

MAKAH TRIBE

P.O. BOX 115 • NEAH BAY, WA 98357 • 360-645-2201



Makah Sustainable Fishing Fleet Project Initiative

Announcement:

DERA NCDC: EPA-OAR-OTAQ-11-01

Applicant Information

- Applicant: Makah Tribe
 - Fisheries Sustainable Resources Division/Air Quality Program
 - Port of Neah Bay
- Address: P.O. Box # 115
Neah Bay, Washington 98357
- Contact Person: Dana Sarff; Sustainable Resources Coordinator
- Contact Phone: (360) 640-8125
- Contact Fax: (360) 645-2323
- Contact E-Mail: sarff.dana@centurytel.net
- DUNS Number: 07-184-5952

Eligible Entity:

The Makah Tribe is a federally recognized Indian Tribe

Total Project Cost:

| | |
|--------|-------------------|
| Makah: | \$ 207,767 |
| EPA: | <u>\$ 750,000</u> |
| Total: | \$ 956,767 |

Target Fleet:

The target fleet is a marine fleet consisting of Makah Tribal commercial fishing vessels. Out of approximately seventy vessels in the fleet, twelve fishing business/vessel owners have chosen to directly participate in this project.

Work Plan

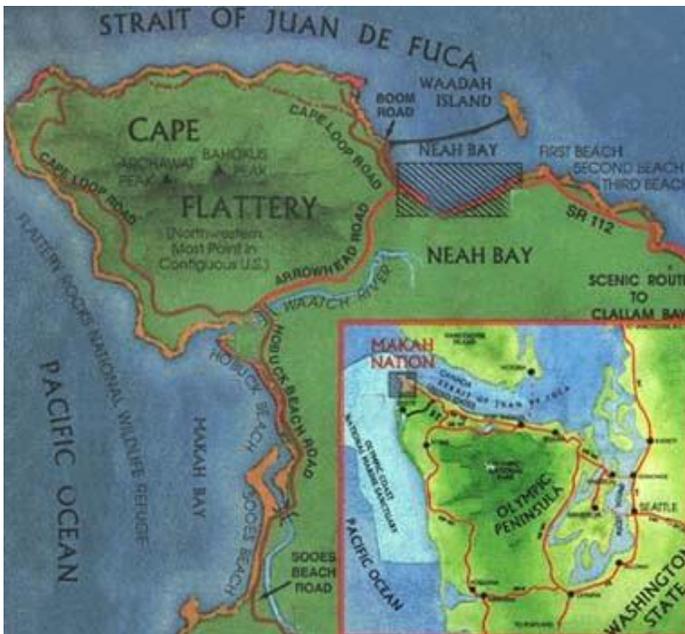
Section I: Project Summary

Background

Some of what follows is information taken from the Makah Tribe's official written Marine Resources Statement made to the White House Ocean Policy Task Force on July 14, 2009. This document provided a summary of the importance of environmental and marine resources to the Makah Indian Tribe and the Tribe's role in managing and conserving those resources.

The Tribe's ancestral home and permanent reservation is located on the northwest corner of the Olympic Peninsula in the State of Washington, at the entrance to the Strait of Juan de Fuca from the Pacific Ocean.

The reservation is 30,067 acres in size and is bounded to the west by the Pacific Ocean, to the north, by the Strait of Juan de Fuca, and to the east, by privately owned commercial timber-lands. To the south, the reservation is bounded by privately owned timber-lands and by Olympic National Park. The following is a map showing the location of the Makah Indian Reservation.



Based on Year 2000 Census information and Year 2006 updated Tribal Enrollment information, the population of the Makah Reservation is approximately 1,700 people including both Tribal and non-Tribal community members.

For centuries, the Makah have managed and sustainably harvested the resources of the sea from this strategic vantage. In 1855, they told United States treaty negotiators that the sea was their country and that without it they would be poor. In the Treaty of Neah Bay, the Tribe agreed to cede most of its lands to the United States, but reserved "the right of taking fish and of whaling and sealing at usual and accustomed grounds and stations".

The ocean and its resources remain the foundation of Makah economy, culture and subsistence today. The Makah Tribe has the largest treaty fishery for marine species in the United States. Harbored at Neah Bay in the Makah Marina, more than 70 marine fishing vessels participate in the Makah fishery, including 40 longline vessels and 12 trawlers. Makah's adjudicated fishing areas extend 40 miles into the Pacific Ocean and east about 50 miles into the Strait of Juan de Fuca, although much of the Tribe's traditional

marine territory is now in Canadian waters and not available to the Tribe. Makah fishermen commercially harvest salmon, halibut, many species of groundfish (including whiting, black cod, flatfish and a variety of rockfish), and shellfish, which collectively provide approximately fifty percent of household income on the Makah Reservation.



Aerial photo of the Makah Marina at Neah Bay



Makah Marina

As interpreted by the Federal courts, the treaty right of taking fish guarantees to the Tribe not just the right to harvest fish but the right to manage environmental and marine resources consistently with sound conservation principles and the right to protection and preservation of the marine environment.

At the same time, the treaty right imposes a trust responsibility on the Federal government to consult with the Tribe and assist in the protection of the Tribe's treaty resources and management rights.

