

Pacific County Marine Resource Committee 2010 Annual Activity Report



PCMRC Mission Statement:

“The Pacific County Marine Resource Committee serves as a steward for the marine and estuarine resources in our county by facilitating science based policies, research, and education that enhance the sustainability of the economy and ecology of our communities.”



Acknowledgements

This program would not be possible without the dedication of the Pacific County Marine Resource Committee Board and Board Alternates (all 28), our Pacific County Commissioner's guidance, and the hard work of our precious volunteers. Thank you for your time, dedication, and insightful direction. We also give a special thanks to our legislators for their dedication to the marine and estuarine ecosystems of our great state.

NOTICE:

THIS IS NOT A FINALIZED DOCUMENT**

THIS IS DRAFT ONLY AND NOT BOARD APPROVED

Year Review

(See Appendix C. page 45)

Potential future challenges and opportunities:

Overall, what the PCMRC accomplished in such a short time is amazing. Although the PCMRC was officially formed in November 2009 the board was not set until December 2009 and the work plan was only half-way in motion by January. The work plan did not get fully approved and moving forward until March 2010. So, in basically a couple of months the PCMRC did quite a bit. For a very small county the PCMRC leveraged a small army to complete the tasks below.

The lessons learned are simple. Too small amount of money to get something like the PCMRC running the first year, not enough time to build something to this level, and not enough leniency for a first time activity (something that should be kept in mind when funding Wahkiakum County Marine Resource Committee). MRC's on the coast are a very good idea, to bring together many different interest groups to work towards common goals at a local level. It is simple, yet has the potential to do great things. Great ideas and enthusiasm is created from within this group, however the strict parameters that are handed down could potentially stifle this enthusiasm. The PCMRC took its "lumps" in this first year and will learn from them to have a more streamlined system.

Future challenges are tied to future opportunities. Money, as usual, is the main focus for future projects. The PCMRC would like to find funding sources to take over many current projects so that the group can use the 20k project money in new areas, and the PCMRC also would like to find larger funding sources to attack large ticket projects such as oil spill prevention, intertidal fish passage projects, helping with material recruitment on our beaches, expand educational programs throughout the county, and invasive species removal. All of these require more funds brought about through grant writing, something the PCMRC is looking into. The PCMRC also intends to keep involved in Olympia on critical issues about the marine and estuarine environment and the natural resource industries that our community relies on.

Task 1: MRC Coordination and NOAA B-WET Grant

The Pacific Conservation District, through an MOU with Pacific County, provided MRC coordination support including planning and organizing meetings, leading/facilitating meetings, and recording and distributing meeting and activity summaries to those interested in MRC activities. The MRC coordinator managed tasks of the MRC, assigned work to MRC volunteers, and actively attempted its timely completion including leading or delegating education and outreach, marine and fresh water quality, and sound science activities. The MRC coordinator was also responsible for coordinating with WDFW and for completing contract deliverables, and providing an annual report describing all the PCMRC activities. The MRC Coordinator also maintained and developed additional outreach tools as a means to communicate to the Marine Resource Committee and the public regarding activities and accomplishments. The MRC Coordinator ensured that there was MRC volunteer representation for each of the activities listed in the contract. Through the NOAA B-Wet grant (The NOAA B-WET is an environmental education program that promotes locally relevant, experiential learning in the K-12 environment. The primary delivery of B-WET is through competitive funding that promotes Meaningful Watershed Educational Experiences (MWEs).), **the PCMRC would have worked with CREST (Columbia River Estuarine Study Taskforce) to promote the Ocean, Estuary, River Education Program, however the grant was not awarded to the Naselle School District for the 2010-2011 school year.** The Ocean, Estuary, River Education Program was to work with, if awarded the NOAA B-Wet grant, with 7-8 grade children from the Naselle Washington school district on marine and estuarine water quality and habitat issues. Future efforts by the PCMRC and CREST will be made to encompass the Naselle School District in educational programs about the marine and estuarine ecosystems of Pacific County.

Task 2: Education and Outreach

Pacific County School Districts field trips and projects

Ocean Beach School District

The contribution from PMRC helped offset the costs of a field trip to Point Defiance Zoo which was the culminating project for this group. At the Zoo, students attended a workshop on marine invertebrates and then were given a tour of the facility. The guided tour taught students about marine animal habitat and feeding requirements. Students were able to get an up-close and personal look at many of the animals they had been studying throughout the year.

These students then went back to their schools and developed reports on what they had learned and shared those reports with their classmates. It was a fantastic outing that had a real impact on the students. The Hi-C teacher Tiffany Hall said that it was definitely a trip that she would like to reschedule for future classes.

Raymond School District

The Raymond 5th grade students took a field trip to the Forks Creek Fish Hatchery as a culminating activity for the Willapa River watershed and water quality unit. Students learned about the needs of various types of aquatic life in the estuary including the different types of salmon found in the Willapa River They also studied the effect that water quality has on aquatic life. The students worked on several outdoor activities to prepare for the field trip including

testing the water of the Willapa River in several different places (8th Street Dock, Willapa Landing, Forks Creek Hatchery and the water in the hatchery itself). Students learned to calibrate and operate the Grays Harbor College SPARKS water quality testing units to test water temperature, PH, and dissolved oxygen levels. At the end of the field trip, each student was given a salmon to “plant” in the Willapa River. Students finished the unit with an understanding of salmon and their life cycles, plus the factors that affect water quality in the estuary which in turn can affect aquatic life.



The staff at Forks Creek Hatchery invited the class to return next year in the fall to continue their study and to view the return of the spawning salmon.

Raymond GPS Units and Noxious Weed Geocaching:

The grant allowed us to purchase 4 GPS units. Students worked in groups using the GPS units to go on a noxious weed geocache. I programmed a route around the school area with markers at different kinds of noxious weeds, including Scotch Broome, thistle, tansy, and knotweed. Students had to find the noxious weed at the given coordinates and then identify the weed using the color brochure from the conservation district. Students learned about invasive species and how they affect the native vegetation habit which in turn has an effect on the animal species in a habitat. We also started to learn mapping skills and next year we will continue to work on this. We hope to make a map of our school and the surrounding neighborhood, notating the areas of noxious weed invasion. As the students become more proficient in mapping, we will expand to include mapping other areas around the harbor and also incorporate such things as beach erosion.

Although some students had heard of Spartina, many were unaware of the problem that noxious weeds pose to the estuary and marine habitats in our area. They did not have the connection between the invasion of a non-native plant and the long-term effects it could have on plant and animal life and the effect on the local economy. We hope to continue to inform and educate students about their own area and what they can do to protect it.

