

Nelson Island Consortium of Caninermiut and Qaluyaat Communities\*

*EPA Region 10 FY 2006 Alaska Tribal Multi-Media Proposal - Keeping our traditions and reducing our risks: Developing sustainable camp practices that protect subsistence.*



June 9, 2006

\* The words in our logo are our Consortium's true name (In Yup'ik, our language). It is approximately translated as "Working Together to Keep the Coastal and Nelson Island Communities and Environment Clean"

**EPA Strategic Goals:** Strategic Plan Goal 4, Objective 4.2 “Sustain, cleanup, and restore communities and the ecological systems that support them, **and** Goal 5, Objective 5.3 “Enhance tribal capacity to implement tribal programs where needed to improve tribal health and environments.”

Approach: Helps tribes and community members to develop new approaches to reducing human health risks and environmental degradation problems they face  
And contribute to the long-term sustainability of tribal communities in rural Alaska.

**Project Overview and Background:**

The following pages provide a synopsis of the project and direct service population. At our last two Nelson Island meeting in Chefnak and Toksook, (in August 2005 and January 2006), our Elders, community members, and environmental staff discussed and approved seeking funds to address camp practices and to identify the level of contamination in our subsistence camp water. On May 16th, during our weekly meetings with each Village present, we voted on what project and issue was most important to us in seeking multi-media monies. Based on the community input and elder guidance from the last two years of the NIC, we had an immediate consensus that ensuring our subsistence areas remain intact to sustain our communities forever was the highest priority, even over addressing our honeybuckets or dump sites.

**Overview of Nelson Island Consortium:** For thousands of years, the peoples of the communities of Chefnak, Newtok, Nightmute, Umkumiut, Tununak, Toksook Bay, and Kipnuk, have shared the Nelson Island area lands and waters for subsistence activities, and have led a traditional subsistence lifestyle, including retention of Yup'ik as our primary language. We speak in Yup'ik because our elders speak only Yup'ik. By tradition, elders are our leaders and provide us their knowledge passed to them from their elders, and so on. For our children to learn how to live in our environment well, and for this generation of mid-life adults to continue to learn so that they in turn can teach well, retention of our language is axiomatic. We lead a “subsistence lifestyle”, which here is a cultural term that, for Yup'ik peoples, includes societal mores and values such as guidance by elders and gratitude for our environment's gifts, in addition to living off the local ocean, lands, and waters.

Our “subsistence lifestyle” transcends and incorporates the spiritual, religious, emotional, aural and physical perceptive spheres, and defines our culture. And it is well documented how communities losing their culture face societal illnesses of alcoholism, suicide, economic depression, and loss of resilience in the face of change. Thus, the Nelson Island Consortium was formed in 2003 as a “grass-roots” organization effort to bring our communities together in a traditional manner to retain and protect our environment, and retain and protect our very lives and culture. Our communities meet four times each year, rotating to a different Village, so that hosting is shared and that elders and community members who cannot afford to travel are able to participate in the 3-day meetings. We then meet each week by teleconference to discuss our progress at implementing the projects and ideas from the meetings. Our first grant came in October 2004, through an EPA IGAP Special Project to develop a solid waste plan through the process of traditional decision-making and community collaboration, and to develop further the administration and traditional-based structure and policies of how the Consortium would work. This grant is administered by Chefnak, who will be administering our 07-08 Base Consortium grant. The NIC shares the work of protecting our habitat and learning about ways to address new environmental problems while retaining traditional ways of community decision making. This process builds capacity within each individual community and the collective Consortium, while strengthening traditional ties, and increasing internal and external partnership

opportunities of benefit for our communities (and environment which we have always assumed as one).

We are succeeding in our mission. Our accomplishments include setting up lead-acid battery and electronic waste backhauls, fish net monitoring, signs in the subsistence area to request visitors to take their trash out, community clean-ups, community trainings in our villages for HAZWOPER, Solid Waste Management Planning, and Freon Removal and we now have started electronic and household battery recycling by small planes to Bethel Recycling who help us with shipping it out from there. We have developed the capacity of each community to host workshops, set up weekly agendas and teleconferences, and host inter-community meetings, and we planned and carried out the first session in a Native language



at the State's biggest environmental conference, using headset translation. It was led by our elders, and well-attended and acclaimed for its demonstration of how communities can use their culture and address environmental issues at the same time. We urge the reviewers to view the DVD we are providing, as it is just two minutes, and demonstrates exactly what the NIC is about, how taking care of subsistence camps is vital to our communities, and how we are effective at collaborating and implementing environmental actions.

In the coming year we will be able to leverage our subsistence (environmental) protection efforts further through a Brownfield Response grant and a CARE grant. These efforts will be administered by Tununak and Toksook Bay, and they will fund capacity building in understanding contaminants and inclusive and culturally-appropriate community educational outreach efforts to prioritize and reduce contaminant problems in our communities.

There are not many Yupiit (about 25,000) when you think about the over 6.6 billion people in the world. But being a culture with a small population does not mean that we need to be an endangered culture. With efforts like our Consortium, we will be able to survive and thrive on our ancestral lands forever. We also believe that the United States, the country of which we are citizens, is stronger, purer, truer, and its environment more beautiful and clean with our Yup'ik culture intact, because our comprehensive and unique environmental knowledge will be available to others to learn from and apply to any number of far-flung problems outside our Yup'ik boundaries.

**Community Profile** Boundary as described previously. Our Villages share the common subsistence grounds and similar Yup'ik cultures, although we each are different. Yup'ik is spoken as the first language in each Village, and English is used only in interactions with the Outside world, and in school, where English is taught. We all live a subsistence lifestyle and depend on traditional foods on average for more than 80% of our diet intake. We only have one to two stores, the size of "convenience marts" otherwise that offer some basic supplies and food. Our villages range in size from 232 to 690. The population served by this grant is 2,617 people, about 10% of the Yup'ik speaking population, over 98% Alaska Native, who are members of the community-based Tribes. Each village bans the sale, import or use of alcohol.

**Economic indicators:** Adults not in the cash-economy workforce range from 52% to 94% in our various communities (averaging about 73%, and the percent living below the national poverty line ranges from a low of 10% (in our smallest community) to 31%, averaging about 25%. Our school district has a 186.6% higher cost differential than the national urban average, and teachers don't pay their own utilities, which are 3 times higher. So the appropriate poverty

line is approximately 2 *times* higher. See [http://www.commerce.state.ak.us/dca/commdb/CF\\_CIS.htm](http://www.commerce.state.ak.us/dca/commdb/CF_CIS.htm) for additional statistics.

**Facilities:** With the partial exception of Toksook Bay, we do not have household piped water or sewer facilities. About 10% of our households have tank-haul/flush systems, and more than three-quarters of our households are unplumbed, using honeybuckets for human wastes. Honeybuckets are 5-gal buckets that serve as toilets and contain undiluted, untreated urine and feces. These are hauled to an unlined lagoon for three of our villages, with two villages having lost access to their disposal sites. Unplumbed households haul their own water from a public water point, and all communities commonly use roof rain catchment and snow melt for drinking water. Also, we do not have access to heavy equipment, and have unlined open dumpsites with open burning (allowed by the State).

**Statutory authority:** This project will result in the direct reduction of health and environmental risks from air, water, and solid and hazardous waste pollution, and meets the statutory authorities of Clean Air Act of 1963 (CFDA 66.034) (primarily via addressing emissions from sno-machines, chain saws and atvs), Safe Drinking Water Act (SDWA) (primarily via reducing pollution and potential pollution to traditional drinking water from unsafe camp practices), Section 1442 CFDA 66.424], and the Clean Water Act Section 104(b)(3) [CFDA 66.436] (primarily via same) SWDA Section 8001 Resource Conservation and Recovery Act of 1976, Public Law 94 580 U.S.C. et seq., 98-616, 99-339, 99-499[CFDA 66.808] (primarily via sustained removal of contaminants from camp sites, eliminating litter).

**Alaska Tribal environmental or human health issue to be addressed:** The issue to be addressed by this project is the environmental protection and care of subsistence camps and areas in the face of our increasing populations that use modern technologies and can leave behind harmful wastes and byproducts in conducting subsistence. We wish to examine how our subsistence camps are being impacted by our own practices and use, how we can avoid negative impacts, and to develop educational pamphlet guides to pass out to our people and other Village users of our camps. Note that a subsistence camp in our area is a place from where we conduct subsistence, either traveling back and forth from our communities, or camping out for weeks at a time. It does not include permanent structures, and most people would refer to it as wilderness.



