Youth Area Watch

EXECUTATION VALUE TRUSTEE

Project Number:

02210

Research Category:

General Restoration

Proposer:

Chugach School District

Lead Trustee Agency:

ADF&G

Cooperating Agency:

DNR

Alaska SeaLife Center:

Yes

Duration:

7th year, seven year project

Cost FY 02:

\$90,000 (project) plus \$6.3 (ADF&G GA) = \$96.3 total \$106,100

Geographic Area:

Prince William Sound, Resurrection Bay and Lower Cook Inlet including: Cordova Harbor and Orca Inlet, Port San Juan and Evans Island, Tatitlek Narrows, Boulder Bay,

Landlocked Bay

Injured Resource/Service:

Harbor seal, mussels, pink salmon, killer whales, subtidal

and intertidal communities, subsistence, passive.

ABSTRACT

Youth Area Watch links students in the oil spill impacted area with research and monitoring projects funded through the Trustee Council. The project involves students in the restoration process and provides these individuals the skills to participate in oil spill restoration now and in the future. Youth conduct research identified and delegated by principal investigators who have indicated interest in working with students. Youth Area Watch fosters long-term commitment to the goals set out in the restoration plan and is a positive community investment in that process. Participating communities include: Cordova, Chenega Bay, Nanwalek, Port Graham, Seldovia, Seward, Tatitlek, Valdez, and Whittier.

INTRODUCTION

Since the inception of Youth Area Watch, coordination between research and restoration projects and the communities affected by the oil spill continues to increase. Resulting from many factors, community involvement in the restoration process continues to grow and strengthen; Youth Area Watch is an example of this coordinated effort through the connection that students, the communities and researchers maintain. This relationship creates an environment where youth are encouraged to interpret the data collected and apply the information to the ecosystem.

Students from the oil spill impacted communities are screened and selected for participation in Youth Area Watch at the beginning of each school year. Those showing an interest, academic ability and concern for the oil spill effects on local ecosystems are invited to represent their community as a student of the project. Students work with principal investigators of research projects and community facilitators, as well as independently to achieve the set project objectives.

Three core research projects funded by the Trustee Council serve as the central link for all Youth Area Watch activities. Initial cooperating projects include pristane mussel analysis (02195), harbor seal management and biological sampling (02244F) and comprehensive killer whale investigation in Prince William Sound (02012A). These projects continue to work with Youth Area Watch, providing specific research activities for students to conduct and protocol training for those duties. According to protocol, students collect samples and data for the cooperating research and monitoring projects. The samples and data are compiled by a Youth Area Watch project coordinator located in Anchorage and sent on to the principal investigator of the respective projects. Information on the data collected is maintained by the project coordinator for project analysis conducted by the students during group project sessions.

Yearly, students select a local restoration project to conduct. As in previous years, students will begin by completing a planning process during the winter months. Students work with local Community Involvement coordinators to integrate, where possible, their knowledge and expertise.

Students will post project information on their web site (http://www.micronet.net/users/~yaw) for the public to view. This information will be updated throughout the project year.

NEED FOR THE PROJECT

A. Statement of Problem

Youth Area Watch, identified by the Trustee Council as a "general restoration" project, is committed to collecting the requisite samples and data for principal investigators of research projects to make informed decisions concerning the ecology of oil spill impacted areas. Research and restoration project PI's identify needed data collection within the oil spill impacted communities that in many instances can best be facilitated through local involvement of community residents.

Given the finite resources available for project activities, cost containment is necessary. By working with local community youth, information can be collected at a minimal cost. In addition, a greater quantity of data collection from an increased number of sites throughout the year can be accomplished by Youth Area Watch project activities.

As a part of the Memorandum of Agreement and Consent Decree approved by the U.S. District Court, "meaningful public participation in the injury and assessment and restoration process" is recognized as an important component of the restoration process. While there are a variety of instituted mechanisms for this involvement, Youth Area Watch offers positive examples of meaningful public participation expressed by the oil spill impacted communities through the involvement of community facilitators (Community Involvement \052A) and other community-based projects. The project continues to receive strong support both within the communities that it is conducted as well as among the principal investigators involved with the youth.

B. Rationale/Link to Restoration

Community-based participation in ecosystem restoration is supported by recent research. Graduate field ecology work conducted through SUNY, Stony Brook applied comanagement principles to revitalize the Oak Brush Plains Preserve of Long Island, New York (Block, p. 38). In this exercise, a local group familiar with the environment assisted in replanting and management efforts while the researcher actively participated in their experiential activities so that cooperative management strategies could best be achieved. This approach is supported by research techniques used in other ecological restoration projects such as fisheries (Pinkerton) and tropical rain forests (Allen). Furthermore, the link between Native cultures and environmental revitalization has gained significant support as a mechanism for sustaining ecological practices within communities (Rogers-Martinez). Given this research, appropriate extension is made to youth within the restoration region so that "the issue of how people will inhabit, utilize and maintain the area in a manner that sustains its integrity" can be addressed (Block, p. 38).

