October 31, 2008

W. Scott Pegau, Ph.D.
Prince William Sound Oil Spill Recovery Institute
P.O. Box 705
Cordova, AK 99574

Dear Dr. Pegau,

The Prince William Sound Science Center is pleased to submit a final report for the Education Program’s 2008 From the Forest to the Sea Summer Education Program. A $12,000 grant from the Oil Spill Recovery Institute was used to support education staff salaries to plan and implement a variety of Summer Education programs, including day and overnight science camps, a field course for high school students, and several community events. These programs were implemented with the support of many community partners and volunteers and served over 200 adults and children. As a result of our programs, participants have an increased awareness of the ecosystems of Prince William Sound and the Copper River Delta and the potential environmental and economic impacts of oil pollution and climate change.

The Prince William Sound Oil Spill Recovery Institute has been a consistent and generous supporter of the Science Center education programs and we appreciate the Institute’s continued support. Our staff looks forward to continuing to deliver high quality, innovative, science-based education programs that utilize the outstanding outdoor classroom surrounding Cordova. We will continue to work towards our ultimate goal of developing a scientifically literate citizenry that engages in stewardship behavior and responsible decision making with regard to our natural resources.

Please contact Lindsay Butters at (907) 424-5800, extension 231 with any questions regarding this report.

With regards,

Nancy Bird      Lindsay Butters
President      Education Coordinator
Appendix L – OSRI Grant Policy Manual

Final Report Form - Oil Spill Recovery Institute
This report may be submitted by mail, fax or e-mail
P.O. Box 705 - Cordova, AK 99574 - Fax: (907) 424-5820 - E-mail: osri@pwscc.gen.ak.us

Deadline for this report: Submittal within 90 days of grant/award expiration. Also, note that a summary Financial Statement shall be submitted within 30 days of the grant expiration.

Today’s date: 31 October 2008

Name of awardee/grantee: Lindsay Butters

OSRI Contract Number: 2008-09-16

Project title: From the Forest to the Sea

Dates project began and ended: March 1, 2008- September 30, 2008

PART I - Outline for Final Program or Technical Report
This report must be submitted by all grantees. However, for those whose project work resulted in a peer reviewed publication (whether in draft or final form), this report may be abbreviated and the publication attached as part of the report.

A. Non-technical Abstract or summary of project work that does not exceed 2 pages and includes an overview of the project. This abstract should describe the nature and significance of the project. It may be provided to the Advisory Board and could be used by OSRI staff to answer inquiries as to the nature and significance of the project.

B. Review objectives as described in original proposal and state whether these objectives were achieved.

C. Describe problems or roadblocks encountered in project implementation.

D. Highlight accomplishments, whether or not they were part of the original proposal.

E. Conclusions.

F. Appendix including copies of all written reports or publications completed or in progress, resulting from the project work. This also includes abstracts of papers presented at conferences. Please note the acknowledgment of OSRI support stated in Section 10.3.4 of the Grant Policy Manual.
### Part II - Final Financial Statement

This may be submitted on a separate sheet; it must include the following information.

<table>
<thead>
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EXECUTIVE SUMMARY

Summer Education Programs at the Prince William Sound Science Center offer participants of all ages exciting opportunities to learn in the field, and increase their understanding of the interdependence of our forest, coastal and marine ecosystems. Our programs incorporate a variety of environmental issues, such as oil pollution, marine debris, resource management and climate change, to raise participants’ awareness of their impact on our environment, and to give them to knowledge and tools to become good environmental stewards.

A Science Day Camp was held in partnership with the USFS Cordova Ranger District. The camp had full enrollment with 18 campers. Activities included hiking, canoeing and a sleepover at Skater’s Cabin.

An overnight Science Camp was held in partnership with Alaska River Expeditions (ARE) and was based out of the ARE campground at Mile 13. The camp had 6 campers from Cordova and Anchorage. Activities included stream bank restoration, kayaking, glacier trekking and river rafting. An August camp was cancelled due to low enrollment.

A new 10-day field course titled “Oceanography of Prince William Sound was held for high school students. The course was available for college credit through PWS Community College and included day kayaking trips in Orca Inlet and a three-day kayak expedition from Blackstone Bay to Whittier. The course had full enrollment of 10 students with a wait list.

Science Center educators facilitated a variety of one-day educational events for audiences of all ages to learn about local habitats and their inhabitants. These events included Small Fry educational activities during the Copper River Wild! Salmon Festival, Community Kayak Day, Community Canoe Day, two Tidepooling for Tots days and a program for the 4H Cordova Music Camp.

