

Co: Clallam County
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G1200004

Clallam MRC 2011 Annual Report



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Annual Report for the Clallam County Marine Resource Committee January 1, 2011 – December 31, 2011

Summary: This report summarizes the activities and progress of the Clallam County Marine Resources Committee according to Task 2 of CZM 310 Grant Agreement No. G1200004 and its amendments.

A. Activities:

The Clallam County MRC activities for 2011 focused on administration; participation in MRC and NWSC meetings; training, outreach, and education; and specific action projects related to the goals and objectives of the NWSC. A changing budget scenario prompted the Clallam MRC to look closely at its priorities.

The committee accomplished the following in 2011:

- Conducted 12 regular MRC meetings.
- Participated in the annual NWSC training workshop.
- Attended regularly scheduled NWSC meetings.
- Continued the PSP shellfish sampling regime on the West-end beaches for Clallam County.
- Hosted several speakers at MRC meetings.
- Continued to fund a project coordinator.
- Funded six studies or monitoring efforts.
- Participated in local symposia and festivals with MRC activities and displays.
- Funded field trips to Feiro Marine Life Center MRC sponsored field trips to the Art Fiero Marine Life Center for over 2,000 students and 130 adult chaperones or teachers.
- Built upon MESA research and workshops through studies of seabird populations and sediment transport.
- Sponsored and coordinated symposia, workshops, and local events.
- Sponsored college interns to compile workshop and symposium proceedings.

Narrative

1) **Administration** – Local: County staff and the MRC coordinator continued to provide support to the MRC. During this year, County staff organized monthly meetings, prepared agendas, meeting materials, minutes, and public notices for the monthly MRC meetings. Contact lists were also updated and maintained.

County staff, in cooperation with members of the MRC, prepared and submitted amendments to the 2011-2011 Action Grant. Amendments to the grant include expanding the eel grass monitoring project to include fish use in subtidal habitats; building on MESA-based pilot studies to investigate marine population trends; monitoring sediment changes in the nearshore; and refining the groundwater monitoring project.

County staff and the MRC coordinator assisted MRC members in the preparation of the 2011 work plan.

As the budget contracted, the note taker and coordinator positions were eliminated, and the county habitat biologist took on the coordinator tasks.

Participation in NWSC meetings and programs – MRC members attended NWSC meetings held during the year. MRC members and staff also attended the annual NWSC training conference. Jeff Ward, Clallam MRC member, gave a presentation on harnessing ocean energy. Cathy Lear, MRC coordinator, described public outreach in Clallam County's Shoreline Master Program update.

Training and education – This is a high priority for the MRC. During the year the committee invited speakers to regularly scheduled monthly meetings:

Clallam MRC hosted guest speakers David Parks (WA DNR); Hilary Papendick (University of Washington); Jim Norris (Marine Resources Consultants); Bob Boekelheide (Dungeness River Audubon Center); Ann Soule (Clallam County) who reported on their MRC-funded projects. Clallam MRC also hosted Ian Miller (Washington Sea Grant) who described his work as coast coordinator. Kristina Geiger & Maggie Wenger presented on their University of Michigan Master's project, Olympic Coast National Marine Sanctuary interactions, and requested participation by the Clallam MRC. Shannon Walz and Tia Skerbeck introduced "Celebrate Elwha!" which offered visitors an opportunity to learn about the Elwha watershed during the dam removal celebrations.

Following Geiger and Wenger's presentation, MRC members participated in the U of M project. As a follow-up to Walz and Skerbeck's presentation, Clallam MRC sponsored a booth for Celebrate Elwha!.

2) **Public Outreach** – Outreach and education continue to be a high priority for the MRC. In addition to its public meetings with invited speakers, in 2011 the MRC sponsored field trips to the Art Fiero Marine Life Center for over 2,000 students and 130 adult chaperones or teachers. MRC participated in the Dungeness River Festival and other local public forums and sponsored HAZWOPER and oiled wildlife recovery training for 75 community volunteers.

