NOAA Harbor Protection Program Proposals

Five proposals were submitted to NOAA's Restoration Office for the implementation phase of their Harbor Protection Program. Each of the five proposals was reviewed by a technical committee, as required by the any Federal Funding Opportunity (FFO), which consisted of staff from NOAA, EVOSTC office, and the Alaska Department of Environmental Conservation.

This list of reviewers is presented in no particular order:

- Fish Biologist - NOAA Restoration Center (AK), Fisheries Habitat Conservation Program Office
- Federal Program Officer - NOAA Restoration Center (HQ), Fisheries Habitat Conservation Program Office
- Science Coordinator - Exxon Valdez Oil Spill Trustee Council, Exxon Valdez Oil Spill Trustee Council
- Program Planning and Evaluation Specialist - NOAA Restoration Center (WA), Fisheries Habitat Conservation Program Office
- Hydrologist - NOAA Fisheries (AK), Fisheries Habitat Conservation Program Office
- Environmental Specialist, Non-Point Source Program (AK), Alaska Department of Environmental Conservation
- NOAA Corps Officer - Habitat Conservation Division (AK), Habitat Conservation Division – Alaska

Proposal scores and comments have been reformatted for ease of use from the original excel document that was provided by NOAA. No information has been edited or removed and is presented verbatim from the original document.

Proposal Number: 12120112-A
Proposal Name: Cordova Clean Harbor Program
Lead PI: Native Village of Eyak, John Whissel

Reviewer	Importance and Applicability of Proposal *(Out of 35 points)*	Technical/Scientific Merit and Community Outreach *(Out of 40 Points)*	Overall Qualifications of Applicant *(Out of 10 Points)*	Project Costs *(Out of 15 Points)*	Total Score *(Out of 100 points)*
A	31	34.5	10	14	***89.5***
B	27	26.5	9	7	***69.5***
C	25	30	9	13	***77***
D	25	30	7	8	***70***
E	32	35	9	12	***88***
F	35	35	10	12	***92***
G	25	30	8	10	***73***

Importance and Applicability of Proposal

Reviewer A: This proposal is well thought out and provides a wide range of projects that have the potential to benefit the marine environment in the spill-affected area.

Reviewer B: No comment submitted

Reviewer C: Good Coordination with relevant organizations in Cordova. Builds on previous work from surveys.

Reviewer D: No comment submitted

Reviewer E: This appears to be a highly coordinated and supported project with substantial potential benefits to marine habitat around harbors.

Reviewer F: No comment submitted

Reviewer G: I found that more information linking injured water resources or species to the potential benefits generated by this project would be helpful. It would help to paint the picture a bit more. Also, it is tough to gauge success when there are no baseline numbers (for example, how much oil/waste/antifreeze is currently entering the harbor)? I understand that the Cordova Clean Harbor Project is a partnership of several groups, but I don't know who those individuals are, it was never listed. However, the description I was given sounds good and that a true partnership focused on protecting Cordova harbor was formed.

Technical/Scientific Merit and Community Outreach

Reviewer A: I appreciate the amount cooperation and coordination that this proposal represent between the Native Village of Eyak, Cordova residents, city staff, and local environmental groups. The projects are well designed and have a high likelihood of success if implemented.

Reviewer B: No comment submitted

Reviewer C: Would like more information on the mussel testing

Reviewer D: No comment submitted

Reviewer E: This appears to be a very feasible project with a great degree of community participation.

Reviewer F: No comment submitted

Reviewer G: This application is missing detailed timelines and an implementation plan (there was a colorful graph at the beginning of the document, but it wasn't enough). I also wonder about the longevity of these projects, who owns and operates the antifreeze recycling machine (for example) once this project is complete? How can we be sure this is a long term investment? There was little justification for the choice of mussel monitoring and how that choice specifically will show project success. More monitoring parameters, like water quality or EVOS spill affected resources, would be helpful and could strengthen the monitoring and reporting portions of this application. The outreach components are strong and include harbor signage, outreach and a high school design team competition.

Overall Qualifications of Applicant

Reviewer A: No comment submitted

Reviewer B: No comment submitted

Reviewer C: No comment submitted

Reviewer D: No comment submitted

Reviewer E: This appears to be a well qualified applicant with the necessary resources to accomplish this project.