South Bend School District

The 7th grade field trip was a field study at Grays Harbor College’s Donald F. Samuelson Model Watershed. Carol Harrison, junior high science teacher, and thirty-five students participated. To prepare for the trip, educators from the watershed program came to the class to teach us about the Willapa River Watershed and the importance of being aware that rain and water will wash pollutants into the river and then the bay and ocean. At the college, volunteer educators led small groups of students around the watershed and hatchery. We learned about native plants, the lake and creek, and how the ecosystem helps the salmon survive and thrive. We also toured the hatchery and saw the workers clipping the fins off the salmon fry. Many of

the students had some understanding of the riparian ecosystem and really enjoyed being outside and participating in the activities. During our walk, the students practiced using the GPS units to mark invasive species and notable geologic features. The students also conducted a temperature study to determine the best place to release frogs raised in captivity.

The grant money was spent on three Garmin eTrex H GPS units and transportation costs for junior high field trips. The GPS units arrived three weeks ago. Mr. Bale, our chemistry and physics teacher, worked with his seven physics students to set up four geo-caching routes for the junior high students. The clues were answers to the questions from our populations and ecosystems and earth history units. The correct answers were the way points. Seventy-eight students participated in this. Each student was able to handle the GPS unit and practice locating the correct pages and following the GO TO screen. The 8th graders are going to set up a similar geo-cache treasure hunt for the 6th grade classes to introduce the upcoming 7th graders to the GPS units. As usual, the technology that seems tricky to adults is much easier for the students to pick up.

The 8th graders are working with water quality testing using SPARKS units. We are focusing on pH, dissolved oxygen, and temperature. We will be going to GHC for a field study.

Next year we will continue to work with the GPS units and learn to use a GIS computer program so we can learn how to make maps of data. In April, I attended a GIS workshop with the Pacific Education Institutes. The workshop was part of a grant that provided for 20 GIS programs to use with the students. This spring, the 7th graders learned a little about invasive plant species. My goal next year is for the students to collect data in the neighborhood around the school and create map layers that show where scotch broom, Japanese knotweed, and Himalayan blackberries are located. At the GIS workshop, we also worked with an activity about planning for an oil spill near Neah Bay. Next year when we have the programs, we'll be able to do the simulation in class.



Willapa Valley School District

Mrs. Wonhoff took 35 Students from Willapa Elementary attended the watershed field study program. She went to Grays Harbor College for a Field Study on May 25 from 9:45-11:45. The teachers divided each class into 3 groups and each group had at least one parent volunteer/chaperone. The students dressed properly for the weather.

On May 6th, 2010, the students from Willapa Valley Elementary also visited the Willapa Bay National Wildlife Refuge. The program included eight hands-on stations for the children. The stations included; shellfish, mud critters, frogs, mammal skulls, soils, raptors, and bird watching. Each station lasted 15 minutes before moving to the next station.



School to River

Educational Riparian Restoration Strategy



A Native Plant Nursery Program
Funded through the Lower Columbia Fish Recovery Board
Community Salmon Fund
National Fish and Wildlife Foundation
July 6, 2010

The School to River: Educational Riparian Restoration Strategy was proposed in August 2008 to the Lower Columbia Fish Recovery Board's Technical Advisory Committee. A program that was in the development stages but lacking funds, the School to River program was supported by the local community and educators as a method for improving stream conditions while providing students with productive outdoor education.

The School to River program proposed to plant 2,000 native plants in areas currently bare of riparian vegetation or colonized by weedy non-native plants, such as reed canary grass, Himalayan blackberry, and Canadian Thistle. Three-quarters of an acre were proposed to be planted or 3300 linear river feet. Specific project goals were to increase long-term shading, increase macrodetritus input complexity, and provide a diversity of insect outfall for salmon prey.

The program focused on two high school classes; horticulture and natural resources. CREST proposed seed harvest, germination, basic horticulture, and out-planting at suitable riparian restoration sites. This metric was reached; approximately 15 – 20 students in the natural resources course and 10-15 students in the horticulture class participated. One teacher from the school provided oversight and curriculum.

Outreach was conducted through a newsletter prepared by a concurrent project. While several landowners expressed interest, one site was chosen for its location on the river, overall site condition (riparian and erosion), and accessibility. The site, Petersons, was approximately 2.5 acres of riparian planting, located on a Tier 1 reach which was currently stable. The area to be planted was either lawn, poor complexity, or colonized by invasive plants. The site was easily accessible from the roadway and provided educational opportunities in addition to riparian restoration opportunities.

Through this project and the concurrent project, CREST has developed partnerships with additional private property owners. We have submitted a proposal which would allow us to expand the program to a summer education element and conduct 10 acres of plantings. Below is a table of expected results followed by actual results.

Check	Proposed Activity	Unit of Measurement	Expected Result
X	<i>Example: Riparian planting</i>	<i>Example: Square feet planted and number of plants</i>	<i>Example: 45,000 square feet, 300 conifer and 500 shrubs</i>
X	Riparian planting	Square feet planted and number of plants	32,300 square feet, 2,000 shrubs/forbs with average cover of 16 s.f.
X	Invasive plant removal	Square feet of invasive vegetation removed	32,300 square feet
	Fencing	Linear feet of fence	
X	Landowner participation	Number of landowners contacted/involved	3, minimum
X	Community involvement	Number of volunteers contacted/involved	38 student/teacher volunteers
X	Student education	Number of students educated/involved	37
	Other	(please describe and quantify)	

Check	Proposed Activity	Unit of Measurement	Actual Results
X	Riparian Planting	Square feet planted and # of plants	108,900 square feet, 5400 shrubs/forbs with an average cover of 5 s.f.
X	Invasive Plant Removal	Square feet of invasive vegetation removed	108,900 mowed by landowner prior to planting
	Fencing	Linear feet of fence	
X	Landowner Participation	Number of landowners contacted	5
X	Community Involvement	Number of volunteers contacted/involved	4 Americorps, 70 students, 4 school staff
X	Student Education	Number of students educated/involved	35

The structural element of the project was construction of a 50' by 20' greenhouse. Building codes required this building to be built to International Building Code, and as a result the cost was higher than estimated in the proposal. The structure is a pole building with a roof and one wall of clear poly paneling. The structure has three 4' high benches constructed and

\$500 cost share was received from the Pacific County Marine Committee for bench construction.

Appendix A: Project Photos



Photo 1: 2008-09 students evaluating a Grays River site for restoration feasibility.