The Tribe's extensive involvement in environmental management forums and marine resource protection initiatives demonstrates the central importance of marine resources to the Tribe and its commitment to environmental conservation and protection. The Tribe looks to the Federal Government as a partner and trustee to preserve and protect these resources and the Tribe's ability to harvest them sustainably for generations to come.

Over the past decade, the Makah Tribe has endeavored to build infrastructure and capacity within its environmental programs, which include solid waste, water and air quality, and environmental health. As part of the effort, the Makah Air Quality Program was established in 1999, with much of that time used to build infrastructure and capacity under CAA 103 funding. Two years ago, the program began receiving funding under CAA 105, and more recently became the first Air Quality Program to be included under Performance Partnership Grant funding pursuant to, and under, Treatment as a State (TAS).

The Makah Air Quality Program's "2003 Makah Emissions Inventory" was instrumental in the development of the Makah Air Quality Program's strategic planning efforts, and identified mobile marine diesel emissions as a major area of concern, both locally, within the Strait of Juan de Fuca, and along the Pacific Coastline. Pursuant to this, IMPROVE (PM_{2.5}-PM₁₀) monitoring began in August of 2006 followed closely by Nephelometer PM_{2.5} and meteorological monitoring. Recent analysis and interpretation of the data shows that there "seems little doubt that Makah sees shipping emissions much more clearly than its neighbors" (IMPROVE sites to the east and south along the Northern California coastline).

In addition to this, the Puget Sound Maritime Air Emissions Inventory (PSMAEI) was released in April 2007. Portions of the inventory data are organized into the regional clean air jurisdictions. The Makah Reservation, Clallam County, and the Olympic Peninsula are included in the Olympic Region Clean Air Agency (ORCAA) regional area. Out of the total maritime related emissions inventoried in the PSMAEI, the ORCAA region receives 40% of all NO_x, 4% of VOCs, 2% of CO, 83% of SO₂, 13% of PM_{2.5}, and 66% of Diesel PM (DPM). Furthermore, Clallam County is the area of major concern for maritime emissions within the ORCAA region and in Washington due to maritime activity on the Strait of Juan de Fuca. Clallam County was identified as the area with the highest levels of NO_x, SO₂, PM₁₀, PM_{2.5}, and DPM emissions out of all 12 counties inventoried in Washington State.

Air monitoring data (AQS), analysis and interpretation show the Makah Reservation to be in attainment, however the Reservation is in close proximity to Olympic National Park, which is one of the 156 Mandatory Class I Federal Areas listed under 40 CFR Part 81, and is the largest such area in the State of Washington, with almost 900,000 acres, managed by the National Park Service.

Within the past few years, and especially as fuel prices started to rise, inquiries from Makah Tribal fishermen in reference to helping them improve fuel efficiency started filtering into the Makah Air Quality Program. Our fishermen had heard of government programs that could assist both public and private fleets in improving fuel efficiency and air quality. A large part of this concern was due to diesel emissions and exhaust resulting in "indoor air pollution" aboard their vessels, which many fishermen felt were causing them health problems. More recently, outreach and education efforts by the Makah Air Quality Program has also helped make the fishermen and the community aware of outdoor "ambient" air quality and greenhouse gas emissions related to climate change. Many of them know Alaskan Natives that are experiencing first hand, the effects of climate change in their communities.

Pursuant to these overwhelming concerns, the Makah Sustainable Fishing Fleet Project Initiative was developed with direct support from the community. The goals and objectives of this project are multidimensional, and fall not only into the Makah Air Quality Program's Strategic Plan, but also address issues of energy efficiency and economic/business sustainability.

Makah Sustainable Fishing Fleet Project

There are two elements to this project. Both are aimed at achieving a significant reduction in diesel emissions.

The first element involves a two-year strategy aimed at the re-power (re-builds and/or replacements of old engines) of eligible Tribal fleet commercial fishing vessels to vastly improve fuel efficiency, thereby not only decreasing marine fuel consumption and diesel emissions, but also cutting down on fuel costs, helping make the fishing businesses that own these vessels more competitive in the market place. Diesel emission reduction solutions are those that utilize a certified engine configuration and/or a verified technology, as defined in Section I of the RFP.

The second element, although not a part of this application, involves upgrading the auxiliary power system at the Makah Marina to accept larger fishing vessels that cannot at this time hook up to the system. This inability to run off of the land based power grid while berthed results in very high periods of time during which these vessels auxiliary engines are idling.

Re-Power of Eligible Makah Commercial Fishing Fleet Vessels

During 2009 and 2010, outreach and education efforts, including the development of a Survey/Pre-Application form, have been conducted to recruit Makah commercial fishing business/vessel owners to participate in this project. Out of a total of seventy vessels in the Makah Tribal fishing fleet, these efforts have resulted in the application of twelve eligible Makah commercial fishing vessels. These vessels are under the jurisdiction of the Makah Tribe through the Fisheries Management Department, and owners are required to have Tribal Membership Fishing I.D. cards. In addition, under Tribal law, they must submit to all Tribal fishing regulations that are resultant from intertribal, state, regional, national and international negotiations. Vessels are owned by individual fishing business/boat owners.

The following chart is a summary, shown as averages, of vessel information provided by participating fishing business owners for this project. Vessel sizes range from 39' in length to 88' in length with primary engines ranging from 80 horsepower to 450 horsepower. A chart showing detailed information on the fleet applicants is included in the Appendix of this application as an attachment.