Through a partnership with the nonprofit Port Angeles Education Foundation, the MRC sponsored field trips to the Art Feiro Marine Life Center for over 2,000 students and 130 adult chaperones or teachers from 3 school districts.

The MRC co-sponsored the Elwha Nearshore Research Consortium workshop, which highlights presentations and dialogue for nearshore restoration researchers and the public. The focus of the annual event is Elwha nearshore restoration. A proceedings has been compiled, funded by the MRC.

A display board, developed for use at public events, was updated and is used at public outreach events.

Highly successful beach cleanups were conducted in celebration of Earth Day, in April. The MRC partnered with several organizations in the Clallam Bay and Sekiu communities and with groups in the Port Angeles-Sequim area to clean up beaches between Pillar Point and Dungeness Spit.

The MRC co-sponsored the Elwha River Symposium, attended by more than 325 people from the scientific and local community. The symposium kicked off Celebrate Elwha!, which marked the beginning of dam removal and ecosystem restoration on the Elwha River.

MRC members and staff volunteered at the MRC booth during Dungeness River Festival, a public forum focusing on the Dungeness watershed. About 3,000 people attended the 2011 festival.



Clallam MRC member Mike Blanton plays the “Escape Cord” game with some of the 1,000 kids participating in the 2011 Dungeness River Festival.

Clallam MRC co-sponsored an 8 Hour HAZWOPER class and two Oiled Wildlife Recovery classes for 75 community volunteers.



Community volunteers participate in HAZWOPER training

The MRC coordinator works closely with the County's half-time web master to keep the MRC's web site updated. The coordinator posts meeting minutes and other updates to the site, www.clallam.net/ccmrc.

- 3) **Shellfish monitoring** – To keep shellfish harvesting opportunities available to recreational shellfish harvesters, Clallam MRC members monitored Strait of Juan de Fuca beaches, west of Dungeness Spit, for paralytic shellfish poisoning. Samples are sent to Washington Department of Health for testing. Sampled once a month in the winter and more frequently in the warmer months, beaches may now remain open for recreational shellfish harvesting unless PSP levels exceed safety standards.



Clallam MRC vice-chair Doug Morrill samples shellfish at Freshwater Bay

- 4) **Groundwater monitoring** – Clallam MRC partnered with the County's Environmental Health Division to monitor groundwater quality in association with commercial and light industrial development, including the City of Sequim's west side. This sampling augmented an assessment of existing monitoring conducted through Clallam County's EPA stormwater grant, in partnership with Washington Department of Ecology's Environmental Assessment Program. Results from the study were provided to Clallam County and the City of Sequim to aid their efforts to protect water quality in their aquifers, rivers, and bays.

Groundwater study conclusions and recommendations

Conclusions:

- Elevated nitrates in shallow aquifer away from Dungeness River, closer to development

- Apparent low nitrates away from development
- Low inorganic nitrogen in “Old Dungeness”-area drinking water wells
- Typical, low chloride levels
 - Higher away from River
 - Higher closer to marine shoreline
- On a regional scale, the shallow aquifer may be fairly well protected from certain stormwater contaminants
 - Some potential stormwater contaminants (organics and metals) were not found in drinking water wells with known vulnerability (elevated nitrates) at the time of sampling (Fall 2010)
 - The shallow aquifer is susceptible to nitrate contamination, from stormwater & otherwise

Recommendations:

- *Land use management*
 - Regulate and monitor sources of nitrate contamination, from septic systems & stormwater runoff from residential and agricultural development
 - Treat stormwater runoff prior to infiltration
- *Research*
 - Study nitrogen loading with shallow water table, especially Dungeness/Three Crabs
 - Verify (or qualify) nitrate data from Chemetrics kits



Sampling groundwater in the Dungeness basin

5) **Derelict gear removal** - Originating with the Clallam MRC, has been a successful project that is now overseen by the NWSC and is conducted at a regional scale. In 2012 the Clallam and Jefferson MRCs plan to collaborate on crab pot removal in the area of the proposed Protection Island Marine Protected Area. In the meantime, crabber outreach is making a positive change in the

number of derelict crab pots. Clallam MRC members distribute crab gages and escape cord at local festivals, sporting goods stores, and local boat ramps.