Photo 2: 2008-09 subgroup estimating sediment deposition at potential restoration site.



Photo 3: Site prepared for greenhouse construction.



Photo 3: Posts and eaves up.



Photo 4: Trusses ready to be lifted.



Photo 4: Trusses in place.



Photo 6: 2009-10 School to River participants at Peterson planting site.



Photo 7: Students planting Douglas spirea.

Photo 8: Planting site condition



Photo 9: Plantings visible on silt bank in foreground

Appendix B: Curriculum Materials

2009-10 Curriculum Development

Greenhouse

Nelson: Set up trusses to lift

CREST: Lift trusses, bolt into place, cross members, and roofing

Nelson: Construct benches

Moten: Purchase pots and soil

Seed/Whip Collection – Field Trip

½ field trip to TNC property

Amy does recognizance

Collect seeds in specified varieties. Students break into groups targeting specific plants.

Need to be very effective

Lectures (field trips highlighted)

Fall. Plants: Riparian area function, **riparian area plants in Pacific NW/Grays/Naselle**, propagation techniques.

Winter. Riparian Restoration: Selecting a restoration site. **Determining appropriate plant needs/locations.** Developing a planting plan (density).

Spring. Implementation: Organizing outplanting; preparing plants for transport, making sure tools are available, getting transportation together.

Working on the site to make sure spacing and plants are installed properly. Quality control (are roots showing, plants leaning, was this done properly?). Final check up on site going into summer.

Introduction to Collection of Site Data

Site data collection is vital to the successful planning of a restoration site. Riparian plans require a real-world analysis of many factors, including soil, water, and plant communities. Today, we are going to sample these at a test site – you will not be planting this site. But this will give you valuable experience for the next site we visit, which will be the spring 2009 planting site.

Walk in from WDFW site

Talk about:

Particle size

- Larger particles (silt to rocks, etc), higher water speed
Braiding & Anabranching
- More channels is a symptom of high sediment loads
Artificial structures, specifically wood structures
- Completed by the LCFEG to help with erosion and provide habitat
LWD
- A LWD survey is going on in the upper reach – check for blue dots X extra credit available if you find one!
- Higher water depths and higher water speeds contribute to the size and movement of logs being moved.
- It takes more to stop bigger logs, unless they go aground.
Willows
- Very hardy species
- Only require a staking in order to take off
- We will be using these at our planting sites, so notice where they are growing!

Stations

- | | |
|---|----------------------------|
| 1. Plants (April Silva) | Needed: |
| Identification cards | 6 strings & stakes |
| Area of the total planting area (staked) | Plant Identification cards |
| Sample plot | Tape & stakes for corners |
| 2. Water (Amy Ammer) | Needed: |
| Measure water velocity with a ping pong ball | Ping pong ball |
| Measure height of raked material | Tape |
| Measure depth of scour holes (volume) | |
| 3. Soil (Jim Moten) | Needed: |
| Bore test pits to sample soil type/depth of sedimentation | Boring tool |
- Notice stratification of soils
Total Depth to ground water.

Peterson Site Fact Sheet

Landowners: Eric and Nancy Peterson

Landowner objectives:

Reduce erosion

Maintain aesthetics

Maintain views from house

Overall Lot Size: 8.4 acres

Bank Planting Area: 1.1 acres

Lawn Planting Area: 0.3 acres

Riparian Forest Planting Area: 0.8 acres

Vegetation Present:

Trees: oaks, alder

Shrubs: elderberry

Grasses: lawn, reed canary grass

Soil: Grehalem silt loam

Very deep, well-drained soil

Native plants mainly conifers

Within Floodplain

Close up aerial



Support for Ocean Beach School District's Stewardship Program

One of the key initiatives for the PMRC is educational outreach. To achieve this goal we have provided targeted monetary support for school districts in our area that are working on natural resource issues with their students.

The Ocean Beach School has been in the process of developing an innovative natural resource program entitled *Stewards of our Peninsula (SOOP)*. This program is an interdisciplinary approach to hands-on learning that spirals through all grade levels. It gets students out into the "real world" getting their feet wet, their hands dirty and their minds engaged.

The program explores the cultural and physical geography, as well as the history, politics and economy of the Long Beach Peninsula and its surrounding environs. A special emphasis of the study is placed on the sciences associated with the natural resources of the region.

Designed to be a rigorous program, SOOP requires students to apply critical thinking skills, incorporate academic learning standards, utilize technology, investigate using the scientific method, communicate using a variety of mediums and engage in outdoor activities that promote a healthy lifestyle.

Each grade level will select a theme or essential question that will serve as an umbrella for their explorations during the year. The theme, or question, should be sufficiently broad as to allow studies to occur across many subject areas, but narrow enough to make the program manageable in scope. The themes or questions will be coordinated across the grade levels and should serve as building blocks for the students' comprehensive understanding of, and appreciation for, the Long Beach Peninsula.

The 2010-2011 School Year will be the first year to pilot this program in selected classrooms across the district. To develop the new curriculum we have been training teachers in field investigations, nature mapping, and utilizing technology in an outdoor setting.

After receiving their training, the teachers identified supplies and technical equipment they would need to carry out their planned field investigations. The request for equipment was presented to the Pacific Marine Resource Committee who subsequently approved the expenditure of funds. The equipment purchases included Water Testing Kits and Handheld GPS units.

The 7th/8th grade team ordered water testing kits to be used in their study of Black Lake. The City of Ilwaco commissioned a community group to conduct a study of the Lake to determine its health and to identify any major environmental concerns with the Lake. The Middle School science students will be working with local biologists and water specialists to conduct research and contribute to the project. Their efforts will be a part of an on-going study of the lake and the longitudinal data they collect will be a critical piece of the project.

The fourth grade team works with the Department of Fish and Wildlife and the Willapa Bay Interpretive Center on estuarine ecology of Willapa Bay. This group requested GPS units to use in a species inventory project. Students will collect data from around the Bay and the collected information is to be submitted to a GIS database. Throughout the year wildlife biologists and Friends of Willapa Bay volunteers work with students in the classroom and in the field on a variety of environmental issues including habitat protection and restoration.

After receiving training through a B-WET grant on how to conduct field investigations and use GPS and GIS data systems, 5th and 6th grade teachers also wanted to purchase GPS units

for their fieldwork. These grade levels are focusing on beach ecology. Julie Tennis from the Washington State Parks – Lewis and Clark Interpretive Center, leads a team of experts from the local area that interacts with the students twice a week both in the classroom and in the field. Students will be looking at inventorying biodiversity on the Long Beach Peninsula ocean beaches. In addition they will be studying Marine Science including the accretion and erosion of coastal areas.