Reviewer F: No comment submitted

Reviewer G: I am not sure they have managed this level of funding before (almost $500K), more information to show me how they can handle this funding level successfully would be helpful. However, there resumes look good and they have plenty of staff on this project's budget to ensure the project runs smoothly.

Project Costs

Reviewer A: I would like to see a more detailed breakdown of the costs of this project including those of the contracted engineers and the CRWP staff.

Reviewer B: No comment submitted

Reviewer C: If anything might scale back on the funds to prize money. Need clarification on what we are funding. The proposal identifies match of skimmer use.

Reviewer D: No comment submitted

Reviewer E: The proposed budget seems realistic and appropriate.

Reviewer F: No comment submitted

Reviewer G: I am concerned about the long term costs associated with this project; many were not mentioned in the budget justification and need to be considered. For example, who takes on the responsibilities for the garbage bin once it is built? Who maintains the many small spill equipment pieces and ensures they are ready for the public's education and continued practice? Also, I noticed that the indirect rate has expired, we'll need to know the new number.

Final Comments

Reviewer A: Overall, the proposal is clear and maximizes the local, state, and federal resources available. The costs are clearly detailed and the objectives are reasonable in both time frame and cost. The amount of cooperation and coordination that has already been achieved is remarkable and I appreciate that much of the planning and design has already occurred prior to this funding request.

My primary concern is with the projects that address small-spill response though workshops and a demonstration project. While these projects would certainly be useful, they may not be able to receive funding through the EVOS Trustee Council who is usually not able to fund any activities in oil spill prevention and response.

Reviewer B: Project is building off of a previous pilot collaboration in the area (the CCH). Priorities (ie. Trash management needs were based off of surveys). Anti-freeze and small spill cleanup components of this proposal are pilots themselves - much is still unknown related to what disposal needs are and will be. In both cases serious thought seems to have been given to what they will do, but there seems to be also a 'let's see what we need' approach to these two components. Outreach component seems OK - but it is expensive due to various coordinator salary costs. Would like to know more information on how the mussell analysis is the best indicator of success? Would they be doing anything that leads them to believe they should see a decrease in PAH accumulation, since so much of this project is pilots and test studies? Support letters indicate trash management, stormwater and harbor facilities needs are the most important. Significant letters of support; applicant seems qualified for work they propose. A lot of salaries and travel in the budget - we should explore how this can be streamlined if the project is recommended.

Reviewer C: Would fund.

Reviewer D: This project has a strong potential to improve water quality in and around the harbor. I suggest that some clarification is needed about the antifreeze demonstration project to ensure that this project would result in a long term solution to the harbor's need for dealing with antifreeze. Also, the addition of water quality monitoring to the mussel monitoring may provide more evidence of success of this project.

Reviewer E: This appears to be a well supported and coordinated project with a high degree of potential benefit.

Reviewer F: Great project for prevention. I feel the monitoring process while sufficient a more immediate process should also be included such as actively looking for boats that may have sheen around them. Larger cost could be incurred once they figure out best methods for disposal of used fluids.

Reviewer G: Overall, this project has many great project ideas and I believe all of them have merit. I found some places were more description and/or a better organization would have improved this application (for example there is no narrative about a battery shed, but there is a budget line item for it). I would have also liked to know which of the projects are most pressing, if EVOS funds can only be used to fund some of the ideas, which ones have to be done vs. which ones are nice to have done? I think the ideas are innovative and address real shortcomings and lapses in information experienced by the community. There are tons of letters of support for this project.

Proposal Number: 12120112-B
Proposal Name: Engaging the Exxon Valdez-affected fishing community in clean boating activities and improved waste management using smartphones and regional outreach
Lead PI: Cook Inletkeeper, Rachel Lord

Reviewer	Importance and Applicability of Proposal *(Out of 35 points)*	Technical/Scientific Merit and Community Outreach *(Out of 40 Points)*	Overall Qualifications of Applicant *(Out of 10 Points)*	Project Costs *(Out of 15 Points)*	Total Score *(Out of 100 points)*
A	19.5	27.5	6	12	***65***
B	25	23	9	7.5	***64.5***
C	20	30	8	10	***68***
D	22	26	7	7	***62***
E	33	38	9	12	***92***
F	20	25	8	10	***63***
G	21	30	10	12	***73***

Importance and Applicability of Proposal

Reviewer A: No comment submitted

Reviewer B: No comment submitted

Reviewer C: Coordination and Partnership in this project would be high in reaching many people. The smartphone app would need to have information that fishermen were seeking. NOAA RC could help participate in creation of survey questions to ensure that they are geared toward results which would affect the marine environment. Metrics would be in number of users and metrics

Reviewer D: No comment submitted

Reviewer E: This proposal appears to have the most potential benefit to a larger area in the affected region, and has the ability to coordinate and collaborate with the appropriate public and private entities to accomplish substantial marine habitat benefits in and around harbors.