6) **Beach cleanup** – The Clallam MRC provided volunteers and sponsored disposal costs, garbage bags, and gloves for 3 beach cleanup events. The MRC also initiated co-sponsorship of Sani-Kans on popular local beaches and participated in a helicopter-assisted cleanup of a remote Cape Alava beach.

Springtime beach cleanup

The MRC partnered with community groups in two distinct Clallam County communities for Earth Day beach cleanups.

The first Earth Day cleanup was the perennial Clallam Bay/Seki area event, in partnership with the Crescent Lions Club and the Clallam Bay/Seki Chamber of Commerce. This cleanup focused on the Strait beaches between the Makah Indian Reservation and Clallam Bay. The MRC donated “No Net Loss” t-shirts, disposable nitrile gloves, and disposal fees. The local WA Dept. of Transportation office donated trash bags.

Led by a Port Angeles businessman, the second Earth Day cleanup focused on beaches from Pillar Point to Green Point. The geographic focus encompassed the entire central Strait of Juan de Fuca coastline, as well as several major urban stream corridors and estuaries. About 20 teams of beach volunteers participated. The MRC donated disposable nitrile gloves. The MRC’s project coordinator pitched in with his truck to collect trash from western Strait beaches. The local WA Dept. of Transportation office donated trash bags.

Quantity of debris collected: 3.99 Tons

Number of beaches cleaned: 21(10 of which were MRC beaches)

Number of volunteers: approximately 40



Two MRC volunteers (and a dog) sort recyclable materials out of trash from beach cleanup.

Sani-Kans and remote beach cleanup

Several volunteers braved gusty winds, rain, and pounding surf to collect beach trash from three popular surfing beaches.

Five Clallam MRC volunteers and local Surfrider Foundation chapter members scoured beaches for trash at the west side of the Elwha River mouth, the Twin Rivers, and Cape Alava. The Marine Resources Committee volunteers committed \$475 to support the Surfrider's long-term sponsorship of Sani-Cans at the two beaches, which are popular surfing destinations. The Surfriders have paid for these facilities for several years to encourage socially and environmentally responsible recreation at the sites.

