County: Clallam

Grant No: SEANWS-2014-ClCoCD-0007

PROJECT TITLE: Task 4

DELIVERABLES FOR TASK NO: 4

PROGRESS REPORT: [] FINAL REPORT [x]

PERIOD COVERED: October 1, 2015 - September 30, 2016

DATE SUBMITTED: October 3, 2016



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County: Clallam

Grant No: SEANWS-2014-ClCoCD-0007

PROJECT TITLE: Dungeness River Festival

DELIVERABLES FOR TASK NO: 4.2

PROGRESS REPORT: [] FINAL REPORT [X]

PERIOD COVERED: September 22-24, 2016

DATE SUBMITTED: October 3, 2016





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This report must accompany all requests for payment, along with any other deliverables per the scope of work.

Dungeness River Festival

Introduction

The Dungeness River Festival was initiated in 1999 and the 17th festival was held September 23-24, 2016. The Dungeness River Audubon Center's mission is to inspire understanding, enjoyment and stewardship of the Olympic Peninsula's unique natural and cultural resources, with emphasis on birds, rivers, fish, and people. Clallam MRC has participated in the festival with an educational booth for more than 10 years. The theme for the educational outreach has varied throughout the years including outreach to crabbers about derelict crab pot gear and the benefits of shellfish.

2016 Festival

At the 2016 festival the Clallam MRC booth was one of 22 booths staffed by local, state, federal, tribal and nonprofit entities active on the North Olympic Peninsula. The booths offered interactive nature exhibits and activities, as well as exhibits providing information on numerous environmental topics from marine debris and marine mammals to the importance of bees and wildlife living in the Olympic National Park. The display at Clallam MRC's booth focused on the importance of good habitat and clean water for healthy shellfish populations. Live geoducks, Olympia and Pacific oysters provided a way to talk about water quality and other essentials of marine habitat. Many of the visitors were also interested in learning about the biology of geoducks. The geoducks were provided by CMRC member Ralph Riccio from Jamestown S'Klallam Tribe and the Olympia and Pacific oysters were on loan from Feiro Marine Life Center. The booth also displayed a new poster that summarizes all the major Clallam MRC projects throughout the years.





Clallam MRC members Alan Clark, Kathy Cooper, Mike Doherty, Jeff Ward, Bob Campbell, Lyn Muench and Clallam MRC staff staffed the booth during the two day event and potential reached about 2,500 festival participants of which 1,000 were 3-5 grade school students. Similar to previous years, students visited each booth at the festival to answer a question. With a correct answer, each student received a stamp under the question printed on their festival passport. CMRC members asked the question, 'How long does a geoduck live?' The question and the live geoduck provide a way to talk about water quality and other essentials of marine habitat, and the stamped passport offers a reminder to the student about both the geoduck and the importance of marine habitats.





The festival was featured in Sequim Gazette http://www.sequimgazette.com/entertainment/394246711.html and in Peninsula Daily News http://www.peninsuladailynews.com/life/dungeness-river-fest-returns-for-17th-year/. The festival was also featured on the Dungeness Audubon River Center website and blog http://dungeness-river-festival.

Task Number: 4.2

What was the goal of this project and did you accomplish it?

Clallam MRC will engage several hundred elementary and middle school students and their families to increase their understanding of shellfish and the role they play in the marine environment. The goal was accomplished.

Please provide a list of measurable outcomes or accomplishments from this project (e.g. number of people trained, miles of shoreline restored, etc.):

The Clallam MRC potential reached about 2,500 festival participants of which 1,000 were 3-5 grade school students.

Please list the specific deliverables associated with this project (e.g. educational/outreach materials, monitoring protocol, summary report):

Clallam MRC made a new poster summarizing all the major Clallam MRC projects throughout the years. The poster will be used at other educational outreach events.

Any difficulties encountered or lessons learned during the project?

None

If this task was part of an ongoing project, please provide a brief summary of the project to date, including initiation and expected completion dates, overall goals and anticipated outcomes:

NA

Were any other resources or funding leveraged for this project?

None

Did you work with any partners or other MRCs to carry out this project?

Dungeness Audubon River Center, Jamestown S'Klallam Tribe, Feiro Marine Life Center

What are the regional cumulative significance/impacts/results of this project?