Reviewer F: No comment submitted

Reviewer G: In order to fully understand the marine habitat benefits, a clear link should be established to show the relationship between spilled oil, impaired waters and injured resources. Also, this project description could be strengthened by quantifying how big of a problem the misdirected oil is in AK harbors. I find it hard to determine the actual impact and value of the phone application and outreach. The most telling of the measurable results (page 18) seems to be the measure of increase harbor waste facilities see after the information is presented to boat owners. I would like to know that information over number of downloads, it tells a more solid story of success. It seems like a good idea but how successful will it be?

Technical/Scientific Merit and Community Outreach

Reviewer A: Technology has radically changed how people receive and utilize information and I commend the proposers for thinking of new ways to transmit vital information to the boating community. I do have some reservations regarding whether or not this would be the preferred method of information for boaters and who

would be responsible financially for the long-term, frequent updates that would be necessary to make this truly useful.

Reviewer B: No comment submitted

Reviewer C: I would suggest that the app have information such as harbor maps possibly GPS linked to show boat owners the exact location and presence of waste facilities and oil spill response equipment at each harbor.

Reviewer D: No comment submitted

Reviewer E: This proposal is very feasible and technically sound and can be implemented rapidly. This project has the potential to take advantage of a great deal of previous and ongoing community participation and training.

Reviewer F: No comment submitted

Reviewer G: Technically speaking, this doesn't seem to tough to build. From what I understand the data already exists and the hiring of a designer who specializes in phone application will ensure that the process is seamless during the 36 month window. Outreach is at the heart of this project, I have no doubt they will achieve their outreach goals and will be successful.

Overall Qualifications of Applicant

Reviewer A: No comment submitted

Reviewer B: No comment submitted

Reviewer C: Cook Inlet Keeper is well known in this area as is Rachel Lord who runs the Clean Harbor Program

Reviewer D: No comment submitted

Reviewer E: The applicant is well qualified to accomplish or administrate this type of work.

Reviewer F: No comment submitted

Reviewer G: The staff seems to be well equipped and comes highly recommended in the various letters of support.

Project Costs

Reviewer A: No comment submitted

Reviewer B: No comment submitted

Reviewer C: Cook Inlet Keeper is well known in this area as is Rachel Lord who runs the Clean HArbor Program

Reviewer D: No comment submitted

Reviewer E: The applicant is well qualified to accomplish or administrate this type of work.

Reviewer F: No comment submitted

Reviewer G: The staff seems to be well equipped and comes highly recommended in the various letters of support.

Final Comments

Reviewer A: It would appear that the first task that this project needs to start is just a count of how many boaters using the harbors listed have a smartphone and would use an app for harbor information. I am concerned that $66,311 would be spent just to find out that there is not much interest. Also, would the app be free and, if not, who would benefit from the sale? The app would need to be accessible without a wi-fi or 3/4G connection since many of these areas have spotty cell service, especially before you are actually in a slip. Is there a long-term plan in place for updates? The information would need to be regularly updated which has a cost associated. Would the Cook Inletkeeper or Cordova Clean Harbor program be in a financial position to maintain the program?

Reviewer B: Proposes to reduce pollution throughout the affected area by engaging fishermen and raising awareness through Iphone app, working at harbors, and publicizing project activities. Question the need for an iphone app - is information on disposal locations, etc...really going to change that often to require such a tool? Proposal mentions nothing of alternative ways of doing this - ie. cheaper website (still accessible by smart phone), outreach, etc...The letters of support however indicated such an app would be useful.

Reviewer C: Would fund.

Reviewer D: In addition to monitoring the number of smart phone applications downloaded, direct monitoring or survey of harbors should be conducted to assess increased use of existing waste facilities. A survey at select harbors could provide further evidence that this application provided a service.