**Immediate- and long-term environmental outcomes:** The immediate environmental outcomes will be reduction of waste littering at the camps, knowledge of baseline water quality at the camps, knowledge on how best to educate people regarding more environmentally sound camp use including responsible fish net monitoring, minimized gas, oil, and fuel emissions and leaks, elimination of waste littering, responsible ATV and snowmachine use to minimize tundra disturbance, and maximize switchover from lead shot to steel or other shot, information exchange to communities. Long-term outcomes will be 1) reduction of contaminants at our camps, 2) cleaner environments, 3) better community health due to less contaminated subsistence foods, less stress concerning subsistence foods, and increased use of subsistence foods, 4) Elder knowledge and respect enhanced and traditions retained, and thus more sustainable tribal communities, through following our elders' wishes about cleaning up our camps and practicing more respectful and wiser subsistence, 5) More sustainable communities due to retaining ability to conduct subsistence versus reliance on expensive store foods, and due to youth having more incentive to conduct subsistence and learn from elders.



**How project results may be applied for the benefit of other Alaska Tribes and how those results will be communicated:**

We will be recording our activities to see how we can change people's use of the camps. The information will be included in our pamphlets. The pamphlet idea was something that was discussed by the consortium as a way to educate hunters before they leave town and a way to incorporate elders' guidance, thus strengthening our traditional community structure. These pamphlets will be made available for use at regional meetings for Yup'it in other communities (or other Tribal cultures). We plan to print out 3,000, with 2,000 of these being available to other Tribes. We will also submit for a session on our lessons learned at the ANTHC or Alaska Forum and give this in Yup'ik, as we did this last February.

- 1. Serious human health/environmental issue:** Project narrative addresses a specific and serious environmental or human health issue and describes the components and commitments to be undertaken to address the issue.

**Issue and Purpose:** The project addresses short-term unsustainable campsite use or uses that otherwise are against our elders' directions and Yup'ik cultural values. The latter for example would include littering of non-hazardous wastes at the camps because it is disrespectful to the animals that feed us so that we become less worthy of a successful hunting or fishing trip, and in the long-run, we know from elders accumulated historical knowledge that subsistence will become less abundant as a result. This issue is could not be more serious to us. Subsistence is the number one issue for our communities because without it we cannot exist as a community or people. We cannot disappoint our elders in saying that another health or environmental issue might be more important. We understand that we face serious risks from honeybuckets and open dumps. But these risks will not affect whether our communities survive. Loss of subsistence will. The baseline water quality monitoring that we propose serves two purposes: It provides us a means of judging whether petroleum leakage or emissions or lead sinkers, shot, discarded batteries are contaminating our water during subsistence activities, and it provides us a well-documented baseline so that we will possess technical data concerning our water quality that allows us and others to assess whether and to what degree any proposed development projects may impact our subsistence. This aspect is critical because mining, ocean aquaculture, oil and gas development projects are all considered to be possibilities by State, federal, and corporation landowners. We also wish to know if road building for tourism, for State or federal plans, or for our own purposes would affect our subsistence waters.



Note that cleaning up camps and increasing subsistence provides a number of indirect environmental benefits beyond reducing contaminants at the camps and along transport routes. Migratory bird health improves with switch from lead shot to alternatives, and thus the habitat is improved by promoting a sounder ecology. Three pellets ingested by waterfowl can poison a bird, and also make them susceptible to diseases which they can spread to others, so that for every lead poisoning, another 5 bird deaths can be caused. Also, lead is harmful to humans. In a recent study it was found that women in YK Delta area have much more lead than on the North Slope where they do not use lead shot anymore due to a higher income. More subsistence means less packaging wastes at the open dumps. Improved pride and community awareness of how petroleum products and emissions can pollute will likely translate to better waste disposal and air management practices in town.

Our campsites contain scattered littering from store wastes, wrappings, as well as discarded fuel containers, drained oil from oil changes, some household and lead-acid batteries, ash from burning unseparated garbage, and gas, oil, fuel residuals from leaking engines. We anticipate that the water contains contaminants from leaking gas and emissions from chain saws used in winter ice fishing, boat motors, and settled emissions from atvs and snowmachines – which can be operated during breakup and freezeup periods so that their motors can actually contact water. Also, we are concerned with human waste disposal and whether high levels of coliform enter the water and affect our fish. Note that we are in flat, low-lying tundra and hydrologically our waters connect to each other.

### **Project Inputs:**

**Staff:** To plan steel shot clinic and to advocate and educate for steel shot use, to run a free hand ice auger lending program from the environmental department, to sample, to work with elders to develop pamphlets, to plan education event days with youth, elders, community, to provide outreach to hunters, to monitor camps, to record education efforts, so that each village can know what might help if we see a decrease in negative camp impacts. Staff includes leveraged time from Nelson Island staff for contaminant education and research.

**Supporting supplies:** Educational materials that interest people and provide something they need (T-shirts, steel shot, hand ice augers), oil and gas and snowmachine/boat rental for monitoring camps

**Pamphlets:** A really nice color pamphlet like those from the Park Service, with pictures that elders choose and worded in a way that is effective for our communities.

**Testing plan and equipment:** (note QAPP), differences in camp use, type of fuel, blanks, high and low water, under ice for chain saws

**Support staff:** Note NI coordinators will carry out education, compile elders advice, review pamphlet draft that is developed by Umkumuit based on their input, distribute pamphlets in their village, hold educational events in their villages, advertise the lead shot clinic. Serve as monitors to campsites through educating hunters.

**Technical Assistance:** Lab analysis from qualified lab for contaminants. Assistance in training and developing a QAPP and available guidance throughout year, someone to input data into the WQ database used by agencies, and also to interpret the data. Assistance in setting up a performance evaluation and monitoring templates for this project to meet our commitments and provide useful measures of results.

### **WORKPLAN COMPONENTS TO BE FUNDED UNDER THE GRANT**

**Purpose:** To significantly reduce health and subsistence/environmental risks resulting from poor solid waste or associated honeybucket sites and practices through targeted, direct, informed, proactive, and accessible technical assistance in implementation of sustainable interventions.

#### **Component 1:** Campsite use monitoring and educational outreach

Note that the camp monitoring is a way for us to see whether our education efforts work. If we are able to go out each week and record the differences we will be able to correlate that the education efforts that we try. If we don't see a difference after 6 months, then we know

we must try something else, etc. The camp monitoring also serves as an education effort on its own. The monitors will be educating on-site the hunters they come across, and pointing out ways to protect the sites and how their practices can harm the sites and what elders suggest. The monitors will be going out with hand augers in winter to show people the latest, best quality hand augers and how they work. They will go out with information on how lead shot can harm people and birds, and maybe carry some steel shot so that hunters can practice there and they will end up using less lead shot that day. The tags for fish nets will be brought out by monitors too, for those people that did not get them in village, or were not aware of the program. The monitors will be able to show people how to write on the tags and how important the elders believe it is for the health of the water and other fish and for good hunting luck.

**Commitments:**

1. (1<sup>st</sup> month) Complete hiring procedures in accordance with OMB circulars.
2. (2<sup>nd</sup> month) Procurement for hourly consultant assistance in developing reporting and evaluation templates.
3. (2<sup>nd</sup> – 12<sup>th</sup> month\*\*) Camp use monitoring and on-site hunter education. Ongoing weekly through project period, except during weeks of no subsistence (due to access). Depending on funding we will continue monitoring through 14<sup>th</sup> month of project. Monitoring use and on-site education consists of:
  - ◆ Checking fish nets to ensure that persons are complying with the fish net monitoring plan developed by the consortium for which each community is responsible. The plan we have developed is for each community to issue different colored tags to camp users and for users to write on the tags when the nets were placed and to whom they belong. Note nets can be left in the water and the catch is left to die. This causes littering of the subsistence waters and is disrespectful. Elders have observed that this practice may lead to diseased or injured fish as pathogens from stressed, crowded, and dying fish can be transmitted to those outside of nets, and the dead fish left in water could contribute to rivers that are out of balance in the nutrition and ecology they are supposed to sustain.
  - ◆ Taking photos of the camps and trails during each trip.
  - ◆ Using a “count method” to assess amount of litter along trails and at camps.
  - ◆ Clean up of camps and trails. We will clean up two areas near the beginning of the project and after our education has begun in full, and the rest we will wait. We will see if people are less likely to start littering again if they see a clean camp.
  - ◆ Looking for disposal indicators or presence and level of hazardous wastes, such as batteries, used oil containers, fuel cans, DEET bottles, plastics that can harm wildlife when ingested, oil sheen, contaminated soil, dead vegetation
  - ◆ Look for degraded trails or new trails caused by snowmachining or atvs during times of sensitive tundra.
  - ◆ Speaking with hunters that are out there and educating them on bringing back all wastes, changing oil in town, best practices for snowmachines, boats, and atvs for reducing hazardous emissions, availability of hand augers at environmental department (note in winter we will bring one out with us on trips to demonstrate how good ones can work better than the old ones and that they do not pollute or cost fuel monies).
4. (3<sup>rd</sup> through 6<sup>th</sup> month) Plan a steel shot clinic in one of the Nelson Island Villages. Both DNR and USFWS offer these courses, although USFWS will probably be more available to us because of our national refuge status and DNR teaches more urban hunters.