For more than 10 years Clallam MRC has been a part of the Dungeness River Festival which each year

reaches hundreds of school students, their parents and other local residents with the goal of inspiring understanding, enjoyment and stewardship of the Olympic Peninsula's unique natural and cultural resources.

Which NWSC Performance Benchmarks or PSP Near Term Actions does this project address? NWSC Goal 4: Educate local residents about the health of the NW Strait marine waters and habitat and provide opportunities for engagement.

County: Clallam

Grant No: SEANWS-2014-ClCoCD-0007

PROJECT TITLE: Educational Outreach

DELIVERABLES FOR TASK NO: 4.4

PROGRESS REPORT: [] FINAL REPORT [X]

PERIOD COVERED: October 1, 2015 - September 30, 2016

DATE SUBMITTED: October 3, 2016





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Educational Outreach

<u>Introduction</u>

In 2016 Clallam MRC hosted, coordinated or participated in numerous educational outreach events. This report summarizes the highlights of these events including media releases, articles, produced materials and evaluation results. The 2016 events included:

Speaker Series:

- January 25, Bob Simmons, the Olympic Region Water Resources Specialist at WSU Extension, gave a presentation on the Beach Naturalists and Watershed Stewards programs in Jefferson County.
- March 21, Jon Schmidt, the coordinator for CoastSavers, gave a presentation on the current efforts of the organization CMRC coordinated with Northwest Straits Foundation to offer an oil spill awareness workshop and forum.
- May 16, Anne Murphy, retired executive director for Port Townsend Marine Science Center, gave a presentation on a micro debris study conducted in Puget Sound between 2008 and 2010.
- June 20, Cheryl Lowe, Jefferson Marine Resources Coordinator, gave a presentation on Olympia oyster restoration in Jefferson County.

Oil Spill Preparedness Training

- February 27, Clallam MRC helped organize an 8-hour HAZWOPER training held in the Port Angeles City Council chambers.
- March 26, oiled wildlife training focused on basic intake and stabilization was held at the Clallam Fairgrounds
- April 9, oiled wildlife training focused on search and capture was held at the Clallam Fairgrounds.

Workshops and Forums

- May 3rd, Clallam MRC organized a 3-hour workshop with the title "Changing Risks in the Strait of Juan de Fuca."
- September 28, Clallam MRC partnered with Olympic Climate Action and organized a 2.5-hour speaker event titled "Our Marine Resources Facing Climate Change."

Summer Intern Program

• Three interns worked with Clallam MRC members and staff on the following projects: Kelp monitoring, GRP update and beach use along the west bank of Elwha River.

Each of these events are described in more detail in the following sections.

Speaker Series

To raise awareness of the Clallam MRC the speakers presented at the monthly MRC meetings.

<u>January 25</u>: At the first meeting in 2016 which was held in the large Commissioner's conference room in Port Angeles, Bob Simmons, the Olympic Region Water Resources Specialist at WSU Extension, gave a presentation on the Beach Naturalists and Watershed Stewards programs in Jefferson County. Participants in these courses receive comprehensive, science-based training through classroom lectures given by regional experts and local field trips.





After completion of the programs the participants are asked to give back to the community by becoming stewards, citizen scientists, or educators and volunteering a minimum of 40 hours.

Currently the WSU Extension, North Olympic Salmon Coalition and Feiro Marine Life Center have submitted a proposal to the Puget Sound Partnership requesting funding for similar programs in Clallam County.

March 21: Jon Schmidt, the coordinator for the CoastSavers, gave a presentation on the current efforts of the organization. 2015 was a very successful year with about 2700 volunteers participating in beach cleanup removing 141 tons of marine debris. Over a 100 countries participated in the International Beach Cleanup in September and CoastSavers are now part of a network, "World Ocean Collective", which focus on removing marine debris in the Pacific Ocean.

For the upcoming Earth Day event April 23 more than 600 volunteers have already signed up online. CoastSavers are working on introducing a new program "adopt a beach" which will work similarly to the successful "adopt a highway" program.