Reviewer E: This project is simple, clear and provides tremendous short and long term benefits to the entire EVOS affected region, as well as benefits outside of it.

Reviewer F: Good idea for a project but the long term maintenance of the app needs to be included in the cost. I feel the actual use of the app would be more short term and would not reach those without smartphones. Overall the long term maintenance of the app and the cost associated is more of a concern.

Reviewer G: In our invitation to applicants we asked them to align their work with the needs identified by the AK Clean Harbors Program, this project is clearly in step with those efforts. In addition, it should be noted that this does not duplicate those Clean Harbor efforts; instead it adds to their work and elaborates on outreach. I think it is a good fit for this competition. I would like to see this applicant strengthen their proposal by including information about how they plan to combat the faddish nature of yet another new smart phone application and to reach users who do not have a smart phone. Could the development of maps for email circulation be a part of this effort? Also, there should be a discussion of how this work will be supported in the future, how will funding for future platform development is secured?

Proposal Number: 12120112-C
Proposal Name: Mitigating Stormwater Run-off in Cordova Through Snow Management Analysis
Lead PI: Copper River Watershed Program, Rachel Lord

Reviewer	Importance and Applicability of Proposal *(Out of 35 points)*	Technical/Scientific Merit and Community Outreach *(Out of 40 Points)*	Overall Qualifications of Applicant *(Out of 10 Points)*	Project Costs *(Out of 15 Points)*	Total Score *(Out of 100 points)*
A	28	35	10	10	***83***
B	30	31	9	12	***82***
C	30	30	10	12	***82***
D	26	27	9	8	***70***
E	25	35	7	11	***78***
F	35	37	10	10	***92***
G	30	30	10	12	***82***

Importance and Applicability of Proposal

Reviewer A: No comment submitted

Reviewer B: No comment submitted

Reviewer C: Identification of a need for the plan in three stormwater plans.

Reviewer D: No comment submitted

Reviewer E: Snow management is a critical component to developing areas in the high precipitation areas of this region.

Reviewer F: No comment submitted

Reviewer G: This snow management project has been a demonstrated need in several reports and is not something the city or state has money (or a requirement) to do. There are potential benefits for marine, freshwater systems and also for the Cordova community. There would be a benefit to Pacific herring, a major focus area for TC restoration dollars. I have no doubt on The Copper River Watershed's ability to coordinate and partner with other groups; they have a many letters of support and great examples of past work.

Technical/Scientific Merit and Community Outreach

Reviewer A: This project is well thought out and addresses an important issue in water quality and marine habitat in Cordova. I would recommend that the proposers clearly state that a comprehensive snow management plan is not required by state or federal mandate. The proposer's community outreach plan is also well designed and allows for ownership of the marine environment in the area by school students, city planners, and local concerned citizens.

Reviewer B: No comment submitted

Reviewer C: No comment submitted

Reviewer D: No comment submitted

Reviewer E: This type of project has been implemented with success elsewhere and is very achievable

Reviewer F: No comment submitted

Reviewer G: I liked seeing that there has been past NOAA involvement and funding, it would be good to continue on with the scientific work already started. This is mostly a planning/prioritizing project, so the technical elements are very limited. The snow plan will have lasting impact since each year this city receives snow. The project would have been stronger if they could show a longer term water quality monitoring plan, it is currently only planned for the first year (page 8). This proposal includes an excellent communication and outreach plan.

Overall Qualifications of Applicant

Reviewer A: It is clear that all of the organizations that would participate in the design of this plan are experienced in their field and would be able to utilize city and community support to implement and maintain the monitoring program.

Reviewer B: No comment submitted

Reviewer C: No comment submitted

Reviewer D: No comment submitted

Reviewer E: The applicant appears to be well qualified to accomplish this type of work. Implementation of the plan is however the value and that requires additional resources and commitment.

Reviewer F: No comment submitted

Reviewer G: They have successfully managed NOAA RC funds in the past and I am confident that they would be successful again.

Project Costs

Reviewer A: I would like to see a more detailed breakdown of the costs of this project including those of the contracted engineers and the CRWP staff.

Reviewer B: No comment submitted

Reviewer C: No comment submitted

Reviewer D: No comment submitted

Reviewer E: The project costs and budget seem reasonable for the type of work described, and excessive funding is not consumed by non-essential tasks.

