15 male coho salmon were caught and placed in the holding pens to ripen. The instream incubator boxes and water head collector boxes were cleaned and disinfected. The Three Star River was also visited where 5 adult coho salmon were spotted. Jim McCullough met with the new science teacher, Patsy Chapple and discussed report requirements and the permit process for running the school aquarium, and cleaned, disinfected, and filled the aquarium with fresh water and turned the chiller on.

October and November 1998- Jerry Yagie conducted weekly stream surveys of the Kametolook for the presence of coho.

November 1998- Jim McCullough and Melvin Chya participated in a field trip on 9 through 13 November 1998, to Perryville, Alaska. The purpose of the trip included: 1) foot survey of salmon in the Kametolook River, 2) spawn adult coho salmon that were ripening in holding pens, 3) fertilized and place coho salmon eggs in the Kametolook River incubation boxes, and 4) fertilize and place coho salmon eggs in the school aquarium. Melvin Chya works at the Pillar Creek Hatchery in Kodiak, Alaska. (A detailed trip report is available.)

November 10, 1998- Jim, Melvin and Jerry Yagie checked the Kametolook River incubation boxes to insure they were operating properly for the next days-planned egg

take. The holding pens where checked for adult ripening coho salmon and noticed that the adult male salmon had escaped, the female salmon were still captive in their pen. The Kametolook River was surveyed again for adult salmon with approximately 20 coho and 10 sockeye salmon in the main upriver spawning area located about ¼ mile below the incubation boxes observed. None of these salmon appeared fresh and were likely counted during the 23 October salmon survey. The indexed escapement count for the Kametolook River should remain at 148 coho salmon and 40 sockeye salmon, the survey count from 23 October.

November 11, 1998- Jim, Jerry, Melvin, Austin Shangin caught 7 male coho salmon from the Kametolook River and used them to fertilize the 11 ripe female coho salmon from the holding pen. Standard salmon delayed fertilization techniques were used and the fertilized eggs were immediately rinsed and placed in the instream incubators. All but about 300 unfertilized eggs which were held back for the school aquarium, were distributed between the two instream incubator boxes. Fin and kidney samples were collected form each salmon for genetic analysis and disease screening, and ovarian samples were collected from each female salmon for disease screening.

November 12, 1998- Jim and Melvin showed all the Perryville students from kindergarten through the sixth grade how to fertilize salmon eggs. After fertilizing the eggs, they were placed them in the school aquarium where the students will be able to watch their development through the swim up fry stage and their release into the Kametolook River in the spring of 1999.

November 13, 1998- Genetic samples were delivered to U.S. Fish and Wildlife laboratory in Anchorage and kidney and ovarian samples taken to Anchorage Alaska Department of Fish and Game laboratory for testing.

November 1998 - April 1999- Jerry Yagie continued to conduct BI-monthly trips to the instream incubation boxes to check their condition. He provided reports to the ADF&G staff.

January 1999- Jim McCullough attended the State Board of Fisheries meeting and gave a status report of this project.

March 17-19, 1999- Jim McCullough and Lisa Scarbrough attended Chignik RPT and CRRAA meeting and provided project status report of project. A Perryville Subsistence Workgroup was created consisting of representatives from: Perryville, Chignik commercial fisherman and ADF&G staff members to look into identifying ways (in addition to the incubation boxes) to assist with the recovery of coho salmon in the Kametolook River.

March 23-26, 1999- Jim McCullough and Lisa Scarbrough constructed a project poster for the 1999, 10th annual EVOS conference "Legacy of an Oil Spill 10 Years After *Exxon* Valdez". Attended the conference and presented the poster during the scheduled poster session.

April 9, 1999- Jim McCullough and Lisa Scarbrough participated in a teleconference with the Perryville Subsistence Workgroup. The Kametolook River project was discussed.