Youth Area Watch is based on the commitment by principal investigators of research and restoration projects to involve students in their work. Participating projects are funded by the Trustee Council and have met the guidelines under the settlement. It is through the

cooperating projects that Youth Area Watch holds an interest in the immediate restoration activities.

As a long-term goal, project activities are expected to provide the foundation for long-term commitment to restoration of the impacted area to pre-spill levels. Involvement of youth in research and monitoring activities is essential in developing local commitment to the restoration plan adopted by the Trustee Council. Cooperating PI's request precise and detailed sampling/data collection from the youth. Students, in turn, have increased their knowledge and participation through their connection to the projects. As a result, students are now stakeholders in the restoration process.

C. Location

While Youth Area Watch is administered through the Chugach School District's main office in Anchorage by project coordinators, project activities currently take place in the nine participating communities and in the oil spill impacted area. Local communities include Chenega Bay, Cordova, Port Graham, Nanwalek, Seldovia, Seward, Tatitlek, Valdez and Whittier.

The science teacher (site teacher) within each of the nine communities oversees the day-to-day activities pertaining to the project. Project coordinators travel to the local communities to facilitate in-class integration of project activities and off-shore research in specific locations of importance to the identified research projects. Local projects activities identified by each site occur at or near the community.

COMMUNITY INVOLVEMENT AND TRADITIONAL ECOLOGICAL KNOWLEDGE

One of the main goals of Youth Area Watch is to facilitate community involvement in the restoration process at a primary and secondary school age. It is through community interest and participation that the project has had a positive impact on students. Ultimately, long-term impacts, to include local ongoing restoration and ecosystem sustainability, are anticipated as youth conduct established research and apply this knowledge to community efforts to understand and preserve species affected by the oil spill. As a result, communities continue to request participation in Youth Area Watch.

Local oil spill impacted communities are involved and participate in Youth Area Watch. The local facilitators of Community Involvement (/052A) continue to work with students and the community Youth Area Watch activities to involve youth. Local facilitators and parents of participating youth assist with various aspects of project activities such as serving as chaperones, providing traditional ecological knowledge and coordinating opportunities for youth to work with local projects. Through this cooperative effort, information is exchanged between projects and across generations.

As a component of the project scope, students at each site are asked to identify a local project that they will conduct. Through these local projects, students gain a greater understanding of what the research and restoration process means at the community level, as well as an interest in meaningful project outcomes.

PROJECT DESIGN

A. Objectives

Selected students from the identified communities participate in research and restoration activities set out by Alaska Department of Fish and Game principal investigators, NOAA staff, University of Alaska, Fairbanks biologists and other project principal investigators working with Youth Area Watch. As part of an area watch project that works with existing research and restoration projects, students collect samples and data that is then provided to the respective projects.

Youth Area Watch objectives include:

- 1. Research project principal investigators interacting with students.
- 2. Identifying all research and data collection activities.
- 3. Updating memoranda of agreement with school districts.
- 4. Completing site teacher orientation.
- 5. Conducting school orientations for students on Youth Area Watch.
- 6. Selecting students to participate in Youth Area Watch.
- 7. Conducting site teacher training on project activity protocol.
- 8. Completing the student project orientation and training.
- 9. Conducting oceanographic data collection.
- 10. Assisting local hunters/technicians collecting harbor seal biological samples.
- 11. Conducting a local research/restoration projects.
- 12. Maintaining a Youth Area Watch web site.
- 13. Collecting blue mussels for pristane/mussel analysis.
- 14. Facilitating project follow-up training for site teachers.
- 15. Conducting killer whale monitoring

B. Methods

The Chugach School District currently works with the Kenai Peninsula Borough School District, Cordova School District and Valdez School District through memoranda of agreement so that the communities of Chenega Bay, Cordova, Nanwalek, Port Graham, Seldovia, Seward, Tatitlek, Valdez and Whittier may participate. School districts will operate under the existing agreements during the seventh project year.

Youth Area Watch project coordinators work with the principal investigators of the cooperating projects to solidify project expectations. Protocol is established for

sample/data analysis. In addition, principal investigators commit to working with the students for a period of time during the training and/or data collection stage.

The Chugach School District developed an application and screening tool to select students for participation in the project. Up to 28 students will be selected from the communities to be a part of Youth Area Watch. While the distribution may vary according to the interest and ability of students that apply, it is expected that the distribution will be as follows: two students from Chenega Bay, three students from Cordova, two students from Port Graham, two students from Nanwalek, two students from Seldovia, six students from Seward, three students from Tatitlek, four students from Valdez, three students from Whittier, and one remote site student.

Prior to the beginning of school in the fall, participating Youth Area Watch teachers at the local sites will come together for an orientation session facilitated by project coordinators. It is anticipated that site teachers will again receive protocol training directly from principal investigators. This training will occur at one community site and the training will be videotaped for future referral.

Youth Area Watch relies on the participation of research projects, sites and program resources to successfully fulfill the project objectives. Throughout the project year, students travel to research vessels, specific project sites near their community and research labs in the process of project activity completion. In the past year, Youth Area Watch was able to coordinate with projects conducting research cruises and work cooperatively on task completion while sharing the costs of vessel hiring. In FY99, FY 00 and FY01, Youth Area Watch coordinators assisted with the coordination of harbor seal protocol training. It is expected that this type of cooperative effort will continue in the present and coming years.

