20301-012

Fox Creek
no nomination

# Alaska Clean Water Action (ACWA) Grant Application
## Fiscal Year 2004

| 1. Project Title: Cook Inlet Watershed Health Project |
|---|

| 2. Type of ACWA Project: (select one) | |
|---|---|
| | Recovery of Polluted Waters *(This category includes projects that will restore ACWA priority waters. Actions may include, but are not limited to: assessment, development, or implementation of Watershed Restoration Plan or a Total Maximum Daily Load, monitoring, outreach/education, bank restoration, or public outreach.)* |
| X | Protection and Restoration of Waters or Aquatic Habitat *(This category includes projects that protect priority waters at risk. Actions may include, but are not limited to: assessment, development of protection plans, monitoring, restoration efforts, education, and public outreach targeted at protection and restoration.)* |
| | Stewardship of Alaska's Water or Aquatic Habitat *(This category provides baseline stewardship of Alaska's waters and develops guidelines for future actions to protect water quality. Projects may be specific to a waterbody or statewide in nature. Stewardship projects can include but are not limited to: outreach/education, development of best management practices, and development of application tools.)* |
| | Data Collection *(This category includes projects on impacted waterbodies where agencies lack data needed to evaluate the problems, track trends, determine solutions for restoring polluted waters, or determine effectiveness of protection and restoration measures.)* |

| 3. Project Duration |
|---|
| Start Date (no sooner than July 1, 2003): July 1, 2003 |
| End Date: June 30, 2004 |

| 4. Applicant |
|---|
| Name of Organization: Homer Soil and Water Conservation District |
| Address: 4014 Lake Street, Suite 201<br>Street1:<br>Street2:<br>City: Homer State: Alaska Zip Code: 99603 |
| Project Contact(may be different than person authorized to sign): Shirley Schollenberg |
| Title: District Manager |
| Phone: (907) 235-8177 |
| Fax: (907) 235-2364 |
| E-mail: hswcd@xyz.net |
| IRS ID# or Non-Profit #: 41-2033815 |
| *I certify to the best of my knowledge that the information in this application is true and correct and that I am legally authorized to sign and submit this application on behalf of the applicant.*<br>**Signature of Person Authorized to Sign:** Shirley Schollenberg |
| **Printed Name and Title:** Shirley Schollenberg, District Manager |
| **Date:** 4/9/03 |

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DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
ANCHORAGE

| 10. Will this project affect a waterbody?<br>Proceed either to 10a if yes or 10b if no.<br>NOTE: points will be awarded under either 10.a. or 10.b., but not both. | | Yes<br>X | | no |
|---|---|---|---|---|

**If Yes:**

**10 a) What is its location and ACWA priority?** (please provide latitude/longitude, or township and range or hydrologic unit code).

| Waterbody name: | Anchor River, Deep Creek, Ninilchik River, Fox Creek, and others | |
|---|---|---|
| Latitude: | Longitude: | Hydrologic Unit Code;<br>19020301 |
| Township | Range | Section |

Appendix C is a preliminary list of medium and high priority ACWA waters. It can be used as a guide for grant applications. These waters are currently being ranked using the final ACWA ranking methodology. If the water you are proposing to work on under your grant proposal is not shown in Appendix C, then an ACWA waterbody Nomination Form in Appendix D must be completed .

These nomination forms should be completed using the DEC Web site; or if that is not possible, by hard copy with the grant application.