The Forest to the Sea programs benefitted from the partnership and volunteer support of over a dozen individuals and organizations who donated staff time and educational supplies.
SCIENCE CAMPS

Objectives

- Organize and facilitate one Science Day Camp program for 8-11 year olds in partnership with the U.S. Forest Service/Cordova Ranger District.
- Organize and facilitate two overnight Science Camp programs for 10-15 year olds.

Science Day Camp

A Science Day camp was held in June, engaging 17 participants in hands-on exploration of the environment surrounding Cordova. Each day the campers studied the rainforest, wetlands, marine and glacial ecosystems with camp staff and local experts. Highlights included exploring the mudflats and rocky intertidal zone during Ocean Day. Campers examined the adaptations of intertidal organisms and discussed how the introduction of oil contamination to the shoreline habitat can affect the entire marine food chain. A demonstration used gravel, food coloring, water and a siphon to show how the rising tides can deposit oil and marine debris in the tidal zone.

Science Camp

An overnight Science Camp was also held in June, with 6 campers aged 11-13 in attendance. Science Campers began the week by participating in a stream bank restoration project at an angling area on the Eyak River trail with biologists from the U.S. Forest Service. Campers planted native trees and revegetated eroded river banks with sod mats and willow shoots, while they learned about the importance of protecting fish habitat and managing human impacts on resources.

Another highlight was during Wetlands Day, when campers explored the ponds at the Alaganik Slough recreation site and identified a variety of aquatic macroinvertebrates. They learned that certain species, such as caddisflies, are indicators of water quality. Campers also used a variety of clues to identify animals that use the estuarine environment of the slough for hunting and breeding, including brown bears, eagles, dusky Canada geese, seagulls and eulachon. The campers discussed the ecological implications of oil contamination in this estuary, noting that through the complex wetland food web, all organisms are subject to harm by oil pollution.

A second Science Camp scheduled in August was cancelled due to low enrollment. In the future we will aim to schedule camps earlier in the summer to avoid competition with sports practices.
**OCEANOGRAPHY OF THE PRINCE WILLIAM SOUND**

**Objectives**

- Plan and implement a 10-day field course for high school students to learn about the ecological, social and economic impacts of environmental issues and resource management.
- Coordinate with the Prince William Sound Community College and the University of Alaska, Anchorage to provide academic credit for this course.
- Combine engaging outdoor activities with hands-on, field-based scientific study of the ocean environment and physical and chemical oceanography concepts.
- Educate participants about marine and estuarine resources and their susceptibility to environmental damage from oil spills, and about oil spill response systems now in place in the Prince William Sound region.

The Oceanography of Prince William Sound (OPWS) field course was held from June 23-July 2 and was filled to capacity with 10 high school students from Cordova, Anchorage and the Mat-Su valley. The ten-day course was based in Cordova, and included a three-day kayak expedition in the western Prince William Sound. Seven of the participants took the course for academic credit offered through the Prince William Sound Community College.

The course began in Cordova with an introduction to kayaking skills and rescue techniques, followed by a series of ocean science classes and demonstrations organized by course instructors Rob Campbell, Krysta Williams and Lindsay Butters. Topics covered over the next three days included physical properties of water, ocean basin formation, waves, oceanic and atmospheric circulation, the Coriolis effect, tides, estuaries and upwelling.

Students also had the opportunity to interact with a variety of guest presenters, exposing them to a variety of careers and research areas in ocean science. Scott Pegau from the Oil Spill Recovery Institute gave a presentation to the students about technological and organizational advances in oil spill response and prevention in the 19 years since the *Exxon Valdez* Oil Spill. Dr. Pegau helped the students understand how the lessons we’ve learned can be applied to future spills in arctic and subarctic waters. During a trip to Child’s Glacier, students visited the Miles Lake Sonar station and met with ADF&G Biologists who use sonar to count salmon as they migrate up the Copper River. Students learned about the importance of fisheries management and the methods ADF&G uses to set escapement goals each season. They also toured the bridge of the M/V Chenega and the U.S. Coast Guard Cutter Sycamore to learn about marine transportation and navigation technology used in the past and present. Aboard the Sycamore, the students were shown oil spill response and containment equipment, which the Coast Guard can deploy in the event of a spill in the Sound.