Students will participate in the core research projects as a group. This will consist of coming together as a group to work on collection protocol, as well as conducting activities for these projects in their community. In addition, students will participate in local projects that pertain to their geographic area. It is during the local project work that students receive a high degree of one-on-one interaction and involvement with principal investigators and their research. Youth Area Watch coordinators will continue to be open to working with other projects funded by the Trustee Council if students can have meaningful participation in these projects.

Ongoing Youth Area Watch research and restoration projects include:

1. Pristane/mussel analysis, Project Number 01195. Jeff Short and Pat Harris at the NOAA Auke Bay laboratory study the pristane levels in blue mussels. There are approximately thirty mussel collection sites in Prince William Sound. Students will continue to collect mussels twice a month at sites appropriate for collection according to set protocol. During the fall and winter months, students are responsible for overall mussel bed seasonal watch. Students will tag, identify mussel bed characteristics and predator/prey activities.

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- 2. Harbor seal management and biological sampling, Project Number 01244F. The project is conducted by Monica Reidel of the Alaska Native Harbor Seal Commission, in cooperation with Vicki Vanek from the Department of Fish and Game in Kodiak. After they have participated in traditional ecological knowledge and protocol training, students will pair up with local technicians/hunters and assist with bio-sampling activities. Students collect different parts of the seal, including the skin, blubber, teeth and stomach. Adherence to sampling protocol is ensured by working directly with the local hunters.
- 3. Comprehensive Killer Whale Investigation in Prince William Sound, Project Number 01012A. The principal investigator is Craig Matkin. The project tracks the killer whale population in Prince William Sound and Kenai Fjords. Whales are photographed and cataloged based on identifying markings and family relationships. Genetic studies on the whales are also conducted through the use of darting. Students will assist in locating and identifying the whales during day cruises in and around Resurrection Bay.

In addition to the core projects in which Youth Area Watch students participate, each site is selecting a restoration project to work on in their local community. This restoration activity is something that the students select and not necessarily a project that is currently funded by the Trustee Council. However, local projects are closely linked to existing restoration activities.

Coordination between Youth Area Watch and participating research projects remains strong. Where possible, research vessel costs are shared to maximize resources for project activities. In the case of the pristane/mussel project, Youth Area Watch has paid for the biologist's chartered flights to sites for mussel collection to allow students to participate in the process. In other instances, time and resources are contributed by participating projects to Youth Area Watch.

At this point, the YAW project is in the midst of a metamorphosis. With the trustee council transitioning to the greatly reduced work level of the GEM program, YAW must transition also if it is to remain vital and current. There is a significant degree of uncertainty within the research community as to what exactly the GEM program will look like. In the current climate, we must remain flexible and agile so as to most advantageously position ourselves to participate in long term research and monitoring projects. While we maintain our working understanding with the three previously mentioned projects, (Pristane/mussel analysis, Project Number 01195, Harbor seal management and biological sampling, Project Number 01244F and Comprehensive Killer Whale Investigation in Prince William Sound, Project Number 01012A), we expect that changes in the working protocol will probably occur. We also fully expect to forge new, long-term partnerships as the GEM program settles into a more steady state. During this time of funding reductions, student contributions to research projects will become more and more important. The past six years have allowed us to demonstrate that students can cost effectively and reliably collect scientific data for existing projects. As we Project 02210

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move toward a program of low cost, high yield monitoring, it is time for our previous work to bear fruit. The many relationships we have built within the research community will serve us well in the next chapter of the Youth Area Watch program.

As funding for the Youth Area Watch project comes from increasingly non-trustee sources, and the pool of Trustee Council projects diminishes, the project will transition to include some non-Trustee Council funded projects. This shift will be necessary in order to meet the goals of the original project proposal and provide a long-term role for middle and high school students in research and restoration projects.

Objectives and Activities

Objective 1: Youth Area Watch students will interact with research project principal investigators, gaining a greater understanding of the affects of the oil spill on the ecosystem.

Activity 1: Principal investigators commit to working with students directly at least once during the project year.¹

Activity 2: Students work beside principal investigators during field work.

Activity 3: Students independently conduct activities set out by the principal investigators.

Activity 4: Students draw conclusions from their independent work to be reported at the annual Science Review.

Activity 5: Students work with Community Involvement (/052) local facilitators and community members to increase awareness of restoration activities and the status of the ecosystem.

Objective 2: Project coordinators identify all research and data collection activities to be conducted by students at all sites participating in Youth Area Watch.

Activity 1: Project coordinators meet with the principal investigators or delegate project research personnel either by phone or in person to set student activity parameters.

Activity 2: Activity protocol forwarded by the principal investigator or delegate, including sample and data forwarding process, to project coordinators.

¹ It is expected that additional contact occur throughout the project year, though not necessarily in person. Research project PIs receive updates and samples according to the protocol set out for students.

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Activity 3: Project coordinators finalize project activities for site teacher and students.