Reviewer F: No comment submitted

Reviewer G: One way to strengthen this application would be to show more justification in the budget narrative and to include a break down table by year.

Final Comments

Reviewer A: A snow management plan for Cordova would likely be highly beneficial to the marine habitat. With the recent record snowfall years it becomes even more important that the pollutants contained in the snow are not contributing to a decline in water quality or detrimental to critical marine habitat. I would highly recommend that the proposers clearly state that this plan is not currently required by state or federal mandate and that they clearly define the injured resources and services that would benefit.

Reviewer B: How does this project build off of ARRA funding? What were the results of that project? Project involves a diverse number of groups and sectors of the community in different purposes of the project- at the City level, student level (trash surveys), federal level (USFS doing culvert removal in Odiak pond), volunteers to re-vegetate certain high-risk areas, etc...Good outreach component disseminating information to the community via newspapers, etc...capable organization in terms of grant management. Strong letters of support as well.

Reviewer C: Good proposal that looks like it is a prioritized need in the community. Would like to ensure that it has alternatives for high and low snow years

Reviewer D: The applicant's history of working on complex environmental problems, while seeking community involvement and education, give me confidence that this project will result in a successful snow management plan. Snow management has been identified in Cordova as a major source of pollutant to anadromous waters. This plan will likely be implemented based on the support letters from the state (ADFG and ADOT), City of Cordova, and the Native Village of Eyak.

Reviewer E: Seems like a good project for the funding.

Reviewer F: Excellent project. Protects streams and involves a lot of the community. Project addresses a problem that has needed attention for some time with a better snow management plan that will limit the amount of pollutants that enter the environment.

Reviewer G: This project comes highly recommend in at least 3 planning documents and has the support of the City of Cordova and the AK Department of Transportation. I feel that if EVOS funds are not used for this work it not be completed (since neither the city nor the state have an obligation to do this planning exercise).

Proposal Number: 12120112-D
Proposal Name: Port Lions Landfill Restoration Project
Lead PI: City of Port Lions, Kathryn Adkins

Reviewer	Importance and Applicability of Proposal *(Out of 35 points)*	Technical/Scientific Merit and Community Outreach *(Out of 40 Points)*	Overall Qualifications of Applicant *(Out of 10 Points)*	Project Costs *(Out of 15 Points)*	Total Score *(Out of 100 points)*
A	24	29	9	12	***74***
B	28	31	9	12	***80***
C	25	30	8	12	***75***
D	25	29	6	9	***69***
E	28	30	7	12	***77***
F	30	30	10	12	***82***
G	30	31	8	14	***83***

Importance and Applicability of Proposal

Reviewer A: It would be beneficial to the proposal to state which species and services on the EVOSTC's Injured Resources and Services List would be helped by this project.

Reviewer B: No comment submitted

Reviewer C: The location of the landfill on a slope above the harbor is compelling for necessary action and containment

Reviewer D: No comment submitted

Reviewer E: There is good potential for benefit to the harbor area of this project.

Reviewer F: No comment submitted

Reviewer G: This application would be strengthened if there was a shown link between the EVOS oil spill and species or habitats in Settlers Cove. In addition, having baseline numbers for the water samples would be helpful. To be sure, the landfill is low-tech and is a documented problem area (the KIB gave it only a 41% approval rating). There is a regional and state documented need. Improving the structure and the community's use of the existing facility will have long lasting impacts as everyone in this village uses the landfill at some point. This application shows that there has already been coordination with the City of Port Lions and NVOPL, Kodiak Island Borough, and the State of AK Department of Environmental Conservation.

Technical/Scientific Merit and Community Outreach

Reviewer A: The project plan is well thought out and clearly indicates a reasonable timeline and monitoring plan. I would like to see the proposal clearly state that this type of project is not required by state or federal mandate and that its primary goal is to preserve the marine environment in Settlers Cove.

Reviewer B: No comment submitted

Reviewer C: NOAA RC will work with applicant on monitoring plan, but the basis looks good

Reviewer D: No comment submitted

Reviewer E: This project is technically feasible and can be expected to be accomplished in the expected time frame.