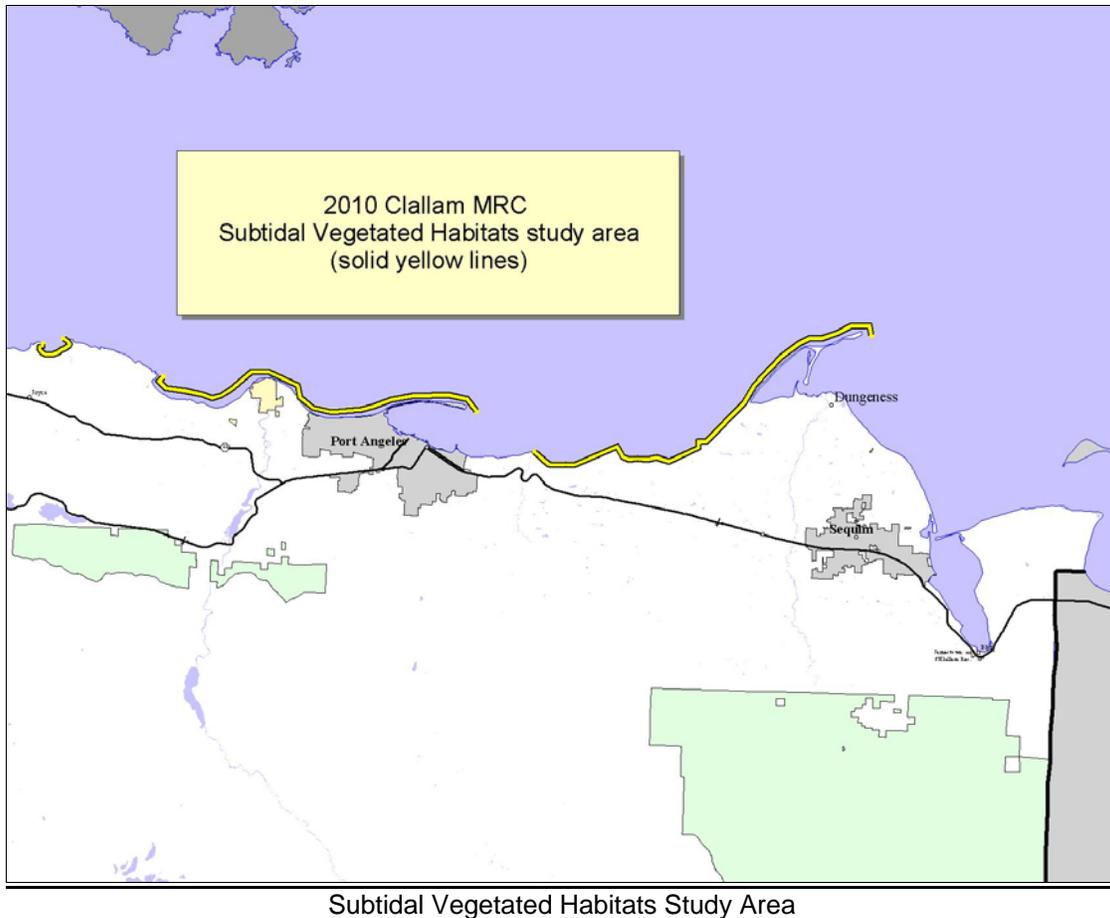
Members of the Surfrider Foundation teamed up with the U.S. Coast Guard to remove accumulated trash from Cape Alava, as part of a previously scheduled Coast Guard exercise. The Coast Guard used one of its helicopters to hoist eight sling-loads of beach trash that was collected and stashed above the high tide line this summer. The trove of trash included a refrigerator and discarded tires. The Coast Guard crews usually practice hoisting pallets, but noted that they gained practical experience with the different sizes, shapes, and weights of the beach trash.

The debris was trucked to the home of MRC member Arnold Schouten and examined by marine debris experts Curtis Ebbesmeyer and Jim Ingraham, assisted by college interns and Mr. Schouten. Mr. Ebbesmeyer and Mr. Ingraham analyzed the debris and realized that one of the floats is, indeed, wind-driven tsunami debris from Japan. The Clallam MRC paid the tipping fees for the debris disposal.



Clallam MRC and Surfrider members at Twin Rivers Sani-Kan

- 7) **Eelgrass mapping/Subtidal vegetated habitats** – Clallam MRC expanded its eelgrass mapping project to include documenting fish use in subtidal vegetated habitats of the Elwha drift cell and comparative locations in the Dungeness drift cell and Crescent Bay (please see map below). The project used standard Department of Natural Resources Submerged Vegetation Monitoring Project methods. Six study areas were surveyed twice each during the late summer of 2010.



Subtidal vegetated habitats conclusions, questions, follow up suggestions

Macroalgae:

- Macroalgae is present over almost all of the study region (98%; about 50 times more than eelgrass).
- Photic zone extends below -15 m.
- Baseline data from this study can be used to detect responses to dam removals.
- Big Blades in the Elwha drift cell appear to grow deeper than in the adjacent areas.

Forage Fish:

- Frame trawl was not capable of catching adult Pacific sand lance.
- Dip netting can sample bait balls.
- Pacific sand lance appear to use entire water column.
- Cannot conclude that Pacific sand lance prefer any type of vegetation.