This year our Highly Capable program (HI-C) for our most talented and gifted students laid the ground work for our SOOP project. Selected students from both elementary schools, Long Beach and Ocean Park, engaged in a weekly two-hour session revolving around the natural environment of our area. Wetland studies, trips to a salmon hatchery, and many other interactive activities were a part of this very successful program.

In future years, we will see expanded studies being conducted in all grade levels around issues related to the natural resources of the region. As a result, we are expecting students are not only well versed in the geography and ecology of the Long Beach Peninsula, but that they are prepared to be active stewards of their world.

Educational KIOSK, banners, and logo

Signage –Public Relations

Our efforts in educating the public that we indeed exist and have a purpose, along with expanding the marine and estuarine knowledge base in our community and visiting enthusiasts, culminated in two projects. The first is mobile, the second is stationary however strategically placed. The first is a series of banners and the second is an educational KIOSK.

Pacific County Marine Resources Committee

Educational Signage Sub-Committee Report March 16, 2010

These signage projects are intended to promote education about marine and estuarine environments and habitat. The projects will be completed and reported on by June 15, 2010. A 2-3 page report showcasing pictures of the signs, locations, and predicted response from the public, and ideas on a future survey to identify actual response from the public.

Sign Project #1: Banner Projects (\$1000.00)

3 banners created by students from Ocean Beach School District

- *General PCMRC
- *Grass Roots Garbage Beach Clean-Up Gang
- *Annual Science Conference

Sign Project #2: Educational KIOSK (\$1900.00)

3 sided KIOSK—Location: potential site 1 Long Island Boat Launch, Site 2 Johnson's Landing

—Materials: (6 4x4, 20 2x4, 12 bags cement, Roofing material, 3 plastic coverings)

- *Natural Resource Industries of Pacific County
- *Invasive Species
- *Native Wildlife & Ecology of Willapa Bay

Sign Project #3: Drainage Stencil Project (if funds are available)

A critical part of our efforts to establish ourselves as an effective community voice on important issues around marine ecology, economic sustainability and public policy is to raise the community's awareness of our presence and our activities. To that end we have embarked on a process of establishing a new logo and creating banners for the various events we sponsor. The Banners are for displaying at our annual science symposium, the beach clean-ups that we help sponsor, as well as two general purpose banners with "sponsored by the Pacific Marine Resource Committee" on one and our logo and PMRC on the other.

We asked the marketing students in the new “Ilwaco Industries” program at Ilwaco High School to assist us in our endeavors. They created several logos for us to choose from as well as printing four large (2’ x 8’) weather resistant banners.

Our KIOSK project turned out well, however took much longer to build than anticipated. Our Signage Committee will meet to determine the subject material to be placed on the boarded slots. See below for pictures.





Task 3: Beach Clean-up



The Grass Roots Garbage Gang is a small, friendly group of full and part time residents in Ocean Park, Washington, we volunteer time and talents to tackle garbage on the ocean beaches of the Long Beach Peninsula. We call ourselves the Grass Roots Garbage Gang for a simple reason. We are definitely grass roots, all volunteers of all ages, means and backgrounds, utilizing the talents we have, learning as we go, and very clear about our direction and mission. Started in November, 2001, we are young, and growing. We believe we can make a difference using all talents and resources available.

Our ultimate goal is a truly pristine beach that our whole community can be proud of.

The topic of beach litter is not pretty and it is not fun. With community support, however, we believe there are viable solutions that can be sustained over the long haul. Working through the community of engaged individuals, governments, businesses, community

service clubs, schools and marine industries, we will mitigate litter making and facilitate litter collection and disposal.



Why tackle garbage

1. Beauty The Pacific Ocean and the Columbia River are beautiful natural resources to be protected, not abused with uncontrolled littering. A clean ocean beach is beautiful.
2. Health and Safety There are health and safety concerns for human beach goers, marine wildlife and the beach environment. Plastics are the most notorious for marine wildlife destruction.
For example, the large, heavy mil plastic bags dumped at sea can cover a 4 ft sq area of sand the stops food supply to the razor clam sanded below.
3. Community Pride and Tourism Everyone wins when beaches are clean and safe. Visitors to our Peninsula expect to enjoy the ocean beaches. Garbage has a very negative impact upon visitors who ponder why this community tolerates such dumping. They can walk away, never to return.
4. Disposal is Habit forming, we are creatures of habits, good and bad. Once we can break the bad habit of littering, we see a safer and healthier environment for all to enjoy.

Current grass root activities

The Grass Roots Garbage Gang is currently engaged the following volunteer activities:

1. Individual members collecting garbage on a routine basis whenever possible.
2. Encouraging all beach goers in the community to pitch in and collect while on the beach.
3. Conducting quarterly community beach clean ups to cover as much beach as possible.
4. Educating the community about our litter problem through all communications channels; including an inviting web site, handouts and posters, and group presentations.
5. Working with local government, business, community service groups to define ways that the community can contribute, such as tote bags distributed for major beach events.
6. We are also working with marine industries in our community to reduce dumping.

Future Activities

We have dreams of reaching these goals in the future:

1. Monthly, community beach clean ups the entire length of the Peninsula.
2. Adding garbage receptacles to the beach approaches to discourage littering with accompanying maintenance funding.
3. Aiming for the Blue Wave Award, America's first environmental certification for clean, safe beaches.



2010 Clean-up Results

January 23, 2010	400 volunteers	7.0 tons
April 21, 2010	300 volunteers	7.5 tons

The July 5th event is consistently the largest clean-up each year, basically the first two clean-ups combined.

Task 4: Bay Watch “Eyes on the Bay”

Background

The PC MRC provided CRA with support for its efforts to carry out a spring survey of the re-growth of *Spartina alterniflora* in Willapa Bay. The support was designated for GIS services to prepare maps to guide the crews and volunteers in their sampling activities and to integrate the data collected by these efforts into the existing GIS system for Willapa Bay.

The eradication of spartina continues to be one of the highest priorities for Pacific County. Since 1995, state and federal agencies have expended over \$25 million on eradication activities. From 1995 to 2003, these efforts only slowed the pace of its spread. The combination of relatively ineffective and expensive tools and inadequate funds hampered progress. In 2004, substantial increases in federal funding occurred in time to allow large-scale utilization of a more effective herbicide.