On Day 4 of the course, the group traveled to Whittier to be outfitted with expedition kayaks and gear. Honey Charters then ferried the group to Herring Bay on Knight Island where the students...
visited a beach that was oiled by the *Exxon Valdez Oil Spill*. Several soil pits were dug, but no evidence of lingering oil was found in that particular location and no sediment samples were collected. The group was then dropped off in Blackstone Bay where we camped at the foot of Lawrence Glacier and prepared for a three-day paddle back to Whittier.

During the expedition, students paddled near glaciers and icebergs, explored the intertidal communities along the coast and practiced open water sampling techniques. The students used a Niskin sampling bottle to collect water samples at varying distances from Blackstone Glacier. Then they performed measurements of water temperature, clarity and salinity, and analyzed the composition of bottom sediments collected with an Ekman dredge. Students also used a plankton net to collect plankton samples, which they viewed using microscopes upon their return to Cordova.

Despite chilly, rainy weather the group enjoyed their three days of paddling and camping in the western Prince William Sound, and made it safely back to Whittier in time to catch the ferry back to Cordova for the remainder of the course.

The students spent the final days of the course working on their portfolio assignments and final exam. Course participants also participated in a marine debris education project. They watched a film about the sources, fate and effects of marine debris in the ocean, then paddled to North Island in Orca Inlet to inventory and remove debris found there.

Working in small groups, the students produced a variety of outreach materials to raise public awareness about the issue of marine debris and to educate citizens about ways they can prevent pollution from entering the marine environment. Outreach materials produced included an article, artwork and a narrated film. The article was published in the Science Center’s newsletter and was sent to the Cordova Times, and given to course participants to submit to their local newspapers (Please see the article in Appendix 1). The sound bites and video clips for the film are being compiled and edited by a Cordova High School student as a service learning project. The finished product will be distributed broadly, including to course participants, posted on the PWSSC website and uploaded to YouTube. The film will also be used in subsequent ocean science and marine debris projects coordinated by Science Center educators.
COMMUNITY EVENTS

Objectives

- Facilitate Small Fry educational activities related to oil spills for use at the Copper River Wild! Salmon Festival in July 2008.
- Coordinate one Community Canoe Day for participants of all ages to learn about the wetland and estuarine resources of the Copper River Delta and their susceptibility to environmental damage from oil spills.

Science Center educators coordinated the Small Fry educational event during the Copper River Wild! Salmon Festival, which was held in July. The event attracted approximately 65 children and their parents. Several organizations participated in the event including the Science Center, Forest Service, Native Village of Eyak and the Alaska Department of Fish and Game. Stations included fish printing, casting practice, Eskimo ice cream making, beading, and activities in the ADF&G Mobile Aquatic Classroom related to salmon biology and healthy salmon habitat.

Community Canoe Day was held in August with 6 participants joining Science Center educators for a day of paddling down Alaganik Slough. During the paddle, participants learned about the ecologic importance of wetland habitats, what birds and animals inhabit the area and the effects of oil pollution on wetland organisms.

Other summer community events coordinated by our Education staff engaged both children and adults in science education activities. Community Kayak Day brought together 25 adults and children to paddle to Humpback Creek and learn about the intertidal environment and the adaptations of intertidal organisms.

The Science Center coordinated two Tidepooling for Tots events where 20 youngsters and their parents explored the shore, discovering different types of animals living in the intertidal zone. The children observed the different shapes, sizes and body coverings of the animals and learned how to handle them carefully.

Each year, educators prepare a short science lesson to present to a group of campers participating in the 4H Cordova Music Camp program. Our education intern delivered a program to 25 campers to teach them about adaptations plants and animals use to protect themselves. Using a variety of materials, the campers dressed each other up as unique animals and plants with special body parts to protect themselves from predators.

NATURAL HISTORY OF THE COPPER RIVER WATERSHED

Objectives

- Provide opportunity for adults to earn continuing education credit while increasing their knowledge of local ecosystems.
• Introduce program participants to OSRI funded research projects taking place in the Copper River Delta and Prince William Sound region.
• Educate participants about the local marine and estuarine resources and their susceptibility to environmental damage from oil spills, and about oil spill response systems in the Copper River Delta and Prince William Sound region.

In partnership with Alaska River Expeditions, the PWSSC planned and marketed a Natural History of the Copper River Watershed field course for the 2008 summer season, based on the 2007 course materials. The course was approved to be offered for Continuing Education credits through the University of Alaska, Anchorage. Unfortunately, course registration was quite slow; we did not reach our target recruitment by our registration deadline, and opted to cancel the course. In the coming year, we will continue to expand our marketing strategy for this program and look to build partnerships with school districts, elderhostel groups and EcoAdventure programs in order to recruit participants for a 2009 program.