Reviewer F: No comment submitted

Reviewer G: At first I wasn't sure that a Geotech fabric lining was the proper approach to bring this landfill up to standards, but after talking to colleagues I learned that yes, Geotech is appropriate and that other measures (like lining the entire landfill with an impermeable surface) is not required due to the size of the village. With this new understanding, I can conclude that these proposed actions are appropriate and necessary and do not duplicate the requirements the city already has with regard to waste management. I think the technical training for two people is important and critical as is the hiring of a part-time staff person to run the landfill. These are good ideas and add to the success of this project. I am happy to see that the community will be involved in the planning of the Landfill Operations Plan and their daily use of the landfill will be improved by the many education efforts.

Overall Qualifications of Applicant

Reviewer A: No comment submitted

Reviewer B: No comment submitted

Reviewer C: NOAA RC met with these applicants who were capable and enthusiastic. This is the type of applicant who this solicitation is geared for who might not apply for larger grants but can do good work with assistance

Reviewer D: No comment submitted

Reviewer E: The applicant appears to be qualified to accomplish this work.

Reviewer F: No comment submitted

Reviewer G: I think that the city has an impressive amount of awarded funds over the years for a community of only 200 people. They have successfully managed awards over the amount they are asking for in this proposal.

Project Costs

Reviewer A: No comment submitted

Reviewer B: No comment submitted

Reviewer C: No comment submitted

Reviewer D: No comment submitted

Reviewer E: The project costs appear to be appropriate.

Reviewer F: No comment submitted

Reviewer G: I thought the match amount was really excellent and was also pleased to see that they decided to rent equipment rather than purchase, which I see as a smart financial decision.

Final Comments

Reviewer A: The proposal is well thought out and provides a reasonable time frame for completion. Again, I would recommend that the proposers clearly define which species would be helped by this project related to the EVOSTC Injured Resources and Services List. I would also recommend a discussion of why this project is not required by state or federal mandate.

Reviewer B: Straightforward project with a clear goal. Baseline information will be collected to determine whether they are being successful and need to adapt their project over time. Are they confident that the grading and geofabric activities they propose are going to solve the problem? There was no indication that this method is appropriate and needed for this problem, however it seems to be the right approach based on their access to resources and technical capacity. Budget is reasonable.

Reviewer C: Would fund.

Reviewer D: Community need for this project is presented and community support is high relative to the size of the community. The improvements to the landfill should also include a plan to address other community waste problems that have been identified in the past. Including metal waste collected in a separate facility, potentially as a second phase to this project.

Reviewer E: This project appears to be reasonable and beneficial.

Reviewer F: Project has great goals that seem to be achievable and the city has received plenty of support in the past for other projects. They have worked closely with many different organizations to complete the proposed projects. This project in particular long term monitoring and landfill security as proposed will be an increasing cost over the years to come.

Reviewer G: I think this is a perfect project for the EVOS and NOAA RC funding. They could benefit from even more money (and assistance) as we know that they have at least two other improvement projects waiting in the wings that would be eligible under this funding announcement.

Proposal Number: 12120112-E
Proposal Name: Oil-Water Separation by Superhydrophilic and Superhydrophobic Surfaces
Lead PI: University of Rochester, Chunlei Guo

Reviewer	Importance and Applicability of Proposal *(Out of 35 points)*	Technical/Scientific Merit and Community Outreach *(Out of 40 Points)*	Overall Qualifications of Applicant *(Out of 10 Points)*	Project Costs *(Out of 15 Points)*	Total Score *(Out of 100 points)*
A	9	17	7	7	***40***
B	6	15	10	6	***37***
C	5	20	5	5	***35***
D	11	15	9	5	***40***
E	10	10	5	5	***30***
F	0	15	10	11	***36***
G	3	17	10	5	***35***

Importance and Applicability of Proposal

Reviewer A: The proposal offers no clear narrative on which injured resources or services would be helped by this project. It also does not offer any coordination or partnership with any affected communities.

Reviewer B: No comment submitted

Reviewer C: No comment submitted

Reviewer D: Although the technology would be valuable for oil and water separation in many places, this technology does not seem to be especially applicable to the spill-affected area.