Eradication Goal Nearing

In 2003, Willapa Bay looked quite different. A wide fringe of dense non-native cordgrass all but blocked access to the Bay for hundreds of shoreline property owners. Spartina meadows stretching across several thousand acres converted vast expenses of important shorebird

feeding habitat. Accelerated sedimentation caused by the presence of spartina removed highly productive areas from the intertidal zone. At its peak, roughly 9,000 net acres of spartina was dispersed over 25,000 acres of Willapa Bay in various densities. After years of repeated treatments, the success of the eradication effort is visible and encouraging. Roughly 70 net acres remained in 2009. Less than 30 net acres of spartina are likely to re-grow this summer

Spring 2010 Survey Approach

The final stage of an eradication program poses a number of new challenges. The remaining infestation is composed of thousands of small patches and individual plants tucked into the complex drainage sloughs that wind their way through an estimated 10,000 acres of saltmarsh terrain. Only patient and thorough scouting by foot can find all those outliers. It will be difficult to know with confidence when the last plant has been found and eliminated. While success is finally on the horizon, it is clear that complete eradication is still years of hard and meticulous work away.

Several years ago, the Coastal Resources Alliance launched its *Eyes on the Bay* project to enlist local residents to help with the final stage of the spartina battle. With funding from the US Fish and Wildlife Service, the *Eyes on the Bay* project also sponsored yearly surveys to assess progress baywide. Each year, CRA works with local leaders to design the assessment approach to be taken in response to changes in the eradication effort. In the Fall of 2008, a new survey approach was tested using cameras equipped with global positioning system (GPS) devices. That Fall the survey yielded an inventory of 3,500 photos of spartina infestations of varying sizes throughout the Bay. Though not intended to be an exhaustive all-inclusive inventory, the 2008 survey revealed a sobering picture of the challenge ahead: it showed that thousands of infestation sites remain around the Bay. This summary portrait of the infestation served as a reminder that if the spartina were left untreated, it would readily expand from these thousands of toeholds throughout the Bay.

2010 Survey Methodology

A methodology for the 2010 spring survey was developed during a meeting On March 25, 2010 at the Willapa Refuge attended by representatives of the US Fish and Wildlife Service, Pacific County, the Willapa Bay – Grays Harbor Oystergrowers Association, Washington State University and the University of Washington. A summary of the decisions made during that meeting was generated to document the outcome of those consultations. On April 21, the summary document was shared and discussed with the state, federal, tribal, and private agencies collaborating in the spartina eradication program.

The purpose of the 2010 survey is different from the previous baywide inventories. This year the survey was designed to assess the prevalence of difficult-to-find spartina by sampling in the upland reaches of saltmarshes around the Bay. The survey would reveal whether potential seed producing clones might still exist in the areas that have not been repeatedly visited by treatment crews in recent years. The survey would also have the added benefit of improving treatment efficiency by flagging live plants and taking their GPS locations.

Design Features of the Survey

To prepare for this survey, UW ONRC Geographic Information System (GIS) Specialist Keven Bennett conducted an analysis of the geographic extent of the saltmarsh habitat that may be infested with spartina. He determined that approximately 10,000 acres of marsh are

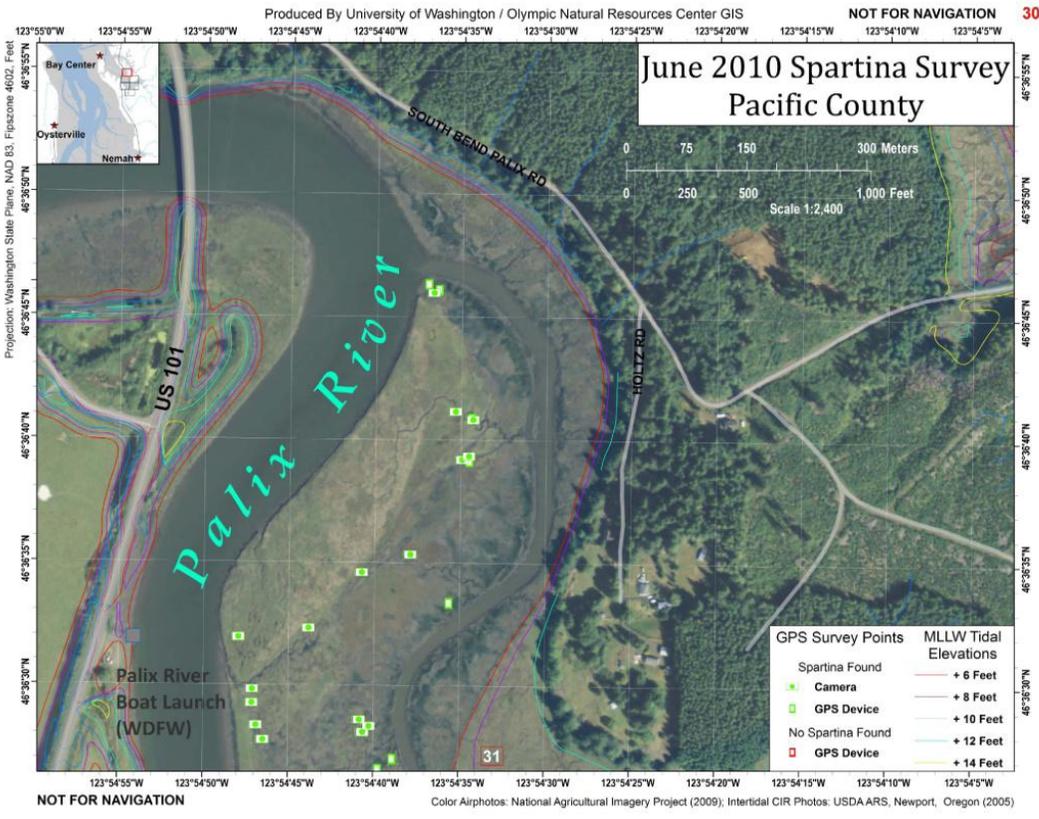
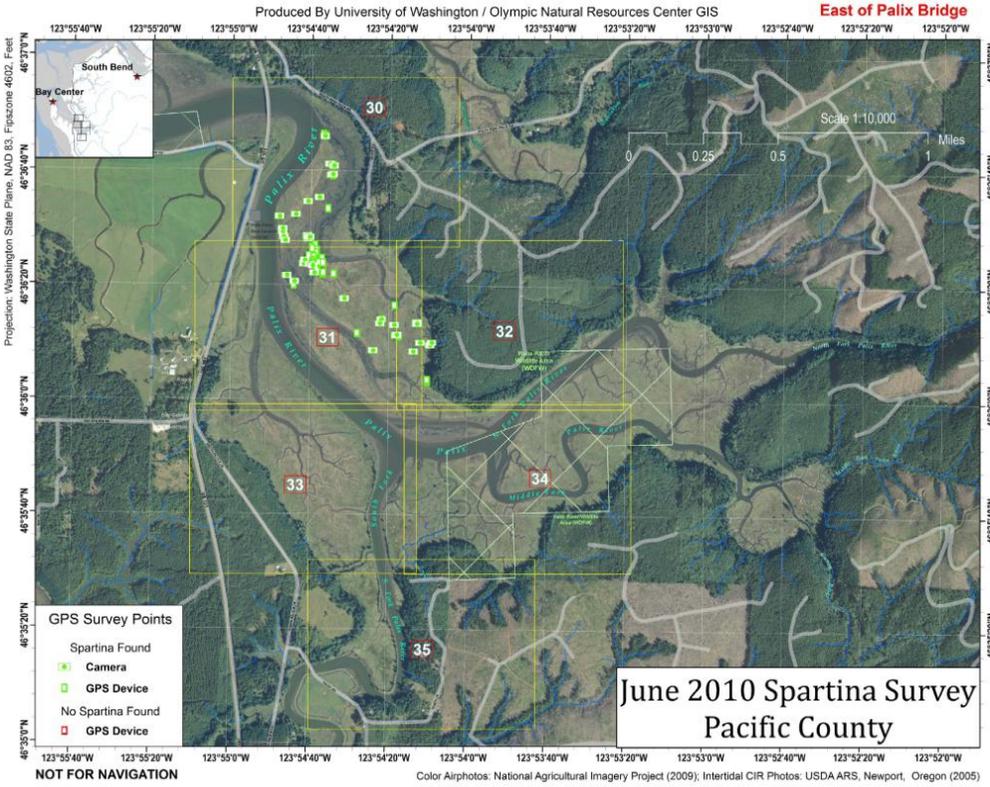
within the range of saltwater influence. The team recognized that it would be impossible to meticulously scout an area that large in a single summer. Some plants appear to emerge late in the summer, complicating the timing of a survey. Therefore the team decided that the spring survey crews should focus its efforts on the places where the early growth will be most visible—inside the tidal guts or drainage sloughs. A survey in the fall would target the limited amount of spartina growing on the marsh plateaus that are rarely inundated.