5. (3<sup>rd</sup> through 6<sup>th</sup> month) Develop pamphlets. We have a lot of guidance that is recorded from elders on proper campsite usage. We will use this information with their approval. We will get suggestions from all villages from their elders and environmental staff as to what should be in the pamphlet. We will ask USFWS for what they think should be in the pamphlet based on what they see from subsistence use in the Refuge. We assume we will already have all the most important rules by using Yup'ik wisdom, but want to make sure that we address practices that we do not see much in Nelson Island, but that are in other areas and that people might start using one day here unless we tell them early. We will draft a pamphlet. We will then submit to our elders and the Nelson Island staff, environmental staff, participating community and council members, and others in the community whose opinion is important. For example, our youth often use poor hunting practices because they do know better and are less respectful of our traditions. We will make sure that we have youth look at the pamphlet to see if there is something they want to have. Printing and proofing and shipping should take about two to three weeks.

6. (4<sup>th</sup> through 6<sup>th</sup> month) Design educational T-shirts. We will give about 50 to each village to use as ways to educate the whole community by reading people's shirts that state Yup'ik values about caring for our subsistence lands, increasing pride, and by getting people to come to our educational events. We will likely use the Nelson Island Logo we have developed  
““CANINERMIUT/ QALUYAAT-LLU NUNAMTA MENUITENGNAQLERKAANUNNUNAM CALIARAT”

*It means something like “We must work Together to Keep the Coastal and Nelson Island Communities and Environment Clean for our subsistence”*

7. (6<sup>th</sup> through 8<sup>th</sup> month) Each village will hold an educational event to take care of our subsistence camps. We will use the T-shirts, pass out pamphlets, answer questions about safe camp practices and what contaminants can enter our camps if we are not careful. We will invite elders to speak at an open meeting, and have the school kids participate by drawing pictures or dancing. People will get a chance to use a hand auger and we will have a contest to see who can make a fishing hole the fastest. We will offer a chance for people to shoot Hevi-shot and explain how lead shot can kill 1 out of 5 waterfowl by lead poisoning. For people who could not attend the alternative-shot clinic it will be a chance to reach more community members in this way, and we will have learned how to give a shot clinic. This event will be leveraged by education outreach and research carried out for the Brownfield Response and CARE grants.

8. (Month 3- 8) Purchase high-quality hand ice augers, 3 for each village. These will go to environmental departments and be available for people to use by signing up. People won't use their chain saws if they try these and like them. Most people don't have good hand augers, so they don't realize they can work well, just slower.

**Component 1 total cost: \$49,454**

### **Component 2: Water quality monitoring of campsites**

While it is being used to monitor the use of the campsites and help to assess human impacts on our subsistence areas we are treating the testing as a separate component because it is more technically-oriented in terms of procedure. We will ask elders and decide consensually via our regular Consortium decision making process which sites will be tested. We have budgeted for 5 sites, with 1 serving as a reference site that does not receive noticeable impacts or traffic. Our target will be to monitor twice monthly, but at least once monthly during open water season, and the same for ice fishing season. Three of these sampling events we will additionally test for lab



analysis contaminants – Diesel Range Organics, BenzeneTolueneEthyleneXylene (BTEX), and 23 heavy metals. We will use 20% duplicates. Because our boats or snowmachines or atvs may affect BTEX, we will use blanks too. For the contaminant sampling events we will be targeting high water (usually just after breakup), low water (later in season), and during freezeup at height of ice fishing season. We will be purchasing a reliable and easy-to-use advance water quality testing probe. It tests for 10 WQ parameters, including ph, temperature, DO, TDS, turbidity, nitrates, and depth. We need this equipment because we will be able to continue using it to continue our camp monitoring and for sampling other areas of concern. We have a problem in that we are very remote and logistics to send back and forth inferior lab equipment or to rely on color strips will not work here. We need to be trained in using this probe and intensively trained on the importance of calibrating it for each sample. With this equipment, testing is much simpler and there is much less chance for error than less expensive kits. Our data will be considered reliable by scientists. We will also perform on priority pollutant scan at each site to test for presence of pesticides, POPS, etc. We also will be using fecal coliform gel tests. For this we will need an incubator, and then the tests are just \$5 each. We will pack in a cooler and send out via plane to Bethel two samples each month to correlate with our own counting. The coliform tests will be useful in determining whether we have a problem with human wastes – people not being careful when they are out there.

Please note, we will develop a QAPP and have it approved before sampling begins.

**Commitments:**

1. (1<sup>st</sup> month) Hire Technical consultant in accordance with OMB guidelines for QAPP, training, data entry into DASLER\*\*, data interpretation, and followup technical assistance with sampling questions and shipping procedures and arrangements.
2. (1<sup>st</sup> month) Update vendor quotes to ensure best cost is obtained for WQ Probe (including government discount), and make purchase.
3. (2<sup>nd</sup> month) Hold training with consultant and NI staff and any environmental staff that are interested. The consultant will let us know how to prepare for this training, but mainly they will be doing the planning for the training. Training will include location scouting, demonstration, basic WQ principles, WQ sample field recording techniques, and calibration and care instructions. Establish protocols/schedule for how we will team for WQ monitoring. Consultant begins QAPP and completes asap for submittal to EPA
4. (3<sup>rd</sup> month) QAPP submit to EPA approval, assume up to one month approval process.
5. (4<sup>th</sup> through 12<sup>th</sup> month) Carry out sample monitoring. Monitoring will be carried out in conjunction with camp monitoring. In this way we will be able to correlate camp use that day with the samples for that day. Note sampling events will include a full summer. We will be able to complete a full year of baseline monthly basic parameter sampling with the probe, using our QAPP, and making this part of our IGAP workplan.
6. (12<sup>th</sup> month) Lab analysis results and basic wq parameters data will be interpreted by consultant, and entered into DASLER database.

**Component 2 cost: \$60,431**

**Applicant and EPA roles and responsibilities in carrying out the workplan commitments:** The EPA will have no substantial involvement in the accomplishment of work plan commitments. EPA

will monitor progress and provide project officer review and comments as needed to ensure project completion.

**2. Tracking and measuring progress:** Project narrative describes how the recipient will track and measure progress toward achieving the expected outputs and outcomes identified in the workplan including those identified in Section I of the announcement, and demonstrates the connection between components and commitment with resulting outputs and outcomes.

**Logic model:**

*We are monitoring our camp use and campsites  
So that  
We can use the results to see whether our community education works  
So that we can provide effective community education, including hunter pamphlets  
So that  
We can reduce contaminants and environmental degradation at our camps  
So that  
We can sustain our subsistence forever.*

*We are monitoring water quality at the camps  
So that  
We can see whether there are physical impacts to the water, and whether they are associated with  
different levels of camp use  
So that  
We can develop good education and have a baseline to protect our environment  
So that  
We can sustain our subsistence forever.*