April 29 - May 4, 1999- Lisa Scarbrough traveled to Perryville with Jim McCullough to issue subsistence salmon permits and conduct key respondent interviews. The interviews were designed to further investigate the subsistence salmon fishery in Perryville as requested by the Perryville Subsistence Workgroup. Topics discussed in the interviews were directed at trying to learn how each salmon stock contributes toward meeting the salmon needs of Perryville, and alternative subsistence resources available. Life histories were also gathered for several respondents to document stocks used over time, locations of harvests, and ways each species is processed and cooked. Jim McCullough and local assistants attempted to travel to the incubation boxes on the Kametolook River, but heavy wet snow halted the trip. (A detailed trip report is available.)

Project 00247 (October 1999 - September 2000)

September - October 1999- Local Assistant, Jerry Yagie conducted stream surveys, counting coho in upper reaches of Kametolook River. Reports information to ADF&G's Jim McCullough.

October 25, 1999- Teleconference with ADF&G and the Perryville Subsistence Workgroup. The Kametolook Coho Restoration project was discussed.

October 28, 1999- Jim Fall (ADF&G Division of Subsistence) attended the Alaska State Board of Fisheries meeting in Fairbanks and gave a status report of the Perryville Subsistence Workgroup including the Kametolook project.

November 1-5, 1999- Jim McCullough participated in a field trip to Perryville, Alaska. The purpose of the trip included: 1) survey Kametolook River's salmon escapement, 2) set up holding pens for ripening adult coho salmon, 3) captured and placed in holding pens adult coho salmon, 4) cleaned and set up the coho salmon school aquarium project and 5) met with villagers to determine how the 1999 salmon subsistence fishery was proceeding. (A detailed trip report is available.)

November 1-2, 1999- Travel for Jim McCullough from Kodiak to Perryville via Anchorage and King Salmon.

November 3, 1999- Bad weather prevented travel to the Kametolook River spawning area so Jim McCullough spent the day cleaning and setting up the school aquarium and met with the junior and high school teachers to discuss the school aquarium project.

November 4, 1999- Jerry Yagie, Jim McCullough and one high school student, Michael Shangin set up the holding pens in the spring above the Kametolook River incubation boxes. They also surveyed the Kametolook River for the presence of any fish. In the spring of 1999, about 75% of the glacial water that had been flowing into the Long Beach

River changed course and began flowing into the Kametolook River. The additional flow nearly doubled the size of the Kametolook River and made extremely poor salmon survey conditions due to turbidity. They observed only 3 coho salmon immediately below the incubation box site, an additional 6 coho salmon in the main stem and 5 coho salmon in clear water tributaries. Jerry noted that in one clear tributary, where they saw only 2 sockeye and one coho salmon, he had observed 20 coho salmon about two weeks earlier. They also saw 10 sockeye salmon in the main stem of the river.

November 5, 1999- Jerry Yagie, Michael Shangin, and Jim McCullough captured 6 female and 16 male coho in the stream reach just below the incubation boxes. They kept and put in the holding pens all 6 females and 13 male coho salmon. They were surprised by this catch because we had only observed 3 salmon the previous day in this area. The glacial melt water made the survey conditions very poor.

During this trip Jim asked several people about the on-going coho salmon subsistence fishery. He was informed that fishing in Sleepy Hollow and Humpback Bay was slow while Anchor Bay and Ivan River fishing was generally good. One person said they had just returned from Chignik Lake with 96 "red" sockeye salmon from the Clark River and that their fishing partners had also taken about 100 fish each for a total of ~300 sockeye salmon. People also noted that the coho run to Ivanof was good with plenty of fish for that village. Jim returned to Kodiak, the evening of November 5.

November 9, 1999- Jerry Yagie and another person caught 3 female and 7 male coho salmon and added these to the holding pens.

November 10, 1999- Jim also presented a paper on the Kametolook project at the annual meetings of the American Fisheries Society in Anchorage.

November 15-19, 1999- Jim McCullough participated in a field trip to Perryville, Alaska. The purpose of the trip included: 1) a coho salmon egg take from the Kametolook River's salmon stock, 2) collecting biological samples from the salmon used in the egg take, 3) winterizing the holding pens and other equipment and 4) placing fertilized eggs in the incubation boxes and in the school aquarium. (A detailed trip report is available.)

