Project Title: Chugach Native Region Clam Restoration

Project Number:	01131
Restoration Category:	General Restoration
Proposer:	Chugach Regional Resources Commission
Lead Trustee Agency:	Alaska Department of Fish & Game
Cooperating Agencies:	Chugach Regional Resources Commission, Native Villages of Tatitlek, Nanwalek, Port Graham and Eyak
Alaska SeaLife Center	
Duration:	6th year, 5-year project
Cost FY 00	0.0
Cost FY 01	\$11.5
Geographic Areas:	Native villages in Prince William Sound and lower Cook Inlet
Injured Resource/Service:	Clams/Subsistence

ABSTRACT

Cost effective procedures for establishing easily accessible subsistence clam populations near Native villages in the oil spill region are being established. All fieldwork has been completed on this project. Additional funding is needed to complete data analysis and final report preparation. FY 99 fieldwork and data collection was more costly than anticipated

INTRODUCTION

A. General

The purpose of this project is to develop cost effective procedures for establishing managed populations of clams in areas that are readily accessible from Native villages in the oil spill region. These clams will be used as a source for subsistence food to replace the natural clam resource that has been lost, damaged or depleted. The project was initiated in FY 95 and all fieldwork and data collection was completed in FY 99. The villages Nanwalek, Tatitlek, Port Graham and Eyak took part in the project.

Adverse weather conditions increased the cost of the fieldwork in FY 99. The fieldwork consisted of planting the final batch of littleneck clam seed produced by the Qutekcak Shellfish hatchery and collect growth and mortality data from seed that had been planted previously. Since this was the final year of the project all fieldwork had to be completed prior to October 1, 1999 regardless of the weather. This meant that rather than canceling field trips when the weather was bad, the consultant and field crew was put on standby waiting for the weather to clear.

In addition to the extra cost of the fieldwork in FY 99 the cost for data analysis in FY 98 was greater than expected. These costs were carried over to FY 99 and added to the deficit.

NEED FOR THE PROJECT

A. Statement of Problem

Local shellfish populations, especially clams have been severely reduced as a subsistence food source for Native villages. Part of the reduced use is a loss of confidence in the safety of consuming shellfish as a result of the Exxon Valdez Oil Spill. In addition, local shellfish populations have been greatly reduced as result of hydrocarbon toxicity, sea otter predation, human over harvest and beach changes from the 1964 earthquake.

B. Rationale

This project will accomplish two things. One, it will help restore the clam resource base in the oil spill area, and two, it will enhance subsistence gathering by providing an easily accessible source of clams for subsistence use.

C. Location

The hatchery and pre-nursery work was carried out at the Qutekcak Shellfish Hatchery in Seward. Growout operations and sampling occurred in the area around the villages of Tatitlek and Eyak in Prince William Sound and in the Port Graham/Nanwalek area in Lower Cook Inlet. Pathology work was conducted in Anchorage and Juneau.

COMMUNITY INVOLVEMENT

The communities named in this project were directly involved in it. Each community decided whether or not it wanted to be involved in the project initially. Local residents were heavily relied upon to help locate existing clam populations and the areas for

reseeding. Project work involving the villages was done mostly with local labor. Community leaders were kept appraised of how the project is progressing.

PROJECT DESIGN

A. Objectives

- 1. Complete data analysis.
- 2. Complete and submit final report.

B. Methods

Objective 1. Complete Data Analysis

The hatchery staff will conduct data analysis for the hatchery, including the pre-nursery. The hatchery analyses will compare growth and survival against industry standards. Dr. Ken Brooks of Aquatic Environmental Sciences, Port Townsend, WA will conduct analyses on data from the remote nursery and growout portions of the project. The remote nursery analysis will determine the efficacy of producing 10+ mm seed clams. The growout analysis will examine growth and mortality as a function of several parameters including tidal height, rearing density and in the presence or absence of protective predator exclusion devices. All data analysis work will be completed by December 31, 2000.

Objective 2. Complete and Submit Final Report

CRRC staff will compile and edit the final report. The report will be ready for submission by April 15, 2001.

C. Cooperating Agencies, Contracts and Other Agency Assistance

There will be no agency assistance for data analysis or final report completion.

SCHEDULE

A. Measurable Project Tasks for FY 01 10/00 – 12/00 Complete data analyses.

1/01-4/01 Complete final report

B. Project Milestones and Endpoints

Objective 1. December 31, 2000 All data analyses completed.

Objective 2. April 15, 2001 Final report submitted

C. Completion Date

The objectives of this project will be met in FY 2001.

PUBLICATIONS AND REPORTS

April 15, 2001 Final report due

PROFESSIONAL CONFERENCES

The staff will not attend any professional conferences under this project in FY 2001.