### Identification of environmental results, including outputs and outcomes:

	Outputs, commitment # ("C#")*	How Outputs measured	Outcomes	How Outcomes measured (proxy or direct)
<b>Component 1.</b> Camp use monitoring and community education				
<b>Inputs:</b> Staff, travel funding, ice augers, steel shot				
Commitments 1,2, 3	<b>Deliverable:</b> Record of visible camp assessments over time	Will submit	<p><b>Short-term</b> (within life of grant): We will see whether we made improvements to our camps and whether people learned.</p> <p>Expected reduction of litter at our camps by 50%.</p> <p><b>Medium term:</b> It will help to have these pictures so that if people forget what they did or how it used to be, we can show them, and also show other villages.</p> <p><b>Long-term:</b> Part of historical record of our people.</p>	<p><b>Short-term;</b> Count litter and type, compare pictures over time.</p> <p><b>Medium term:</b> Whether the pictures and records are located in accessible form to community, whether we use the pictures and records in future educational flyers and presentations, etc.</p> <p><b>Long-term:</b> It is told by elders and passed on how we did this.</p>
Commitments 1,2	<b>Deliverable:</b> Record of main education efforts over time	Will submit	<p><b>Short-Term:</b> We will know what we tried to do and when, providing us with a plan on what to do next.</p> <p><b>Medium-Term:</b> Will help envr. Dept. if staff turnover for documentation if the camp practices remain or go back to being not good.</p>	<p><b>Short-Term:</b> Do we manage by project end to find a way to reach hunters and reduce the camp litter?</p> <p><b>Medium-Term:</b> Does future staff use our documents?</p>
Commitments 1,2, 3	<b>Deliverable:</b> Qualitative interpretation of what worked best from our data and elders	Will submit written narrative that is easy to read for other villages and includes any educational flyers that we did.	<p><b>Short-term:</b> Will help to develop pamphlet and later educational flyers and messages.</p> <p><b>Medium-term:</b> What we learn will help other villages implement improved camp practices.</p> <p><b>Long-term:</b> More subsistence, cleaner environment for YK Delta</p>	<p><b>Short-term;</b> Does pamphlet incorporate this information?</p> <p><b>Medium-term:</b> Do other villages ask for our pamphlets? How many? Do people reproduce them?</p> <p><b>Long-term:</b> Less store-bought inventory per person. Less food wrapping wastes, elders will know whether environment is cleaner, wq testing later too. Also less diabetes, etc.</p>

Commitments 5	<b>Deliverable:</b> Pamphlets	Will Submit	<p><b>Short-term;</b> People will be proud and learn from elders about what they need to do. Less littering and oil changes, more careful practices. Reduction in contaminants.</p> <p><b>Medium Term:</b> More people will make a habit of good practices.</p> <p><b>Long-Term:</b> Subsistence camps will be sustainable and environment cleaner</p>	<p><b>Short-term;</b> We can tell by looking at camps before the pamphlets are passed out and then after. Whether people ask for pamphlets and are interested when we pass them out.</p> <p><b>Medium Term:</b> We will continue to see better campsites.</p> <p><b>Long-Term:</b> Less store-bought inventory per person. Less food wrapping wastes, elders will know whether environment is cleaner, wq testing later too. Also less diabetes, etc.</p>
Commitment 8	<b>Activity:</b> Hand Ice Auger Free-Use Project	Pictures, vendor receipts or postage	<p><b>Short-term:</b> People will learn how well good hand augers perform and see how they save money on fuel and also learn that chain saws pollute water and air. Less gasoline spilled into fish holes and less polluting emissions as a result of auger lending program.</p> <p><b>Medium-term:</b> More people will use hand augers</p> <p><b>Long-term:</b> Water and air will be protected. Fuel can be saved for subsistence travel, and subsistence protects the environment and our health.</p>	<p><b>Short-term:</b> How many times ice augers are borrowed. Calculate how much fuel is used to make holes.</p> <p><b>Medium-term:</b> Continue to track lending program, note ice holes and people's practices as they go out (all of our staff practices subsistence so they will see)</p> <p><b>Long-term:</b> WQ testing to see if BTEX is reduced, elders observations on air smell and water .</p>
Commitment 4	<b>Activity:</b> Steel shot clinic and education day give-away		<p><b>Short-term:</b> Reduction of lead use and environmental contamination by at least 600 lead shot rounds, and anticipate reduction by 1200 rounds. Protection of up to 300 waterfowl.</p> <p><b>Medium-Term:</b> More people will switch to non-lead shot, protecting more waterfowl</p> <p><b>Long-Term –</b> Lead in our environment will stop accumulating, and also be absorbed or covered with sediment, so not a risk. Our people will have less lead in their bodies, possibly protecting them from high-lead effects.</p>	<p><b>Short-term:</b> Amount provided to community for demonstration/educational purposes will be minimum amount switched. Each village can find out inventory of alternative shot in store and see whether increase in purchase over the year and what education efforts might have been successful.</p> <p><b>Medium -Term:</b> Track store inventory, collect any lead poisoning data from USFWS for this region.</p> <p><b>Long-term:</b> Maternal blood core study for our village participants.</p>

<p>Commitments 4 - 8</p>	<p><b>Activity:</b> Camp education day</p>	<p>Pictures of events, people wearing t- shirts</p>	<p><b>Short-term:</b> Camp users will learn what are the best camp practices and how their littering or unnecessary petroleum product spill, leak, emissions, use of lead shot, or fish nets left in, or vehicle use in poor tundra conditions can affect our subsistence. Reduction in contaminants.</p> <p><b>Medium term:</b> Better camp practices Long-term; Improved environmental conditions and sustained subsistence.</p>	<p><b>Short-term:</b> Pamphlets passed out and taken, how many people attending, camp site appearance before and after events, change in number of fish nets left in, steel shot purchased, oil containers and batteries left. By visible assessment of wastes we can estimate contaminants removed. WQ parameter might tell us too, or it might be too short before end of project period.</p> <p><b>Medium Term:</b> Do people start purchasing better emission sno-goes, atvs, boats? Do they start using in-town used oil change sites? Do elders see a difference? Do WQ parameters indicate an improvement?</p>
<p>Commitments 3 - 8</p>	<p><b>Participants:</b> Users of camps</p>	<p>Pictures, turn-outs, auger borrowers, shot takers</p>	<p>See above.</p>	<p>Same.</p>
<p><b>2. Campsite water quality monitoring</b> <b>Inputs:</b> Staff, Technical assistance, lab analysis, equipment</p>				
<p><b>Commitments</b> 1-4</p>	<p><b>Deliverable:</b> Approved QAPP</p>	<p>Will submit</p>	<p><b>Short-term:</b> Quality assured sampling plan so that our data is reliable to use for studies and education that protect our subsistence.</p> <p><b>Medium and Long-Term:</b> Other villages may be able to use our QAPP as a template, our QAPP will provide documentation of the quality of our data.</p>	<p><b>Short-term:</b> Is the data considered reliable by QAPP advisory committee?</p> <p><b>Medium and Long-Term:</b> Do other villages ask for a copy, or is it distributed via a website, etc?</p>
<p><b>Commitment</b> 2,5</p>	<p><b>Deliverable:</b> Water quality data</p>	<p>Will submit</p>	<p><b>Short-term:</b> Quality assured data to use for studies and education that protect our subsistence.</p> <p><b>Medium Term:</b> We will be able to compare our WQ into the future to see how the changes in camp practices affect the water quality. If we find chemicals that are not generated here, then we can publicize this finding to outside world to ask them to stop</p>	<p><b>Short-term:</b> Do we use the data to educate community on camp practices?</p> <p><b>Medium Term:</b> Has use of the data made a difference with people? We would ask them or note after we have made flyers or presentations with the data whether camps are cleaner. Do we write letters or otherwise use the data about global sources to protect our subsistence?</p>



			<p>producing these chemicals.</p> <p><b>Long-Term:</b> We will be able to identify trends and protect the environment for our fish, keeping their population high. We can continue to monitor with our probe and see how the parameters change – scientists will be able to use this information to assist us in slowing global warming and contaminant sinks.</p>	<p><b>Long-Term:</b> Are trends analyzed and the information used to take action or educate?</p>
<p><b>Commitment 6, 1</b></p>	<p><b>Activity:</b> Interpreting, comparing water quality data between sites and over time to see if any trends can be found in regards to changes in camp practices, education efforts, or level of camp use.</p>	<p>Will submit a narrative of whether and what qualitative correlations can be made.</p>	<p><b>Short-term:</b> We can use the information to show people whether higher use of certain sites is impacting their water quality and thus possibly the fish. Knowledge is gained by target audience</p> <p><b>Medium Term:</b> We can encourage people to use lower-use sites if higher use sites show significant impacts from use (besides litter which is easy for people to clean up once they are educated)</p> <p><b>Long-Term:</b> We will be able to maintain the water quality of our sites at least within our local source control. If we find that we cannot explain how some contaminants are there, we can look for additional funding to find the source.</p>	<p><b>Short-term:</b> People start to us high-use areas more carefully (evidence by litter amount) or use other areas.</p> <p><b>Medium Term:</b> We can look at amount of litter and also indicators like coliform or BTEX that probably comes from engines.</p> <p><b>Long-Term:</b> We can do a suite of WQ contaminant sampling, as well as continue monitoring to see that we are not degrading the sites.</p>
<p><b>Commitment 3</b></p>	<p><b>Activity:</b> Water Quality training workshop</p>	<p>Pictures, attendance sheet</p>	<p><b>Short-term</b> Knowledge gained by staff on handling equipment, sampling protocols, and plan formed based on elders wisdom combined with expert wq sampler.</p> <p><b>Medium-term:</b> We will be able to continue our baseline monitoring with our equipment and gain a full 3 year record that is suggested by agencies. We will build capacity for additional funding sources because we will have the experience and equipment to carry it out.</p>	<p>How many questions, consultant hours are needed by people afterwards? Does the data sampling process start off well?</p> <p><b>Medium Term:</b> whether we can submit successful grants to expand, detail, or otherwise monitor into future our subsistence areas.</p>

Reporting Schedule: Reporting will be carried out quarterly, with annual and end of project reports and forms submitted per grant agreement and at no less frequency or content than required, and in accordance with 40 CFR Parts 30.15, or 31.40 and 35.515.