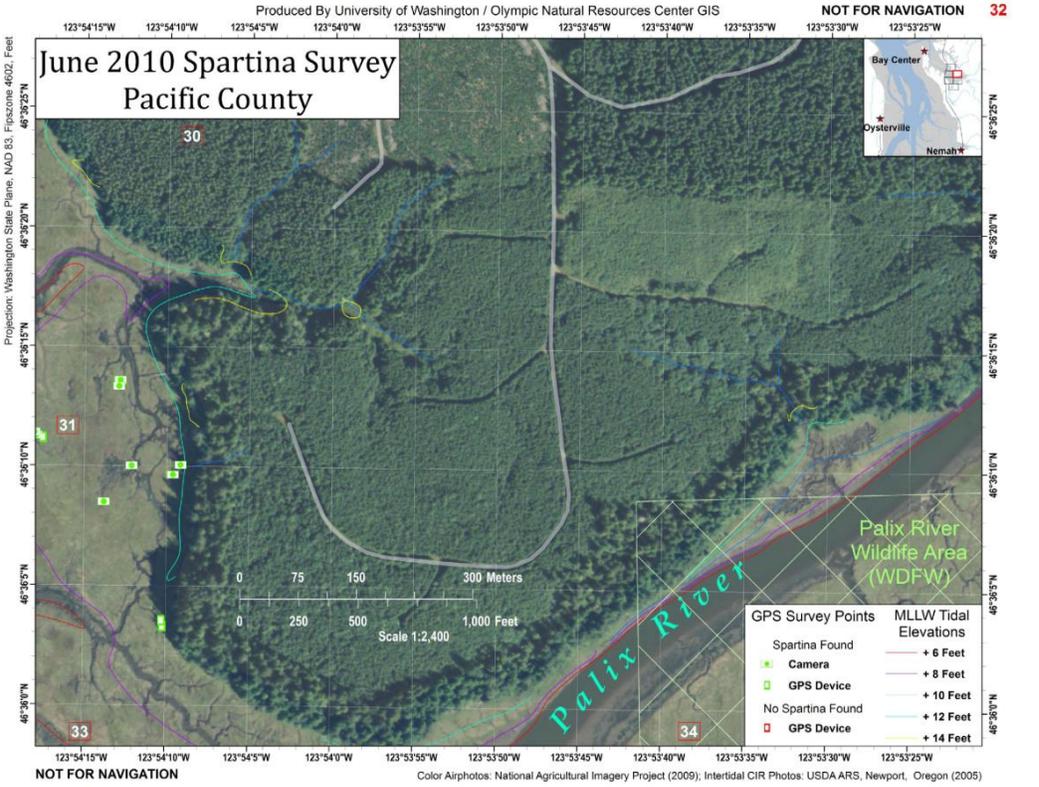
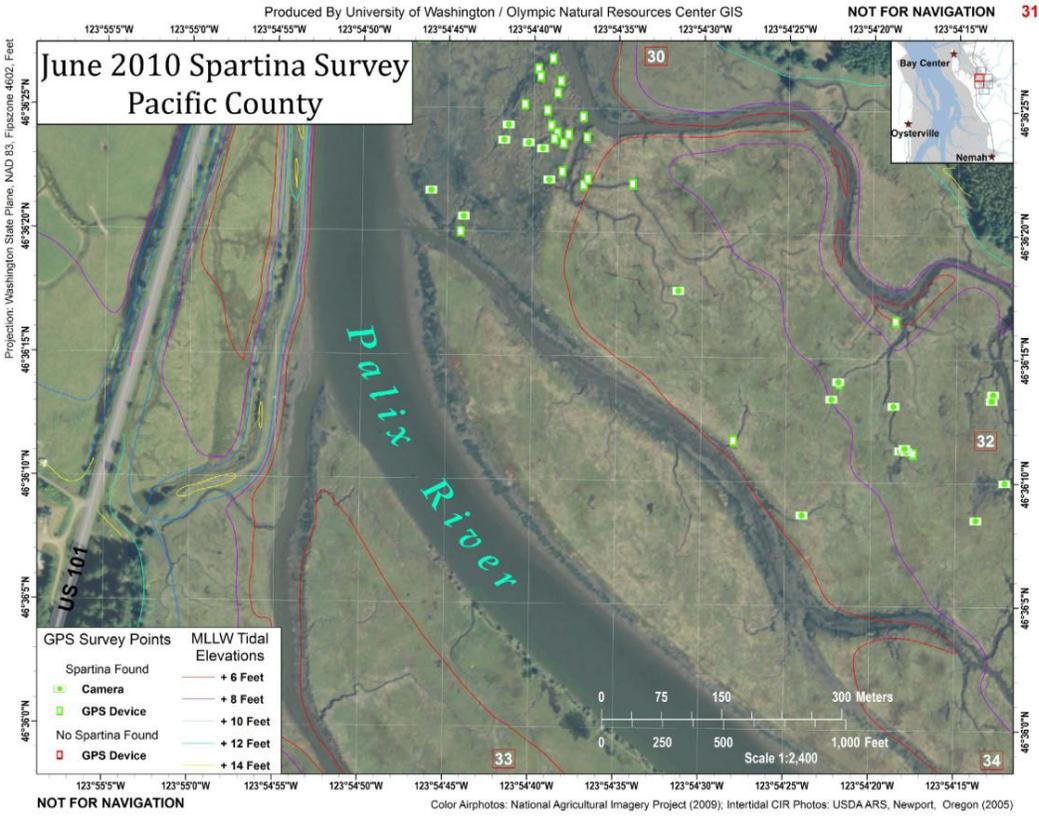
To allow the maximum growth and visibility, the spring survey was planned for June in the weeks before the treatments should begin (in early July). Chosen for this year's reconnaissance were areas around Tokeland, the Palix River, the riverine sloughs that cross Highway 101 south of Bay Center, and the Ellsworth Slough area. The county supplied 6 -8 crew members to conduct the surveys. Crews were instructed to carefully check each drainage slough starting from points that are clearly above saltwater influence moving downstream towards the Bay. Crews walked both sides of each drainage channel and checked both banks. They flagged and GPSed the infestations they found. Tall bamboo stakes were used to mark the infestations. Bamboo was selected because it is likely to last more than one season, but decomposes in the longterm. When an infestation was found, crews used the GPS camera to document its appearance and location.