Objective 3: Project coordinators update memoranda of agreement with the Valdez School District, Cordova School District, and Kenai Peninsula Borough School District for participation in Youth Area Watch.

Activity 1: Project coordinators contact each school district to evaluate the current agreement and make any necessary changes.

Activity 2: Site teachers are identified by each school district for the participating communities.

Objective 4: Site teachers receive Youth Area Watch project orientation.

Activity 1: Project coordinators develop an orientation and training session plan in consultation with research project principal investigators.

Activity 2: Project coordinators set a date in the early part of October to conduct orientation. Site teachers are contacted to determine the most appropriate dates.

Activity 3: Project coordinators perform site teacher orientation and training.

Objective 5: Project coordinators conduct school orientations on Youth Area Watch.

Activity 1: Project coordinator travels to each participating school site prior to beginning the project year.

Activity 2: Project coordinators present Youth Area Watch to community science classes. Students that have participated in prior years will be asked to assist.

Activity 3: Students will be informed of the process to apply and participate in Youth Area Watch '02.

Objective 6: Students are selected to participate in Youth Area Watch.

Activity 1: Project coordinator distributes student applications to project sites. All village council/tribal offices (Chenega Bay, Seward, Tatitlek, Valdez, Seldovia, Port Graham, Nanwalek) will receive application forms, as well as the Valdez, Cordova and Kenai Peninsula Borough School Districts for their respective community sites.

- Activity 2: Project coordinators convene a committee to review student applications for Youth Area Watch participation. The committee is comprised of Chugach School District staff and may be assisted by participating school district staff and community facilitators (/052).
- Activity 3: The review committee examines applications and selects students based on science interests, academic achievement, maturity and site teacher recommendation.
- Objective 7: Project coordinators conduct site teacher training on project activity protocol.
 - Activity 1: Project coordinators set a date in early October for site teacher protocol training and coordination
 - Activity 2: Project coordinators request the attendance of research project principal investigators at the site teacher orientation.
 - Activity 3: Project coordinators facilitate a protocol training session to ensure that correct information and research practices are followed by students during the project year.
- Objective 8: Project coordinators complete the student project orientation and training. All participating students from the community sites collectively meet at the Seward SeaLife Center for the Youth Area Watch introduction and preliminary activity participation.
 - Activity 1: Project coordinators work with SeaLife Center staff to determine appropriate dates for orientation.
 - Activity 2: The project coordinators invite research project principal investigators to participate in the student orientation.
 - Activity 3: The Youth Area Watch principal investigator coordinates travel arrangements for student participation in the orientation.
 - Activity 4: In cooperation with the research project principal investigator(s), project coordinators conduct the student orientation to Youth Area Watch goals, responsibilities and activities. Students learn about the ecosystems, and identify ways in which project activities fit into the biotic cycle.
- Objective 9: Students conduct oceanographic data collection in their local communities. Site teachers oversee these activities.

Activity 1: Students take twice monthly water temperature and salinity readings at their local site.

Activity 2: A weather station is installed at each site under the supervision of the site teacher. Students measure the wind speed and direction, air temperature and barometric pressure.

Activity 3: Data is collected at each site and transmitted to the project coordinator periodically.

Activity 4: Data is posted on the Youth Area Watch web page by the project coordinators

Objective 10: Students assist local hunters/technicians collecting harbor seal biological samples.

Activity 1: Project coordinators work with principal investigators to coordinate harbor seal biosampling trainings for students and local hunters.

Activity 2: Students analyze an available sample to become acquainted with what is taken and what to look for in a sample. Students collect various parts of the seal for analyzing, which include: skin, blubber, teeth, stomach, skull, liver, heart and kidney. Additionally, measurements and weight are taken for each animal.

Activity 3: Students at local sites participate in taking samples from harvested seals.

Activity 4: Students assist the hunter/technician in preparing the sample for shipment to the harbor seal management principal investigator.

Objective 11: Each community site conducts a local research/restoration project.

Activity 1: The site teachers and project coordinator work with participating students to identify a local research/restoration project.

Activity 2: During the winter months of November through January, students develop a plan for their local restoration project. This is completed with the appropriate assistance and coordination of community facilitators.

Activity 3: Site teachers work with project PIs where appropriate to develop protocol for student participation.

Activity 4: Students conduct local project activities according to protocol

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and timelines set out by site teachers.

Activity 5: Students provide data/samples to project PIs according to protocol.

Objective 12: Students maintain a Youth Area Watch web site.

Activity 1: Students become Internet proficient and learn to update their web site with current YAW information.¹

Activity 2: Students analyze data collected from the research projects, both past and current.

Activity 3: Using the established reporting format, the data is posted on the web site.

Activity 4: Students update data on research activities as necessary.

Objective 13: Students at each site collect blue mussels for pristane/mussel analysis.

Activity 1: Students tag and identify mussel bed characteristics during fall and winter months at their local sites.

Activity 2: Students note predator/prey activity at the identified mussel bed sites monthly.

Activity 3: Students collect mussels according to principal investigator request during the spring months. Sites are selected by the principal investigator and noted in project reporting.