EXPLANATION OF CHANGES IN CONTINUING PROJECTS

PROPOSED PRINCIPAL INVESTIGATOR(S)

Dave Daisy/Jeff Hetrick/Jon Agosti Chugach Regional Resources Commission 4201 Tudor Centre Drive, Suite 300 Anchorage, AK 99508 Phone: (907) 562-6647 Fax: (907) 562-4939

PERSONNEL

PATRICIA BROWN SCHWALENBERG 6450 Andover Drive Anchorage, Alaska 99516 907 345-2187

Employment:

June 1994 to Present: Executive Director Chugach Regional Resource Commission. Responsible for Natural Resource and Fisheries development for the seven native villages in the Chugach region. This includes administering office staff, village projects in mariculture and fisheries and protecting and enhancing subsistence opportunities.

October 92 to June 1994: Office Manager Bering Sea Commercial Fisheries Development Foundation. Responsibilities included maintaining all management systems for the organization including financial, personnel, property and central filing. She was responsible for financial management and accountability of all grants, payroll, taxes and financial statements, and organizing and overseeing public relations.

October 1987 to June 1992 Society Administrator /Public Relations Director. Native American Fish and Wildlife Society. Assisted in the establishment and development of a national office for the Native American Fish and Wildlife Society. Implemented personnel policies and procedures, property management policies, record and financial management systems. Implemented strategies to obtain goals and objectives of the society.

Education: Business Administration University of Alaska-Anchorage (ongoing). Certification of Completion. 1977 Humboldt Institute

DAVID DAISY 3936 Westwood Drive Anchorage, Alaska 99517 (907) 243-8544

Employment:

October, 1987-Present: Fisheries consultant with emphasis on aquaculture. Contractor to Chugach Regional Resource Commission developing salmonid hatcheries at Port Graham and Nanwalek and oyster mariculture operations at Tatitlek and Chenega Bay. Oversight and management of these projects involves grant writing and financial and activity reporting to granting agencies.

February, 1979 to October, 1987: Regional Program Manager, Region II, Fisheries Rehabilitation, Enhancement and Development (FRED) Division, Alaska Department of Fish & Game. Under general supervision of the FRED Director, responsible for the planning, development, operation and control of the State's salmonid enhancement and rehabilitation program in Region II which encompasses all of Alaska except Southeast.

November, 1977 to February, 1979: Regional Project Manager: Cook Inlet - Prince William Sound, Fisheries Rehabilitation, Enhancement and Development (FRED) Division, Alaska Department of Fish & Game. Under supervision of the Regional Program Manager responsible for the implementation and control of salmon enhancement research and development projects in the Prince William Sound and Cook Inlet areas. Assisted the Regional Program Manager in hatchery development planning.

April, 1968 to February, 1979: Management Biologist, Commercial Fisheries Division, Alaska Department of Fish and Game in the Ketchikan, Cook Inlet and Upper Cook Inlet areas. Oversaw various management projects (weirs, counting towers, fisheries sampling) determined and set fishing periods for herring and salmon and responsible for meeting escapement and recruitment goals.

Education: B.Sc. Fisheries, University of Massachusetts, Amherst, 1965.

JEFF HETRICK P. O. Box 7 Moose Pass, Alaska 99631 (907) 288-3667 Employment:

1987- Present: Hatchery Manager Cook Inlet Aquaculture Association. Manage Trail Lakes Hatchery which produces 12 million sockeye salmon fry and 2 million sockeye salmon smolts annually.

1988-Present: Consultant for Shellfish Culture. Clients include:

Chugach Regional Resource Commission- develop oyster farms at Chenega Bay and Tatitlek. Included permitting, farm design, training and marketing. Outekcak Native Tribe- Design and develop first shellfish hatchery in Alaska.

1983-1987 Assistant Manager. Alaska Department of Fish and Game. Assistant manager at Main Bay (Chum and Sockeye Salmon) and Cannery Creek (Pink Salmon) Hatcheries in Prince William Sound.

Education:

MBA California Coast University- Thesis under review B.Sc. Biological Sciences. University of Maryland, 1980

DR. KENNETH M. BROOKS

644 Old Eaglemount Road Port Townsend, WA 98368 (360) 732-4464

Employment

1 2	
1959-1979	U.S. Navy Officer - retired in 1959
1979-1992	Owner/operator of Black Angus ranch
1982-1992	Environmental mediator for Washington state
1988-1990	Battelle Marine Science Laboratory, NORCUS grant
1989-present	President, Aquatic Environmental Sciences, Port Townsend, WA
1993-present	Director, Fisheries Technology Program, Peninsula College

Education B. Sc. - Physics, Naval Postgraduate School (NPS), 1973 M. Sc. - Physics, NPS, 1974 Ph.D. - College of Ocean Sciences and Fisheries, University of Washington, 1991