One goal of this survey was to generate sufficiently detailed and reliable information, so that some areas can be safely declared "spartina-free." These subareas can then be quickly revisited or skipped entirely the following year. Without the ability to document the absence of spartina in blocks of the bay, the program will not be able to efficiently direct its efforts elsewhere. With 10,000 acres of potential habitat to carefully search, it is more crucial than ever that the crews' energies are directed efficiently.

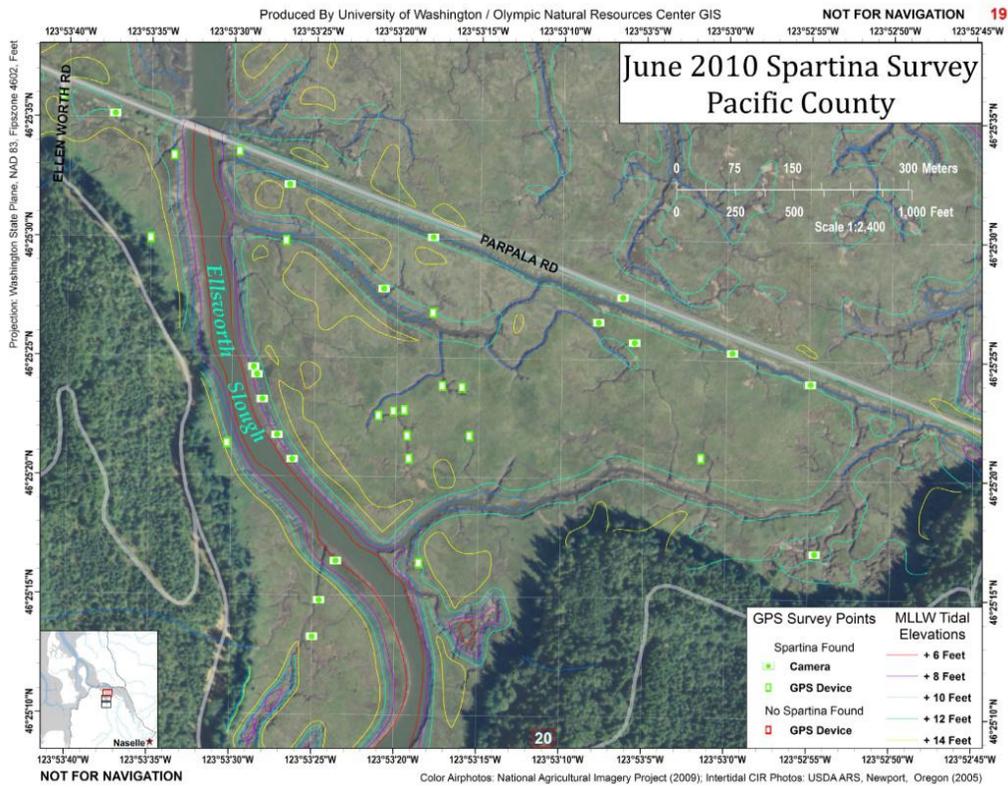
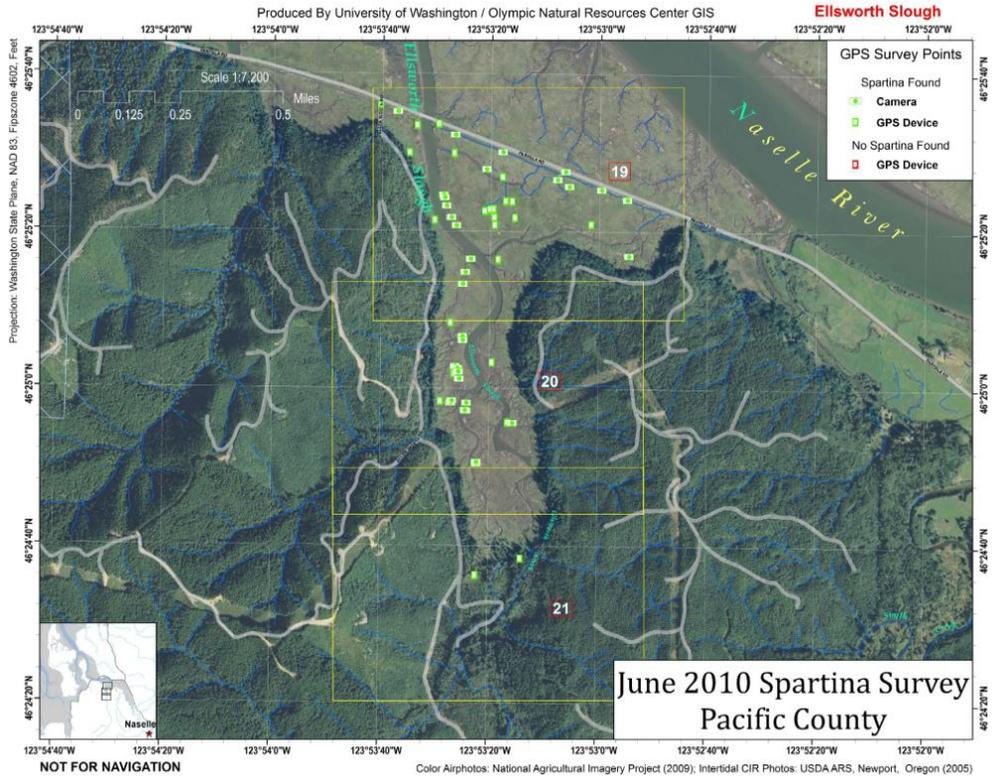
Survey Maps