November 15-16, 1999- Travel for Jim McCullough from Kodiak to Perryville via Anchorage and King Salmon.

November 17 1999- Jerry Yagie, Austin Shangin, five junior and high school students (Boris Kosbruk, Alec Phillips, Harry (JR) Kosbruk, Ryan O'Domin and Jonathan Kosbruk) and Jim McCullough collected eggs and milt from the coho salmon that had been placed in the holding pens. They also collected kidney, ovarian and genetic samples. Standard delayed fertilization techniques were used and the fertilized eggs were placed in the incubation boxes. About 400 eggs from a singe female and milt from 2 males were held back for the school aquarium. The holding pens and other equipment that was no longer needed was winterized at Jerry Yagie's house.

November 18, 1999- Jim McCullough met with the grade school and high school students that did not participate during the previous days egg take. Again using standard delayed fertilization techniques; the eggs were fertilized and added to the aquarium. Students got to watch the process and a discussion of the care of the eggs and aquarium followed. Jim returned to Anchorage that evening arriving about 8:30 p.m.

November 19, 1999- Jim McCullough dropped off the kidney and ovarian samples at the ADF&G lab and the genetic samples at the US Fish and Wildlife lab in Anchorage. He returned to Kodiak that evening.

November 1999 - May 2000- Jerry Yagie continued to conduct bi-monthly trips to the instream incubation boxes to check their condition. He provided telephone reports to the ADF&G staff.

January 2000- Jim McCullough presented a paper at Annual EVOS Restoration Workshop in Anchorage summarizing the Kametolook project. His presentation emphasized the project's community involvement. The poster created for the EVOS 10th annual conference in 1999 was displayed again at 2000 annual workshop.

April 4, 2000- Jim McCullough participated in a teleconference for the Chignik RPT and CRRAA meeting and provided project status report of the project.

April 2000- Jim McCullough and Lisa Scarbrough (PI's) met via teleconference April 6 to discuss the progress of the project and identify measurable tasks for FFY-2001. Prepared project DPD for 2001 funding.

Project 01247 (October 2000 - September 2001)

September - October 2000- Local assistant, Jerry Yagie conducted stream surveys, counting coho in upper reaches of Kametolook River. Reports information to ADF&G's Jim McCullough.

November 2000- Jim McCullough traveled to Perryville November 1-5 and assisted by local assistants Jerry Yagie and Andrew Shangin surveyed Kametolook River's salmon escapement, set up net holding pens, captured and placed adult coho salmon into holding pens, cleaned and set up the coho salmon school aquarium, and met with the community to determine how the 2000 subsistence salmon fishery was proceeding. (A detailed trip report is available.)

Jim returned to Perryville November 13-18 and harvested eggs and milt from salmon held in the holding pens, added fertilized eggs to the egg boxes and school aquarium, and winterized holding pens and other equipment. Additional ripe salmon were not found and no biological samples were collected due to few salmon available for sampling and kidney sample requirements were satisfied in 1999. (A detailed trip report is available.)

December 2000 - May 2001- Local assistants make monthly trips to incubation boxes to inspect condition of boxes and eggs. ADF&G analyze commercial and subsistence harvest dada for community of Perryville.

March 2001- Jim McCullough met with Chignik Regional Aquaculture Association (CRAA) and Perryville Subsistence work group to discuss project and other potential restoration techniques. March 12-14, 2001 (Anchorage).

April 2001- Jim McCullough attended Kodiak ADF&G staff meeting in part to discuss the project.

April 5, 2001- Teleconference with CRAA consultant, ADF&G pathology, genetics and fish transport permit staff on restoration techniques and requirements for obtaining coho eggs or fry from other river systems and transporting them to Kametolook River.

SCHEDULE

A.1. Measurable Project Tasks remaining for FY 01 (May 2001 - September 2001)

May - September 2001:

-Chignik Regional Planning Team will meet in Chignik. A status report of the Kametolook Project will be given and Perryville Subsistence Workgroup will meet.

-Apply for FRP permits to collect coho salmon pathology and genetic samples from potential brood source streams (Ivanof, Smokey Hollow, and Ivan Rivers) for

future FTP permits for eggs and/or juvenile fish transport from area rivers to the Kametolook River.