May 16: Anne Murphy, retired executive director for Port Townsend Marine Science Center, gave a presentation on a micro debris study conducted in Puget Sound between 2008 and 2010. This presentation and the Clallam MRC meeting took place at the Sequim Library.



Port Townsend Marine Science Center in collaboration with Department of Ecology lead the effort. The goal was to learn what types and quantities of micro debris were accumulating on beaches and to establish a baseline for future studies. The project started in seven counties and grew to include all twelve counties bordering the Salish Sea. To give a more complete picture of the distribution of micro marine debris Anne also talked about the surface water sampling effort conducted by Wallace Davis between Everett and Skagway, Alaska in 2011-12.

Hillary Burgess, the marine debris coordinator for COASST, had to cancel her presentation on COASST's small marine debris project due to illness.

June 20: Cheryl Lowe, Jefferson Marine Resources Coordinator, presented at the joint MRC meeting with Jefferson MRC which was held at the Jamestown S'Klallam Tribal Center in Blyn. Cheryl has for numerous years worked on Olympia oyster restoration in Jefferson County. She talked about the successful restoration in Discovery Bay and a new restoration effort starting this year in Quilcene Bay.

Media Coverage for the Speaker Series

Information about the speaker series was posted on the Clallam MRC website and for the joint June meeting on the Jefferson CMRC website.

Produced Material

A flyer was made for the marine debris presentation by Anne Murphy and Hillary Burgess and posted at locations throughout Port Angeles and Sequim. Information about the presentation was also distributed through several local email lists.



Evaluation Results

In general few local residents came to the presentations at the Clallam MRC meetings. At the advertised meeting at Sequim Library six community members came to the marine debris presentation.

The joint MRC meeting was well attended with seven Jefferson MRC members, seven Clallam MRC members, one community member, three staff members from Jefferson and Clallam MRC, and one NWSC staff member.

Oil Spill Preparedness Trainings

HAZWOPER Training

Clallam MRC partnered with federal, state and non-profit organizations to offer an 8-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training which was held on February 27 in the Port Angeles City Council chambers. Participation in an annual HAZWOPER training is a requirement for participation in an oil spill response. The instructors came from state and federal agencies, and a nonprofit organization including Department of Ecology, Washington Department of Fish & Wildlife, the US Coast Guard and Focus Wildlife.

The participants learned about safety & health, use of personal protective equipment, site characterization and the organization of an oiled wildlife response including the set-up of the rehabilitation center. Several videos were shown to demonstrate the different topics.



Media Coverage

The media coverage and advertisement of the training was led by Lisa Isakson, the Spill Prevention, Preparedness & Response Outreach and Education/Statewide Volunteer Coordinator at Washington State Department of Ecology. The information on the annual training was posted at the Ecology website and emailed to all oil spill volunteers listed with Department of Ecology. The information was also posted on the Clallam MRC website.

Produced Material

Department of Ecology produced and distributed a flyer throughout western Washington and Clallam MRC revised the flyer to focus on the local training and posted it throughout Port Angeles.



WDFW, the U.S. Coast Guard, Focus Wildlife, Washington Department of Ecology, Marine Spill Response Corporation, and the Clallam County Marine Resources Council will be hosting a training in Port Angeles.

This one-day training will teach you how to recognize, react, and protect yourself from the hazards associated with an oil spill. The class will cover hazardous situation recognition, personal protective equipment, decontamination procedures, and an overview of how oil spill response operations are conducted. The class also examines hazards associated with working around oiled wildlife. Upon completion you will receive an 8-hour Hazardous Waste Operations and Emergency Response certificate.

<u>Note:</u> While some of the subject matter discussed is related to oiled wildlife specific hazards, this training is not a wildlife handling or treatment course.

Log onto www.oilspills101.wa.gov. Click on "training" and follow the prompts. Register quickly as the class fills up fast

Evaluation Results

More than 70 volunteers signed up for the training filling the class, but unfortunately only 53 volunteers came to the training. All of these volunteers completed the training and received the HAZWOPER certification. Based on the large drop-out rate Lisa Isakson planned to have stricter sign-up criteria for 2017.