Questions:

- Do Pacific sand lance aggregate into bait balls by unique size or age classes?
- Where are the Pacific sand lance sand refuges in the study region?

- Do Pacific sand lance preferentially use 3-dimensional vegetative habitat (e.g., bull kelp, eelgrass, *Pterygophera*)? If yes, why?

Suggestions:

- Repeat macroalgae survey after Elwha dams are removed.
- Design studies to investigate Pacific sand lance research questions.
- Consider developing macroalgae categories based on 3-dimensionality (e.g., tall and short Big Blades).

8) **MESA Pilot Study** - Based on recommendations from the MRC's 2007 Marine Ecosystems Analysis (MESA) workshop and the results of an MRC-funded pilot implementation study (2008), the MRC identified both primary research questions to be investigated and potential research partnership opportunities. The MRC partnered with the University of Washington's COASST program, the Dungeness River Audubon Center, Peninsula College, the SeaDoc Society, and Washington Department of Natural Resources to focus on seabird mortality and sediment budgets for the Elwha nearshore and comparative drift cells (Elwha and Dungeness) in the central Strait of Juan de Fuca.

Seabird mortality study conclusions

- Several bird populations using Clallam coastlines have suffered long-term declines. Few have increased.
- There are many factors at work, possibly related to each other, but it appears that forage fish declines may play a key role.
- Many affected birds are migrant and/or wintering species that have complex annual cycles. Some may be affected during their breeding seasons in other areas, whereas some may be wintering elsewhere.
- Can these patterns be reversed and populations be restored? Only if we can reverse systemic environmental degradation of the Salish Sea.



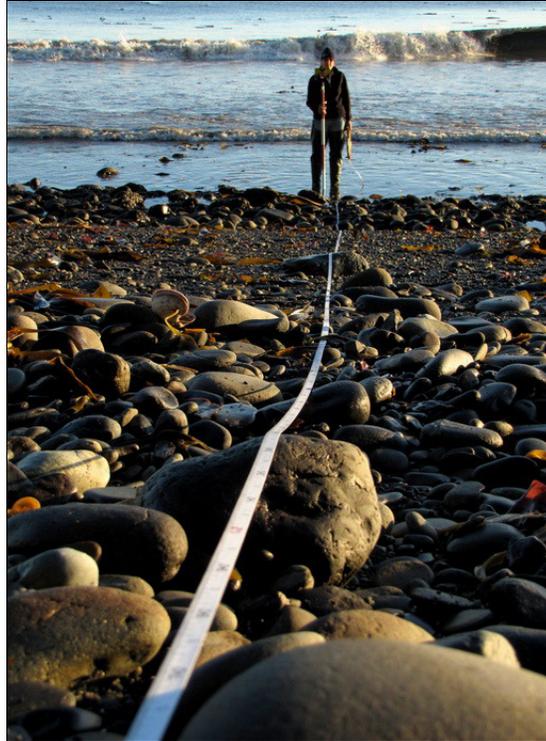
Left to right: Daniel Baker, Daniel Williams (from North Olympic Peninsula Skills Center natural resources class) and Tara Morrow (mentor) key out a Double-crested Cormorant with the COASST *Beached Birds* field guide on their beach survey.

Sediment budget study conclusions

- It is apparent that the degree of month-to-month vertical change in the upper foreshore of profiles in both Elwha and Dungeness beaches indicate that the sediment is highly mobile and subject to transport.
- In general, transects in both drift cells displayed similar changes in topographic form between July 2010 and May 2011, with upper beach profiles building out away from the base of the coastal bluffs in late summer and scouring back and steepening over the winter and into the spring.

Recommendations

- Implement GPS-based surveying techniques over the use of fixed-monument surveys.
- Add additional survey sites on Dungeness Spit and Ediz Hook.
- Continue student intern funding at the current level.
- Engage Landowners of Bluff-Front property.