-Conduct stream surveys and genetic/pathological work in area river systems for FTP requirements to transport coho eggs and/or juvenile fish to Kametolook River in fall of 2001 and 2002.

-Complete annual report 01247

A.2. Measurable Project Tasks for FY 02 (October 2001 - September 2002)

October 2001:

-Local Perryville assistants will conduct stream surveys for coho salmon in Kametolook River, and report findings to ADF&G.

-Two ADF&G personnel will travel to Perryville to work with PV assistants and conduct stream surveys of Kametolook River, capture adult coho salmon (assisted by 2 or 3 Perryville residents), and will place the salmon in holding pens until they are ripe. In addition, they will start or continue with stream surveys and genetic/ pathological work in local area river systems for FTP requirements to transport coho eggs and/or juvenile fish to Kametolook River and egg boxes.

-Consult with teachers and set up school aquarium and obtain school FTP.

-Perform maintenance of instream incubation system and school aquarium.

November - December 2001:

-Two ADF&G staff travel to Perryville to meet with Perryville personnel and conduct escapement surveys.

-Perform a coho salmon egg take (Kametolook and another nearby river if FTPs allows), fertilize eggs, place in incubation boxes.

-Sample salmon for genetic and pathology tests.

-Meet with school children and community to discuss project.

-Renew school aquarium FTP.

-Meet with Chignik RPT/CRAA and the Perryville SubsistenceWorkgroup to discuss the Kametolook Project.

December 2001 - May 2002:

-Perryville assistants make monthly trips to incubation boxes to inspect condition of boxes and eggs.

-ADF&G analyze subsistence and commercial harvest data.

-Attend EVOS annual restoration workshop. Anchorage.

-Attend Chignik Subsistence Workgroup meeting. Anchorage.

-Attend Board of Fisheries meeting to discuss Kametolook project. Anchorage or Kodiak.

April - May 2002:

-Meeting with assessment team to evaluate the project.

-Write FY 01 annual report.

-Meet with community to review status of project and discuss community involvement activities.

-Purchase and ship to Perryville any necessary equipment needed for project maintenance.
-Perryville assistants monitor boxes for fry release.
-Sanitize boxes after fry leave.
-Students release aquarium fry into Kametolook River.

June - September 2002:
-Regional Planning Team and Perryville Subsistence Workgroup meeting in Chignik Bay to review success of the project and evaluate if need to continue project and look for other sources of funding.
-Write FY-02 annual report and final project report to EVOS Trustee Council.

B. Project Milestones and Endpoints

Annually through the duration of the project: One day every month, one or two trained Perryville researchers will return to the Kametolook River to monitor the environment, the egg boxes, net pens and conduct general stream surveys (counting adult salmon). ADF&G will continue to supervise the project and continue to take trips to assist with the project. As this project continues; however, (up through 2002) Perryville assistants will continue to be better trained and will take on additional responsibility for the project. Some of their duties will include: conducting escapement surveys, netting salmon for holding in pens, harvesting and fertilizing eggs and transporting to egg boxes, taking samples of harvested salmon for genetic and pathology tests, assisting school children with obtaining eyed eggs for the school aquarium project, and releasing fry in the spring. (This is necessary because of budget constraints preventing ADF&G from being present at all critical times of the project.)

Annually, ADF&G staff will evaluate the Kametolook coho runs through subsistence harvest reports, evaluate incubator performance and stocking levels, perform egg takes, stocking, update project plan, review FTPs and FRPs, provide annual peer review and write annual reports. ADF&G biologists will determine any significant changes to the coho salmon spawning and rearing habitat of the rivers to determine appropriate stocking levels. ADF&G will also evaluate the use of Kametolook River coho salmon as brood stock and the release of fry back into the Kametolook, Three Star, and Long Beach Rivers and other potential stocking sites including Sandy and Sicken Lakes.