*Evaluation Criteria (max.10 points): Is this an ACWA priority waterbody? 10 points if a high, 5 if a medium, 2 if a low. If waterbody is not included in Appendix C , is completed Nomination Form Attached? If no, award 0 points. If yes and there is enough information to make a determination, award 10 points if a high, 5 if a medium, 2 if a low. If there is not enough information to rank the waterbody, 2 points.*

Clk mon. Site. at Dolphin Rd Bridge LAT 59.7965 LONG 151.0519

**If No:** 59\47\45 – 151\03\30

| 10 b) Will this project address a non-waterbody specific ACWA priority? | yes | | no | |
|---|---|---|---|---|

Check all that apply:

| | | | |
|---|---|---|---|
| Project is primarily watershed education | | Measuring Success of Stewardship/Restoration | |
| Regional Protocol Development | | Best Management Effectiveness Monitoring | |
| ATV use education/outreach | | Ranking of waters using the ACWA ranking method | |

*Evaluation Criteria (max 10 points): 1) Is this project an ACWA priority?(up to 5 points), 2) How effective will this project be at addressing the ACWA priority(up to 5 points)*

## 11. Project Need and Benefits:

Southcentral Alaska's Cook Inlet basin boasts some of the world's richest and most productive waters. These waters host one of the largest commercial fisheries in the world, the largest fleet of charter boats in the State, an expanding tourism industry that witnesses nearly one million annual visitors from around the world, and resource-based economies from which hundreds of families make their living. The waters of the Cook Inlet basin also support a subsistence lifestyle among Native Alaskans that is centuries old. And these public resources support diverse fish and wildlife species including a dozen types of marine mammals, black and brown bears, and all five species of wild Pacific salmon.

Yet fifty-three percent of waters at risk in the state of Alaska, as identified by the 2004 ACWA Draft Priorities List, are in Southcentral Alaska. Southcentral Alaska's waterways are at risk from population growth, expanding development, and increasing natural resource use. According to a 2000 study by the EPA, nonpoint source pollution is the leading cause of waterbody impairment. Southcentral Alaska is experiencing increases in the following activities which pose potential nonpoint source pollution threats: logging, gravel extraction, road construction, off-road vehicle use, home building, commercial development, and inadequate septic systems. The cumulative effects of these activities are threatening

to degrade Southcentral Alaska's waters.

Furthermore, catastrophic environmental events pose threats to these watersheds that are not yet fully understood. During Fall 2002, the lower Kenai Peninsula experienced flood events not seen in the last 50-100 years. Channel scour, bank erosion and major habitat alteration reshaped salmon stream channels and riparian habitat. Five years of baseline habitat and water quality data collected by Cook Inlet Keeper (Keeper) in collaboration with the Homer Soil and Water Conservation District (HSWCD) and volunteers are invaluable for assessing conditions before the flooding. Continued monitoring and assessment is needed to understand the impacts of these flooding events on water quality and stream productivity.

Longer-term climatic shifts may also pose additional threats to these watersheds. Water temperature is one of the most significant factors in the health of stream ecosystems. Temperature affects salmon egg and fry incubation, fish metabolism, organisms' resistance to disease, and the availability of oxygen and nutrients to fish and wildlife. The winter of 2002 has left much of Southcentral Alaska with little snow accumulation which is important for maintaining summer baseflows. Due to anticipated low water levels, streams could experience warmer than usual temperatures in the summer of 2003. In addition, warmer air temperatures likely contributed to the severity of the Spruce Bark Beetle epidemic which has impacted more than 2 million acres of Kenai Peninsula's forests. Changes in discharge patterns may result from such large-scale tree mortality accompanied by accelerated logging. Monitoring is critical to understand how climatic shifts are affecting the water quality and quantity of these at-risk watersheds.

As agencies' budgets for monitoring and protecting public water resources decline, citizens and communities are stepping in to fill this important gap. The Homer Soil and Water Conservation District and Cook Inlet Keeper are collaborating to monitor and protect the Cook Inlet basin's threatened waterways. By using DEC- and EPA-approved methods, actively involving local communities, coordinating partner organizations throughout the Cook Inlet basin, providing training and quality assurance oversight for monitoring efforts throughout the region, and responding to water quality issues when they arise, the Partners are working to protect 43% of Southcentral Alaska's waters at risk.