Oiled Wildlife Trainings

Clallam MRC and Island Oil Spill Association partnered again this year to host two oiled wildlife trainings. The first of the two trainings was held March 26 at the Clallam Fairgrounds. This training focused on basic intake and stabilization. The participants learned basic bird anatomy and how to take care of oiled birds. The training included working with live ducks learning how to hold, weigh, and give them fluids and how to perform a general health examination. The participants also had the opportunity to examine several different species of dead frozen birds.

A second oiled wildlife training was held April 9th and focused on search and capture. The participants learned about search & collection procedures including stalking and netting birds and how to perform an initial "beak-to-tail" examination and safely handle birds. The last part of the training was conducted in the field at Ediz Hook where the participants practiced search and capture techniques.

Media Coverage

The trainings were posted on the Clallam MRC website and information was emailed to all oil spill volunteers listed with Department of Ecology. Information about the presentation was also distributed through several local email lists.

Produced Material

The Clallam MRC produced flyers for the two trainings and posted them throughout Port Angeles.





Evaluation Results

Both oiled wildlife trainings were well attended with 27 volunteers completing the basic intake and stabilization training and 17 volunteers completing the search and capture training.

Workshops and Forums

Oil Spill Awareness Workshop

Clallam MRC organized a 3-hour workshop with the title "Changing Risks in the Strait of Juan de Fuca." Captain Joe Raymond, US Coast Guard, gave an update on the risk perspective for an accident in the Strait of Juan de Fuca including projected risks associated with the cancellation of Keystone, the expected decision by Congress to allow crude oil exportation, and the pending decisions on coal transshipment.

David Byers, Department of Ecology, gave an oil spill program overview and update in light of the Keystone decision, crude oil exportation and coal transshipment. The presentation included a discussion of the geographical response plan for the Strait of Juan de Fuca.

Stephanie Buffum, Friends of San Juans, talked about reducing the risks posed by an oil spill from global shipping, by designating the Salish Sea as a Particularly Sensitive Sea Area. This designation is a tool that the global community can adopt for an area that needs special protection.

The three presentations were followed by a round table discussion on "What happens if an oil spill is reported; on the ground response along the Strait of Juan de Fuca." The panel members included the three presenters and Jennifer Garcelon, Clallam County Solid Waste; Craig Cornell, MSRC and Jeff Ward, Clallam MRC.

Media Coverage

The workshop was posted on the Clallam MRC website and information was emailed to all oil spill volunteers listed with Department of Ecology. Information about the workshop was also distributed through several email lists and submitted to Peninsula Daily News Event Calendar.

Produced Material

The Clallam MRC produced a flyer for the oil spill awareness workshop and posted it throughout Port Angeles.



Evaluation Results

The oil spill awareness workshop was poorly attended by local citizens; besides the presenters and panel members only five community members came to the workshop along with several Clallam MRC members and staff.

Climate Change Speaker Event

The Clallam County Marine Resources Committee and Olympic Climate Action partnered to organize a speaker event called "Our Marine Resources Facing Climate Change." The workshop was held September 28th between 6 and 8:30 pm at the Red Lion Hotel in Port Angeles. Forum speakers examined the ecological impacts of ocean acidification, the impacts of ocean acidification on local shellfish, water availability on the North Olympic Peninsula, and how individuals can be involved to help make a difference.

Ginny Broadhurst, Executive Director at the Northwest Straits Commission, facilitated the event and the panel discussion. Ms. Broadhurst outlined actions that individual citizens can take to help reduce the impacts of ocean acidification. Anna McLaskey, PhD student at University of Washington, discussed the ecological impacts of ocean acidification. A member of the West Coast Ocean Acidification 2016 Cruise, Ms. McLaskey introduced the cause and chemistry of ocean acidification. Ms. McLaskey's research focuses on the impacts of ocean acidification on crustacean zooplankton such as krill and copepods. Bill Dewey, Director of Public Affairs for Taylor Shellfish, explored the impacts of ocean acidification on oysters and other shellfish. He travels around the world speaking about ocean acidification, how ocean acidification impacts the shellfish industry, and how it will impact the ocean food web. Ann Soule, Resource Manager at City of Sequim, described future water availability on the North Olympic Peninsula. She has worked extensively on surface water and stormwater, and water

quantity and quality issues in the Dungeness watershed and Clallam County and explored potential relationships between freshwater supplies and marine resources. Following the presentations a panel engaged the audience in a discussion about ocean acidification and water availability on the North Olympic Peninsula.