In order to rehabilitate the coho salmon run in the Perryville area, education of villagers through a better understanding of the life cycles and conservation of salmon is essential and will continue every year. The ADF&G team will assist with an educational process that focuses on teaching the community through the both the school children and adults. They plan to continue working with the community and teachers and help with this process. Results from all samples will continue to be shared with the school and community.

In conjunction with all other aspects of this project, the ADF&G team will continue to work with the Village Council to assess the project and look at ways the community can

facilitate the success of the project and help increase the number of spawning coho salmon. As mentioned earlier, as of October 1997, Perryville Village Council voluntarily closed the upper half of the Kametolook River to salmon fishing as a way to do their part at helping solve the salmon shortage problem.

In 1999 and 2000, virtually no one from Perryville chose to catch any of their subsistence coho from the Kametolook River to help with the rehabilitation of it's salmon runs. In addition, Chignik commercial fisherman delivered two loads of fresh coho salmon (approximately 600 fish) to Perryville residents in August of 1999 (given mostly to the elders). This delivery was greatly appreciated, and also took some of the pressure off of the Kametolook River. This action was in part due to recommendations made by the Perryville subsistence workgroup which consists of representatives of Perryville subsistence users, Chignik commercial fisherman, and ADF&G staff. The workgroup was created in 1999 and continues to meet (as recommended by the Alaska State Board of Fisheries) in order to assist Perryville with the rehabilitation of their declining coho salmon stocks (in addition to this incubation box project). These actions as well as other options will be evaluated and discussed with the community annually on a regular basis.

At the start of this project in 1997 and through 2000, the ADF&G team expected the stream side incubation boxes, in conjunction with some fishing restraints, and the Perryville subsistence workgroup would provide sufficient coho salmon to rehabilitate the run within two to three coho life cycles. Due to the low escapement of coho salmon into the Kametolook River system, this project will be unable to achieve this goal. In the last five years (1996-2000) the total estimated adult coho escapement has ranged from 85 (2000) to 724 (1997) fish and averaged about 289 salmon. The project's instream incubator boxes were designed to hold eggs from 60 females or use 120 total salmon. Due to the difficulty of capturing ripe female coho salmon and the low escapements we have always used less than 10 females for the annual egg take.

We are requesting an expansion of the project to investigate potential genetic and pathology brood stock sources from nearby river systems. If the scope of the project is broadened, we intend to collect coho salmon samples in the Ivanof, Smokey Hollow, and Ivan Rivers and if budgets allow, also from Humpback and Fishrack systems for pathology and genetic analysis. If fish transport permit applications are approved, we will transport eggs and/or juvenile fish to the Kametolook River to help in restoring this subsistence salmon run.

C. Completion Date

The project will be completed by September 30, 2002 due to the cut off of funding from the EVOS TC. If another funding source can be obtained after that date and the community of Perryville is still interested in participating, it is recommended that the project continue until coho salmon runs have been fully restored to satisfy the needs of Perryville subsistence users.

Cooperating Agencies, Contracts, and Other Agency Assistance

Perryville

Perryville Village Council has hired a local project administrator to track the project, arrange for logistical support, and assist ADF&G with field work and long term monitoring of the project. Three additional Perryville residents have been hired (by the Village Council) to work annually, as needed, to assist ADF&G and the project administrator with building and hauling materials, maintenance of installed egg boxes, site selection and installation of fish holding nets. Local assistants will also help with capturing adult salmon, taking genetic and pathology samples, removing, fertilizing, and seeding eggs into incubation boxes, and releasing fry in spring. Village assistants will also need to continue providing a skiff and 4-wheelers as needed. The project administrator is responsible for checking the boxes and habitat monitoring sites throughout the winter to insure they are operating efficiently, and safe from natural or human harm. Wages for the four village assistants have been included in the cost of the grant.

Alaska Department of Fish and Game

Several ADF&G personnel have provided technical assistance for the project to date. These people include: Jim McCullough, Fish Biologist III for Commercial Fisheries, Kodiak, and Lisa Scarbrough, Subsistence Resource Specialist II for Subsistence, Anchorage. Personnel assisting the project include: Bill Hauser, Fish Biologist IV for Habitat and Restoration, Anchorage; Joe Sullivan (retired), Fish Biologist III for Habitat and Restoration, Anchorage, Dave Owen (retired), Fish Biologist III, Chignik/Kodiak; George Pappas, Fish Biologist III, Chignik/Kodiak; Wayne Dolezal, Habitat Biologist III for Habitat and Restoration, Anchorage and Pete Velsco (retired), Fish Culturist II for Commercial Fisheries, Nome.