Measuring a beach bluff profile

- 9) **Elwha Nearshore Fish-use Seining Surveys** - The MRC sponsored three Peninsula College Fisheries students to participate in seining surveys. Two long term sites, Salt Creek and Elwha River west estuary are sampled monthly utilizing the small Puget Sound Water Quality Authority Protocol nets.

Conclusions

- There is a strong seasonal trend in fish use, with virtually no fish present in either site in February; outmigrating chum appearing in March, and then Chinook, chum, and coho numbers comprising larger percent composition of the Elwha estuary fish assemblage.
- Coho, chum, cutthroat, and steelhead were the larger percent composition of the Salt Creek estuary assemblage as the spring outmigration progresses. Fish length also increases as the sampling season progresses.



Students and volunteers seine at Salt Creek estuary
Photo courtesy of coastalwatershedinstitute.org

B. Benchmarks for Performance

During 2011 the Clallam County MRC continued to work towards achieving benchmarks set by the NWSC. Members agree that public outreach, educating committee members, and filling data gaps are essential for further progress in meeting benchmarks. The following indicates how the Clallam County MRC worked toward meeting benchmarks in 2011:

1) ***Marine Habitats*** – *Protect and restore marine, coastal, and nearshore habitats; prevent loss and achieve a net gain of healthy habitat areas.*

Shoreline Inventory - Clallam County contains more than 210 miles of shoreline bordering both the Strait of Juan de Fuca and the Pacific Ocean. To facilitate the update of the Clallam County Shoreline Master Program, the MRC continues its shoreline inventory of physical processes, shoreline features, and fish use in its area of interest. The overall inventory is divided into a fish use inventory and a physical features inventory.

Fish use inventory was conducted in part by beach seining. Beach seining from the Salt Creek estuary east to the Elwha revealed substantial use of the nearshore by numerous fish species, including anchovy, herring, and salmonids. Additional inventory has identified forage fish spawning at the base of active feeder bluffs in the Dungeness Spit drift cell.

The physical features inventory provided information on the current state of the shoreline from Freshwater Bay east to Dungeness Bay; and is expected to provide a baseline from which to identify changes and trends. The study will also

help to identify potential sites for additional study; and will help to identify future activities such as conservation, restoration, or monitoring.

2) **Marine Life:** *Protect and restore marine populations to healthy, sustainable levels.*

Beach clean up – Western Strait of Juan de Fuca beaches are considerably cleaner through the efforts of 50 volunteers and the material support of the MRC. Clallam MRC provided support for cleaning local beaches; the MRC is providing a tangible contribution to better water quality by supporting the Sani-Kans at Elwha and the East and West Twin Rivers. Participating in the Cape Alava beach cleanup resulted in the added knowledge that wind-driven tsunami debris is arriving on the coast of the Western US.

Through subtidal habitat mapping, the scientific community gained a better understanding of fish use in vegetated habitats in the Elwha nearshore, and will be able to use that information to assess changes throughout the Elwha ecosystem restoration.

Spring Beach Cleanup– The MRC partnered with community groups in two distinct Clallam County communities for Earth Day beach cleanups.

The first of these groups was the perennial Clallam Bay – Sekiu area Chamber of Commerce and the Crescent Lions Club. This area is fairly remote, very dependent on fishing and tourism, and is considered by many who reside there to be an underserved community. The MRC was able to secure donated WA DOT highway litter bags for the event, and paid for disposable gloves, “No Net Loss” t-shirts, and the disposal costs.

The second group that the MRC partnered with was led by a Port Angeles businessman who owns a large waterfront building. The MRC and a number of local businesses and organizations focused beach cleanup efforts on the beaches Pillar Point to Dungeness Spit, as well as several lower urban stream drainages.

Autumn Beach Cleanup and Sani-Kans - Clallam MRC partnered with Surfrider to sponsor Sani-Kans at two popular beaches, the mouth of the Elwha River and the East and West Twin Rivers. MRC members performed a cleanup at both beaches during the Sani-Kan dedication outing.