Activity 4: Students label and cold storage mussels for transport to the Auke Bay laboratory in Juneau.

Activity 5: Students send mussels to project coordinators once an adequate collection has accumulated for transport to Auke Bay Labs.

Activity 6: Students count mussels in the beds according to set protocol.

Activity 7: Students compile site data for transmission to the project coordinator.

Activity 8: Students travel to the Auke Bay laboratory to participate in the analysis of data.

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¹ While many students will be familiar with the Internet, some communities recently linked will need training. Additionally, previous Youth Area Watch participants may be proficient at updating the web site, yet new students will need assistance.

Objective 14: Project coordinators facilitate project follow-up training for site teachers in the spring.

Activity 1: Project coordinators set a date convenient for site teachers to

conduct a spring follow-up session.

Activity 2: Project coordinators invite principal investigators of

participating projects to assist in the follow-up session.

Activity 3: Project coordinators facilitate a follow-up session for site

teachers to share information and identify strategies for improving

student activities.

Objective 15: Students participate in killer whale identification project.

Activity 1: Principal investigators train students in killer whale identification

methods. Students are also informed of project scope and goals.

Activity 2: Students participate in a day cruise with principal investigators to

track and identify killer whales in and around Resurrection Bay including: hydrophonic monitoring of whales, photographic recording of individual animals, and darting to obtain blubber and

skin samples.

C. Cooperating Agencies, Contracts, and Other Agency Assistance

The Chugach School District serves as the administrative agency for Youth Area Watch through their contract with the Department of Fish and Game. The school district has shown that it is an effective link to the students and communities impacted by the oil spill. As the administrative entity, the Chugach School District will maintain memoranda of agreement with the Valdez School District, Cordova School District and Kenai Peninsula Borough School District as the school districts that serve the identified communities.

The Chugach School District continues to work with the Chugachmiut and Chugach Regional Resources Commission to coordinate and exchange community information with regard to regional restoration activities. As the coordinating agency for community involvement, Chugach Regional Resources Commission works with the youth through the local facilitators so that students may participate in research and restoration activities.

Since the inception of the project, significant contributions have been made and are identified in the budget. Contractors have provided discounted services, as in the case of vessel hiring. Expensive equipment used in project activities are offered by coordinating agencies. Cooperating agencies provide technical assistance, student supervision and support for project activities. The Chugach School District relies heavily on the

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commitment and participation of cooperating school districts involved in the project. Site teachers dedicate their time to the goals of Youth Area Watch, serving as an in-kind contribution.

In keeping with its commitment to secure additional support for Youth Area Watch activities, Chugach School District has sought and received two significant grants that offset the cost of the project. A three-year (\$1,450,000) M.A.T.E. grant allows the District to couple real life activities with education, focusing on how these experiences will be applied in adulthood; a particular objective of the grant is directed at science opportunities in response to Youth Area Watch. The second grant is a three-year (\$510,000) 21-Century grant from the Department of Education that provides funds for real life after-school activities for students. In addition, the district will continue to commit general funds to the project and will seek out alternative funding sources as the program transitions away from Trustee Council support. The success of the project activities motivates the Chugach School District to commit additional funding through diversified means so that the youth are equipped to continue their restoration and ecological management activities as an integral component of their education.

As Trustee Council responsibility for restoration activities decreases due to the decline of settlement funds, the project coordinators continue to pursue opportunities where Youth Area Watch project activities can transition to a more stable position. Toward this end, the school district maintains cooperative relationships with entities engaged in ecological management and restorative projects, independent of Trustee Council funding. Particularly with respect to local restoration projects where other agencies, organizations and private groups are involved, the Youth Area Watch project scope is expanding so that a smooth shift of focus can occur. By building and maintaining these cooperative working relationships, resource exchanges can be enhanced to augment other district resources.

SCHEDULE

A. Measurable Project Tasks for FY 02 (October 1, 2001 - September 30, 2002)

July 1 - August 1, 2001: Confirm research & data collection activities
August 15 - 31, 2001: Site teacher orientation

September 1 - 18, 2001: School site orientations

September 15 - 30, 2001:

October 1 - 31, 2001:

October 1 - 31, 2001:

November 1 - 7, 2001:

Students selected for participation
Site teacher training on protocol
Student orientation and training
Sites prepare weather stations

November 1 - July 30, 2002: Students participate in research activities

November 1 - May 31, 2002: Students maintain web site

March 1, 2002: Project Coordinator sends data to PIs

May 1 - 15, 2002: Site teacher follow-up training

June 1, 2002: Project Coordinator sends data to PIs

June 1, 2002: Students complete project reports for FY 01

Ongoing Activities:

February 02 - August 02: Student bi-monthly collection of mussels

October 01 - September 02: Student mussel bed monitoring

October 01 - September 02: Student weather station monitoring (daily)

October 01 - September 02: Students collect harbor seal samples with

local hunters

October 01 - September 02: Students conduct local project activities

October 01 - September 02: Students assist in documenting local TEK

October 01 - September 02: PIs interact and exchange information with

students

B. Project Milestones and Endpoints

October 17, 2001: Students selected for participation

October 30, 2001: Protocol training complete

November 1, 2001: Students conduct project activities

March 1, 2002: Data/samples to PIs

June 1, 2002: Data/samples to PIs and reports complete

October 17, 2002: Students selected for participation

October 30, 2002: Protocol training complete

November 1, 2002: Students conduct project activities

March 1, 2003: Data/samples to PIs

June 1, 2003: Data/samples to PIs and reports complete

C. Completion Date

Objectives identified in the project design will continue to serve as guidelines for community involvement within the civil settlement throughout the life of the restoration effort. It is expected that the Youth Area Watch project will continue beyond the seven years of Trustee Council Funding.