**Performance evaluation process:**

We will evaluate our progress and final success of project through the following evaluation process. Each report will contain answer to the Evaluation questions based on listed indicators or others that we realize are good indicators as we go. We will be looking at these questions each month, and writing down our answers to see if we are “on-track” with what we want this grant to do.

What is evaluated	Evaluation Questions	Indicators (How evaluated)
<b>Inputs</b>		
Project Staff	Are they the right choice?	Do they work with all the villages and elders before drafting the pamphlet and ordering t-shirt and other supplies as planned? Do they work with consultant if they have questions and do they provide the graphic requirements for pamphlets and t-shirts needed? Do they make sure reporting is done on time and includes performance measures and milestones? Is monitoring carried out at least as frequently as our minimum schedule? How much more frequently than minimum? With our logistics, success would be minimum frequent. How close is the schedule to what we planned? Do we get back positive feedback from project officer? Are elders happy?
Consultant(s)	Are they the right choice?	Do they assist us with easy to fill-out templates on reporting and documenting? Are they readily available for questions? Does the Water Quality consultant provide training in a way that we understand? Are they respectful of elders and listen to their advice? Do they get the QAPP approved? Are they available for our questions? Do they provide timely interpretation? Does the lab provide timely analysis? Are they friendly and answer our questions?
NI staff working on contaminant issues and assisting in this (separate hours)	Do they come up with the research we need about best emission practices for vehicles used to camp? Do they provide the research details we need for other education?	Pamphlet draft and presentations reviewed by scientist technical consultant for accuracy.

Supplies	<p>Did we get the right hand augers?</p> <p>Did we get the right steel shot?</p> <p>Did we order from the right pamphlet and t-shirt printing company?</p>	<p>Are the augers used with good comments?</p> <p>Do people think the shot is good?</p> <p>Does the printing company process our order in a timely manner, do they provide us good service and technical information or their needs? Do the pamphlets look right?</p> <p>Do the t-shirts look like we want? Are they worn a lot by people? Do people request the pamphlets and t-shirts?</p>
Resources, Activities	<p>Did we have enough travel money to people to come to clinic? Did we advertise it well enough?</p>	<p>How many people came to the clinic? Did we get at least a 50% attendance from what we wanted (50 people). Did we get at least a couple of hunters from each village? Do staff feel comfortable providing information they learned to their own villages? Do we get complaints that people could not afford to travel or it was on the wrong day? Do we hear that people didn't know when it was?</p>
<b>Outputs</b>		
Pamphlets	<p>Do they accomplish what we want (i.e. educating people for better camp practices? Do people like them and feel proud of producing something professional and Yup'ik?</p>	<p>Using the monitor's pictures and trash counts – is there at least a 50% reduction in litter from before and after we distribute pamphlets? Is there at least a 50% reduction in signs of petroleum contamination (sheen, oil containers). Do we get good comments? Do we get other villages or USFWS or NRCS or AVCP or DNR requesting pamphlets? Do we distribute pamphlets to each hunting household?</p>
Education events/programs	<p>Do they accomplish what we want (i.e. educating people for better camp practices?</p>	<p>How many people attend? Do people comment about liking the event? Are elders involved? Do they think the event was good? Looking at camp monitoring records to see changes before and after events.</p>
Monitoring activity	<p>Is it successful? Did it work like we planned?</p>	<p>Monitors keep to a weekly schedule, with just 6 weeks allowed to be missed – or close to this with reasons due to weather, family, illness. Are we getting pictures each time and litter counts. Do they encounter hunters while out (and how many?) We hope to educate 50 hunters this way – out in the field. Do the hunters comment positively? Do they use the hand augers?</p>

Outcomes		
Camp practices improved (traditions re-enforced and adapted to modern technologies in a way that we can sustain the sites to be healthy.)	Is there marked progress every three months	Camp monitoring records – reduction in litter expected to increase as time goes by. First few months, not much difference because we won't have started targeted educating. 50% litter reduction and augers checked out for fishing at least 10 times from each village during winter and stores reporting increased alt shot by 50% by year's end? We expect only 10% progress to goal first 3 – 5 months, then major improvements proportionate improvements in all of our measures. We can get a lot of feedback from community because our communities are so small, we will hear whether things are working. Are more people coming to environmental office for fish net tags? Each village should see a marked increase within a couple weeks of the season start, and 75% participation is goal by season end.
Contaminants reduced	Do we reduce lead, BTEX, DRO, mercury, coliform contamination at camps?	Again, we will be looking at monitor measures as time goes on, each month. We expect to see little difference until our educational events and programs and pamphlets are introduced, then increasing differences. The main reduction from this project at first will be through direct education on-site by monitors.
Water quality knowledge leading to improved practices, informed actions	Does the wq monitoring data help in educating people or making them aware?	Attendance at council or school or education presentations that discuss the wq data. The results will likely not be able to be used much until end of project, when we can compare better with more data. However, if data shows definite substantial impact, then we can use the data right away and we can isolate certain practices that probably cause it and see from our camp monitoring whether these practices decrease after we have educated people about what they are doing to their sites.
Elders approval of how our camp practices have improved and what we have started (maintenance of culture)	Do elders at our Nelson Island calls and meetings think we are doing well?	About 75% of elders are positive by end of year. Each time we have opportunity to ask elders for their advice and comments, we should get more and more positive, and less and less advice from them to change what we are doing.
Subsistence increased, maintained, protected.	How much subsistence do people do from beginning to end of year?	This depends on so many factors, like weather and runs and events. But we can monitor camp use by number of nets, number of people we see. Also, we can look at how much meat the stores sell at beginning of project, and how much at end to see that it has not changed or it has lessened. We can provide that information, although it would be more meaningful if it were monitored for several years to adjust for difference in subsistence opportunities from year to year.

Reduced acute and chronic lead effects on waterfowl and humans , reduced mercury effects	Did we reduce lead and mercury exposure?	Batteries counted that are left at camps, steel shot use monitored by store sales, and also noting what type of shot the hunter we encounter are using.
Less impacted campsites	Do the elders and other community members feel that the camps are back to how they want to see them? Do people report better hunting?	Again, more and more positive comments, or less and less negative ones by elders from beginning to end of project. Camp monitoring pictures of what they look like and what on-site hunters day.
Capacity built in WQ programs	Can we carry out the program as planned? Do we use our knowledge to build our wq program?	Quality assurance officer and WQ consultant review of sampling and results. Are we keeping to a timely schedule? Do we write a grant or plan a volunteer wq monitoring program to continue our program?



**3. Replicability:** Project narrative describes how project may be applied or adapted for the benefit of other Alaska Tribes and how those results will be communicated to other interested parties.

Alaska Tribes are very different in their cultures and logistics. So there are not many projects that can be applied to all Tribes. Logistics and infrastructure for example for the popular back haul are very different depending on where you are and whether you have equipment, and like all projects to be carried out sustainably it must be done by the Tribe itself so they can learn how. We are still working on our backhaul logistics, which when we talk to the barge companies they tell us it is very different from the Yukon river with a home port, and we need funding to backhaul out our metals, which we asked for but did not get. But one thing that Tribes all share even in their cultures is subsistence. We all place subsistence and respect for elders in the middle. That is why we chose this project and not a backhaul project which wouldn't be sustainable for us now anyhow. We know that our metals can wait in the dump while we work on reducing hazardous wastes, but our subsistence can't wait. Our guide will apply to all Tribes because they all wish for subsistence forever and they want to learn out to use elders' wisdom. Our pamphlet and information we collect is something that is sustainable – that all Tribes can put into place and that won't cost them anything. It will just cost them education, which is free.