RECRUITMENT
A variety of methods were used to outreach the Summer Education Programs in an effort to recruit participants of all ages.

Science Center Website: the Summer Education Program web pages were updated to provide a more complete resource for the camp schedule, program information and necessary forms.

Program Partner Websites and other internet sites: Alaska River Expeditions advertised our partnership programs on their websites. In addition, From the Forest to the Sea posted profiles on three summer camp websites: www.mysummercamps.com and www.summer-daycamps.com.

Program Brochures: a color brochure was produced and mailed to every family on the camp mailing list (approximately 150 households). Brochures were also distributed to various locales including the airport, ferry terminal, Chamber of Commerce, program partner offices and to several schools across Alaska.

List serves and email lists: list serves such as “EE News”, an online newsletter of the North American Association for Environmental Education, and “What’s Up” are employed to advertise our programs both nationally and in Alaska. In addition to the Science Center Community Education email list, we have compiled email lists for high school science teachers and career resource advisors in over 30 schools across Alaska that we use to send information about our summer programs. Program staff also forward program information to personal and professional contacts, college advisors and family members.

Newspaper and Newsletter articles: our education staff prepared several articles and advertisements that are published in the Cordova Times, the Anchorage Daily News Summer Camp pages and the Science Centers’ Breakwater newsletter.

Other local media outlets: program specific fliers were posted on bulletin boards in Cordova, Valdez, Whittier and Anchorage, and ads were run on the GCI cable scanner.
EVALUATION
Post session evaluations were completed by program staff, parents and OPWS participants during the summer season. (Evaluations by Science Campers were not completed during camp due to a last minute schedule change on the final day of camp; evaluations mailed to the campers were not returned.) The results from these evaluations are used primarily to measure the success of our educational programming and to revise program development and delivery as necessary to meet the needs of our audience.

A summary of participant evaluations for Oceanography of Prince William Sound is located in Appendix 2.

A total of 26 parent evaluations were mailed out following camp sessions; only eight (30%) were returned. Comments from these evaluations are listed below.

“Anchorage school kids and families should become more informed about Prince William Sound as recreational use out of Whittier grows. This will help promote conservation and protection of resources, as well as appreciation and interest in them over time.”

“Excellent overall. Great camp location this time.”

“Thanks! You run a first-rate program. Very Professional. I’d recommend to anyone.”

“You did a great job! My kids had tons of fun. Thanks!”

COMMUNITY PARTNERSHIPS
Forest to the Sea is a collaborative community-based program. We are supported by a variety of local organizations and agencies through community partnerships (Table 1). Our partners make contributions in many forms including in-kind donations of staff time, event organizing, logistical support an cooperative fundraising. Community members and businesses also support Forest to the Sea through financial donations, volunteerism and logistical support.

Table 1: List of organizations, agencies and institutions participating in From the Forest to the Sea Summer Education programs.

<table>
<thead>
<tr>
<th>Representative</th>
<th>Affiliation</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Rob Campbell</td>
<td>Prince William Sound Science Center</td>
<td>Led plankton collection and microscope activity during Day Camp; Science Camp overnight volunteer</td>
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<tr>
<td>Allen Marquette</td>
<td>Prince William Sound Science Center</td>
<td>Assisted with meal preparation and Wetlands Day activities for Science Camp.</td>
</tr>
<tr>
<td>Dirk Lang, Ken Hodges</td>
<td>U.S. Forest Service Cordova Ranger District</td>
<td>Led stream bank restoration service project during Science Camp, assisted with canoe logistics</td>
</tr>
<tr>
<td>Trail Crew</td>
<td>U.S. Forest Service Cordova Ranger District</td>
<td>Assisted with canoe logistics and paddled with campers during Day Camp Canoe Day</td>
</tr>
<tr>
<td>Shelton Gay</td>
<td>Prince William Sound Science Center</td>
<td>Gave a presentation about tides and currents during the OPWS course and Science Camp</td>
</tr>
<tr>
<td>Name</td>
<td>Organization</td>
<td>Activity Description</td>
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<tr>
<td>Neil Dawson, Kevin Swicke</td>
<td>Prince William Sound Science Center</td>
<td>Participated in evening camp activities and as overnight volunteers</td>
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<tr>
<td>Leigh Dorsey</td>
<td>U.S. Coast Guard</td>
<td>Facilitated a tour of the Cutter Sycamore for the OPWS students to learn about navigation</td>
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<tr>
<td>Captain Stormoff and M/V Chenega Crew</td>
<td>Alaska Marine Highway System</td>
<td>Facilitated tour of the M/V Chenega for the OPWS students to learn about marine vessels and navigation</td>
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<tr>
<td>Scott Pegau</td>
<td>PWS Oil Spill Recovery Institute</td>
<td>Discussed the impacts of oil contamination in marine ecosystems and spill response technologies</td>
</tr>
<tr>
<td>Breena Apgar-Kurtz</td>
<td>Alaska Department of Fish and Game</td>
<td>Gave OPWS participants a tour of the Miles Lake Sonar station and discussed fisheries management</td>
</tr>
<tr>
<td>Erin Cooper</td>
<td>U.S. Forest Service Cordova Ranger District</td>
<td>Led songbird surveys and wetland plant exploration during Science Camp</td>
</tr>
<tr>
<td>Robin Irving</td>
<td>Alaska River Expeditions</td>
<td>Gave Science Campers in-depth information about Sheridan glacier and river geomorphology</td>
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**PROGRAM FUNDING SOURCES**