Vessel Statistics Summary Chart

| Item | Statistic |
|-----------------------------------|------------------|
| Avg. Yr. Vessel Made | 1955 |
| Avg. Vessel Length | 53 Feet |
| Avg. Age Vessel | 57 Years |
| Avg. Primary Engine Size | 270 HP |
| Avg. Age Primary Engine | 32 Years |
| Avg. Auxiliary Engine Size | 90 HP |
| Avg. Age Auxiliary Engine | 33 Years |
| Avg. Last Marine Survey Completed | 2004 |

Analysis of this information and further inspection of the boats by the Air Quality Specialist shows that all of these vessels are seaworthy. In addition, all of these vessels, due to the average age of the engines, will require replacement technology, including both primary and auxiliary power-plants. This conclusion was confirmed upon review of eligible EPA retrofit technologies and meetings with qualified marine contractors. Finally, each vessel owner has submitted a signed "letter of intent" stating that he/she will commit, in the form of a money order or cashiers check, an amount of not less than 25% of the engine replacement costs, prior to any work being performed by EPA funding. "In kind" contribution of owner labor may be considered in lieu of cash however the mechanism for this has not been determined at this time and would have to be negotiated between the owner of the vessel and the diesel retrofit contractor, and accurate records kept for reporting purposes. Letters of intent are included in the Appendix of this application as attachments.

Revised Proposal Section Components

Reduced Funding

Initially, the total project cost was anticipated to be \$ 1,280,546. Based on best estimates, this would cover the cost for the repower of all twelve participating vessels. Of this, the Makah Tribe applied for \$ 999,136 in EPA funds to implement this project. Pursuant to EPA notification that the Makah Tribe has been selected to receive a maximum of \$ 750,000, or a 25% reduction in funding, the total project cost is now anticipated to be approximately \$ 957,767, with the Makah to provide a total of \$ 207,767 in matching funds.

Statistics, Costs, Data, and Emissions Calculations

Vessel statistics, data, and costs throughout this application have been based on averages of all twelve vessels. This was done to facilitate simplicity and continuity in these statistics, data and the resulting calculations, and in order to lessen the chance of making mistakes in providing this information to the grant reviewers and the EPA. Because it is not known which nine vessels out of the

twelve will be receiving engine repowers, this methodology lends itself to applying a simple 25% reduction to this proposal, not only in costs, but in emissions in each emissions category, and in each cost/benefit category.

First to “Match” First Served

Pursuant to this funding reduction, it is anticipated that not all participating vessel owners will receive funding. It is estimated that out of twelve vessels, 75% (nine vessels) will be funded. Since all vessel owners participated in good faith, and in order to keep the 75% (EPA)/25% (vessel owner) cost equation as was initially agreed upon between the EPA, the Tribe, and the vessel owners, follow up meetings and discussions with the stakeholders were held. These discussions with Makah Tribal Council, vessel owners, and Fisheries resulted in a “first to match, first served” implementation strategy. It is not anticipated that all vessel owners will have the 25% match when project start up begins. Decidedly, those vessel owners who are able to provide their 25% matching funds first in a dedicated vendor account, would be approved for retrofit first. In order to facilitate fairness in this process, it was further determined that vessel “lay away” accounts could be set up with the diesel engine contractor/vendor. As matching requirements are met by the vessel owners, a “notice to proceed” with work would be issued by the Project Manager. Close monitoring of these accounts by the Project Manager, Coordinator, and the vendor would ensure that this strategy will be implemented in a timely and fair manner.

Timeline for Completion of Eligible Re-Powers

The following chart shows the timeline for completion of this project. Due to having to work around seasonal commercial fisheries openings, there is by necessity, flexibility built into the timeline. It is anticipated that this project will take no more than two years to complete.

Timeline

Timeline development is structured around a “diversified fishery” season beginning roughly in February and ending in September on an annual basis. The months of October through January are the optimal months during which to complete engine repowers. Because it is anticipated that we will not receive the assistance agreement until October of 2011, we will be mobilizing, staging, and doing start up during this ideal window, and will miss most of the 2011 window of opportunity for repowers, although, depending on the fishing business/vessel owners and their financial readiness to provide the matching funds, it may be possible to get some engines installed as late as January and February of 2012. This will be at the discretion of the vessel owners, however we have included a Phase I installation window in the timeline that will facilitate this. Likewise, some vessel owners may opt to shut down operations temporarily for repower installations.

| Item/Activity | Leading Role/Responsible Party(s) | Date Range |
|--|---|--|
| Mobilization and staging. Including budget development, development of final job description for the Makah Sustainable Fishing Fleet (MSFF) Project Coordinator I, advertisement, interviews, and selection. Office and station set up, etc. | Makah Human Resources, Makah Fisheries Sustainable Resources Coordinator, Air Quality Specialist, and Interview Committee | October-November, 2011 with completion by no later than November 30, 2011. |
| Project Coordinator I orientation. | Makah Fisheries Sustainable Resources Coordinator/Project Manager, Air Quality Specialist | December, 2011 w/ completion by no later than December 31, 2011. |
| Outreach and education. <ol style="list-style-type: none"> 1. Contact and meet with vessel owners and co-develop anticipated work plan and schedule for repowers. 2. Continue to accept pre-applications/surveys from interested Makah fishing business/vessel owners for future phases. 3. Community outreach and education about project. | Makah Fisheries Sustainable Resources Coordinator/Project Manager, Air Quality Specialist and MSFF Project Coordinator. | December, 2011 w/ completion of Item # 1 by no later than December 31, 2011. Items # 2 and # 3 are ongoing during entire project. |
| Develop RFQ/RFP for qualified marine consultant/surveyor. Advertise per EPA and Tribal policies and procedures. Contract | Vessel owners, Sustainable Resources Coordinator/Project Manager and MSFF Project Coordinator | October-December 2011 w/ completion no later than December 31, 2011. |