Another answer to this question is that we represent 7 Tribes and this project was thought up by us and will be carried out by us, not an office staff living in Anchorage or Fairbanks. Our consortium decided this project and we have held several phone calls about it to make sure that we all support the final proposal and what it contains. Because this project will be carried out by Tribes at the Tribal level, our results are have to be more applicable to other Tribes. Particularly our pamphlets on camp practices and the learning of what types of education efforts worked to improve hunter understanding and practices that our elders tell us must be followed to keep the sites clean will help rural, remote Tribes that conduct a lot of subsistence. And from that, even more, it is what Yup'ik villages (Tribes) will be able to directly use because it will be information that is written and collected in a way that we understand, and most Yupik Tribes have the worst incomes and logistics (a reason why so many of us still have honeybuckets). There are ways to say things and to think things and do things that are very different from how people that are not Alaska Native might think are the "best ways".

We also share a similar language and many cultural similarities with Inupiaq communities. We are printing out extra pamphlets to make available to other Tribes at the regional and state-wide conferences. We will submit for a session in Yup'ik at either the Fall ANTCH conference or the Alaska Forum conference or the BIA Provider's conference (or more than one). We will have the Delta Discovery write an article about our project and how villages in our region can get a pamphlet and also the write-up about what we did and what worked or didn't, and who they can call about learning from our mistakes and successes. We will provide our information about what we did and the progress of our sites to anyone who asks. We will advertise the pamphlets on the SWAN message Board, Alaska Native newsletters, and also contact DNR, NRCS, USFWS, DEC to mail them the pamphlet to see if they would like to print more and distribute them. We have been offered to have a website developed for us for free, so once that is placed up, we will also post it on there.

As far as replicability – if we can do it, any tribe can. We have the poor logistics, communications infrastructure, low-income, high unemployment, pretty new programs and a lot more learning to do, and many high priority issues.

**4.Environmental Results Past Performance:** Under this criterion, applicants will be evaluated based on the extent and quality to which they adequately documented and/or reported on their progress towards achieving the expected results (e.g., outcomes and outputs) under Federal agency assistance agreements performed within the last three years, and if such progress was not being made whether the applicant adequately documented and/or reported why not.

We (the Umkumiut TC) assume that we have adequately reported on our progress towards achieving the expected results that we have included in our past awards. We have not had any problems or concerns from our project officers and we have worked with them when they requested additional information. And we are pretty certain that we have done an excellent job in relation to where our capacity has been and the challenges we face, where our staff must do all the work without assistance from technical assistance providers. We operate a good and effective environmental department that keeps records and tracks all of our activities, and we are timely and detailed with what we do. Also, the reporting on results is something that we are getting even better at, as it gets defined better by EPA and other Agencies on what they are looking for. Our previous Environmental director was asked to serve as a Circuit rider for other villages in helping them with grant management and recordkeeping. He taught us all how to carry out these tasks properly so that our current staff is completely trained and experienced, and the transition was accomplished in a way that we did not need to go backwards.

**5. Programmatic Capability:** Under this criterion, applicants will be evaluated based on their ability to successfully complete and manage the proposed project taking into account the following factors: (i) its past performance in successfully completing and managing federally funded assistance agreements similar in size, scope, and relevance to the proposed project performed within the last 3 years, (ii) its history of meeting reporting requirements under federally funded assistance agreements similar in size, scope, and relevance to the proposed project performed within the last 3 years and submitting acceptable final technical reports under those agreements, (iii) its organizational experience and plan for timely and successfully achieving the objectives of the proposed project, and (iv) its staff expertise/qualifications, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the proposed project.

**Past/current grants for Umkumiut**

Grant	Dates	Status	Reporting	Reporting done by	Amount of the Grant (\$)	Grant #
BIA Small Tribes Grant	02-current	Good standing	Quarterly financial and performance reports have been turned in	Clement	\$507,143	GTE02T50850
ATG	05-08	Good standing	Quarterly financial and performance	Clement	\$497,583	CTE02T50820

			reports have been turned in			
IRR	01-current	Good standing	Quarterly financial and performance reports have been turned in	Clement	\$70,000	E004501549
ANHB Demonstration Grant	04	Completed in good standing.	A final financial and performance report were required and were completed	Clement	\$11,741.70	N/A
IGAP	04-current	Good standing	Quarterly performance reports and annual financial reports have been done	Andronik, Simon, Clement, Evelyn	\$110,000 x 2	GA-97094501
AVCP SWETP	04-05	Completed in good standing.	A final report was done.	Andronik	\$10,000	N/A

**Organizational experience and plan for achieving:** As the above table demonstrates, we have extensive experience in managing grants at the level and nature of the proposed project. Our Environmental Department currently employs 3 staff. The Environmental Coordinator reports to the Tribal administrator, and also the staff reports to the Traditional Council at each meeting. The accounting is carried out by Clement George, whose is certified in Quickbooks. We will adhere to our policies and procedures for this grant. Umkumiut (and Nightmute) and Newtok are the closest in proximity to our subsistence areas. The project manager will be from Umkumiut, and the monitor assistant position will be available to the other villages. The Consortium will decide by consensus, with ultimate responsibility for the decision being Umkumiut's. This is the manner in which Consortium grants have been managed in the past. The submitting Tribe takes full responsibility and carries out all bookkeeping. Any expenditures or activities related to the grant performed by the other villages must be expressly authorized by Umkumiut first.

**Staff qualifications:** All staff speak Yup'ik and have a full lifetime experience working in our environment and using subsistence camps that are the subject of this proposal. All staff work closely with, and have learned from elders how to practice subsistence. These are the highest qualification for this proposal because without it, we would not know enough to do it right.

**Environmental Coordinator:** Evelyn Agnus, 2 years working in Environmental Department. Has been Environmental Coordinator since last year and was the Environmental technician before that. She will be directing the project manager.

**Environmental Technician:** Bertha George serves as the IGAP Technical Assistant and has been in the environmental department for 8 years.

**Project Manager:** This person will be working in coordination with the rest of the IGAP staff and will also serve as the Nelson Island Coordinator role (a 10 hr per week position) for Umkumiut beginning October. The community of Nightmute and Umkumiut have a number of highly qualified persons to fill this job. There are several experienced people

with environmental backgrounds as well as supervisory backgrounds. Umkumiut TC will post a job description which includes requirement of good organizational skills, reporting skills, knowledge of the subsistence areas, desire to work as a team with the rest of Nelson Island Consortium active members, and to be guided by elders. \*\*

**6. Efficient and effective use of funds:** Budget narrative describes how requested funds will be used efficiently and effectively to achieve the goals and objectives of the proposed project and budget provides detailed information of the cost and time frame of each workplan component and commitment.

We will be accomplishing our goals with the least cost available. Pamphlet development will be based on work previously done and collected by our NIC coordinators (i.e. elder interviews) and will also be assisted by their research activities under the Consortium Base grant. Educational outreach materials on contaminant reduction will be developed through our response program educational outreach that leverages the goals of this project. We have the minimum staff time needed to complete the monitoring and reporting work. We are using consultants to assist us in the reporting/evaluation/documentation work so that we can have effective, easy to use templates to follow and to assist us with any questions. In this way our staff can devote the bulk of their time to project work in assessing how to best improve campsite practices and what our campsites and water quality are like. We have researched with WQ experts for the least cost testing methods that will produce reliable Quality controlled data collected from our subsistence areas. Note for example, that YKHC in Bethel use Colert and ColAssure tests, which indicate presence or absence for total and fecal coliforms. Each sample costs \$40. This is good for SDWA reqs., but doesn't meet our needs for baseline water quality data that we need for our camps, which include an indication of coliform levels. Using the coliform gel tests will save us money even though we will need to purchase an incubator. We will then be set up for coliform testing in the future at very low per sample prices.