PUBLICATIONS AND REPORTS

Youth Area Watch was featured in "The Science Teacher," "Living on Earth" and "Alaska Magazine." Copies of these articles have been forwarded to the Restoration Office. In addition, the project has been featured on NPR. The project will also be featured during state-wide broadcasts on the Alaska Rural Communication System during programs on standards in education.

The Youth Area Watch Web site www.micronet.net/users/~yaw continues to be an important venue for students to both receive and distribute information. Each project that students work with has a student generated page of explanation and photographs. There is also space for students reports on their own local restoration projects as well as meteorological and oceanographic data. The site is utilized by students during training at the beginning of the year as they attempt to learn about each of the projects with which they will participate work over the course of the year. FY '02 will be the second year that all of the community schools involved in the project are online. This connectivity has been a strong benefit in allowing the project coordinator to communicate directly and regularly with students at each school. This increase in communication and coordination enables more flexible and responsive action by project coordinators and school site participants.

PROFESSIONAL CONFERENCES

Throughout the year, Chugach School District administrative staff showcase Youth Area Watch. This year, the project will be highlighted to the Oxford Coalition at Harvard University and to members of the Gates Coalition at their annual meeting. Youth Area Watch will also be a feature in the Principal Investigator's keynote speech to the National Quality School Conference in Los Angeles California.

NORMAL AGENCY MANAGEMENT

This section is not applicable.

COORDINATION AND INTEGRATION OF RESTORATION EFFORT

Youth Area Watch relies on the participation of Trustee Council funded projects to maintain coordination with restoration efforts. Through the commitment of principal investigators, youth conduct research activities with and for participating projects. Students work independently, as well as beside researchers during the project year. Costs

are shared between projects to allow for increased research vessel time and one-on-one interaction between students and the researchers.

Various people contribute the necessary technical assistance and resources. Local community facilitators from Community Involvement (/052) work with students and serve as chaperones for project activities. School districts provide teacher time and facility space for activities.

A variety of funding sources and project contributions ensure the success of the project. The Chugach School District commits over \$142,000 in FY '02 to the project. These funds come in the form of administrative time, certified teacher time, travel expenses and housing for students. Other school districts contribute \$58,300 in teacher time and \$21,420 in facility resources. Communities and school districts contribute \$11,600 in lodging. Equipment in-kind contributions total \$6,200. Participating principal investigators from research projects contribute \$8,520 worth of their time.

PROPOSED PRINCIPAL INVESTIGATOR

Richard DeLorenzo Chugach School District 9312 Vanguard Drive, Suite 100 Anchorage, AK 99507

Office: (907) 522-7400 Fax: (907) 522-3399

PRINCIPAL INVESTIGATOR

Richard DeLorenzo is the superintendent of the Chugach School District. He maintains administrative authority over all day-to-day functions of the district's activities. Mr. DeLorenzo has extensive experience administering grants, adhering to project objectives and managing budgets. Mr. DeLorenzo will be directly responsible for budget expenditures, negotiating contracts and working with the participating school districts to ensure effective project management.

OTHER KEY PERSONNEL

Project Coordinator: Randy Fleharty is a certified secondary teacher with Bachelor of Science degree in physics. Mr. Fleharty's responsibilities include:

- 1. working with principal investigators of research projects to ensure proper protocol.
- 2. coordinating student selection process.
- 3. coordinating all orientation and training sessions with site teachers and staff
- 4. ensuring that site teachers and students have proper supplies.
- 5. completing site visits.
- 6. monitoring project activity of students.
- 7. providing support to site teachers.
- 8. coordinating principal investigator-student interaction through research.
- 9. transmitting data to principal investigators.
- 10. completing necessary project reports and/or materials for publication.
- 11. continuing to seek additional funding sources for project activities beyond the life of the Trustee Council.

LITERATURE CITED

- Allen, W.H. "Biocultural Restoration of a Tropical Forest." <u>Bioscience</u>. 38(3): 156-161, 1988.
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- Pinkerton, E. <u>Cooperative Management of Local Fisheries: New Directions for Improved Management and Community Development</u>. Vancouver: University of British Columbia Press, 1989.
- Rogers-Martinez. "The Sinky One Intertribal Park Project." Restoration & Management Notes, 1992.

ADDENDUM TO PROJECT 02210 DETAILED PROJECT DESCRIPTION:

Subsequent to the original submission of the project 02210 DPD, a significant opportunity has presented itself. Please consider this addendum to the project 02210 DPD.

