Project Number: **13120112**

Project Title: **PWS Harbor Cleanup Program**

Principal Investigator: Laurel Jennings

Affiliation: Not Available

Co-PIs/Personnel: Erika Ammann

Project Location:

Funding Requested by Fiscal Year:

FY13:	$10,988.00	**FY14:**	$0.00	**FY15:**	$0.00
FY16:	$0.00	**FY17:**	$0.00	**FY18:**	$0.00

Total Funding Requested: $10,988.00

Abstract:

This project was funded by the Trustee Council in FY12 for $136,300.
Abstracts are excerpted from the proposer's submission.

The National Oceanic and Atmospheric Administration (NOAA) Restoration Center (RC) proposes to establish a new funding opportunity for Prince William Sound coastal communities to help them prevent small but damaging toxic releases originating from harbors and marinas. This opportunity will build upon existing resources and knowledge and provide communities with a long serving set of methods for handling small spills and re-engage an already informed group of concerned citizens to help run the program after the five years of EVOS funding is completed. This effort will review past EVOS assistance to harbors ensuring that past EVOS expenditures for equipment are utilized to the maximum efficiency, identify technology advancements that can improve current activities in the marinas, and create a local investment and ownership in the success of chosen projects. The purpose of this project will be to protect marine resources negatively affected in EVOS from future aggravation and pollution.

Science Panel Comments:

Comments from FY12 (April 2011):
April 2011 comments below. In response, the Proposer has reduced their budget to $1 million and has indicated funding from NOAA in the final proposal. The panel has several key concerns regarding the proposed program. First, a significant portion of the funding requested will be spent in administrative and travel costs for the Seattle, WA and Anchorage, AK based team. Second, the narrative does not provide enough information to determine the potential effectiveness of the program. Finally, there is no established plan for outreach and education that would be critical for this type of effort.

There are only general descriptions of types of activities that might be included in community-specific plans. There are references other Best Management Practices (BMP) but does not commit to following any particular BMP. There seems to be overlap in scoping and assessment phases with an already existing Alaska Clean Harbor project funded for $282,615 by CIAP grant (see CIAP approved state plan, http://dnr.alaska.gov/coastal/CIAP/ciap_Fall.htm). Unless coordination is required, there may be duplication of effort with the Clean Harbor program at significantly higher expense in this project. Travel costs seem high, especially in the implementation phases that do not involve public outreach. Most of the staff is coming from Seattle which increases the cost, but there is not much justification in the proposal other than relationship building with communities. The listed project managers do not seem to have much experience with harbor operations, so technical assistance may be limited.

Comments for FY13 (January 2013):
Not reviewed due to narrowed administrative nature of this budget.

Science Panel Recommendation: Not Reviewed

Science Coordinator Comments:

Comments from FY12 (April 2011):
The team has reduced their budget as requested by the Council. I continue to be concerned that the first projects will not even be selected until June 2013 leaving only three field seasons available for the actual work. Also, the current timeline would not allow the Council (who will only be meeting annually in Aug/Sep) the opportunity to review the projects prior to their selection and implementation.

Comments from FY13 (January 2012):
I appreciate that the team has provided a detailed per project cost for management. I feel that their costs are reasonable and that their personnel has the appropriate experience with the proposed project types. However, the funding for this project is contingent on the Council's funding decision on projects 13120112-A through 13120112-E.

Science Coordinator Recommendation: Fund Contingent

Public Advisory Committee Comments:

Comments from FY12 (April 2011):
A revised proposal with funds leveraged has reduced the cost of this effort, which will be managed by NOAA staff. While there are merits to the cleanup of harbors, the Trustee Council should proceed with caution, as there are few details at this time explaining what this project will accomplish.

Comments for FY13 (January 2013):
Abstracts were submitted to individual members of the PAC for comment. No comments were received.

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

Comments from FY12 (April 2011):
The proposer has responded to SP and TC concerns and submitted a reduced-budget proposal that mitigates issues identified prior. However, the PAC has identified concerns with funding an largely administrative process and I agree with the Science Coordinator's concerns. This is an important focus area, as also discussed by the PAC, but due to those issues, my "fund" recommendation is fairly soft.

Comments for FY13 (February 2013):
I support the recommendations and observations of the Science Coordinator. While appreciative of the efforts made by the proposers and the project support by NOAA, legal and practical concerns remain.

Executive Director Recommendation: Fund Contingent

Trustee Council Comments:

Comments from FY12 (April 2011):
A revised proposal has been submitted in response to their concerns.

The Council requests the proposer review the Science Panel comments and strengthen it's proposal and adjust the budget to $1 million dollars.

Comments from FY12 (September 2011):
The Council did not vote to fund this entire request. However, it did request a revised proposal and budget that would be limited to the scoping and RFP phase, concluding with presentation to the Council of the proposals received in response to the RFP and with a budget not-to-exceed $125,000 (plus 9% GA). The following items were also specifically noted as being of interest:

1. Greater staffing efficiency for travel in the spill-area communities: limit travel time and number of travelers to only those necessary.

2. Consult EVOSTC office staff members, such as Cherri Womac, who have experience locating free or low-cost meeting rooms in these communities.

3. Work with DEC staff to ensure that the scoping/RFP phase seeks proposals for work which is not already legally-required by state or federal law.

4. The currently-proposed timeframe for scheduling meetings in the communities is an extremely busy time for harbor personnel. It is recommended that you determine when other meetings with harbor personnel are occurring and/or adjust your schedule to dates that are outside of the commercial fishing season.