| | | |
|--|---|--|
| development and sign. | | |
| Conduct vessel inspections/surveys. Marine consultant/surveyor to confirm vessel eligibility. and develop vessel scope of work. | Vessel owners, Sustainable Resources Coordinator/Project Manager, MSFF Project Coordinator and Marine Vessel Consultant/Surveyor | November-January 2012 w/ completion no later than January 31, 2012. |
| Based on vessel scope of work, develop “Advertisement for Bids” for contracting services, postings, bid openings. Advertise per EPA and Tribal policies and procedures. Contractor selection/contract. | Sustainable Resources Coordinator/Project Manager, MSFF Project Coordinator and Marine Vessel Consultant/Surveyor | |
| Off site dry dock (if required) and retrofit of vessels. Including coordination between vessel owners and contractor, meetings, and facilitate replacements. | Vessel owners, Sustainable Resources Coordinator/Project Manager, MSFF Project Coordinator, Marine Vessel Consultant/Surveyor and Marine Diesel Retrofit Contractor | Phase I: February 2012-March 2012 Note: Fishing season between February and September 2012. Phase II: (“lay away” participants): October 2012-January 2013 Completion of both phases by no later than March 31, 2013. |
| Operational tests and adjustments. | Vessel owners and Marine Diesel Retrofit Contractor | Phase I and Phase II: Ongoing from about March, 2012 through to April 2013 w/ completion no later than April 30, 2013. |
| Project close out and reports | Makah Sustainable Resources Coordinator/Project Manager and the MSFF Project Coordinator | Completion by no later than May 30, 2013 with report no later than September 30, 2013. |

The Makah Tribe shall ensure that the scrapping of the old engines shall be implemented by the marine vessel repower contractor and shall be written into the bid documents. Scrapping of old engines shall be certified by the contractor, and there shall be no program/project income produced from scrapping of these engines. The Makah Tribe shall also represent the vessel owners to ensure that the warrantee/guarantee period for equipment, materials and labor, which shall be the responsibility of the marine vessel repower contractor, shall be enforced. Once the guarantee/warrantee period has expired, maintenance and repair of all retrofitted engines shall be the sole responsibility of the Makah fishing business/vessel owners. The existing older engines that are currently in these vessels that have been maintained and kept in good repair for so long are a testimony to the pride and commitment by Makah Tribal fishermen in pursuing their Tribal Treaty fishing rights, their culture, and subsistence levels for food security within the community. All of these fishing vessel owners are members of the Makah Fishermen’s Cooperative, and work in partnership to help one another in the development of sustainable commercial fishing business efforts. This project initiative is part of that effort.

Section 2: Environmental Results: Outputs and Outcomes

Outputs and outcomes include but may not be limited to the following:

Outputs/Outcomes Chart

| Item/Activity | Outputs | Outcomes |
|---|---|--|
| Mobilization and staging. Including budget development, development of job description for MSFF Project Coordinator, advertisement, interviews, and selection. | Job description, human resources/personnel interview, selection, and hiring documentation Periodic and final performance reports. | Task force capacity to implement this project. |

| | | |
|---|--|---|
| MSFF Project Coordinator orientation/PETE training. | 90 day employee evaluation and PETE Certification. Periodic and final performance reports. | Task force capacity to implement this project |
| Development of RFQ, “Advertisement for Bids” for consulting and contracting services, postings, and consultant/contractor selection/contract. Including qualified marine consultant/surveyors and marine diesel engine retrofit contractors. Advertise per EPA and Tribal policies and regulations. Contract development and sign. | Request for qualifications, advertisement for bid/posting documentation, proposal and bid comparison documents and contract documents. Periodic and final performance reports. | Task force capacity to implement this project |
| Conduct marine surveys: Licensed/bonded/insured marine surveyor to confirm vessel eligibility. | Marine survey reports. Contractor invoice for service fees, periodic and final performance reports. | Confirmation of vessel eligibility to proceed with expenditures, engine replacements. |
| Off site dry dock and retrofit of vessels. Including coordination between vessel owners and contractor, meetings, and facilitate replacements. | Contractor, supplier invoices, confirmation of engine recycle/dismantle, photos, periodic and final performance reports. | Retrofitted vessels with engine replacements, reduction in diesel emissions in all categories as shown in emissions reduction chart. Human and environmental health related benefits. |
| Operational tests and adjustments. | Fishing business/vessel owner reports, contractor documentation, periodic and final performance reports. | Maximum engine performance and final acceptance of work. |
| Project close out and reports | Final performance report. | Project completion. |

Estimated Reduction in Emissions

The following chart represents fuel consumption averages determined from statistics gathered on the twelve participating vessels, including engine size, number of hours of operation annually, and gallons of fuel used per hour projected to an average annual use rate per vessel, etc.