Financial support for our Summer Education programs came from a variety of federal and non-federal sources including: the PWS Oil Spill Recovery Institute, Educational Legacy Fund, National Parks Foundation, ConocoPhillips, BP, community donations, participant fees, the Carol Treadwell Scholarship Fund and the Totem Ocean Trailers Express Scholarship Fund.

**CONCLUSION**

The Summer Education Program staff is pleased with the outcome of the 2008 field season. A large part of our success is due to the many individuals who generously donated their time to participate in our camp programs as guest scientists, camp cooks, overnight volunteers and field trip chaperones. The incorporation of adventure activities, such as kayaking, river rafting and glacier trekking served to attract participants to our programs and challenged them both physically and mentally. Overcoming these challenges builds character in our campers and fosters a personal connection to the environment and the natural resources we all depend upon. We look forward to improving our marketing strategies and continuing to develop exciting and sustainable summer education programs in the coming years.
APPENDIX 1

Oceanography Students Take On Marine Debris
Written by 10 high school students participating in the 2008 Oceanography of Prince William Sound field course.

Have you ever walked down the street and dropped some garbage, even accidentally? Most likely the answer is yes, and most people will pick up what they’ve dropped, but not every time. This doesn’t happen only on the street either, it could be when out on a boat, fishing in river, or just hanging out around at the beach. All these places and many more ultimately lead to the ocean, which means anything dropped in or near them winds up in the ocean. This creates marine debris, also known as marine litter, which is any type of manufactured or manmade material that enters the coastal or marine environment.

Marine debris impacts sea life. Plastic 6-pack rings get stuck on birds, and other sea animals can choke on plastic bottles. Plastic makes up 90% of all floating marine debris. It is lightweight, durable, and strong; it does not break down easily, so one piece of plastic can kill multiple animals over the years. Many animals mistake plastic for food, and eat it. Plastic in the stomach may cause a false feeling of being full, and animals can starve to death. A recent study\(^1\) showed that there were about six pounds of plastic for every one pound of plankton in the North Pacific Central Gyre, an area larger than the U.S., Canada, and Mexico combined! That’s a whole lot of garbage that could be accidentally swallowed. Marine debris affects numerous species worldwide, including humans.

How does marine debris affect us? Have you ever looked out the window and seen how beautiful nature is? Marine debris damages that. By collecting in the ocean and on the shorelines, it ruins the beauty of the sea and beaches. It makes the waters and beaches around us unpleasant, nobody likes to go to a beach covered in garbage. Marine debris can also physically hurt people. It gathers on beaches, and beachgoers can step on glass, plastic or metal and cut themselves. And when fishing, nobody wants a piece of garbage getting stuck in their propeller or getting tangled in their nets. Most people would rather see sea life when they are on the water instead of disconcerting debris floating all over. That trash can also destroy sea life that you would otherwise be enjoying. But thankfully, even though marine debris has lots of negative effects, there is something we can do about it.

Prevention is an important method to stop marine debris. The three main ways to prevent marine debris are not littering, community outreach, and recycling. Cleaning up after ourselves is a major part in preventing marine debris. When we litter, we are affecting our life style as well as everyone else around us.

Reach out to your community through presentations and public announcements. By working together can prevent marine debris. Organizing a cleanup day is a good way to get the community involved, this way everyone understands the need to protect their environment and respect their community. By spreading the word of prevention and taking action as a group we can become marine debris free.