## 12. Project Objective:

The Homer Soil and Water Conservation District (HSWCD) and Cook Inlet Keeper (Keeper) are playing a central role in watershed protection and community-based water quality monitoring in Southcentral Alaska. Since 1998, HSWCD and Keeper (Project Partners) have worked together through the Cook Inlet Watershed Health Project (Project) to establish Alaska's first successful community-based effort to gather baseline water quality data and track water quality trends related to current and potential land use and management within the Cook Inlet basin.

The overall objective of the Project is to monitor, assess, protect and restore the waters of the Cook Inlet basin threatened by nonpoint source pollution. Specific objectives include:

- Collect and distribute scientifically-credible habitat and water quality data that describe baseline conditions and assess watershed health;
- Actively involve citizens and community groups in watershed monitoring and protection;
- Coordinate citizen-based monitoring in Cook Inlet basin to ensure consistency, credibility, and cost-effectiveness;
- Identify and respond to habitat and water quality issues in waters at risk; and
- Provide quality assurance oversight and other services and support to collaborating organizations throughout Southcentral Alaska to promote protection and restoration of waters at risk.

The Project has two main tasks: The objective of Task 1 is to increase public understanding of watershed health through data collection, analysis and distribution, and coordinated education, outreach, and on-the-ground activities. Since 1998, HSWCD and Keeper have conducted professional-level monitoring of four at-risk salmon streams on the lower Kenai Peninsula: Anchor River, Deep Creek, Ninilchik River, and Stariski Creek. In addition, the Partners have carried out a coordinated education and outreach campaign that increases public understanding of watershed concepts and helps promote public involvement in watershed planning and protection through education and on-the-ground activities. The Caribou Lake Trails project, for example, is a unique project in its second year that involves state and

federal agencies, local landowners and an all-terrain vehicle (ATV) users group to reduce ATV impacts in the at-risk Anchor River watershed and other watersheds. With five years of baseline data collected and effective educational and outreach projects in place, the Partners are poised to move ahead with Task 1 by addressing water quality issues of concern in these at-risk watersheds and involving diverse stakeholders in watershed planning and protection.

The objective of Task 2 is to use Cook Inlet Keeper's citizen-based monitoring program as a model to foster and guide similar monitoring efforts, and provide support and quality assurance oversight for other citizen-based monitoring projects in the Cook Inlet basin. In 1996, Keeper started the Kachemak Bay Citizens' Environmental Monitoring Program (KBCEMP) as a pilot volunteer-based habitat and water quality monitoring project. Keeper convened Technical and Citizen Advisory Committees and received state and federal approval for its methods and protocols. During the first three years of the pilot CEMP, Keeper spent $194,627 to establish and implement a viable and credible citizen-based monitoring program in the Kachemak Bay watershed.

Since then, Keeper has partnered with the HSWCD and six other organizations which have used the pilot program to start similar citizen-based monitoring programs throughout the Cook Inlet basin. The Project Partners have continued to provide resources, oversight and guidance to these groups, now called the Citizens' Environmental Monitoring Program Partnership of the Cook Inlet Watershed (CEMP Partnership), which includes: Keeper, HSWCD, Kenai Watershed Forum, Anchorage Waterways Council, University of Alaska Anchorage Environment and National Resources Institute (ENRI), Mat-Su Borough Planning Department and the Upper Susitna and Wasilla Soil and Water Conservation Districts. To date, the CEMP Partners have trained more than 500 volunteers to collect baseline habitat and water quality data from 100 sites throughout the Cook Inlet watershed. (Please see attached CEMP Partnership Fact Sheet.)

Rather than having several monitoring efforts headed in separate directions, the CEMP Partners recognize the need to come together in a unified effort with consistent data collection, coordinated data management, and credible quality assurance. In addition, the CEMP Partners realize that they can increase the cost effectiveness of citizen-based monitoring through coordination and sharing of resources. Resources that Keeper and HSWCD have brought to the region-wide CEMP Partnership include: 1) QMP and QAPPs (see attached CEMP Partnership Quality Assurance Fact Sheet); 2) a comprehensive data management system for coordinated and consistent management of citizen-collected data (see attached database training session roster); 3) training and technical consultations; 4) a study entitled "The Effectiveness of the Citizens' Environmental Monitoring Program," which makes specific recommendations to improve the efficiency and effectiveness of citizen-based monitoring; and 5) coordination of three CEMP Annual Meetings.