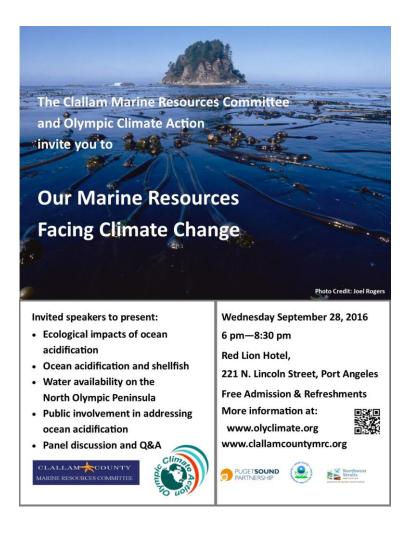
Media Coverage

A press release was submitted to both Sequim Gazette and the Peninsula Daily News. The speaker event was featured in an article in Peninsula Daily News

http://www.peninsuladailynews.com/news/ocean-acidification-water-supply-topics-of-free-forum/. In addition, an advertisement was placed in the Peninsula Daily News September 21 and 22. Information was posted on the Clallam MRC website and the NWSC website. The information was distributed through the NWSC social media and linked to media covering the North Olympic Peninsula. Information about the speaker event was also distributed through several email lists. On Tuesday September 27, Ed Bowlby, the chair of Clallam MRC, talked about the event in a Port Angeles News Talk Radio (KONP) program.

Produced Material

The Clallam MRC produced a flyer for the speaker event and the flyer was posted throughout Port Angeles and Sequim.



Evaluation Results

The speaker event was a success with one of the largest audiences participating in an educational outreach organized by Clallam MRC. A total of 77 people, including the four speakers, came to the event. We handed out 50 questionnaires and received 23 back (a return rate of 46%). The results of the questionnaire were as follows: The audience, based on the 23 return questionnaires, consisted of 76% retired, 10% farmers, 5% business owners, and 5% elected officials, 4% others. Five questions on the questionnaire focused on the general impact of the speaker event. The scores of the answers to the questions below are based on the number of return answers (if any of the 23 left it blank it is not included in the score). The scoring scale was 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), 5 (strongly agree).

- This workshop improved my understanding of local ocean acidification affects score 4.4 (agree)
- This workshop gave me ideas of actions I can take to help my local waters adapt to ocean acidification score 3.7 (agree)
- This workshop improved my understanding of how climate change will affect local water resources score 3.6 (agree)
- This workshop persuaded me to make decisions differently in my work place score 3.3 (neutral)
- This workshop persuaded me to make decisions differently at home score 3.5 (neutral agree)

The audience was also asked to give feedback on the individual speakers. The following number of people felt they gained knowledge from the respective speaker (the percentages take into account the numbers of people scoring the individual speaker):

Anna McLaskey – 13 (62%); Bill Dewey – 17 (81%); Ann Soule – 6 (30%); Ginny Broadhurst – 9 (45%)

To get a sense of how knowledgeable people felt they were before the speaker presentations below are the numbers of people deeming themselves knowledgeable before the presentations:

Anna McLaskey – 5 (24%); Bill Dewey – 1 (5%); Ann Soule – 6 (30%); Ginny Broadhurst – 5 (25%).

Bill Dewey and Anna McLaskey received the highest scores with 81% and 62%, respectively, of the responding audience stating that they learned from the presentation. Of this same group 5% and 24%, respectively, stated that they felt knowledgeable about the given topic before the presentation.

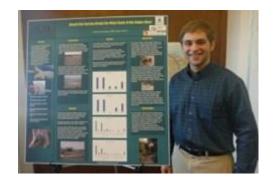
2016 Summer Intern Program

In 2016 the Clallam MRC members decided to increase the number of paid hours for the Clallam MRC summer internship to provide the students more time to work on the individual projects. Three interns completed the internship. On August 15th they presented their projects at Feiro Marine Life Center. The 2016 intern projects included:

Anthony Creasey focused on beach usage along the west bank of Elwha River. Anthony conducted six surveys to document the different usage of the newly formed beach and the west river bank. The surveys also documenting free-running dogs and pet waste.