5. The scoping/RFP phase should emphasize to proposers and interested parties that the Council's current intent is to consider funding proposals with a total not to exceed the remaining amount of the original NOAA Clean Harbor proposal. For example, if the entire $125,000 is used during the scoping/RFP phase, fund proposals up to a total of approximately $953,750.

This revised proposal will be reviewed for funding by the Elise Hsieh, the Executive Director. Upon her approval, funds can be released for this revised proposal.

Comments from FY12 (October 2011):
A revised proposal has been submitted by the team. At this time, funding has only be approved to complete the scoping and RFP development phase of this project. The Council will review the completed RFP at a later date and will determine at that time if future funding is warranted.

Trustee Council Decision: Pending

Project Number: **13120112-A**

Project Title: **Cordova Clean Harbor Program**

Principal Investigator: John Whissel

Affiliation: Not Available

Co-PIs/Personnel: None

Project Location: Cordova, AK

Funding Requested by Fiscal Year:

FY13:	$281,560.00	**FY14:**	$105,598.00	**FY15:**	$98,969.00
FY16:	$0.00	**FY17:**	$0.00	**FY18:**	$0.00

Total Funding Requested: $486,127.00

Abstract:

Abstracts are excerpted from the proposer's submission.

Over the past two years the Cordova Clean Harbor Program has worked to raise awareness of issues related to the harbor and collect input from harbor users to identify ways in which the harbor could be improved. Over three hundred and fifty responses to harbor user surveys were received over the two years. Their input indicated that there is broad interest in improving harbor conditions, increasing garbage bin availability, anti-freeze and waste oil management, and bilge pumping services. Over forty percent of respondents in 2012 indicated that they supported more public education and signage. NVE proposes a portfolio of several projects. The following components were identified by CCH over the past two years:

Addressing waste and anti-freeze disposal. This will be achieved by providing new waste receptacles and locations that reduce the chance of materials being lost back to the environment while making it easier to properly dispose of waste.

Examining ways to improve our ability to respond to small spills and waste in the harbor. To achieve this we are looking at a workshop for identifying the best technologies for small spill cleanup, testing soil of the approaches in the harbor, developing a small spill response document, and holding a competition at the high school level to build a better clean up system.

Continued outreach activities aimed at educating harbor users to best practices that will reduce waste reaching the harbor. This will be done using signage and development of outreach materials.

Evaluate the effectiveness of the effort by tracking changes in use patterns and PAH levels in mussels.

Science Panel Comments:

These are individual comments from science panel members for FY13 (December 2012/January 2013):

Reviewer 1:

This proposal describes several projects, each of which could make important contributions to preventing water pollution in the Cordova harbor and Orca Inlet and one of which can provide proof of concept for responding to small oil spills. The proposal reflects past work in various groups in Cordova-Eyak coming together under the banner of Clean Harbors to support this project on behalf of the environment and natural resources of the area. Several components make up this proposed project. It will address antifreeze pollution by pursuing recycling possibilities. It will address the lead pollution of improper disposal of batteries with a battery storage shed. It will hold a conference and then conduct pilot studies of containment and removal of small oil spills, including purchase of boom. It will conduct a variety of outreach efforts including educational possibilities through the high school ocean science bowls. All of this seems well conceived. The question is whether this fits the profile of EVOS Trustee funding policies. First, the EVOS Trustee Council has not

previously invested in pollution prevention or in research or implementation of response actions. That is clearly what this proposal is all about. Second, the cost of this project is very high – 417 K in EVOS Trustee Council funds. Third, I cannot find evidence that the responsible PIs have a track record of demonstrating experience and success in handling this level of funding in a previous similar project. Fourth, I question the value of the PAH sampling in mussels, given that the response activities for small oil spills represent merely a pilot project not a sustained set of responses that could be sufficient to allow detection of reduced pollution in the mussels. Fifth, the sampling design for collecting mussels (From where? How many? Why the proposed frequency?) is not adequately justified. Sixth, this proposal needs to do a better job of relating pollution reduction to enhancing recovery of injured species, to show the connection typically required for EVOS Trustee Council funding.

Reviewer 2:
I appreciate that groups are coalescing on behalf of the community to improve water quality of the Cordova Harbor. Several projects have been proposed, including 1) proper disposal of antifreeze, batteries and trash, 2) small oil spill response, 3) workshops, public education and outreach, and 4) monitoring of water quality. A substantial component of this proposal is exploratory (e.g., workshops, contest), but I favor a more cost-effective approach of implementing best available practices. There are a great many harbors that are addressing these same issues, and it should be straight forward to adopt existing practices. I am also not convinced that the monitoring PAHs in mussels is the best use of funds for tracking success of this multi-pronged approach to cleaning up the harbor. Furthermore, mussels will be collected from only one location in the harbor. How will this provide meaningful data on small spills that are patchy in space and time? This is the most expensive of the proposals, and the budget could be trimmed to focus on components that would have a direct, immediate impact on improving water quality while concomitantly reducing associated administrative costs

Reviewer 3:
This proposal is presented by a group of concerned citizens including the NVE and others such as PWS keeper, Cordova fishermen, etc. Their goals are to bring a presence to Cordova Harbor to promote clean boating practices, engage local harbor staff, businesses, etc. in supporting services and to assist with improving user clean practices. Previously NVE and CCH has addressed antifreeze disposal, dealing with small spills in the harbor and developing cleanup approaches, extending outreach activity for education of harbor users, and evaluation of changes through PAH monitoring of mussel tissues. While the other tasks are worthy, the last item on PAH levels in mussels is too ambitious and the design is probably not such that useful data can be obtained. It is suggested this last task be eliminated. This is an expensive proposal and cost savings could be realized in a number of areas, particularly in administration.