Now HSWCD and Keeper are poised to continue with Task 2, by developing and improving the pilot CEMP for use by other groups, coordinating the CEMP Partnership of the Cook Inlet Watershed, and providing quality assurance oversight to the CEMP Partners.

The Project helps achieve Nonpoint Source Pollution Program objectives, including:

- Assess water quality on a statewide basis and in targeted watersheds to support watershed planning and restoration projects to protect water quality and associated uses, including habitat (NPS-B);
- Support water quality information management systems and monitoring efforts (NPS-C); and
- Strengthen partnerships with governmental and nongovernmental agencies and organizations to improve coordination and efficiency and reduce duplication of effort (NPS-D).

The Project helps the State meet goals for monitoring and assessment programs as mandated by the U.S. EPA and outlined in "Elements of a State Water Monitoring and Assessment Program," March 2003, including:

- Monitoring and assessment of streams, rivers, estuaries, coastal areas, and wetlands;
- Efficient and effective data generation that helps determine water quality status and trends, identify impaired waters, and identify causes and sources of water quality problems;
- Use of all core indicators for monitoring and assessment—physical/habitat, chemical/toxicological, and biological/ecological;
- Establishment, maintenance, and peer review of a quality management plan and quality assurance

project plans that meet state and federal guidelines; and

- Entry, retrieval, and accessibility of habitat and water quality data using a region-wide data management system that will be linked to STORET.

The success of data collection and management objectives will be measured against the standards outlined in the Project's Quality Assurance Project Plans. Data analysis and reporting will be evaluated according to the degree of credibility and usability of the annual water quality reports to promote protection and restoration of waters at risk as reported by state and local agencies and planning commissions, local communities and water groups, and concerned citizens.

The success of outreach and education efforts will be measured by the number of active volunteer water quality monitors; the number of citizens attending public meetings and presentations; and the number of citizens reached through informative publications, classes, and other outreach opportunities. In addition, the Partners will evaluate the effectiveness of the Project at increasing public participation in local watershed planning efforts throughout Southcentral Alaska.

## 13. Project Description or Workplan:

Note: All tasks start July 1, 2003 and end June 30, 2004. All tasks currently funded by a grant from ADEC and matching funds.

**TASK 1: Increase public understanding of watershed health through data collection, analysis and distribution and coordinated education, outreach, and on-the-ground activities.**

**Description:** Keeper's Stream Ecologist will continue to sample water quality at 9 locations in the watersheds of the Anchor River, Deep Creek, Ninilchik River, and Stariski Creek, four of the most socially, culturally, and economically important salmon streams on the Kenai Peninsula. All methodologies will adhere to QAPP and Sampling Plan standards. Parameters measured include stream discharge, temperature, dissolved oxygen, pH, conductivity, total dissolved solids, turbidity, suspended and settleable solids, color, and nutrient levels, and macroinvertebrates.

FY 2004 brings important opportunities for the Partners. Throughout the past 5 years of baseline data collection, the Partners have detected issues of concern in these at-risk watersheds. From 1998-2002, 32% of total phosphorous measurements exceeded EPA recommended levels. Phosphorus is considered a contaminant at high levels and phosphorus levels increase with increased sediment inputs into streams. The Project Partners will determine if sediment levels and turbidity are increasing in relation to stream flow; will analyze collected data to more fully understand the link between phosphorus levels, sediments levels, and stream discharge; and determine possible causes for levels that exceed federal recommendations. In addition, the Partners have found that summer temperature levels in the region's salmon streams consistently exceed Alaska standards. Water temperature is one of the most significant factors in determining the health of stream ecosystems. In fact, exposure to long periods of warmer than usual temperatures may cause adult cold-water fish species to cease migrating or die unspawned. During the past four years of salmon stream monitoring, Keeper and HSWCD found that July water temperatures often exceeded Alaska's standards. The Partners will continuously track stream temperature during the summer months to identify the frequency and duration of exceedances to Alaska's water quality standards. In addition, the Partners will continue technical-level monitoring of aquatic macroinvertebrates. By comparing these data to historical data collected by ENRI, the Partners will assess recent flood impacts to stream habitats and macroinvertebrate communities.