Douglas Parks worked on updates to the Geographic Response Plan. The natural resource data in the current GRP was primarily collected in 1990. Douglas helped compile and format GIS data to be uploaded into SoundIQ. The main outcome of the project was uploading beach seine survey data for 40 locations between Discovery and Freshwater Bay in the Strait of Juan de Fuca.

Harley Gray worked on the kelp monitoring project. Harley helped organizing and conducting four surveys of kelp beds in Freshwater Bay. The effort is part of a larger long-term monitoring effort lead by the Northwest Straits Commission.



Anthony Creasey, Beach Usage



Douglass Parks, GRP Update



Haley Gray, Kelp Monitoring

Media Coverage

The intern program was posted on the Clallam MRC website and the information was distributed through several email lists. Information was also shared with student advisors at the Peninsula College and Huxley on the Peninsulas. The program culminated in an Intern Celebration. A press release about the intern celebration was submitted to Peninsula Daily News.

Produced Material

The Clallam MRC produced a flyer for the Intern Celebration and posted them throughout Port Angeles.



Feiro Marine Life Center, 315 North Lincoln Street

Students will share their summer projects, engaging community members in issues that affect people, species and habitats of our local marine waters including:

- Kelp bed monitoring
- · Beach use at the Elwha River estuary
- · Oil spill preparedness

All community members are welcome to this free event to thank Haley Gray, Anthony Creasey and Douglas Parks and learn more about Clallam MRC's. Fore more information contact Helle Andersen at ardeaco@yahoo.com and 360-808-4984





Northwest

Evaluation Results

Seven students applied for the five posted intern positions. Six applicants were interviewed by a panel of Clallam MRC members and five students were selected for the program. Two of the five students dropped out because of other time commitments.

The three interns provided important data and information furthering the three projects they were associated with.

Task Number: 4.4

What was the goal of this project and did you accomplish it?

The MRC seeks to give a higher profile to current issues in the Strait of Juan de Fuca, including climate change, shoreline armoring, and oil spills.

Please provide a list of measurable outcomes or accomplishments from this project (e.g. number of people trained, miles of shoreline restored, etc.):

97 volunteers completed a HAZWOPER or oiled wildlife trainings; 3 students completed the internship; 73 local residents participated in the workshop or forum organized by Clallam MRC.

Please list the specific deliverables associated with this project (e.g. educational/outreach materials, monitoring protocol, summary report):

This report

Any difficulties encountered or lessons learned during the project?

Clallam MRC encountered difficulties with attracting community members to the speaker series and oil spill workshop. Because of these difficulties an all-out outreach effort was conducted before the climate change speaker event including 1) article in local newspaper, ads in local newspaper, radio interview, advertisement through email lists and social media, and flyers posted throughout Port Angeles and Sequim. The outcome was positive with one of the largest audiences participating in a Clallam MRC educational outreach event.

If this task was part of an ongoing project, please provide a brief summary of the project to date, including initiation and expected completion dates, overall goals and anticipated outcomes:

NA

Were any other resources or funding leveraged for this project?

NWSC, NWSF, Olympic Climate Action, Department of Ecology, Washington Department of Fish & Wildlife, the US Coast Guard and Focus Wildlife, Island Oil Spill Association provided staff time or funds to the outreach events.

Did you work with any partners or other MRCs to carry out this project?

NWSC, NWSF, Olympic Climate Action, Department of Ecology, Washington Department of Fish & Wildlife, the US Coast Guard and Focus Wildlife, Island Oil Spill Association, Feiro Marine Life Center.

What are the regional cumulative significance/impacts/results of this project?

On a regional scale the participants in the HAZWOPER and oiled wildlife trainings come from all over western Washington, enabling these volunteers to maintain their oil spill response certifications. The educational outreach events contribute to raising the overall awareness in the region about current environmental topics.

Which NWSC Performance Benchmarks or PSP Near Term Actions does this project address?

Goal 4: Educate local residents about the health of the Northwest Straits marine waters and habitat and provide opportunities for engagement.