Initial Budget Drawdown Through Period Of Use*	Component - commitment	Item	Unit Cost	Basis	Qty	Total Cost
		<b>Personnel</b>				
Oct 15 06' To Sept 30 07'	All	Project manager, supervises and goes out monthly with campsite monitors, samples for base wq parameters, compiles data from other villages, coordinates with interested parties including USFWS, USGS, NRCS, DEC, sets up lead shot clinic, 20 hrs per week for 50 weeks	\$17	per hr	1000	\$17,000
Oct 1 06' To Sept 30 07'	All	Bookkeeping, 6 hrs per week	\$15	per hr	312	\$4,680
Oct 22 06' To Sept 30 07'		Campsite and trail monitor staff persons, 2 days per week, 46 weeks	\$17		736	\$12,512
Project Period	All	<b>Fringe</b>	\$0	lump	1	\$6,155
		<b>Supplies</b>				
Oct 06 To Sept 07	1-3, 1-4, 1-7	Paper, ink for flyers	\$300	per month for 6 tribal communities	12	\$3,600
Oct 06 To Sept 08	1-3, 1-4, 1-7, 2-5	Digital camera, battery, case	\$250		1	\$250
Mar - July 07	1-7	Steel shot for education days in each village, 2 rnds per hunter or 10 boxes per village to give away as educational materials so that people will use them, hevi-shot (environmentally friendly)	\$25	box	60	\$1,500
Dec - Mar 07	1-6, 1-7	T-shirts with protecting subsistence sites message (in Yup'ik), half-youth, half adult to give out at environmental education events in each community, online shopping quote for 10 colors high quality black t-shirts (so people will wear them) Less colors we will make more t-shirts, but there is a minimum qty of 600 for more than 4 colors or for non-graphic art files.	\$7	per shirt	600	\$3,960



Initial Budget Drawdown Through Period Of Use*	Component - commitment	Item	Unit Cost	Basis	Qty	Total Cost
Nov 06 - Apr 07	1-7, 1-8	Hand augers <a href="http://iceaugersdirect.com/products/Storefront/Hand_Augers/storefront_hand.htm">http://iceaugersdirect.com/products/Storefront/Hand_Augers/storefront_hand.htm</a> (electrics are \$460 plus shipping), <a href="http://www.drockicecenter.com/lazer_hand.html">http://www.drockicecenter.com/lazer_hand.html</a> (video of hand-auger)	\$115	per auger with replacement blades	18	\$2,070
Dec 06' To Sept 30 07'	2-3, 2-5	Sampling supplies: box of nitrile gloves (\$13), gauntlet gloves (2 @ \$20/pr = \$40)				\$53
Nov 06 - Sept 30 07'	2-3, 2-5	Incubator for Coliform tests <a href="http://www.bestlabdeals.com/Incubator_Refigerator_Combo_p/rev002.htm">http://www.bestlabdeals.com/Incubator_Refigerator_Combo_p/rev002.htm</a> OR <a href="http://vwrlabshop.com/product.asp?pn=0009372&amp;bhcd2=1149624611">http://vwrlabshop.com/product.asp?pn=0009372&amp;bhcd2=1149624611</a>	\$600	per unit	1	\$600
Nov 06 - Sept 30 07'	2-3, 2-5	Coliscan Easygel Tests, including shipping, <a href="http://www.micrologylabs.com/Home/Our_Methods/Coliscan_Easygel">http://www.micrologylabs.com/Home/Our_Methods/Coliscan_Easygel</a> (These come self-contained for everything you need and are packed in a cooler then brought to our incubator. Three types of coliform can be distinguished by color, and then colonies are counted.)	\$20	per 10 tests	10	\$200
	2-3, 2-5	Sample Cooler + reusable ice packs	\$25	per unit	1	\$25
<b>Equipment</b>						
Nov 06 - Sept 30 07'	2-3, 2-5	Global W-22XD \$6,365 (measures depth, turbidity as well), Global FP201 flow meter \$745. Note rental of flow probe = \$400 monthly and rental of turbidity meter is \$400 monthly, rental of DO - \$400 monthly. Thus, rental price for nine months would be well over \$10,800. The W-22XD is very simple to use with easy "push button" calibration and will allow us to measure water depth, temperature, nitrates, etc. with one sample and accurately. This is necessary due to the difficult field conditions and the difficulty in replacing parts, etc. This unit provides continuous data logging for up to one month. USGS recommended for ease and accuracy.	\$6,365	per unit	1	\$6,365

Initial Budget Drawdown Through Period Of Use*	Component - commitment	Item	Unit Cost	Basis	Qty	Total Cost
		<b>Travel</b>				
Mar 07'	1-4	Travel to steel shot clinic, r.t. \$100 inter-village fare, quote	\$100	per person	30	\$3,000
Nov 06'	2-3, 2-4	WQ consultant travel to training, \$650 airfare (estimate), \$40 per day meals for 5 days (quote), \$120 per night for one night in Bethel (average cost), lodging provided free in Umkumiut	\$970	per trip	1	\$970
		<b>Other</b>				
Mar 07'	1-5, 1-7, 1-3	Camp Pamphlet Printing, 8-page, 4 color booklets (inc. front and back) printing costs, (quote from www.imagingbureau.com)	\$1	per pamphlet	3000	\$1,500
Oct 25 06' To Sept 30 07'	1-3, 2-5	Campsite monitoring, oil and gas, once weekly for 46 weeks, gas @ \$6/gal, oil at \$4/quarter, 2 vehicles each trip ( 2 persons) for safety and WQ QA/QC, estimate based on trips to subsistence area.	\$50	per vehicle trip	92	\$4,600
Oct 25 06' To Sept 30 07'	1-3, 2-5	ATV/Snowmachine rental, quote and typical for this region	\$75	per trip	92	\$6,900
Nov 06' To Sept 30 07'	1-3:1-8, 2-2:2-5	Technical assistance in reporting and performance monitoring, templates, analysis, graphical layout reqs. for pamphlets.	\$50	Per hour	80	\$4,000
Feb, June, Aug 07'		Lab shipping costs	\$75	per shipping	3	\$225
		<b>Contracting</b>				
Feb, June, Aug 07'	2-5	Sampling, BTEX, DRO, metals at 4 camps, 1 reference site, 3 contaminant sampling events with 1 duplicate each test, each event, 6020 23 RCRA metals, DRO AK120, , BTEX , 1 priority pollutant scan event. Additionally, WQ parameters will be collected at each site, as well as additional identified sites during open water season at least monthly (via test equipment). Quotes obtained from certified Alaska lab, with 10% discount offered for Tribes.	\$13,020	lump lab costs	1	\$13,020

Initial Budget Drawdown Through Period Of Use*	Component - commitment	Item	Unit Cost	Basis	Qty	Total Cost
Nov 06' To Sept 30 07'	2-3. 2-4, 2-5	WQ QAPP development in consultation with NIC , interpretation, 5-day sampling training and QAPP outline (locations, goals, etc.) for all NIC environmental and NIC staff that wish to attend, calibration training, phone technical assistance over course of sampling, DASLER data entry, (assuming phone/fax assistance does not exceed 40 hours) quote	\$60	per hr	280	\$16,800
		<b>Total</b>				<b>\$109,985</b>
		<b>Cost per Tribe</b>				<b>\$15,712</b>

\* \*(Note supplies, etc. will be spent in a lump sum, but used for period indicated, other categories such as personnel will be drawn down every 2 weeks)

#### Additional WQ Sampling Details:

	# Samples+Dup+Ref Site	# Sampling Events/Yr	Total # Samples	Cost/Sample	Total Cost	Method Reference
BTEX	6	3	18	75	1350	SW8021
BTEX trip blanks (price = 1/2 sample = ~\$40)	6	3	18	40	720	SW8021
DRO	6	3	18	80	1440	AK102
Metals, total 23 ion ICP scan	6	3	18	150	2700	SW6020/EPA 200.8
Hg, total	6	3	18	45	810	EPA 245.1
Priority Pollutant Scan	6	1	6	1000	6000	6020, 8260, 8270, 8081/8082, 7470/7471, 8290 (2,3,7,8-TCDD only), Cyanide, and total phenols
<b>TOTAL</b>					<b>\$13020</b>	

## **Reporting**

**Quarterly Performance Reports** are required and will be due within 30 days of the end of each fiscal quarter. Recipients must report progress under the workplan, including environmental outcomes and milestones. Additionally, reports must describe any problems with completing the tasks under the workplan and the recipient's plan for resolving these problems. Cumulative expenditure reports must also be provided on a quarterly basis. Please have all original signatures in blue ink.

**Financial Status Reports (FSRs)** are required and must be submitted within 90 days of the anniversary of each project year (interim FSRs) and a Final FSR must be submitted within 90 days of the end of the project period.

**SF-272 Federal Cash Transactions Reports** are required.

**Additional reports and documents:** An annual performance report, annual Disadvantaged Business Enterprise Report, Quality Assurance Project Plan (required to be submitted and approved by EPA prior to any sampling), and/or project outputs may also be required to be submitted under the terms and conditions of the grant.

**Compliance with OMB Circulars will be maintained at all times.**

**NOTE:** This Project does not involve ground disturbing, precedent setting, or highly controversial activities subject to, or potentially subject to, compliance with the National Environmental Policy Act (NEPA). All Agency requirements related to Quality Assurance must be met prior to implementation, if applicable.