HSWCD's Information and Education Coordinator will conduct education and outreach to increase public awareness of and involvement in protection of at-risk waters among residents of the Anchor River, Deep Creek, Ninilchik River, and Stariski Creek watersheds. Educational and outreach activities will include distribution of informative publications; presentations at public forums, the CEMP Annual Conference and the annual meeting of the Alaska Association of Conservation Districts; and the Natural Resource Technologies Class held for high school students. HSWCD's Watershed Coordinator will manage the Caribou Lakes Trail Project, an on-the-ground project in its second year to reduce ATV impacts to the Anchor River watershed by rerouting ATV trails from wetlands and other sensitive areas and building boardwalks where needed.

**Budget: $126,426** (includes grant request, matching support, and federal grants)

**Deliverables:**

- Extensive data sets of baseline water quality, flow, and macroinvertebrates that are quality control checked and entered into a relational database (quarterly)
- Water Quality Status Summary Report (March 2004) (The report will include data from January 1, 2003 – December 31, 2003. Previously, the Project Partners have produced an annual report in July to accommodate ADEC's fiscal calendar. However, the Project Partners recognize the usefulness of compiling information on a calendar year that includes a complete summer dataset, both for analysis purposes and for ease of use. All data collected from January 1 to June 30, 2004 will be exported to STORET via the coordinated citizen monitoring database, included in quarterly reports for the FY 2004 grant cycle, and analyzed in the 2004 Annual Report released in March 2005.)
- Response to water quality issues (as they arise)
- Newsletters which increase public understanding of watershed issues and Project activities (distributed quarterly to approximately 300 people)
- Caribou Lake Trail easement secured, trail improvements nearly complete, and work on trailhead started (June 2004)

- Twenty-four students in Natural Resources Technologies Class (September 2003)

Previous accomplishments include: QAPP; Technical Advisory Committee; five years of baseline water quality data; four annual water quality reports; newsletters about watershed health distributed to about 300 people; community-based project to reduce ATV impacts to watersheds which has already relocated trails, purchased necessary materials and carried out important planning processes; natural resource course curriculum; and three informational signs along the Anchor River.

**TASK 2: Use Cook Inlet Keeper's citizen-based monitoring program as a model to foster and guide similar monitoring efforts, and provide support and quality assurance oversight for other citizen-based monitoring projects in the Cook Inlet basin.**

**Description:** This task has three components: 1) improving and developing the pilot Kachemak Bay Citizens' Environmental Monitoring Program to serve as a model for similar efforts; 2) coordinating the CEMP Partnership of the Cook Inlet Watershed; and 3) providing quality assurance oversight for the CEMP Partnership.

To carry out component 1, Keeper's Research Coordinator and Volunteer Monitoring Coordinator will improve and develop the pilot Kachemak Bay Citizens' Environmental Monitoring Program (KBCEMP) so that it can be an effective, quality-assured model that other groups and agencies throughout Southcentral Alaska (and the State) can use to initiate, improve and promote citizen-based monitoring. Through the KBCEMP, trained volunteers collect data on the following parameters: stream discharge, temperature, dissolved oxygen, pH, conductivity, total dissolved solids, turbidity, suspended and settleable solids, color, nutrient levels, and macroinvertebrates. Volunteers collect data from Bridge Creek, Fox Creek, Fritz Creek, McNiel Canyon Creek, and others. To develop and improve the pilot program, Keeper staff will train and support volunteers, improve protocols and make changes to the QAPP as needed, initiate a pilot volunteer-based wetland monitoring program (which will result in the publication of a Field Procedures Guide in 2005), and distribute citizen-collected water quality data. The Project Partners will use the results of Keeper's study entitled "Effectiveness of the Citizens' Environmental Monitoring Program," which makes specific recommendations to increase the efficiency and effectiveness of citizen-based monitoring to detect statistically significant environmental change. In turn, the Partners will distribute information on methods and protocols to partner groups in order to improve the efficiency, effectiveness and quality assurance of region-wide citizen monitoring.