Science Panel Recommendation: No Consensus

Science Coordinator Comments:

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 for OSRI or the oil and gas industry, 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. I would recommend that these projects be removed from the proposal and the budget be reduced accordingly.

I also 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.

In response to several of the science panel members concern regarding the PAH monitoring in mussels, the sampling and monitoring proposed is part of the existing NOAA Mussel Watch Program. This information would add to the long-term data set that already exists through this program.

Science Coordinator Recommendation: Modify

Public Advisory Committee Comments:

Comments for FY13 (January 2013):
Abstracts were submitted to individual members of the PAC for comment. No comments were received.

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

This project was solicited by NOAA under EVOSTC project 12120112, Phase I of which was funded in the FY'12 Work Plan. Phase I was funded by the Council at a reduced sum of $20,000 for an invitational process and work with spill area communities to encourage submission of proposals reducing contamination originating from harbors and marinas. It should be noted that there are concerns regarding the proposals that were submitted under this program. This has long been a tenuous funding area for the Council. In the past, the Council funded acquisition of waste management facilities and activities and aided their implementation, but there was concern about the very indirect links between such projects and restoration. The projects submitted under NOAA's invitation have simply renewed these concerns. Moreover, some of the proposals are for projects that are very similar to those that have been funded by the Council in the past and have, apparently, not been successful or not maintained, both of which are inimical to Council policies. Lastly, some of the proposals seek funding that is aimed at correcting illegal behaviors on the part of members of the public or of governmental entities and seek monies that would augment, probably unlawfully, the appropriations of local governments and one or more State agencies.

Comments for FY13 (February 2013):
I support the recommendations and observations of the Science Coordinator, though I also note the remaining concerns of the Council's legal advisers.

Executive Director Recommendation: Modify

Trustee Council Comments:

Not Available

Trustee Council Decision: Pending

Project Number: **13120112-B**

Project Title: **Clean Boating Activities and Improved Waste Management Using Smartphones and Outreach**

Principal Investigator: Rachel Lord

Affiliation: Not Available

Co-PIs/Personnel: None

Project Location: Cordova, AK

Funding Requested by Fiscal Year:

FY13:	$30,537.00	**FY14:**	$24,801.00	**FY15:**	$16,940.00
FY16:	$0.00	**FY17:**	$0.00	**FY18:**	$0.00

Total Funding Requested: $72,278.00

Abstract:

Abstracts are excerpted from the proposer's submission.

The goal of this project is to reduce chronic pollution from oil and other hazardous wastes generated on vessels in working harbors throughout the Exxon Valdez spill?affected area. We will accomplish this goal by completing three objectives:

1. Engage commercial fishermen in the process of improving vessel waste management awareness at working harbors throughout the spill area;

2. Develop a smartphone application that provides immediate access to waste management solutions for vessel owners and crews throughout the spill area; and,

3. Widely publicize project activities to spread positive impacts among fishing fleets, other boaters, and throughout communities impacted by the 1989 Exxon Valdez oil spill.

This project will put critical information into the hands of boaters, giving them tools to more effectively utilize services already available to prevent pollution throughout the spill area. Following the 1989 Exxon Valdez oil spill, many facilities around the region developed infrastructure to receive, handle, and store used oil and other waste materials. Through this project we will effectively engage boaters to dramatically increase awareness and use of these services currently available and those that may develop into the future. By providing accessible information on waste management, we will create an ongoing dialogue and raised awareness that will ultimately reduce chronic pollution from oil and other hazardous wastes in a positive and pro?active manner. This will result in further restoring and improving marine habitat and water quality and preventing spills in and around harbors throughout the spill area.

Science Panel Comments:

These are individual comments from science panel members for FY13 (December 2012/January 2013):

Reviewer 1:
This proposal has thoughtful means of achieving sensible goals and fits well into the established Clean Harbor initiatives without being duplicative of any. It will presumably increase awareness among commercial fishermen of the facilities and means of waste disposal in many important harbors. It will develop a cell phone ap that can be accessed by any boater with a smart-phone to guide the boater to information about waste disposal options. And the project will do outreach in other ways to spread information about clean methods for waste disposal at ports and harbors, including working with the harbor masters to develop and offer waste disposal options. The PI, Rachel Lord, has a past record of success in multiple endeavors and wide public support. Costs to EVOS are in line with what probably should be spent on these

types of projects – 66K of EVOS Trustee Council funding. I consider this project to have merit, but it is only loosely linked to any restoration of injured species. If funded, I would suggest consideration of several modifications to be negotiated before funding. First, it would be useful to know how many boaters have smart-phones and thus the size of one key user group. Even if the proportion of boaters with smart-phones is high, one could argue that reliance on this one means of spreading the word is too great and that the ap should be complemented by some other outreach method too. Second, the first objective targets only commercial fishermen in increasing awareness of waste disposal facilities, but I don't see why recreational fishermen and boaters of all types should not be targeted too. I see this problem as universal not restricted to one user group. Third, there is ongoing costs to up-dating and maintaining the ap beyond the duration of this project. Some organization or agency should agree to maintain this toll, if it proves to be used with sufficient frequency and with demonstrated benefits in proper waste disposal.

Reviewer 2:
This is a potentially cost-effective ($66K), well-prepared proposal to increase awareness of commercial fishermen for the proper disposal of waste and available facilities at a number of harbors through the use of an application to be developed for smartphones. The project begins by engaging the commercial fishing community, includes informational outreach and concludes by evaluating the effectiveness of the campaign. My only reservation is whether the application will have much of an impact on compliance. I suspect that the issue may have more to do with the willingness of people to comply rather than the lack of information about the availability of facilities. Still, the project would raise awareness and likely improve compliance to some degree. I have two recommendations. First, reach out to recreational fisherman and boaters as well as commercial fishermen to increase the impact of the campaign. Second, address the disposition of the project after the grant concludes. Will harbormasters maintain the applications and continue the broader informational campaign after this initial investment?