*EPA Region 10 FY 2006 Alaska Tribal Multi-Media Revised Budget for Nelson Island Consortium - Keeping our traditions and reducing our risks: Developing sustainable camp practices that protect subsistence.*

Initial Budget Drawdown Through Period Of Use*	Component - commitment	Item	Unit Cost	Basis	Qty	Total Cost
		<b>Personnel</b>				
Oct 15 06' To Sept 30 07'	All	Project manager, supervises and goes out monthly with campsite monitors, samples for base WQ parameters, compiles data from other villages, coordinates with interested parties including USFWS, USGS, NRCS, DEC, sets up lead shot clinic, 20 hrs per week for 50 weeks	\$16.50	per hr	1000	16500
Oct 1 06' To Sept 30 07'	All	Bookkeeping, 4 hrs per week	\$15	per hr	208	\$3,120
Oct 22 06 To Sept 30 07'	1-3, 2-5	Campsite and trail monitor staff persons, 2 days per week, 46 weeks	\$16		736	\$11,776
		<i>Personnel Subtotal</i>				\$31,396
Project Period	All	<b>Fringe</b>	18.00%	lump	1	\$5,651
		<b>Supplies</b>				
Oct 06 To Sept 07	1-3, 1-4, 1-7	Paper, ink for flyers	\$300	per month for 6 tribal communities	12	\$3,600
Oct 06 To Sept 08	1-3, 1-4, 1-7, 2-5	Digital camera, battery, case	\$240		1	\$240
Mar - July 07	7-Jan	Steel shot for education days in each village, 2 rnds per hunter or 9 boxes per village to give away as educational materials so that people will use them, hevi-shot (environmentally friendly)	\$25	box	54	\$1,350



Initial Budget Drawdown Through Period Of Use*	Component - commitment	Item	Unit Cost	Basis	Qty	Total Cost
Dec - Mar 07	1-6, 1-7	T-shirts with protecting subsistence sites message (in Yup'ik), half-youth, half adult to give out at environmental education events in each community, online shopping quote for 10 colors high quality black t-shirts (so people will wear them) Less colors we will make more t-shirts, but there is a minimum qty of 600 for more than 4 colors or for non-graphic art files.	\$6.60	per shirt	600	\$3,960
Nov 06 - Apr 07	1-7, 1-8	Hand augers <a href="http://iceaugersdirect.com/products/Storefront/Hand_Augers/storefront_hand.htm">http://iceaugersdirect.com/products/Storefront/Hand_Augers/storefront_hand.htm</a> (electrics are \$460 plus shipping), <a href="http://www.drockicecenter.com/lazer_hand.html">http://www.drockicecenter.com/lazer_hand.html</a> (video of hand-auger)	\$115	per auger with replacement blades	15	\$1,725
Dec 06' To Sept 30 07'	2-3, 2-5	Sampling supplies: box of nitrile gloves (\$13), gauntlet gloves (2 @ \$20/pr = \$40))	53		1	\$53
Nov 06 - Sept 30 07'	2-3, 2-5	Incubator for Coliform tests <a href="http://www.bestlabdeals.com/Incubator_Refrigerator_Combo_p/rev002.htm">http://www.bestlabdeals.com/Incubator_Refrigerator_Combo_p/rev002.htm</a> OR <a href="http://vwrlabshop.com/product.asp?pn=0009372&amp;bhcd2=1149624611">http://vwrlabshop.com/product.asp?pn=0009372&amp;bhcd2=1149624611</a>	\$600	per unit	1	\$600
Nov 06 - Sept 30 07'	2-3, 2-5	Coliscan Easygel Tests, including shipping, <a href="http://www.micrologylabs.com/Home/Our_Methods/Coliscan_Easygel">http://www.micrologylabs.com/Home/Our_Methods/Coliscan_Easygel</a> (These come self-contained for everything you need and are packed in a cooler then brought to our incubator. Three types of coliform can be distinguished by color, and then colonies are counted.)	\$20	per 10 tests	10	\$200
	2-3, 2-5	Sample Cooler + reusable ice packs	\$25	per unit	1	\$25
		<i>Supply Subtotal</i>				\$11,753
		<b>Equipment</b>				

Initial Budget Drawdown Through Period Of Use*	Component - commitment	Item	Unit Cost	Basis	Qty	Total Cost
Nov 06 - Sept 30 07'	2-3, 2-5	Global W-22XD \$6,365 (measures depth, turbidity as well), Global FP201 flow meter \$745. Note rental of flow probe = \$400 monthly and rental of turbidity meter is \$400 monthly, rental of DO - \$400 monthly. Thus, rental price for nine months would be well over \$10,800. The W-22XD is very simple to use with easy "push button" calibration and will allow us to measure water depth, temperature, nitrates, etc. with one sample and accurately. This is necessary due to the difficult field conditions and the difficulty in replacing parts, etc. This unit provides continuous data logging for up to one month. USGS recommended for ease and accuracy.	\$6,365	per unit	1	\$6,365
		<b>Travel</b>				
Mar 07'	1-4	Travel to steel shot clinic, to be piggy-backed on CARE or other Nelson Island Meeting	\$0	per person	0	\$0
Nov 06'	2-3, 2-4	WQ consultant travel to training, \$650 airfare (estimate), \$40 per day meals for 5 days (quote), \$120 per night for one night in Bethel (average cost), lodging provided free in Umkumiut	\$970	per trip	1	\$970
		<i>Travel Subtotal</i>				<i>\$970</i>
		<b>Other</b>				
Mar 07'	1-5, 1-7, 1-3	Camp Pamphlet Printing, 8-page, 4 color booklets (inc. front and back) printing costs, (quote from www.imagingbureau.com)	\$0.50	per pamphlet	3000	\$1,500
Oct 25 06' To Sept 30 07'	1-3, 2-5	Campsite monitoring, oil and gas, once weekly for 46 weeks, gas @ \$6/gal, oil at \$4/quarter, 2 vehicles each trip ( 2 persons) for safety and WQ QA/QC, estimate based on trips to subsistence area.	\$50	per vehicle trip	92	\$4,600
Oct 25 06' To Sept 30 07'	1-3, 2-5	ATV/Snowmachine rental, quote and typical for this region	\$60	per trip	92	\$5,520
Nov 06' To Sept 30 07'	1-3:1-8, 2-2:2-5	Technical assistance in reporting and performance monitoring, templates, analysis, graphical layout reqs. for pamphlets.	\$50	Per hour	72	\$3,600
Feb, June, Aug 07'		Lab shipping costs	\$75	per shipping	3	\$225

Initial Budget Drawdown Through Period Of Use*	Component - commitment	Item	Unit Cost	Basis	Qty	Total Cost
		<i>Other Subtotal</i>				\$15,445
		<b>Contracting</b>				
Feb, June, Aug 07'	5-Feb	Lab Analysis: BTEX, DRO, metals at 4 camps, 1 reference site, 3 contaminant sampling events with 1 duplicate each test, each event, 6020 23 RCRA metals, DRO AK120, , BTEX , 1 priority pollutant scan event. Additionally, WQ parameters will be collected at each site, as well as additional identified sites during open water season at least monthly (via test equipment). Quotes obtained from certified Alaska lab, with 10% discount offered for Tribes.	\$11,020	lump lab costs	1	\$11,020
Nov 06' To Sept 30 07'	2-3. 2-4, 2-5	WQ QAPP development in consultation with NIC , interpretation, 5-day sampling training and QAPP outline (locations, goals, etc.) for all NIC environmental and NIC staff that wish to attend, calibration training, phone technical assistance over course of sampling, DASLER data entry, (assuming phone/fax assistance does not exceed 40 hours) quote	\$55	per hr	280	\$15,400
		<i>Contracting Subtotal</i>				\$26,420
		<b>Total</b>				<b>\$98,000</b>
		<b>Cost per Tribe</b>				<b>\$14,000</b>

### WQ Breakdown

	# samples+dup+ref site	# sampling events/yr	Total # samples	Cost/sample	Total Cost	Method reference
BTEX	6	3	18	75	1350	SW8021
BTEX trip blanks (price = 1/2 sample = ~\$40)	6	3	18	40	720	SW8021
DRO	6	3	18	80	1440	AK102

<b>Metals, total 23 ion ICP scan</b>	6	3	18	150	2700	SW6020/EPA 200.8
<b>Hg, total</b>	6	3	18	45	810	EPA 245.1
<b>Priority Pollutant Scan</b>	4	1	3	1000	4000	6020, 8260, 8270, 8081/8082, 7470/7471, 8290 (2,3,7,8-TCDD only), Cyanide, and total phenols
<b>TOTAL</b>					11020	

<b>component 1 cost</b>	<b>component 2 cost</b>
<b>\$55,108</b>	<b>\$42,892</b>