Jim McCullough with ADF&G has several years of varied experience with fisheries enhancement and research projects as well as salmon management in the Alaska Peninsula. Lisa Scarbrough, has been doing subsistence research in the Alaska Peninsula (including Perryville) communities since 1989. Bill Hauser along with Joe Sullivan (retired) have extensive experience in fisheries restoration and enhancement with the department. George Pappas replaced Dave Owen (retired 1999) as Chignik's Area Management Biologist in 1999. Both Dave and George have had several years of experience with fisheries in Alaska. Wayne Dolezal is one of the State's leading habitat experts in Alaska. Pete Velsco (retired 1997) had several years of varied experience with instream and recirculating incubation box projects, particularly in Norton Sound. Labor (with the exception of 0.5 months/year for Lisa Scarbrough) will be provided by ADF&G as part of their normal salary, however, transportation costs and per diem will be covered through the grant.

PUBLICATIONS AND REPORTS

An annual report of activities will be submitted to the Restoration Office before 15 April of each year, commencing in 1998. Similar reports will also be presented to the Chignik Salmon Advisory Committee and the Alaska Board of Fish.

PROFESSIONAL CONFERENCES

American Fisheries Society, Anchorage. November 9-11, 1999. Paper of project was presented by Jim McCullough, ADF&G, Kodiak.

NORMAL AGENCY MANAGEMENT

This proposed rehabilitation effort is not part of ADF&G's normal management responsibilities in the Chignik area.

COORDINATION AND INTEGRATION OF RESTORATION EFFORT

This project is a continuation of Perryville 96-01, funded by DCRA funds from the EVOS Criminal Settlement (in State Fiscal Year 1996) and Trustee Council Civil projects 97247, 98247, 99247 and 00247 (in Federal Fiscal Years 1997, 1998, 1999 and 2000).

PRINCIPAL INVESTIGATORS

Jim McCullough, Fish Biologist III
Alaska Department of Fish and Game
Division of Commercial Fisheries
211 Mission Road
Kodiak, Alaska 99615
Phone: (907) 486-1813
Fax: 486-1841
E-mail: jim_mccullough@fishgame.state.ak.us

1 Nov 1995 - Present: FB III Regional Resource and Development Biologist. Co-author of the Pillar Creek and Kitoi Bay basic and annual hatchery plans. Voting member of the Kodiak, Chignik, and Alaska Peninsula/Aleutian Islands Regional Planning Teams. Author/Review regional Fish Transport and Fish Resource Permits. Regional Habitat Biologist. Co-leader of an EVOS project to restore a coho stock for subsistence purposes in the Chignik Area.

30 June 1990 - 1 Nov 1995: FB III Alaska Peninsula Herring and Southeastern District Salmon Management Biologist. Compiled salmon and herring catch data and herring biomass and salmon escapement data which was analyzed to determine opening and

closure of the various commercial fisheries as delegated by the Commissioner of ADF&G.

16 July 1985 - 31 May 1990: FB II Alaska Peninsula and Aleutian Islands Areas Finfish Research Biologist involved the design, organization, and completion of the annual catch and escapement program.

Lisa Scarbrough, Subsistence Resource Specialist II
Alaska Department of Fish and Game
Division of Subsistence
333 Raspberry Road
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Lisa Scarbrough has been a subsistence resource specialist with the Division of Subsistence of the Alaska Department of Fish and Game since 1989. She has extensive subsistence research experience in the Chignik area, including the village of Perryville. This has included research on the effects of the oil spill on local subsistence patterns. Her work has also involved training residents of the Chignik area communities as research assistants. Since 1993, Lisa has been responsible for assessing Chignik Subsistence salmon permit data.