Reviewer E: No comment submitted

Reviewer F: No comment submitted

Reviewer G: This project is looking for funding to support research; it is a proof of concept project. In the past, the EVOS TC has not funded projects of this nature. It is not possible to give full points to this specific criterion because there is no plan for project implementation, and therefore all the potential benefits are hypothetical and a step or two down the road at this point. There should be a link provided by the applicant to show the benefit of this technology to specific habitats and species in the spill affected area. Also there is a question of who owns the technology afterwards. This work will only benefit AK communities if someone else picks up the technology afterwards. There is a good discussion of the need for data sharing and a plan to inform via scientific publications. However, there does not seem to be any thought about true coordination or partnership building.

Technical/Scientific Merit and Community Outreach

Reviewer A: This proposal represents a proof of concept for a new oil spill remediation technique. I have several concerns regarding the feasibility of the concept, the proposers obvious lack of knowledge of the spill area and current state of EVO in the environment, and the cost of implementing the technology if the pilot project was successful. While I do appreciate the new technology represented by the project, I am not confident that it would be cost-effective in a large scale deployment.

Reviewer B: No comment submitted

Reviewer C: No comment submitted

Reviewer D: This project is a research project aimed at developing a technology, there does not appear to be any EVOS affected community connection.

Reviewer E: No comment submitted

Reviewer F: No comment submitted

Reviewer G: Technically sound, although I do not have familiarity with this technology. However, I wonder about the applicability to marine systems and real world durability. Since this is new technology, can the applicant talk about the likelihood of success and give some milestones for measuring and proving success? Do certain oil concentrations need to be present in order for the material to work? Does the chemical makeup of the EVOS oil match and work well with these materials? More discussion like this would help me understand the scientific success of this project. There is no community tie in and no plan for volunteers or community involvement in the future. There are no letters of support and no specific locations noted for eventual project implementation. This does not seem to have a link to AK and instead is just opportunistic.

Overall Qualifications of Applicant

Reviewer A: It is clear that the laboratory that would be producing this project has significant experience pioneering superhydrophilic surfaces. My concerns comes with the lack of experience that the team has working with PAH's and their apparent lack of knowledge of the current state of EVO in the environment.

Reviewer B: No comment submitted

Reviewer C: No comment submitted

Reviewer D: No comment submitted

Reviewer E: It appears that this proposal comes from a well qualified and intended applicant; it does not appear that those qualifications were relevant to the intent of this solicitation.

Reviewer F: No comment submitted

Reviewer G: They seem to be leaders in the field or at least very comfortable and knowledgeable about this new technology.

Project Costs

Reviewer A: The project costs are only for the laboratory-based initial proof of concept with no potential costs itemized for the implementation of the project. I have significant concerns regarding the cost of the surfaces and the oil-water separator both of which would need to be developed for wide-scale deployment for this technology to be useful.

Reviewer B: No comment submitted

Reviewer C: No comment submitted

Reviewer D: No comment submitted

Reviewer E: Budget for this seems potentially appropriate although it would consume much of for the total funding available.

Reviewer F: No comment submitted

Reviewer G: There is insufficient detail in this project justification section, please include a description of what exactly each student and the professor will accomplish. All of the funding is going towards research rather than project implementation.

Final Comments

Reviewer A: I am intrigued by this potential new technology but I do not feel that this project would be useful in the types of projects that are proposed in this FFO.

Reviewer B: Appears to be a research project and less of an on-the-ground project, but indicates an efficient separation of oil-water. However, it talks of "developing" - how much certainty is here? They have a hydrophilic surface but don't have the hydrophobic surface developed? Applicant is used to complying with Data Sharing requirements. No real connection to the EVOS area is made. They say they will employ a student to study the area but how does that incorporate into the project? The potential to benefit the area perhaps is there, but it is very far off and not direct right now

Reviewer C: Sounds like a good invention but ca not link this invention to PWS habitats

Reviewer D: Overall this project seems less relevant to the spill affected area and is not connected to any of the communities. This is a research project with little certainty of any improvements to water quality in the spill affected area.

Reviewer E: This project does not appear to provide much current true value for EVOS affected areas for the potential cost.

Reviewer F: This project meets some of the requirements but is more research based. It does not involve the community of the affected area or the long term goals of restoration. This project would strictly be used for an active spill.

Reviewer G: Overall, this project does not fit into the conditions and timeline of EVOS work. Currently, the work of the TC is not in oil spill response, it is in restoration. This project is not aligned with the needs of the TC and the spill affected areas of AK. Also, there is no proof of success at a large scale, which would be needed before implementation could take place.