Clallam MRC also partnered with the Makah Tribe, US Coast Guard, Surfrider, Coastal Watershed Institute, and Huxley College to remove (by helicopter) and examine marine debris that had deposited on a remote Cape Alava beach. Curtis Ebbesmeyer and Jim Ingraham analyzed the debris and realized that one of the floats is, indeed, wind-driven tsunami debris from Japan. Clallam MRC members

are considering what training beach cleanup volunteers may need as tsunami debris arrives on our shores.

Shellfish Monitoring - MRC members continued to implement a PSP shellfish-monitoring program on the western Straits portion of Clallam County. Following Washington State Department of Health Office of Food Safety and Shellfish protocols, this sampling program has resulted the in the seasonal opening of more than 30 miles of beachfront previously closed by State regulation. MRC members' monitoring efforts are ongoing. MRC volunteers were formally recognized by the County and the Washington DOH for their efforts.

3) ***Marine Water Quality:*** *Protect marine water quality of the Northwest Straits region, and restore the health of marine waters.*

Through monitoring for Paralytic Shellfish Poisoning the community benefits from an increased awareness of shellfish safety - preventing very serious public health risks, while reducing unnecessary beach closures. Groundwater monitoring offers a greater understanding of the links, if any, between groundwater contamination and water quality in Dungeness Bay.

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Groundwater Monitoring - Clallam MRC partnered with the County's Environmental Health Division to monitor groundwater quality in association with commercial and light industrial development, including the City of Sequim's west side. This sampling augmented an assessment of existing monitoring conducted through Clallam County's EPA stormwater grant, in partnership with WA Ecology's Environmental Assessment Program. Results from the study were provided to Clallam County and the City of Sequim MRC representative to aid their efforts to protect water quality in their aquifers, rivers, and bays.

4) ***Sound Science:*** *Collect high quality data and promote its use and dissemination.*

Significant data were collected and analyzed regarding changing marine bird populations in Clallam County, sediment movement and storage on beaches, and juvenile fish use of estuaries. The Clallam MRC hopes to use these data, and the presentations developed for the project reports, for public outreach in the 2011 to 2013 biennium.

MRC-sponsored projects are conducted according to standard protocols so that the data may be easily used in conjunction with other study efforts.

Marine Population Trend Investigations – Field research was conducted on seabird mortality and sediment budgets for the Elwha nearshore and comparative drift cells in the central Strait of Juan de Fuca.

Nearshore fish use assessment - Through partnerships with Huxley College, Coastal Watershed Institute and the Fisheries Program at Peninsula College, Clallam MRC sponsored at least two interns to investigate and document nearshore fish use and ecology of the central Strait of Juan de Fuca. Emphasis was placed on documenting the restoration associated with the imminent Elwha dam removals. Species of interest include forage fish and ESA listed salmon species. Areas of interest included Salt Creek and the Elwha River.

Proceedings – Huxley College/Peninsula College fisheries interns compiled proceedings from the Elwha River Science Symposium, held at Peninsula College September 15 and 16. Interns also compiled proceedings of the Elwha Nearshore Consortium workshop and forum held at Peninsula College on February 14.

5) *Education and Outreach:* *Promote stewardship and understanding of Northwest Straits' marine resources through education and outreach.*

Outreach and education continue to be a high priority for the MRC. In 2011, along with its public meetings with invited speakers, the MRC sponsored or co-sponsored several events. Greater community understanding and awareness of beach, nearshore, and ocean conditions result in greater support for public entities and governmental actions that protect marine water quality and habitat in Clallam County.