OTHER KEY PERSONNEL

Perryville Traditional Village Council
Gerald Kosbruk, President
Celia Yagie, Village Administrator
P.O. Box 101
Perryville, Alaska 99648
Phone: (907) 853-2203
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Jerry Yagie, Chief Community Coordinator
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Chuck McCallum, Chairman
Chignik Regional Planning Team and Chignik Regional Aquaculture Association
(and Perryville Subsistence Workgroup)
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Fax: 733-4744

Melvin Chya
Pillar Creek Hatchery
104 Center Avenue, Suite 202
Kodiak, AK 99615
Phone. (907) 486-6555

FY 02 *EXXON VALDEZ* TRUSTEE COUNCIL PROJECT BUDGET

October 1, 2001 - September 30, 2002

Budget Category:	Authorized FY 2001	Proposed FY 2002						
Personnel	$2.9	$12.6						
Travel	$6.4	$8.3						
Contractual	$11.8	$10.1						
Commodities	$0.3	$0.2						
Equipment	$0.0	$0.2	LONG RANGE FUNDING REQUIREMENTS					
Subtotal	$21.4	$31.4	Estimated FY 2003					
General Administration	$1.3	$2.6						
Project Total	$22.7	$34.0	N/A					
Full-time Equivalents (FTE)	0.5	2.5						
	Dollar amounts are shown in thousands of dollars.							
Other Resources								

Comments: An Environmental Assessment for all years of the project was approved in 1997. FY 2002 is the final year and evaluation of the project.

This project was originally funded by Criminal Settlement funds in 1996, and has been funded since 1997 through the EVOS TC. The budget estimate for 2002 for staff time has increased from previous years of the project due to additional time needed for writing both annual and final reports and to develop and monitor the subcontract with Perryville Village Council. In addition, due to continual low escapement of coho in the Kametolook River system, this year the project would like to test other coho runs as potential brood sources and transport coho eggs or juvenile fish from streams outside Kametolook River to aid in restoration of the Kametolook coho run (if FTP permits allow). This will require additional travel, field time and labor from a F&W Technician to assist the PI for genetic and pathological sampling, capturing fry and/ or harvesting eggs and transporting to the Kametolook River. The school aquarium also needs to be replaced (the original glass tank cracked in 2000).

FY02

Prepared: April 10, 2001

Project Number: 02247
Project Title: Kametolook River Coho Salmon Subsistence Restoration
Agency: Alaska Department of Fish and Game

FY 02 *EXXON VALDEZ* TRUSTEE COUNCIL PROJECT BUDGET
October 1, 2001 - September 30, 2002

Personnel Costs:		GS/Range/ Step	Months Budgeted	Monthly Costs	Overtime	
Name	Position Description					
Lisa Scarbrough	Subsistence Resource Specialist II (logistics/ report writing annual and final)	16K	2.0	5.7	0.0	
To be determined	Fish and Wildlife Tech II / Kodiak (assist with genetic sampling/ egg take)	9D	0.5	2.4	0.0	
	Subtotal		2.5	8.1	0.0	
					Personnel Total	

Travel Costs:	Ticket Price	Round Trips	Total Days	Daily Per Diem	
Description					
* Kodiak to Anchorage	0.4	5	13	0.1	
Anchorage to Perryville	0.8	4	18	0.1	
				Travel Total	

* Note when traveling from Kodiak to Perryville it is necessary to overnight in Anchorage coming and going.

FY02

Prepared: April 10, 2001

Project Number: 02247
Project Title: Kametolook River Coho Salmon Subsistence Restoration
Agency: Alaska Department of Fish and Game

FY 02 *EXXON VALDEZ* TRUSTEE COUNCIL PROJECT BUDGET
October 1, 2001 - September 30, 2002

Contractual Costs:	
Description	
4A Linkage — 1) Contract with Native Village of Perryville (Perryville wages/ gasoline/ ATV or boat use/ insurance/ Village Admin. Fee (10%) 2) Shipping costs of misc. maintenance supplies/ aquarium to Perryville, via USPS or Peninsula Airways	
When a non-trustee organization is used, the form 4A is required. **Contractual Total**	
Commodities Costs:	
Description	
General maintenance supplies for incubation boxes/ egg take equipment/ fish holding pens temperature instruments/ school aquarium/ film development etc.	
Commodities Total	