The JASON foundation is a nonprofit organization dedicated to education and community outreach in the area of environmental science and research. The program originated with Dr. Robert Ballard and his famous expedition to the RMS Titanic. After discovering the wreck of the RMS Titanic, world-famous explorer and oceanographer Dr. Robert Ballard received letters from students around the world who wanted to go with him on his next expedition. Dr. Ballard founded the JASON Project to bring the thrill of discovery to millions of students worldwide. Since its inception, JASON has undertaken a new expedition each year. Teachers and students world-wide follow each expedition with an extensive curriculum and a two week live broadcast.

Now for its thirteenth expedition, JASON will be coming to South Central Alaska. This year's curriculum and is called "Frozen Worlds" and the live broadcast will take place in Seward at the SeaLife Center and at Portage Lake. In addition to a curriculum that focuses on local organisms, geography, climate and culture, JASON XIII's live broadcast portion will heavily feature annual YAW activities such as harbor seal biosampling and blue mussel collection and analysis.

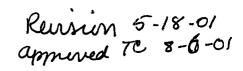
The JASON project is a significant crossroads between the educational and scientific communities. In many ways the goals of JASON and the goals that the Trustee Council has tried to meet through support of Youth Area Watch are aligned. JASON has a much larger scope and impact than YAW, and this partnership represents a significant opportunity for both organizations. With JASON's decision to come to Alaska this year, the local knowledge and experience contained within the YAW program will be vital to their success. In turn we have the opportunity to achieve some national and international recognition for the excellent work that the Trustee Council and YAW have accomplished over the past six years.

We propose to send all Youth Area Watch site coordinators, and five additional teachers, two from Seward, two from Valdez and one from Whittier to receive training and curriculum materials to participate in JASON XIII. This training will take place in Anchorage on September 22, 2001. At least one coordinator and two students from the YAW program will participate in the two week live broadcast in Jan/Feb. of 2002. The additional cost to the Trustee Council will be limited to travel, workshop and curriculum expenses for the 14 educators. A total of \$9,100, mostly in the area of travel. The Chugach School District will provide lodging during the training (approximately \$3,000), and the JASON foundation has agreed to a greatly reduced rate for the training, as well as complete funding for the live broadcast portion of the project (approximately \$7,000).

This opportunity should not be missed. Participation in JASON XIII will provide three substantial benefits. First, the JASON foundation is respected by both the education and the science community. They will make a strong partner for Youth Area Watch. Second, the national and international exposure that participation will bring will greatly assist in the ever present task of securing funding to ensure that YAW continues indefinitely. Finally, the JASON training, curriculum and live broadcast will ensure that YAW not only impacts the students in the program but students in classrooms across the

state and the world. Involvement with JASON will be well worth the additional investment.

October 1, 2001 - September 30, 2002



| | Authorized | Proposed | | | | | | |
|-----------------------------|------------|----------|---|--|--|--|--|--|
| Budget Category: | FY 2001 | FY 2002 | | | | | | |
| | | | | | | | | |
| Personnel | \$52.0 | \$50.0 | | | | | | |
| Travel | \$25.0 | \$27.1 | | | | | | |
| Contractual | \$5.0 | \$5.0 | | | | | | |
| Commodities | \$3.0 | \$5.1 | | | | | | |
| Equipment | \$0.0 | \$0.0 | LONG RANGE FUNDING REQUIREMENTS | | | | | |
| Subtotal | \$85.0 | \$87.2 | Estimated | | | | | |
| Indirect | \$15.0 | \$12.0 | FY 2003 | | | | | |
| Project Total | \$100.0 | \$99.2 | \$80.0 | | | | | |
| | | | | | | | | |
| Full-time Equivalents (FTE) | 1.0 | 1.0 | | | | | | |
| | | | Dollar amounts are shown in thousands of dollars. | | | | | |
| Other Resources | \$277.5 | \$248.0 | \$221.0 | | | | | |

Comments:

Personnel - The project coordinator is responsible for the duties of monitoring and facilitating the project activities at all sites.

Travel - Students travel by both charter (especially when conducting field work, such as mussel collection with the scientist). Student travel to Anchorage for the Science Review is a project contribution. Only transport expenses are requested through the budget.

Contractual - The hiring of boats at a rate of \$1,000 per day (5 days) will occur in conjunction with research on surf scoters and kittiwakes. Commodities - Each major classroom site is allocated \$333 for project supplies. Supplies from previous years will be used as well.

Indirect - School district administrative costs are calculated at 15%. This accounts for the direct oversight of fiscal reporting and associated support at the administrative offices in Anchorage. In addition, these costs offset the expenses that sites incure including telephone, fax, postage and other general support.

Other resources - Teacher time (\$52,100); participating PIs (\$7,940); Youth Area Watch PI (\$13,025); Facility space (\$22,340); equipment (\$6,200); travel, facilities, lodging and additional administrative support (\$146,385).