Reviewer 3:
I have some mixed feelings about this proposal. On the one hand, knowledge of waste disposal regulations and options should be the responsibility of every vessel owner. I would think that information on disposal should be available by simply contacting the harbor master or other local boaters, who can direct the vessel to the local disposal site. It is hard to imagine that boaters will knowingly violate waste dumping regulations simply because they do not bother to access this information. On the other hand, the project proposes to conduct a wide variety of outreach via newspapers, Internet video, stickers, etc. that aim to educate the public on the consequences of pollution in attempts to attract convert some violators to become practitioners of clean boating practices. Without offering details, the proposal indicates that it will benefit marine habitats in and around the harbor. Thus, it is not clear what specific injured resources would benefit from a successful project outcome.

Reviewer 4:
This is an intriguing proposal to develop a cell phone app so that commercial fishermen and boaters in general to provide information/access to waste management awareness throughout the spill area. The goal is to engage commercial fishermen and boaters in pollution prevention and it seems that the proposed person to person contact proposed may be more meaningful than the smartphone app. Still, this is a novel approach and seems like it will be engaging. I wonder how the numbers of recreational fishermen compare to commercial fishermen (since the spill) and perhaps this group should be a focal point? This seems like an appropriate budget for this effort and it looks like the PI has past success and a good track record with public engagement. I support this proposal in general.

Science Panel Recommendation: No Consensus

Science Coordinator Comments:

Comments for FY13 (January 2013):
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?

Comments for FY13 (February 2013):
The proposers have submitted supplemental information based on the science panel's and coordinator's initial comments. I appreciate their response to our concerns but I continue to have doubts regarding use and sustainability.

Even assuming that many of the boaters did have access to a smartphone, I believe that the new dock signage proposed by the Cordova Clean Harbor program would see a greater compliance in trash, bilge, and anti-freeze disposal than use of an app.

Also, if the app is to be usable without a wi-fi or cellular connection, it would be quite large in terms of download size. It would likely require a wi-fi connection for both download and updates due to its size and would take up a large amount of space on the users device. This would be another barrier to wide-spread use and may lead to the app not being as successful as hoped.

Science Coordinator Recommendation: Do Not Fund

Public Advisory Committee Comments:

Comments for FY13 (January 2013):
Abstracts were submitted to individual members of the PAC for comment. No comments were received.

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

This project was solicited by NOAA under EVOSTC project 12120112, Phase I of which was funded in the FY'12 Work Plan. Phase I was funded by the Council at a reduced sum of $20,000 for an invitational process and work with spill area communities to encourage submission of proposals reducing contamination originating from harbors and marinas. It should be noted that there are concerns regarding the proposals that were submitted under this program. This has long been a tenuous funding area for the Council. In the past, the Council funded acquisition of waste management facilities and activities and aided their implementation, but there was concern about the very indirect links between such projects and restoration. The projects submitted under NOAA's invitation have simply renewed these concerns. Moreover, some of the proposals are for projects that are very similar to those that have been funded by the Council in the past and have, apparently, not been successful or not maintained, both of which are inimical to Council policies. Lastly, some of the proposals seek funding that is aimed at correcting illegal behaviors on the part of members of the public or of governmental entities and seek monies that would augment, probably unlawfully, the appropriations of local governments and one or more State agencies.

Comments for FY13 (February 2013):
I support the recommendations and observations of the Science Coordinator. While appreciative of the efforts made by the proposers and the project support by NOAA, legal and practical concerns remain.

Executive Director Recommendation: Do Not Fund

Trustee Council Comments:

Not Available

Trustee Council Decision: Pending

Project Number: **13120112-C**

Project Title: **Cordova Snow Management Analysis**

Principal Investigator: Molly Mulvaney

Affiliation: Not Available

Co-PIs/Personnel: None

Project Location: Cordova, AK

Funding Requested by Fiscal Year:

FY13:	$74,428.00	**FY14:**	$0.00	**FY15:**	$0.00
FY16:	$0.00	**FY17:**	$0.00	**FY18:**	$0.00

Total Funding Requested: $74,428.00

Abstract:

Abstracts are excerpted from the proposer's submission.

Every winter the City of Cordova and the Alaska Department of Transportation spread approximately 2,300 tons of sand on Cordova streets. Hydrocarbons and heavy metals are adsorbed to the sand particles, which become entrained in plowed snow, and this combination of pollutants is often stored to facilitate drainage into salmon habitat waterbodies. The CRWP will form a partnership with the City of Cordova and the AK Department of Transportation to analyze how snow storage and handling practices could be modified to implement Best Management Practices for snow management in areas immediately adjacent to the Cordova harbor, Orca Inlet, Eyak Lake, and Odiak Pond. CRWP will contract with DOWL Engineering for an analysis of City of Cordova and Alaska DOT snow removal and storage procedures. CRWP will then facilitate a planning dialogue with City of Cordova Public Works staff and Alaska DOT Maintenance & Operations staff regarding implementation and evaluation of recommended Best Management Practices. Some BMPS will likely be procedural, e.g. having to do with the timing of snow removal, and some may be mechanical such as placement of a bio?filter to treat melting snow run-off.