| Primary Engine | Hours/Year | Gallons/24 Hr | Gallons/Hr | Gallons Annually |
|-----------------------|-------------------|----------------------|-------------------|-------------------------|
| 270 HP | 2,833 | 122 | 5.07 | 14,363 |

Using the EPA’s Emissions Quantifier, these averages were then entered to determine estimated reduction in emissions. These estimates are the result of using combined averages for both primary and auxiliary engines, since participants did not have the breakdown information needed to separate the two, so the total average number of hours operated annually and gallons of fuel per hour included both engines. Annual estimates were then projected to represent lifetime estimates based on the life expectancy of a new engine before a re-build would be needed. Life expectancy information was provided by Northern Lights, the manufacturer of Luger engines, which are used for estimating purposes.

Revised Reduction in Emissions Estimates

Pursuant to the 25% reduction, the following estimates are based on the repower of nine vessels

| Item | Nox (tons/year) | PM (tons/year) | HC (tons/year) | CO (tons/year) | CO2 (tons/year) |
|----------------------------------|----------------------------|---------------------------|---------------------------|---------------------------|----------------------------|
| Baseline Engine | 3.1020 | 0.0854 | 0.0792 | 0.503 | 159.4293 |
| Baseline Fleet (9 X Engine) | 27.918 | 0.7686 | 0.7128 | 4.527 | 1,434.8637 |
| Percent Reduced | 42.8% | 56.7% | 29.6% | 35.10% | 14.0% |
| Amount Reduced/Year | 11.949 | 0.436 | 0.211 | 1.589 | 200.881 |
| Amount Reduced/Lifetime (7 yrs.) | 83.643 | 3.052 | 1.477 | 11.123 | 1,406.167 |

Note: Because the Quantifier did not have 270 HP in dropdown selections menu, an interpolation was done between 240 HP and 320 HP which were the two nearest sized engines available in the selections.

The cost effectiveness of all pollutants combined (1,505 tons) per ton over the lifetime of the engines is as follows:

| | |
|--------------|---|
| Total: | \$ 636/ton or about \$ 90.81/ton annually |
| EPA Share: | \$ 499/ton or about \$ 71.23/ton annually |
| Owner Share: | \$ 137/ton or about \$ 19.57/ton annually |

| Item | Nox | PM | HC | CO | CO2 |
|------------------------------|----------|---------|---------|---------|-----------|
| Lifetime Cost/Ton Pollutants | \$ 37.65 | \$ 1.40 | \$ 0.77 | \$ 4.58 | \$ 591.61 |

It should be noted here that these new engines are listed as “Tier 2” engines and will improve fuel efficiency by about 14%. CO2 was calculated by using this fuel efficiency figure at a rate of 22.2 pounds per gallon as per EPA guidelines.

Section 3: National Programmatic Priorities

The Makah Air Quality Program’s “2003 Makah Emissions Inventory” was instrumental in the development of the Makah Air Quality Program’s strategic planning efforts, and identified mobile marine diesel emissions as a major area of concern, both locally, within the Strait of Juan de Fuca, and along the Pacific Coastline. Pursuant to this, IMPROVE (PM2.5-PM10) monitoring began in August of 2006 followed closely by Nephelometer PM 2.5 and Met monitoring. Recent analysis and interpretation of the data shows that there “seems little doubt that Makah sees shipping emissions much more clearly than its neighbors” (IMPROVE sites to the east and south along the Northern California coastline).

In addition to this, the Puget Sound Maritime Air Emissions Inventory (PSMAEI) was released in April 2007. Portions of the inventory data are organized into the regional clean air jurisdictions. The Makah Reservation, Clallam County, and the Olympic Peninsula are included in the Olympic Region Clean Air Agency (ORCAA) regional area. Out of the total maritime related emissions inventoried in the PSMAEI, the ORCAA region receives 40% of all NO_x, 4% of VOCs, 2% of CO, 83% of SO₂, 13% of PM_{2.5}, and 66% of Diesel PM (DPM). Furthermore, Clallam County is the area of major concern for maritime emissions within the ORCAA region and in Washington due to maritime activity on the Strait of Juan de Fuca. Clallam County was identified as the area with the highest levels of NO_x, SO₂, PM₁₀, PM_{2.5}, and DPM emissions out of all 12 counties inventoried in Washington State.

Air monitoring data (AQS), analysis and interpretation show the Makah Reservation to be in attainment, however the Reservation is in close proximity to Olympic National Park, which is one of the 156 Mandatory Class I Federal Areas listed under 40 CFR Part 81, and is the largest such area in the State of Washington, with almost 900,000 acres, managed by the National Park Service.

Section 4: Regional Significance

This section is not required for Tribal applicants.

Section 5: Past Performance-Programmatic Capability and Reporting on Results

Under the Treaty of 1855, the Makah are a federally recognized Indian Tribe. By Constitution, the Makah Tribe is governed by a five-member Tribal Council. The Tribal Council currently operates with an annual budget of approximately \$14 million. In any given year, between \$3 and \$4 million of the Council’s budget is derived from grants and contracts.