FY02

Prepared: April 10, 2001

Project Number: 02247
Project Title: Kametolook River Coho Salmon Subsistence Restoration
Agency: Alaska Department of Fish and Game

FY 02 *EXXON VALDEZ* TRUSTEE COUNCIL PROJECT BUDGET
October 1, 2001 - September 30, 2002

New Equipment Purchases:	Number of Units	Unit Price	
Description			
school aquarium (R)			
Those purchases associated with replacement equipment should be indicated by placement of an R.		**New Equipment Total**	

Existing Equipment Usage:	Number of Units	
Description		
None		

FY02

Prepared: April 10, 2001

Project Number: 02247
Project Title: Kametolook River Coho Salmon Subsistence Restoration
Agency: Alaska Department of Fish and Game

FY 02 *EXXON VALDEZ* TRUSTEE COUNCIL PROJECT BUDGET

October 1, 2001 - September 30, 2002

Budget Category:	Authorized FY 2001	Proposed FY 2002						
Personnel	$6.2	$5.4						
Travel	$1.2	$0.0						
Contractual	$4.4	$4.7						
Commodities	$0.0	$0.0						
Equipment		$0.0	LONG RANGE FUNDING REQUIREMENTS					
Subtotal	$11.8	$10.1	Estimated FY 2003					
Indirect								
Project Total	$11.8	$10.1	$0.0					
Full-time Equivalents (FTE)		0.0						
	Dollar amounts are shown in thousands of dollars.							
Other Resources								

Comments:

FY02

Prepared: April 10, 2001

Project Number: 02247
Project Title: Kametolook River Coho Salmon Subsistence Restoration
Name: Perryville Village Council/ Peninsula Airways

FY 02 *EXXON VALDEZ* TRUSTEE COUNCIL PROJECT BUDGET
October 1, 2001 - September 30, 2002

Personnel Costs:			Months Budgeted	Monthly Costs	Overtime	
	Name	Position Description				
	To be determined	Perryville/ Project Facilitator and Assistants				
	Note: Approximately 54 days of work @ about $100.00/ day labor					
		Subtotal	0.0	0.0	0.0	
						Personnel Total

Travel Costs:		Ticket Price	Round Trips	Total Days	Daily Per Diem	
	Description					
	none					
						Travel Total

FY02

Prepared: April 10, 2001

Project Number: 02247
Project Title: Kametolook River Coho Salmon Subsistence Restoration
Name: Perryville Village Council/ Peninsula Airways

FY 02 *EXXON VALDEZ* TRUSTEE COUNCIL PROJECT BUDGET
October 1, 2001 - September 30, 2002

Contractual Costs:	
Description	
Perryville contract: Approximately 45 days of ATV or skiff use @ $50.00/ day (wet) Perryville Village Administrative fee at 10% of contract (not including insurance costs) Insurance for workman's compensation and general liability required of Perryville as contractor of the project by the State of Alaska Air freight costs to Peninsula Airways to ship school aquarium and other project supplies to Perryville	
Contractual Total	
Commodities Costs:	
Description	
None	
Commodities Total	

FY02

Prepared: April 10, 2001

Project Number: 02247
Project Title: Kametolook River Coho Salmon Subsistence Restoration
Name: Perryville Village Council/ Peninsula Airways

FY 02 *EXXON VALDEZ* TRUSTEE COUNCIL PROJECT BUDGET
October 1, 2001 - September 30, 2002

New Equipment Purchases:	Number of Units	Unit Price	
Description			
None			
Those purchases associated with replacement equipment should be indicated by placement of an R.		**New Equipment Total**	

Existing Equipment Usage:	Number of Units	
Description		
None		

FY02

Project Number: 02247
Project Title: Kametolook River Coho Salmon Subsistence Restoration
Name: Perryville Village Council/ Peninsula Airways

Prepared: April 10, 2001