Science Panel Comments:

These are individual comments from science panel members for FY13 (December 2012/January 2013):

Reviewer 1:
This proposal describes an engineering analysis of options for conducting snow removal and storage in Cordova in ways that are intended to minimize negative impacts on water quality and habitat during its melting phase (and create cost economies to the Town). Funding does not cover implementation of the recommendations. Previous engineering reviews imply that beneficial changes are likely to emerge, although no smoking gun of water quality violations has been identified. One year of minimal water quality sampling is proposed but sampling design is only generally presented. The NGO (PIs) responsible for this proposal and project if funded has previous experience with project management and apparently successful implementation. Costs are modest ($68 K) to EVOS. Community outreach and education components seem reasonable and appropriate. What exactly the contracted engineering consultants will do and what ranges of options exist is rather vague, so more history of the similar analyses done by the engineers would have been a useful guide as to the breadth of their analyses likely to be done for Cordova. The tie-in to injured species is minimal – herring were once abundant in Orca Inlet and fresh-water salmon rearing habitats are potentially polluted by contaminants in the melting snow. I am not convinced enough of the relevance to restoration and recovery of EVOS-listed species, but the project has merit.

Reviewer 2:
An analysis of snow management in Cordova has been proposed to reduce likely contamination of the watershed, which might affect salmon, herring and shorebirds. A surprising shortcoming of the proposal is that a specific set of likely alternatives to current management practices was not presented, providing little basis for assessing the potential

outcomes of this proposal. Water quality will be assessed during wet and dry periods, but here too, details are lacking making it difficult to evaluate the success of the study. Recommended changes to the management plan that are easily incorporated will be tried in the second year of the project. Outreach and education components are appropriate, and the cost of the proposal is reasonable ($68K).

Reviewer 3:
This proposal conducts an evaluation of the snow removal and sanding options for Cordova. It does not include any implementation costs. The connection to injured resources in the spill area is somewhat tenuous.

Reviewer 4:
This is a "scoping" proposal for dealing with management of snow from the Cordova area where melt results in contaminant loading into salmon habitat. A BMP for snow removal will be developed and in 2014-2015, a demonstration implementation of snow management will occur. There will be public outreach and education with K-12 student involvement.

This seems like an appropriate use of funds and is a reasonable cost. The specific details of the plan are lacking but could be provided. Also, this is a clear way to improve harbor health, but not clear if specific enhancement of damaged species will occur.

Science Panel Recommendation: No Consensus

Science Coordinator Comments:

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.

However I have concerns regarding the actual implementation of the analysis. This project will only produce a report that would need the financial support of the City to be implemented.

Science Coordinator Recommendation: Do Not Fund

Public Advisory Committee Comments:

Comments for FY13 (January 2013):
Abstracts were submitted to individual members of the PAC for comment. No comments were received.

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

This project was solicited by NOAA under EVOSTC project 12120112, Phase I of which was funded in the FY'12 Work Plan. Phase I was funded by the Council at a reduced sum of $20,000 for an invitational process and work with spill area communities to encourage submission of proposals reducing contamination originating from harbors and marinas. It should be noted that there are concerns regarding the proposals that were submitted under this program. This has long been a tenuous funding area for the Council. In the past, the Council funded acquisition of waste management facilities and activities and aided their implementation, but there was concern about the very indirect links between such projects and restoration. The projects submitted under NOAA's invitation have simply renewed these concerns. Moreover, some of the proposals are for projects that are very similar to those that have been funded by the Council in the past and have, apparently, not been successful or not maintained, both of which are inimical to Council policies. Lastly, some of the proposals seek funding that is aimed at correcting illegal behaviors on the part of members of the public or of governmental entities and seek monies that would augment, probably unlawfully, the appropriations of local governments and one or more State agencies.

Comments for FY13 (February 2013):
I support the recommendations and observations of the Science Coordinator. While appreciative of the efforts made by the proposers and the project support by NOAA, legal and practical concerns remain.

Executive Director Recommendation: Do Not Fund

Trustee Council Comments:
Not Available

Trustee Council Decision: Pending

Project Number: **13120112-D**

Project Title: **Landfill Restoration Project**

Principal Investigator: Kathryn Adkins

Affiliation: Not Available

Co-PIs/Personnel: None

Project Location: Port Lions, AK

Funding Requested by Fiscal Year:

FY13:	$57,553.00	**FY14:**	$0.00	**FY15:**	$0.00
FY16:	$0.00	**FY17:**	$0.00	**FY18:**	$0.00

Total Funding Requested: $57,553.00

Abstract:

Abstracts are excerpted from the proposer's submission.

The Port Lions Landfill is a fenced facility of approximately 6 acres which slopes downward to a bluff overlooking the Port Lions Boat Harbor which is located within Settlers Cove in Kizhuyak Bay.

The City of Port Lions will implement the Landfill Restoration Project on June 1, 2013, following notice of award from the NOAA Grants Management Division. The purpose of the Port Lions Landfill Restoration Project is to reduce contamination of ground water to prevent leachate from moving from the landfill over a nearby bluff to the harbor and into the waters of Settlers Cove, located approximately 500 feet downhill from the landfill. The City proposes to accomplish this through activities focused on improving the landfill facility, adopting a Landfill Operations Plan, an extensive Community Education and Outreach program, and obtaining a State of Alaska Class III Landfill Permit. Settlers Cove is home to a variety of fish, birds, water mammals and land mammals. There are two salmon creeks in the cove, all species of salmon are found there, including large numbers of juvenile salmon. A large population of bald eagles nests in and around Settlers Cove and feed on salmon all summer. Settlers cove is also home to the Northern Sea Otter and Stellar Eider (both threatened species), the Yellowbill Loon and Kittletz's Murrelet (both were listed as Candidate Species n 2009), cod, halibut, 2 species of crab, many varieties of duck, seagulls, and other marine species. Deer, brown bear, fox, weasels and land otters also feed on the beaches in Settlers Cove.