The Makah Tribe has extensive experience in managing federal programs under the Indian Self-Determination and Education Assistance Act, 25 U.S.C. §§ 450 *et seq.* Based on this experience, in 1991, the Makah Tribe became one of the first tribes in the United States to enter into a self-governance compact with the United States government under the Tribal Self-Governance program authorized under 25 U.S.C. §§ 458aa *et seq.* The self-governance compact transfers control to the Makah Tribe over funding and decision-making for most Federal programs previously administered by the Bureau of Indian Affairs. The compact allows the Tribe to redesign and administer BIA programs and services according to tribal priorities.

Under the compact, the Tribe is required to provide an annual single organization-wide audit as prescribed in the Single Audit Act of 1984, 31 U.S.C. § 7501. The Tribe follows all single audit requirements including:

- A-87 Cost Principles for State and Federal Governments and Indian tribes,
- A-102 Grants & Cooperative Agreements with State & Local Governments, and

- A-133 Audits of States, Local Government and Non-Profit Organizations.

The Tribal Government consists of several departments and programs, these include the offices of the General Manager and the Operations Manager, Administrative Services , Community Planning and Economic Development, Public Works, Emergency Services/Clinic, Social Services Department, Environmental Department, and the natural resources departments, including both Forestry and Fisheries management. The Port of Neah Bay includes the Makah Marina and the Office of Marine Affairs. The Tribe also has formed Makah Business Enterprises, which is an umbrella organization that manages the various “for profit” small businesses that the Tribe operates.

The Makah Tribal Council has a fully staffed accounting office with adequate financial controls in place; all accounting is computerized. There is an Administrative Services Manager who supervises the following programs: Accounting, Budget Office, Contract Specialist, Property Management, and Quasi-Enterprises. Monthly expenditure reports are prepared on every grant/contract and program, and distributed to department directors, who are responsible for expenditure approval and the day-to-day management. The Contract Specialist monitors all grants and contracts. Administrative support and direct management of this grant shall take place within Fisheries Management under the Sustainable Resources Division.

Makah Fisheries Management

In order to implement its management rights and responsibilities, the Tribe has a Fisheries Management Department that employs professional fisheries managers and staff. Through this department, the Tribe is actively involved in international, federal, state, and intra-tribal eco-system based management processes. To implement ecosystem based management, the department employs a full time manager, a research scientist, a marine mammal biologist, and two fisheries biologists. This core staff is supported by an established Watershed/Habitat Division, a Sustainable Resources Division, which includes both Air and Water Quality Programs, and a Fisheries Enhancement Division. The Fisheries Enhancement Division includes the Makah Tribal Hoko River Fish Hatchery, and a working partnership with the Makah National Fish Hatchery. The Fisheries Department also works closely with the Makah Marina and the Office of Marine Affairs. Fisheries also works closely with the Forestry, the Environmental Department, which includes solid waste and environmental health, and the Community Planning and Economic Development Department.

Sustainable Resources Division and the Makah Air Quality Program

The Sustainable Resources Division is supported by an EPA R10 funded PPG assistance agreement, which includes the following programs:

- General Assistance Program (GAP)
- Air Quality Program (CAA 105)
- Water Quality Programs (WQA 106 and 319)

The Makah Air Quality Program was established in 1999, with much of that time building infrastructure and capacity under CAA 103 funding. The program recently began receiving funding under CAA 105 and more recently became the first Air Quality Program to be included under Performance Partnership Grant funding pursuant to, and under, Treatment as a State (TAS).

The EPA Region 10 Assistance Agreement/Performance Partnership Grant which the Sustainable Resources Division and the Air Quality Program currently operate under is as follows:

| | |
|-------------------------------------|---|
| Project Title: | Makah Performance Partnership Grants |
| Assistance Agreement Number: | BG-97033802-4 |
| Funding Agency: | Environmental Protection Agency |
| CFDA Number: | 66-605 |
| Award Amount: | \$ 1,677,635 |
| Project Period: | October 1, 2006-September 30, 2011 |

The applicant is successfully managing the four grant programs under this PPG Assistance Agreement pursuant to all EPA agreement conditions and reporting requirements and pursuant to all Makah Tribal Policies and Procedures. Programs and projects under this agreement are ongoing until September 30, 2011. To date, all reporting requirements and technical reports have been submitted in a timely manner.

Successful and documented outputs and outcomes have included, but are not limited to the following:

One of the objectives under CAA 105 PPG funding is mitigation of air pollution as part of a larger outreach and education element that is related to the Makah Air Quality Program Strategic Plan. It is felt that project initiatives that have an immediate effect in the community, have high visibility, receive community support and are community based, are the most viable form of outreach and education when addressing our air pollution issues. Air pollution areas of concern here are as follows:

- indoor air pollution
- woodstove smoke and open burning pollution
- marine diesel emissions and pollution
- climate change

To date, various projects have been initiated to address these issues. These include the following:

- Makah Indoor Air Quality Assessment Project
- Makah Emission Inventory Project
- Makah Clean Air, Healthy Homes; Woodstove Changeout Project (Phase I for seniors/elders)
- Makah Woodsheds for Elders Project
- Makah Sustainable Fishing Fleet Project

The Makah Indoor Air Quality Assessment undertook the study of a cross section of residential, retail, and office buildings in the Makah Nation. This included about twenty-five buildings all together. This was primarily undertaken as a response to community concerns about mildew and mold in the indoor environment in a coastal temperate rainforest environment, where moisture and water penetration of the building envelope is a major issue. This was the first such comprehensive IAQ study conducted on any Indian Reservation in the United States. Conducted simultaneously and of longer duration was the even more comprehensive Makah Emissions Inventory Project, which addressed the sources and amount of air pollution in the outdoor “ambient” environment. This inventory is now part of the EPA’s National Emission Inventory (NEI) database. These two projects together helped to establish the Makah Air Quality Program’s Strategic Plan.