FY02

Project Number: 02210

Project Title: Youth Area Watch Name: Chugach School District

FORM 4A Non-Trustee SUMMARY

Prepared: 4/01

October 1, 2001 - September 30, 2002

| Personnel Costs: | | | Months | Monthly | | Proposed |
|--|--|--|-------------|---------|---------------------|---------------------|
| Name | Position Description | | Budgeted | Costs | Overtime | FY 2001 |
| Project Coordinator | The coordinator facilitates training for | Que Tre annimieramento sur como e como energio estagento en estado de e | 12.0 | 4.20 | | 50.4 |
| in the second of | both site teachers and participating | | | | | 0.0 |
| 2 TE | students; coordinates youth interaction | | | | | 0.0 |
| | with research Pls; schedules project | 11.00 | | | | 0.0 |
| | travel; works with local sites to | | | | | 0.0 |
| 开眼盖 000 | develop community restoration | | | | | 0.0 |
| | projects; works with local facilitators | tarak (11) an melai banjuka ya: | | | | 0.0 |
| 14 _1 mc | and site teachers to ensure the | | | | | 0.0 |
| lendin | exchange of information; monitors | | | | | 0.0 |
| | the completion of project activities; | | | | | 0.0 |
| | solicits additional funding for project | | | | | 0.0 |
| i i i i i i i i i i i i i i i i i i i | enhancement. | | 12.0 | | | 0.0 |
| | Subtotal | | | 4.2 | 0.0 sonnel Total | \$50.4 |
| <u> </u> | | Ticket | Round | Total | | |
| | Travel Costs: | | | | Daily Per Diem | Proposed FY 2001 |
| | Description | | Trips 28 | Days | Pel Dieni | 14.0 |
| | Charter and /or commerical trips for students to training/research. | | 20 | | • | 0.6 |
| Project coordinator from Anchorage to Cordova. | | 0.3 0.2 | 2 | | | 0.0 |
| 134444444141413 | Project coordinator from Anchorage to Nanwalek. | | 2 | | | 0.4 |
| | Project coordinator from Anchorage to Port Graham. | | 2 | | | 0.4 |
| | Project coordinator from Anchorage to Seward. | | ၁ | | | 2.0 |
| Project coordinator from Anchorage to Tatitlek. | | 1.0 0.2 | 2 | | | 0.4 |
| Project coordinator from Anchorage to Valdez. | | 0.2 | 4 | | | 2.0 |
| | Research PI travel to training sites. | | 14 | | | 7.0 |
| Site Coordinators and tea | Site Coordinators and teachers Travel to Anchorage for JASON trainin | | 14 | | | 0.0 |
| | | | | | | 0.0 |
| AND HARA | | 1 | | | Travel Total | |
| | | | | | | ORM 4B |
| | Project Number: 02210 | | | | ľ | Personnel |
| FY02 | Project Title: Youth Area Watch | | | | ' | |
| | Name: Chugach School District | | | | | & Travel |
| | Maine. Chugach School District | | | | | DETAIL |
| Prepared: 4/01 | | | | | | |

2 of 4

October 1, 2001 - September 30, 2002

| Contractual Costs: | Proposed |
|---|----------|
| Description | FY 2001 |
| The hiring of boats at a rate of \$1,000 per day (5 days) will occur in conjunction with research on killer whales and kittiwakes. | 5.0 |
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| Contractual Total | |
| Commodities Costs: | Proposed |
| Description | FY 2001 |
| Supplies for each classroom site are necessary. This will replace consumable commodities used during the project year. | 3.0 |
| Commodities include chemicals, sampling containers (beakers, plastic bags), water resistent note pads and office supplies associated with the project. Each major classroom site (8) will require \$375 for supplies, totaling \$3,000. | |
| JASON curriculum and workshop fees; 14 participants at \$150 each, totaling \$2,100 | 2.1 |
| DASON curriculum and workshop lees, 14 participants at \$150 each, totaling \$2,100 | 2.1 |
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| Commodities Total | \$5.1 |
| Commodities Total | Ι ΨΟ.1 |

FY02

Prepared: 4/01

Project Number: 02210

Project Title: Youth Area Watch Name: Chugach School District

FORM 4B Contractual & Commodities DETAIL

October 1, 2001 - September 30, 2002

| New Equipment Purchases: | Number | Unit | Proposed |
|--|----------|-------------------|--------------------------------|
| Description | of Units | Price | FY 2001 |
| | | | 0.0 |
| | | | 0.0 |
| | | ı | 0.0 |
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| | | | 0.0 0.0 |
| | | | 0.0 |
| | | | 0.0 |
| Light Industrial Indus | New Ear | ı ipment Total | |
| Existing Equipment Usage: | New Equ | Number | ψ0.0 |
| Description | | of Units | |
| Weather stations have been purchased in previous years. They will continue to be used in FY 02. | 5 | | |
| Computers and peripherals are used at each site to synthesize and post information on the Youth Area \ web site. Video equipment is used to document activities for future review and use. | 1 | | |
| A GPS unit is used during various project activities. | | | |
| Project Number: 02210 Project Title: Youth Area Watch Name: Chugach School District | | l I | FORM 4B Equipment DETAIL |