Science Panel Comments:

These are individual comments from science panel members for FY13 (December 2012/January 2013):

Reviewer 1:

This proposal targets a widely acknowledged environmental mess, the Port Lions landfill. It follows the wise advice of KIVEC, the Kodiak Island Village environmental advisory group. The cost to the EVOS Trustee Council is modest (52.8K). The village grants manager, Kathryn Adkins, has a comforting and reassuring record of handling several other externally funded projects in recent years. On the other hand, the proposal fails to link landfill improvements to species injured by EVOS, although the area is so rich in many injured species that this could probably be done effectively. My major reservations involve the need for more technical advice and guidance on two major issues. First, there is a rudimentary plan for water quality sampling in the proposal and this sampling design is poorly conceived and will not provide answers to the key questions of whether there is now a major loading of contaminants and whether the modifications to the landfill will reduce that loading. It is unclear in mention of leachate whether water sampling will involve groundwater and surface water. The sampling frequency (4 times) is inadequate to characterize the pollutant loading from the landfill, especially given that weather conditions will vary and determine flows of both ground- and surface waters. The parameters to be measured in the waters need to be more carefully thought out and justified. Second, the project includes many modifications of the landfill, all sounding sensible, but I do not see involvement in preparing this proposal by qualified engineers necessary to choose and design the modifications so as to achieve

maximum water quality benefits. There may even be a question of whether the landfill should be closed out and relocated. In other words, participation by technical experts is needed, in my opinion, to provide guidance to render the water quality sampling meaningful and to insure that the right modifications of the landfill are selected and done the right way. If those changes are made to the proposal, I would be supportive of EVOS Trustee Council support.

Reviewer 2:
The Port Lions landfill, adjacent to the harbor, will be cleaned up and management plan will be developed. The dump serves 200 residents and wasn't managed at all until 10 years ago. It seems to me that the management plan should be developed first, instead of the second year, with the involvement of waste-management experts before any action is taken. Water quality monitoring has been proposed but a more thorough, detailed plan is needed to evaluate its potential effectiveness. The outreach and education components are appropriate. The cost of the proposal is reasonable ($75K)

Reviewer 3:
This proposal intends to clean up the Port Lions landfill at a modest cost to EVOSTC. While technical details were not really focused on, the general idea of environmental health improvement as a result of the project is probably correct. Nevertheless, details of water quality and contaminant loadings as proposed may not yield useful data. It is clear that input on design and assessments by experts in toxic wast management is needed before implementation of a plan.

Science Panel Recommendation: No Consensus

Science Coordinator Comments:

The proposal is well thought out and provides a reasonable time frame for completion. I am concerned that the monitoring plan, which would measure the success of the project, is not comprehensive or detailed in the proposal.

I would also recommend that the proposers clearly define which species would be helped by this project related to the EVOSTC Injured Resources and Services List.

Science Coordinator Recommendation: Do Not Fund

Public Advisory Committee Comments:

Comments for FY13 (January 2013):
Abstracts were submitted to individual members of the PAC for comment. No comments were received.

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

This project was solicited by NOAA under EVOSTC project 12120112, Phase I of which was funded in the FY'12 Work Plan. Phase I was funded by the Council at a reduced sum of $20,000 for an invitational process and work with spill area communities to encourage submission of proposals reducing contamination originating from harbors and marinas. It should be noted that there are concerns regarding the proposals that were submitted under this program. This has long been a tenuous funding area for the Council. In the past, the Council funded acquisition of waste management facilities and activities and aided their implementation, but there was concern about the very indirect links between such projects and restoration. The projects submitted under NOAA's invitation have simply renewed these concerns. Moreover, some of the proposals are for projects that are very similar to those that have been funded by the Council in the past and have, apparently, not been successful or not maintained, both of which are inimical to Council policies. Lastly, some of the proposals seek funding that is aimed at correcting illegal behaviors on the part of members of the public or of governmental entities and seek monies that would augment, probably unlawfully, the appropriations of local governments and one or more State agencies.

Comments for FY13 (February 2013):
I support the recommendations and observations of the Science Coordinator. While appreciative of the efforts made by the proposers and the project support by NOAA, legal and practical concerns remain.

Executive Director Recommendation: Do Not Fund

Trustee Council Comments:
Not Available

Trustee Council Decision: Pending

Project Number: **13120112-E**

Project Title: **Oil Water Separation by Superhydrophilic and Superhydrophobic Surfaces**

Principal Investigator: Chunlei Guo

Affiliation: Not Available

Co-PIs/Personnel: None

Project Location: Rochester. NY

Funding Requested by Fiscal Year:

FY13:	$392,560.00	**FY14:**	$0.00	**FY15:**	$0.00
FY16:	$0.00	**FY17:**	$0.00	**FY18:**	$0.00

Total Funding Requested: $392,560.00

Abstract:

***Abstracts are excerpted from the proposer's submission**.

The goal of this project is to develop uniquely structured surfaces that can rapidly separate oil from water on its own. First, based on the superhydrophilic technique pioneered in this lab, we will develop the counterpart technology in creating a superhydrophobic surface that will wick oil thus oleophilic. We will perform a systematic study in understanding the relationship between the surface structures created and their oil wicking effect. The surface structures will then be optimized to maximize the oil wicking effect. Lastly, we will provide and test two designs of oil-water separator and optimize them for real-world applications. We expect this study will provide a leap forward in achieving a virtually complete oil-water separation with high speed and minimal energy consumption.