Addressing both indoor and outdoor ambient air quality became the focus of the Makah Clean Air, Healthy Homes Woodstove Changeout Project. Phase I of this project was successful in the replacement of non-EPA certified woodstoves with EPA certified woodstove appliances for fifty Tribal seniors and elders who were in high “respiratory risk” categories. Phase I of the project was completed by the end of the summer in 2008. This project is ongoing. Following closely behind this project and started in the summer of 2009 was the Woodsheds for Elders Project, which effectively provided modular one chord capacity woodsheds to fifteen elders who did not have a place to store firewood so that it could “season” and remain dry. This also is an ongoing project.

Section 6: Staff “Task Force” Team-Expertise and Qualifications

A “task force” management team lead by Makah Fisheries Department/Sustainable Resources Division staff will manage the “Makah Sustainable Fishing Fleet Project Initiative”. This staff is experienced in working with Tribal fishing businesses/boat owners, are trained and experienced in sustainable resources and the air quality field, and have a good track record of working with the Tribal Air Program team at Region 10 EPA. This staff will administer, manage and implement the project work plan during the entire two-year project period.

Makah Sustainable Fishing Fleet (MSFF) Project Manager:

Dana Sarff, the Sustainable Resources Coordinator, shall serve as the MSFF Project Manager, Dana shall conduct “overall” administrative/general management duties and activities related to this project. This shall include communication with the community and client/vessel owners, reporting to Tribal Council and upper level management. Oversight, guidance, and supervision of the MSFF Project Coordinator will also be an integral part of the Project Manager’s duties. The Project Manager, working with MSFF Project Coordinator and the vessel owners, shall oversee researching and identification of eligible contractors/vendors and the development of RFQ’s, RFP’s and bid documents related to this project, and oversight of the bidding and selection process. The Project Manager shall work closely with vessel owners in selecting the contractor/vendor that will be implementing the engine repowers. Issues and challenges in implementing this project shall be the direct responsibility of the MSFF Project Manager.

Dana has twenty years of tribally related program and project related planning, grant development/writing, and program/project related management and budgeting experience. Additionally, for over four years, he was the Air Quality Specialist with the Makah Tribe. As the Sustainable Resources Coordinator, he currently manages the EPA PPG Grant for air and water quality programs including GAP, CAA 105, CWA 106, and CWA NPS 319 funding.

Estimated time contribution to this project is .25 FTE or 1,040 hours over the 24 month life of this project at a salaried/hourly rate of +/- \$ 25.21 per hour This commitment cannot be used as “in kind” contribution

Makah Sustainable Fishing Fleet (MSFF) Project Coordinator:

The MSFF Project Coordinator will be a newly created two year term position within the Sustainable Resources Division of the Fisheries Program. The MSFF Project Coordinator shall be responsible for providing direct support to the Project Manager in carrying out his duties, and in performing the following:

Summary:

Working closely with the Sustainable Resources Coordinator/MSFF Project Manager, the MSFF Project Coordinator will serve to implement the project on a “day to day” basis and will serve as the primary Tribal liaison and contact person for fishing business/vessel owners who are participating in the Makah Sustainable Fishing Fleet Project. In addition, the Coordinator shall keep up to date contact information, shall plan and schedule meetings with clients, and is expected to develop and maintain updated files for each vessel owner and vessel. The Coordinator will keep clients informed as to project status, and represent client needs and goals within the organization to ensure quality service. The Coordinator will also coordinate with contractors and vendors to ensure that all project requirements are being met. The Coordinator must be readily available to assist clients with questions or concerns with their account.

Essential Duties and Responsibilities:

- Assist SRCIII as required to ensure efficient project planning, mobilization, staging, and implementation from beginning to end.
- Co-manage project budget and responsible for developing budget modifications, contract revisions, travel requests, check requests and purchase orders that are requested by the Project Manager.
- Responsible for all client communications and assisting with contractor/vendor communications, conflict resolution and compliance on both client and contract deliverables.
- Facilitates meetings
- Develop, manage, and maintain client accounts and records.
- Ensures that client issues are dealt with in a respectful, timely manner, informing the MSFF Project Manager of any problems that may arise.
- Works closely with the project team and clients in order to maintain a continuous knowledge of project status in order to identify potential issues and/or opportunities within or related to the project.
- Ensures that all processes and procedures are completed and that quality standards are met.
- Communicates the client’s goals and represent the client’s interests to the Tribe.
- Provide resources, outreach and education, and networking opportunities to clients when and where required.
- Conduct reviews on accounts on a regular basis to evaluate account status and to ensure that EPA, Tribal, and client objectives and concerns and are being addressed.
- Ensure that clients know how to use the services and provide assistance if necessary.
- Communicates with contractors and vendors and keeps accurate information about accounts receivable and accounts paid.
- Works closely with the Administrative Services Department at all levels.