Local workshops and consortia

The MRC sponsored and/or partnered in a series of local workshops and consortia. At these and other local and regional events, the MRC display was set up and MRC members staffed a booth. Below is a sample of events where the MRC sponsored the event and/or staffed a display table:

Celebrate Elwha!/Elwha River Symposium - MRC members participated in Celebrate Elwha!, dedicated to the historic removal of the river's two dams. Celebrate Elwha! opened with the two-day Elwha River Symposium, which brought together over 325 researchers past and present who have contributed to the science behind the Elwha ecosystem restoration. More than 1,000 symposium participants and members of the public attended the evening talk given by Yvon Choinard.

At Celebrate Elwha! watershed-based events, MRC members provided attendees an opportunity to learn about the eelgrass mapping project conducted by Clallam MRC. Through conversation and large-format maps and photos, visitors learned about eelgrass and what the Elwha restoration might mean for future eelgrass beds.

Elwha Nearshore Consortium Workshop and Forum - The MRC co-sponsors the Elwha Nearshore Research Consortium, a forum for researchers and interested public to share information about new developments in Elwha River nearshore research. The 2011 consortium was held on February 14. Workshop proceedings were compiled, funded by the MRC.

Northwest Straits Training Conference - MRC members and staff attended the annual training conference and offered presentations. MRC member Jeff Ward gave a presentation on harnessing ocean energy. MRC coordinator Cathy Lear recounted Clallam County's public outreach experience with its Shoreline Master Program update.

Dungeness River Festival – A two-day festival held at the Dungeness River Center, the 2011 River Festival attracted 1,000 school-aged children and 2,000 adults. The MRC set up a booth where kids could play games (the crab-trap/escape cord game was a big hit) and participate in marine education activities. Adults were able to pick up a package of escape cord and a brochure that describes its benefits. The geoduck touch tank is always popular!

Community volunteer training

Clallam MRC co-sponsored an 8 Hour HAZWOPER class and two Oiled Wildlife classes for 75 community volunteers.

Field trips and featured speaker opportunities

Student Field Trips - Through a partnership with the nonprofit Port Angeles Education Foundation the MRC sponsored field trips to the Art Fiero Marine Life Center for over 2,000 students and 130 adult chaperones or teachers in 3 North Olympic Peninsula school districts. Due to funding cuts, the MRC does not expect to fund field trips in 2012.

Public speakers and meeting notice – The MRC hosts experts who speak on a variety of topics, ranging from marine riparian initiatives to shoreline inventory techniques. Monthly meetings are open to the public and are announced in the local newspaper. Announcements of MRC-sponsored workshops are broadly distributed. The agendas and minutes are posted on the MRC website.

C. Summary and conclusions

The Clallam County MRC continues to make progress in meeting benchmarks set by the NWSC. In 2011, historically closed recreational shellfish harvesting areas remained open due to volunteer PSP sampling efforts. Beach cleanup and Sani-Kan projects improve the local beaches for people and wildlife. Studies of the biological and physical nearshore and marine environment contribute to our understanding of these valuable resources.

Education and outreach activities brought the MRC's expertise to the larger community. The MRC contributed to education for over 2,000 students and 130 adult chaperones or teachers at the Feiro Marine Life Center; co-sponsored the Elwha Nearshore Consortium Workshop and Elwha River Symposium; participated in Dungeness River Festival and other local outreach events; co-sponsored HAZWOPER and oiled wildlife recovery training; and invited speakers to address pertinent topics at the MRC regular meetings.

The MRC co-sponsored the Elwha River Symposium, a two-day event that brought together the science behind the Elwha ecosystem restoration. The MRC funded college interns to compile the symposium proceedings.

The MRC co-sponsored the Elwha Nearshore Consortium, which included an evening dialogue between the public and researchers to talk about the Elwha nearshore and its restoration. The MRC also funded college interns to prepare the workshop proceedings. The MRC website, now in the purview of the Clallam County webmaster, was updated and improved. MRC members continued to become more informed on nearshore and marine issues.

Through these meaningful efforts, the Clallam MRC meets the benchmarks set by the Northwest Straits Commission.