Science Panel Comments:

These are individual comments from science panel members for FY13 (December 2012/January 2013):

Reviewer 1:
This proposal describes a research project designed to develop new ways to separate oil from water by an accomplished organic physical chemist with potentially rewarding ideas about superhydrophilic surfaces and their value to oil-water separation. Unfortunately, this project is not sufficiently responsive to the call for proposals. It is more basic research on a methodology of interest to API perhaps or to international oil companies. It has no obvious immediate application to EVOS needs and no identified water body or community in which successful deployment of this technique would enhance restoration and clean-up. I do not recommend funding.

Reviewer 2:
As interesting and potentially valuable as this proposal is, this lab research project does not seem to fit the call for proposals. Therefore, I won't comment on it further, and I don't recommend funding.

Reviewer 3:
This is a very interesting proposal that seems to have considerable technical and scientific merit. However, it is in an area outside of my field of expertise. If it is further considered for funding by EVOS, I highly recommend additional reviews by chemists working in this and related fields. It proposes to develop a seemingly novel method of separating oil from water. However, this developmental project has no direct immediate bearing on injured resources in the spill area; the connection proposed in the first paragraph of the proposal is very weak. Even if this proposed project is completely successful in the laboratory, it is not clear how it would be implemented in the field nor is it clear whether implementation would be cost-effective. For these reasons, I do not recommend EVOS funding. It would seem that this type of R&D project may be more appropriate for funding by the oil and gas industry.

Reviewer 4:

This project represents an interesting technology that could be useful but it is unclear that this fits the call for proposals. The outreach component is lacking as is the directed effort that should be more place-based. I would not rank this proposal high for this RFP.

Science Panel Recommendation: Do Not Fund

Science Coordinator Comments:

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. Finally, I feel that this type of project would be of greater benefit to the oil and gas industry than the Restoration Program.

Science Coordinator Recommendation: Do Not Fund

Public Advisory Committee Comments:

Comments for FY13 (January 2013):
Abstracts were submitted to individual members of the PAC for comment. No comments were received.

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

This project was solicited by NOAA under EVOSTC project 12120112, Phase I of which was funded in the FY'12 Work Plan. Phase I was funded by the Council at a reduced sum of $20,000 for an invitational process and work with spill area communities to encourage submission of proposals reducing contamination originating from harbors and marinas. It should be noted that there are concerns regarding the proposals that were submitted under this program. This has long been a tenuous funding area for the Council. In the past, the Council funded acquisition of waste management facilities and activities and aided their implementation, but there was concern about the very indirect links between such projects and restoration. The projects submitted under NOAA's invitation have simply renewed these concerns. Moreover, some of the proposals are for projects that are very similar to those that have been funded by the Council in the past and have, apparently, not been successful or not maintained, both of which are inimical to Council policies. Lastly, some of the proposals seek funding that is aimed at correcting illegal behaviors on the part of members of the public or of governmental entities and seek monies that would augment, probably unlawfully, the appropriations of local governments and one or more State agencies.

Comments for FY13 (February 2013):
I support the recommendations and observations of the Science Coordinator. While appreciative of the efforts made by the proposers and the project support by NOAA, legal and practical concerns remain.

Executive Director Recommendation: Do Not Fund

Trustee Council Comments:

Not Available

Trustee Council Decision: Pending

Project Number: **13120116**

Project Title: **Marine Debris Removal Program**

Principal Investigator: Chris Pallister

Affiliation: Not Available

Co-PIs/Personnel: None

Project Location:

Funding Requested by Fiscal Year:

FY13:	$483,088.00	**FY14:**	$467,256.00	**FY15:**	$366,650.00
FY16:	$0.00	**FY17:**	$0.00	**FY18:**	$0.00

Total Funding Requested: $1,316,994.00

Abstract:

This project was funded by the Trustee Council in FY12 for $450,097.
Abstracts are excerpted from the proposer's submission.

In early 2012, Gulf of Alaska Keeper (GoAK) commenced work on a multi-year marine debris cleanup, EVOSTC Project #12120116, Contract # IHP-12-057. During the summer of 2012, the EVOSTC-funded cleanup work focused on removing decades of built up deposits of marine debris from southwest Prince William Sound (PWS) beaches. While not the focus of the 2012 EVOSTC project, by late April of 2012, it became clear that massive quantities of marine debris emanating from the Japanese tsunami of March 2011 had made its way across the northern Pacific to the shores of Montague Island, Kayak Island, and other Gulf of Alaska beaches. By June 2012, the tsunami debris had penetrated Hinchinbrook Entrance and had begun to disperse throughout portions of PWS. By mid-summer large quantities of Styrofoam, urethane insulation and other foamed-plastic debris had washed ashore on many islands within PWS. In late June 2012, GoAK re-cleaned 14 PWS beaches during an annual marine debris monitoring project. Data collected during the monitoring project established that tsunami debris had already heavily impacted central PWS beaches in the Naked Island group in central PWS, as far west as beaches on Applegate Island to south of Main Bay, and beaches along the northeastern half of the Knight Island archipelago.

2012 marine debris monitoring data shows that both the amount and composition of annual marine debris deposition in PWS increased remarkably from previous years. The annual deposition of Styrofoam and other foamed plastic debris shot up by an average of 7-fold by weight. See figures 1and 2. Japanese plastic bottles and containers holding a wide array of chemicals washed into PWS. Fuel tanks and chemical drums were found on many beaches. Many varieties of Japanese oyster-culture and commercial fishing floats and buoys have lodged on beaches throughout PWS. Many of these floats are made of Styrofoam that quickly shreds along rugged PWS beaches and the bits are then scattered throughout the inter-tidal ecosystem.