To carry out component 2, the CEMP Coordinator will coordinate the eight member organizations of the CEMP Partnership for the Cook Inlet Watershed. Activities include facilitating communication between partners; identifying and supporting new and potential partner organizations; and facilitating the sharing of resources among CEMP partners including training, the CEMP data management system, etc. In addition, the CEMP Coordinator will coordinating the CEMP Annual Meeting, the purpose of which is to review the CEMP Partnership's quality management structure, policies, procedures and practices to determine whether they are adequate for ensuring that the type and quality of data needs are being met. Component 2 ensures that the CEMP Partnership of the Cook Inlet Watershed continues to strengthen and expand, and that the partnership will conduct coordinated, credible, and cost-effective citizen-based monitoring.

To meet component 3, Keeper's Research Coordinator will provide quality assurance oversight to the CEMP Partnership to ensure that citizen monitoring adheres to stringent state- and federally-approved protocols. The Project Partners will provide guidance and oversight on QAPP revisions to current CEMP Partners and a QAPP template to new CEMP Partners. In addition, the Project Partners will conduct quality assurance reviews with partner groups; review and revise the QMP as needed; provide technical consultation on quality assurance, volunteer management, equipment maintenance, and data management; and provide other quality assurance as outlined in QMP and QAPPs.

**Budget: $275,444** (includes grant request, matching support, and federal grants)

**Deliverables:**
- Data from 20 or more sites on lower Kenai Peninsula entered into the coordinated citizen monitoring database and exported into STORET-compatible files (quarterly)
- Citizen-collected wetland data (March 2004)
- Quarterly trainings yielding 20 or more newly trained volunteers (June 2004)

- Model for citizen-based water quality monitoring (ongoing)
- Revised QAPP and QMP (as needed)
- Annual quality assurance reviews with CEMP Partner organizations (as needed)
- Quality-assured citizen-based water quality monitoring projects around Cook Inlet basin (ongoing)
- Formal partnership agreements with Cook Inlet groups (June 2004)
- Annual meeting for quality management review among citizen monitoring groups and agencies (February 2004)
- Complete, coordinated data management system used by Cook Inlet partner groups (September 2003)
- Annual Water Quality Status Summary Report (March 2004) (The report will include data from January 1, 2003 – December 31, 2003. Previously, the Project Partners produced an annual report in July to accommodate ADEC's fiscal calendar. However, the Project Partners recognize the usefulness of compiling information on a calendar year that includes a complete summer dataset, both for analysis purposes and for ease of use. All data collected from January 1 to June 30, 2004 will be exported to STORET via the coordinated citizen monitoring database, included in quarterly reports for the FY 2004 grant cycle, and analyzed in the 2004 Annual Report released in March 2005.)

Previous accomplishments include 500 volunteer monitors throughout Cook Inlet basin, Technical and Citizen Advisory Committees, four annual reports, report entitled "Effectiveness of Citizens' Environmental Monitoring Program," coordinated data management system, and three annual CEMP meetings.

**SUSTAINABILITY:**
HSWCD is constantly researching funding opportunities for the Project and is committed to providing long-term administrative support for Project activities. In addition, the Natural Resources Conservation Service has made a long-term commitment to HSWCD to provide office space, telephone, fax, internet and copying support to ensure the continuation of the Project. Keeper works hard to secure a diverse and predictable revenue stream to support its projects, by seeking and securing grants from private foundations and agencies, contributions from members and major donors, support from businesses and corporations and income from events, sales and program service fees.