John L. Agosti P. O. Box 369 Seward, AK 99664 (907) 224-5181

Employment1983-1984Hatchery Technician, Westcott Bay Sea Farm, Friday Harbor, WA

1984-1986	Research Consultant, Ketron Island Sea Farm, Stellacoom, WA
1986-1996	Assistant Hatchery Manager, Westcott Bay Sea Farm, Friday Harbor,
WA	
1996-present	Hatchery Manager, Qutekcak Shellfish Hatchery, Seward, AK

Education

B. Sc., Biological Oceanography, Humbolt State University, 1984

David Daisy 2826 54TH ST S Gulfport, FL 33707-5528 Voice/Fax (727) 322-9810; cell (907) 227-0022 email: ddaisy@tampabay.rr.com

October 1, 2000 - September 30, 2001

	Authorized	Proposed		
Budget Category:	FY 2000	FY 2001		
		A = =		
Personnel		\$0.0		
Travel		\$0.0		
Contractual		\$9.9		
Commodities		\$0.0		
Equipment		\$0.0		
Subtotal	\$0.0	\$9.9		
General Administration		\$0.6		
Project Total	\$0.0	\$10.5	\$10.5 \$0.0	
Full-time Equivalents (FTE)		0.0		
			Dollar amounts are shown in thousands of dollars.	
Other Resources				
FY01		: Chugach I	1 Native Region Clam Restoration rtment of Fish and Game	

October 1, 2000 - September 30, 2001

Personnel Costs:			GS/Range/	Months	Monthly		
Name	Position Description		Step	Budgeted	Costs	Overtime	
	L	Subtotal		0.0		0.0	
						sonnel Total	
Travel Costs:			Ticket	Round	Total	Daily	
Description			Price	Trips	Days	Per Diem	
						Travel Total	
[]							
	Project Number: 01131						
FY01 Project Title: Chugach Native Region Clam Restoration							
Agency: Alaska Department of Fish and Game							

October 1, 2000 - September 30, 2001

Contractual Costs:			
Description			
Contract with Chugach Region	nal Resources Commission		
	ion is used, the form 4A is required.	Contractual Total	
Commodities Costs:			
Description			
		Commodities Total	
		Commodities Total	
	Drain at Neural and 04404		
	Project Number: 01131		
FY01	Project Title: Chugach Native Region Clam Restoration		
	Agency: Alaska Department of Fish and Game		
Prepared: 4-12-00			

October 1, 2000 - September 30, 2001

New Equipment Purchases:	Number	Unit	
Description	of Units	Price	
Those purchases associated with replacement equipment should be indicated by placement of an R.	New Equ	ipment Total	
Existing Equipment Usage:		Number	
Description		of Units	
FY01 Project Number: 01131 Project Title: Chugach Native Region Clam Restoration Agency: Alaska Department of Fish and Game			

October 1, 2000 - September 30, 2001

	Authorized	Proposed	
Budget Category:	FY 2000	FY 2001	
Personnel		\$0.0	
Travel		\$0.0	
Contractual		\$9.0	
Commodities		\$0.0	
Equipment		\$0.0	LONG RANGE FUNDING REQUIREMENTS
Subtotal	\$0.0	\$9.0	Estimated Estimated
Indirect		\$0.9	FY 2001 FY 2002
Project Total	\$0.0	\$9.9	\$9.9 \$0.0
Full-time Equivalents (FTE)		0.0	
			Dollar amounts are shown in thousands of dollars.
Other Resources			
Comments:			
	Project Nur	mber: 0113	
	-		
FY01			Native Region Clam Restoration
	Agency: A	laska Depai	tment of Fish and Game
	1		

October 1, 2000 - September 30, 2001

Personnel Costs			Months	Monthly		
Name	Position Description		Budgeted	Costs	Overtime	
	Subtotal		0.0	0.0	0.0	
					sonnel Total	
Travel Costs:		Ticket	Round	Total	Daily	
Description		Price	Trips	Days	Per Diem	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
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	· · · · · · · · · · · · · · · · · · ·	I	I		0.0	
					Travel Total	
	1					
	Project Number: 01131					
FY01	otorotion					
	Agency: Alaska Department of Fish					

Prepared:

October 1, 2000 - September 30, 2001

Contractual Costs:			
Description			
Contract with Dr. Brooks for Fi	nal Report preparation		
		Contractual Total	
Commodities Costs:		Contractual Total	
Description			
		Commodities Total	
	Project Number: 01131		
FY01	Project Title: Chugach Native Region Clam Restoration		
	Agency: Alaska Department of Fish and Game		
	Agency. Alaska Department of Fish and Game		
Prepared: 4-12-00]	

October 1, 2000 - September 30, 2001

New Equipment Purchases:		Number	Unit	
Description		of Units	Price	
Those purchases associated wit	h replacement equipment should be indicated by placement of an R.	New Equ	ipment Total	
Existing Equipment Usage:			Number	
Description			of Units	
FY01	Project Number: 01131 Project Title: Chugach Native Region Clam Restoration Agency: Alaska Department of Fish and Game			