Science Panel Comments:

Comments from FY12 (April 2011):
This long term marine debris removal program has been ongoing for the past 10 years. The costs seem to be reasonable considering the logistics, although it was unclear if they are relying on the NOAA grant to complete the work. The PI's are experienced but outreach efforts are weak and the project lead is in Anchorage. The team leader should speak with Village of Eyak team to see if there might be an opportunity for partnership.

These are individual comments from science panel members for FY13 (December 2012/January 2013):

Reviewer 1:
This project was the most meritorious of the FY 2012 proposals for clean-up projects and was accordingly funded. The

modifications made to the work plan and suggested here for the 2013 field season are well justified by the unexpected challenges associated with tsunami debris from the Japanese earthquake. There is urgency to address the Styrofoam debris quickly, as proposed, because once the large pieces have been broken up by waves and harsh weather, the resulting small bits are exceedingly difficult to find and remove. Even though Japanese or US government funding may become available, re-orienting FY 2013 field efforts to focus on where the GoA Keeper has documented massive debris, especially styrofoam, accumulations is well conceived and I urge support. Postponing the planned debris removal with a lag of one year will not jeopardize the original goals, provided additional funds are provided to handle the proposed FY 2013 clean-up of tsunami debris. In addition, as the Styrofoam breaks up into smaller pieces, the potential for fish and wildlife harm grows dramatically as these smaller pieces can become ingested by fish and birds. A large fraction of the area where the debris has been documented to be most abundant falls on historic herring nesting grounds (Montague, Naked, Eleanor, Knight Islands) potentially inferring with herring recovery efforts. The budget is well leveraged and this clean-up is very cost-effective with diverse contributions to the project. I consider this proposal to be the highest priority project among all submitted for FY 2013 consideration by the EVOS Trustee Council and urge its support.

Reviewer 2:
This amendment to a previously awarded grant is well justified. Indeed, the subsequent input of tsunami debris dwarfs the amount of debris that was already present. I concur that cleaning up the large amount of Tsunami debris should take precedence over the previously funded work. The amendment is well prepared, and the budget seems reasonable. I recommend funding the amendment.

Reviewer 3:
This project seems to have the strongest relationship to injured resources in the spill region among the submitted FY 2013 proposals. Marine debris can adversely modify natural marine habitats and can harm or even kill animals when ingested. Probability of ingestion increases with time after degradation into smaller, bite-sized pieces (e.g., Styrofoam, plastics) by wave action. The justification for the project is strengthened by the arrival of massive amounts of tsunami debris. If funded, the project should be well coordinated with any other state and federal cleanup efforts, as well as those by organizations, such as the Marine Conservation Alliance. I am supportive of EVOS funding of this proposal.

Reviewer 4:
This proposal focuses on a marine debris cleanup program that is an extension of the currently funded work plan. While there is a substantial request for this project, GoAK will match the EVOSTC funds at a 1 to1 level. They propose to stretch funding over a three year period. They propose to clean large stretches of coastline by removal of plastic and styrofoam debris. Much of this additional work will be due to the Japanese tsunami debris that complicates the previous cleanup efforts. The debris areas are valuable intertidal regions. Funding is recommended.

Science Panel Recommendation: Fund

Science Coordinator Comments:

I concur with the comments individual science panel members regarding the technical merits of this project. I would like to see a discussion of how the Gulf of Alaska Keeper is coordinating their work with ADEC's and NOAA's efforts on the removal of tsunami marine debris.

Science Coordinator Recommendation: Fund

Public Advisory Committee Comments:

Comments for FY13 (January 2013):
Abstracts were submitted to individual members of the PAC for comment. No comments were received.

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

Comments from FY12 (April 2011):
I concur with the Science Panel's recommendations. The proposal is extremely detailed and the PIs are already achieving a high level of debris survey and removal. Their familiarity with and effectiveness in this area is impressive. Gulf of Alaska Keeper has worked to strengthen their public outreach and determine whether Council funds would be

eligible for fed match. In between debris cleanup trips this summer, they have are collaborating with the Chugach Children's Forest.org project, Alaska Geographic, and the Chugach School District to involve students from Chenega and Tatitlek, and the Alaska Sealife Center regarding an interactive marine debris exhibit. They have made excellent inroads to expand their outreach.

As requested by the Council, GoAK has submitted an addendum with a menu of four public outreach proposals. My preliminary recommendation is in favor of funding Proposal 1, Youth Action on Marine Debris, with the Center for Alaskan Coastal Studies, Chugach Forest Service and Alaska Geographic. This proposal is diversified, highly leveraged and well-designed.

Comments for FY13 (January 2013):
I recommend funding his Amendment to the original proposal for FY'13. As a multi-year project, funding for FY'14 would be re-submitted on September 1, 2013 for Council review at their Fall 2013 meeting.

Executive Director Recommendation: Fund

Trustee Council Comments:

Comments from FY12 (April 2011):
The Council recommends this proposal's outreach component be strengthened. In particular, the Council encourages the Proposer to consult with Village of Eyak with regard to enhancing GoAK outreach in that community and to pursue additional involvement from other spill communities and organizations that reach youth involvement, such as the Alaska Geographic program and the USFS Chugach Childrens' Group. Please consult with NOAA as to whether Council funds would be eligible for matching fund programs, as noted in your proposal, and provide this information to us and as part of your final proposal. If this proposal is funded by the Council, Council staff will request that NOAA be the project manager, which may lend additional, NOAA expertise to the project.

Trustee Council Decision: Pending