**ENVIRONMENTAL BENEFITS:**
Through Task 1, the Project Partners increase public understanding of watershed health and public participation in on-the-ground activities that promote the protection of the Anchor River, Deep Creek, Ninilchik River, and Stariski Creek watersheds. Data collected and distributed through Task 1 promotes proactive assessment and protection of at-risk waters. In addition, the on-the-ground activities promote community involvement in protecting and restoring at-risk waters.

Through Task 2, the Project Partners develop, build, coordinate and promote Alaska's most comprehensive, quality-assured citizen-based water quality monitoring program. By immersing individuals in their publicly-owned water resources, the Partners increase public understanding of watershed concepts and public commitment to monitoring and protection of Southcentral Alaska's waters at risk. Furthermore, by distributing habitat and water quality data, the Partners provide important information to help the State meet its monitoring goals and help promote sound resource management.

Finally, by working closely with agency officials, the Project Partners help the State meet the requirements of monitoring and assessment programs as outlined by the EPA in "Elements of a State Water Monitoring and Assessment Program."

## 14. Organization and Project Manager Experience:

HSWCD, authorized by AS 47.10 as an entity of State government, is a grassroots partnership of local landowners and state and federal agencies that promotes the conservation and productive and sustainable use of natural resources. HSWCD is a non-regulatory organization of more than 200 private landowners and 12 communities. As an organization that actively involves diverse stakeholders including state and federal agencies, community groups, farmers, and ranchers, HSWCD is well-suited to provide local leadership for water quality related activities. HSWCD has managed a number of grant-supported, collaborative projects including an EPA grant to analyze and catalog functional relationships in the groundwater/wetlands matrix along the lower reaches of the Anchor River and a U.S. Fish and Wildlife Service grant to hire a watershed coordinator for the Community Rivers Planning Coalition. Shirley Schollenberg, District Manager, has managed the Cook Inlet Watershed Health Project for four years. Shirley is secretary of the State Association of RC&Ds, Vice President of the Kenai Peninsula Chapter of the Alaska Farm Bureau, and serves in various officer and lead positions on 4-H, and other youth groups. She brings excellent skills in project management as well as an ability to work with a broad range of individuals and groups.

Water quality monitoring for the Project is conducted through a partnership with Cook Inlet Keeper, a member-supported, nonprofit organization dedicated to protecting the Cook Inlet watershed and the life it sustains. Keeper was founded in 1994 and now has more than 700 members, most in Southcentral Alaska. Since Keeper's inception, it has created Alaska's first state- and federally-approved citizen-based water quality monitoring program, published the premier *Cook Inlet GIS Atlas on CD ROM*, and held numerous watershed trainings and workshops for citizens. In 1996, Keeper initiated its water quality monitoring program and has worked closely with agency personnel to ensure adherence to stringent quality assurance protocols and to help meet state water quality monitoring, assessment and protection goals. Joel Cooper, Keeper's Research Coordinator, has coordinated Keeper's habitat and water quality monitoring efforts since 1998. He reviews and revises the DEC- and EPA-approved quality assurance documents and works with organizations throughout Cook Inlet to meet quality assurance standards and promote and support citizen-based water quality monitoring.

## 15. Partnerships and Community Support:

HSWCD and Keeper work closely with a variety of communities and other citizen-based groups. HSWCD and Keeper are members of the Citizens' Environmental Monitoring Program Partnership of the Cook Inlet Watershed, which includes: Anchorage Waterways Council, Kenai Watershed Forum, Mat-Su Borough, University of Alaska Anchorage Environment and Natural Resources Institute, and the Upper Susitna and Wasilla Soil and Water Conservation Districts. The Partnership has been working to integrate the interests and concerns of the Native communities throughout Cook Inlet and, in addition, is working with the Native American Fish and Wildlife Society to share examples of methods, protocols, and Quality Assurance information. (See enclosed MOU.) In addition, the Project Partners also work with:

- The Kachemak Bay National Estuarine Research Reserve on a project entitled "Coordinated Wetland Research and Monitoring on the Kenai Peninsula," which will train volunteers to monitor wetlands, produce a volunteer wetland Field Procedures Guide (2005) to promote similar efforts, improve public understanding of wetlands and their ecological functions and create a 5-year wetland/watershed plan.
- Center for Alaskan Coastal Studies, with funding from Oracle Corporation to contract with Keeper ($4,950) to coordinate the creation of an additional module of the CEMP data management system for the input and retrieval of intertidal data;
- Alaska Association of Conservation Districts, which support HSWCD's watershed and natural resource education efforts such as the Canon Envirothon;
- Homer Snomads, an ATV-users group, which participates in the Caribou Lakes Trail project by providing input and in-kind support;
- Natural Resources Conservation Service which provides in-kind support, and will establish a snow telemetry site on the Anchor River to supplement water quality information ($13,385 for initial construction and maintenance);
- Native American Fish and Wildlife Society, which contracts with Keeper to provide water quality monitoring training and support (total contract amount up to $3,100 during 2003);
- USDA Kenai Peninsula Rural Development and Conservation Districts in promoting education about

the sustainable use of natural resources in rural areas;
- Volunteers—including Technical Advisory Committee members, Board members and volunteer monitors and field assistants—who will provide approximately $62,640 of in-kind support
- University of Alaska Anchorage's Kenai Peninsula College which donates use of their Kachemak Bay Campus laboratory, valued at $2,600 per year

The Project supports other statewide and regional watershed planning, monitoring and protection efforts by providing information to Alaska Departments of Fish and Game and Environmental Conservation, U.S. Geologic Survey, and the Cook Inlet Information Management and Monitoring Systems database. The Partners work closely with DEC on project design and response to water quality issues. In addition, the Project Partners enjoy support from local governments and the Seldovia Oil Spill Response Team, Ninilchik Traditional Council, Port Graham/Nanwalek Watershed Council, Native Village of Eklutna, Anchor River Community Rivers Planning Coalition, and Ninilchik Community Organization.

Furthermore, community support for the Project is growing. Over the next year, the Partners will actively seek to build and strengthen partnerships with Native communities and organizations in order to share resources and expertise with Native entities and to incorporate Native Traditional Knowledge into the Partners' training and monitoring protocols.

**Letters of Support & Memoranda of Understanding** (please see attached):
CEMP Partnership of the Cook Inlet Watershed Draft MOU
Center for Alaskan Coastal Studies
Jack Cushing, Mayor of the City of Homer
Joyce Beelman, Water Quality Assurance Officer, ADEC
Karen Stickman, Project Coordinator, Native American Fish and Wildlife Society
Milli Martin, Kenai Peninsula Borough Assembly Member and volunteer water quality monitoring
Nicky Szarzi, Area Management Biologist, ADFG
Robert Ward, Secretary of the Homer Charter Association
Tony Knowles, Former Governor of the State of Alaska
University of Alaska Anchorage Kenai Peninsula College MOU for use of lab

## 16. Outreach:

Outreach and education are central to the Project. Project Partners work to reach resource users and current and future decision-makers, including ATV users, sport fishers, Native Alaskans, students, businesses, community organizations, resource managers, and the general public. The objectives of this communication and outreach are to increase community awareness about watershed issues and the Project, and to increase community participation in watershed planning, monitoring, and protection. Specific outreach activities include:
- broadcast Public Service Announcements and distribute press releases to promote Project, recruit volunteers, etc.;
- hold community meetings and presentations to promote watershed awareness and increase public understanding of Project;
- teach Natural Resource Technologies class to high school students which engages future decision-makers in learning about watershed concepts and protection;
- distribute quarterly newsletters and other informational publications to promote watershed awareness and increase public participation in watershed planning and protection;
- soliciting feedback from community groups such as the Homer Snomads (an ATV-users group) and the Ninilchik Cabin Hoppers;
- training citizens to become water quality monitors; and
- distribute annual water quality reports.