During the slow or off season, he/she will be responsible for confirming that all client/vessel owner and vendor files are current, doing outreach and education on project and air quality related issues, report writing, accepting applications for future phases of the project, and assisting in developing continuing grant applications for future phases of the project.

Education and Experience:

- High School Diploma or general education degree (GED) plus minimum of one year of work experience with Makah Fisheries Management is required.
- A.A. or higher in Business, Accounting, Marketing or Computer Science is desirable.
- In addition, the applicant must have received or must have the ability to take EPA’s National Partnership for Environmental Technology Education (PETE) training in the proper management of EPA funds through assistance awards and/or have relevant experience with federal grants and contracts.
- Knowledge and experience working with Makah Tribal Policies and Procedures is desirable and preferred.

Estimated time contribution to this project is 1.00 FTE or 4,160 hours over the 24 month life of this project at a salaried/hourly rate of

between \$ 12.04 and \$ 14.17 per hour.

Note: For a full draft job description, please see Attachment J

Section 7: Budget

Please see following spreadsheet

| Item | EPA | Makah Tribe | Vessel Owners | Total |
|--|-------------------|-------------|-------------------|-------------------|
| PERSONNEL | 70,439 | | | 70,439 |
| Sustainable Resources Coordinator (Project Manager) 0.25 FTE (24 months): 1,040 hrs @ 25.22/hr | 26,229 | | | |
| DERA/Makah Sustainable Fishing Fleet Project Coordinator I (Per attached job description) 1.00 FTE: (18 months) 3,120 hrs @ 14.17/hr | 44,210 | | | |
| FRINGE | 21,642 | | | 21,642 |
| Sustainable Resources Coordinator (Project Manager) .37 x \$ 26,229 | 9,705 | | | |
| DERA/Makah Sustainable Fishing Fleet Project Coordinator I (Per attached job description) .27 x \$ 44,210 (Tribal Member Exempt) | 11,937 | | | |
| TRAVEL | 4,800 | | | 4,800 |
| Pre-award and post award project coordination meetings with boat yard/diesel contractor(s) and/or engine manufacturers in Port Angeles and/or Seattle over course of two year period. (Note: This project does not have a dedicated GSA vehicle, as do other programs. Although the Air Program GSA vehicle or a Tribal vehicle will be used if available, we are including personal vehicle mileage at government rates.) | | | | |
| Local travel Tribal Center to fishermans homes and Marina in Neah Bay. <i>Mileage: 6 miles r/t x 2-3 r/t per week for 104 weeks= 2,057 miles x .51</i> | 1,049 | | | |
| Long distance travel to Seattle meet with vendors and contractors. <i>Mileage: 308 miles r/t x 8 r/t = 2,464 miles x .51</i> | 1,256 | | | |
| <i>Ferry Fare: 8 r/t fares @ \$ 30.40</i> | 243 | | | |
| <i>Per Diem: 8 r/t x \$ 106.50</i> | 852 | | | |
| <i>Parking: 8 days/nights= 8 x \$ 25.00 day/night</i> | 200 | | | |
| <i>Lodging: 8 nights x \$ 139 plus tax (\$ 150.00)</i> | 1,200 | | | |
| SUPPLIES | 2,652 | | | 2,652 |
| Misc. office furniture (desk, chair, etc) | 402 | | | |
| Dedicated laptop computer for Coordinator I w/ MS Office/virus software | 750 | | | |
| Printer/Scanner | 250 | | | |
| Misc. office supplies and postage | 250 | | | |
| Outreach/education materials including posterboards, flyers, meetings, A/Q presentations, etc. | 1,000 | | | |
| CONTRACTUAL | 650,467 | | 207,767 | 858,234 |
| Marine Vessel Consultant/Surveyor 9 vessels | 27,165 | | | |
| Licensed, Bonded/Insured Marine Diesel Contractor at 75% | 623,302 | | 207,767 at 25% | |
| Includes dry dock if required and installation of new engines as follows: 9 vessel repowers average cost of \$ 92,341 per vessel including replacement of primary and auxiliary powerplants as per EPA and Makah Tribal policies, procedures and scope of work and timeline as specified in contract documents. Cost share by vessel owners at 25% per vessel with EPA at 75%. | | | | |
| TOTAL DIRECT COSTS | \$ 750,000 | | | |
| Subtract Major Contract Services | \$ 650,467 | | | |
| Indirect Base | \$ 99,533 | | | |
| Waiver of Indirect Rate @ 40.01% | 0 | | | 0 |
| TOTAL PROJECT COST | \$ 750,000 | | 207,767 | \$ 957,767 |

Appendix

| | |
|---------------|--|
| Attachment A: | Survey/Pre-Application Form |
| Attachment B: | Applicant Fleet Description |
| Attachment C: | Detailed Fleet Cost Estimate |
| Attachment D: | Engine Information |
| Attachment E: | EPA Diesel Emissions Quantifier |
| Attachment F: | EPA CO2 Calculations |
| Attachment G: | Lifetime Calculations per Pollutant Chart |
| Attachment H: | Vessel Participant “Letters of Intent |
| Attachment I: | Signed Participant “Letters of Intent” |
| Attachment J: | Makah Tribe Council Support Resolution |
| Attachment K: | MSFF Project Coordinator I Draft Job Description |
| Attachment L: | Consultant Scope of Work |