What else can one do? Reduce, reuse, repair, and recycle. Reduce means reducing the amount of plastic you buy or looking for packaging with more biodegradable materials. Reuse means not throwing away things that are still useful, for instance buying one water bottle and reusing it, rather than buying a new one every time. Repair involves going out and removing marine debris at places that are already tainted by it. This can be as simple as picking up trash as you see it. Recycling can also aid in the prevention of debris; putting our trash in a recycling stream removes a source of marine debris.

Marine debris is a serious problem that needs everyone’s help to be solved. If we all do our part we can make the world a better place.

Oceanography of Prince William Sound was made possible with support from the Educational Legacy Fund, the PWS Oil Spill Recovery Institute, ConocoPhillips, BP and the National Parks Foundation. Special thanks to Cordova Coastal Outfitters, Alaska Sea Kayakers, Honey Charters, USCGC Sycamore, M/V Chenega Captain & Crew and the many volunteers who donated their time and supplies.

APPENDIX 2

2008 Oceanography of Prince William Sound Participant Evaluation Summary

What are some of your best OPWS memories?
“Watching the tents blow away (Portage Valley).”
“Being together all the time, playing on the net (North Island), setting up camp sites, playing spoons and cooking!”
“I enjoyed making our own food, I also enjoyed the times we had just to sit and talk. "Laughing."  "I liked when we were all together just hanging out and laughing and playing cards. This group was awesome and I loved it."  "Kayaking."  "My favorite moments were hanging out with everybody."  "Our tents blowing away, goofing around with friends, having fun."

What were your three favorite activities during OPWS?
“Kayaking, plankton nets and the little classes with Rob, Krysta and Lindsay because they were short and sweet."  "I enjoyed touring the OC on the ferry. I also liked going to North Island, and I liked the graham cracker plate tectonics activity. I learned a lot and the food was yummy."  "Kayaking, eating, sleeping, learning."  "Kayaking, picking up Marine Debris, kayaking right next to the glacier."  "Kayaking, picking Marine Debris and North Island and testing water depth and plankton."  "Kayaking, sampling, learning about oil spills."
Please comment on the portfolio and Marine Debris outreach activities. Were these activities beneficial to you? Why or why not.

"Yes! By having to work with our newly found information, I was able to have a complete understanding of most all the topics and ideas—it made learning a lot of fun! The portfolio will be lots of fun, the different variety of projects allows everyone to do something they really like."

"I think the portfolio was beneficial because I can use it to remember all the camp memories and what we did. I think the Marine Debris outreach is good because I learned a lot about it and I can now spread my knowledge."

"The Marine Debris outreach activities were good, I thought, because debris clean up is very important and we need to spread the news. The portfolio was kind of confusing and has a lot of stuff to do, but I liked some parts of it."

"Yes, it let me think and remember all that I learned."

Yes, because it taught me a lot I didn’t know."

Please comment on the presentations given by OPWS staff and guest scientists. Which ones did you enjoy the most? Do you have suggestions to make them more successful in the future?

"All of them were great and very informative."

"The staff presentations were my favorite, but the guest scientists mixed it up and gave a lot of interesting information. (But some of the guest scientists used a lot of big words and terms unfamiliar to me.)"

"I liked the oil spill presentation because it wasn't too complicated and I learned a lot of new information. In the future the presentations could be a little more based on this age instead of complicated."

"I enjoyed Shelton's presentation the most. They were all very good."

"I liked the presentation Scott gave (oil spills) because it was easy to understand on an important topic. I also like the presentations/lectures that Rob and Krysta gave because Rob has a PhD so he knows how to make learning fun with lots of experiments. Shelton's presentation was kind of hard for me to understand."

"I would do more labs, other than that it was fun!"

"Have more examples, pictures maybe."

"Scott's because it was broken down and understandable."

"I liked Scott's presentation about oil spills."

"I liked Dr. Rob's, Krysta's and Scott's the best. Maybe have more or a flat white screen."

What is the coolest thing that you learned during OPWS?

"About all the different kinds of waves."

"About kayaking and plankton and waves—cool stuff."

"I enjoyed learning about waves, tides and plankton. All the demonstrations were very useful."

"I learned how lucky I was to be in such an awesome class with a great group of people, and wonderful teachers. Thanks Rob, Lindsay and Krysta."

"About all the different ways the ocean works, and kayaking. Ocean and the carbon cycle."

"The word schlieren."

"That kayaks are awesome."

"Everything."

"10"