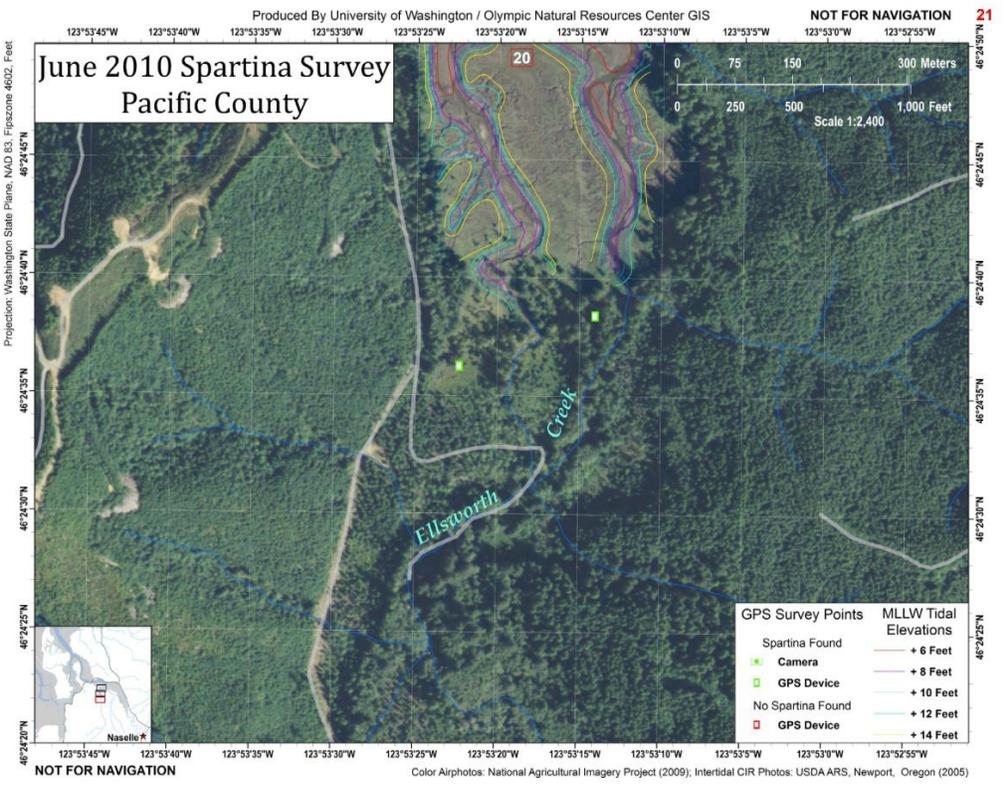
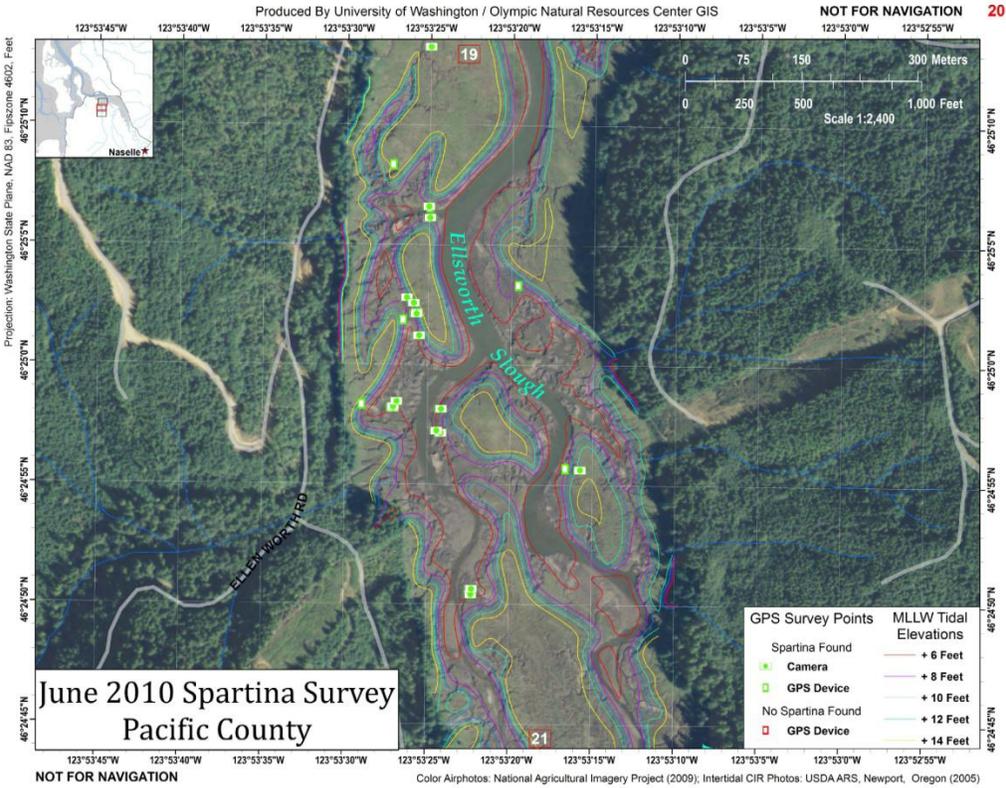
Palix Maps



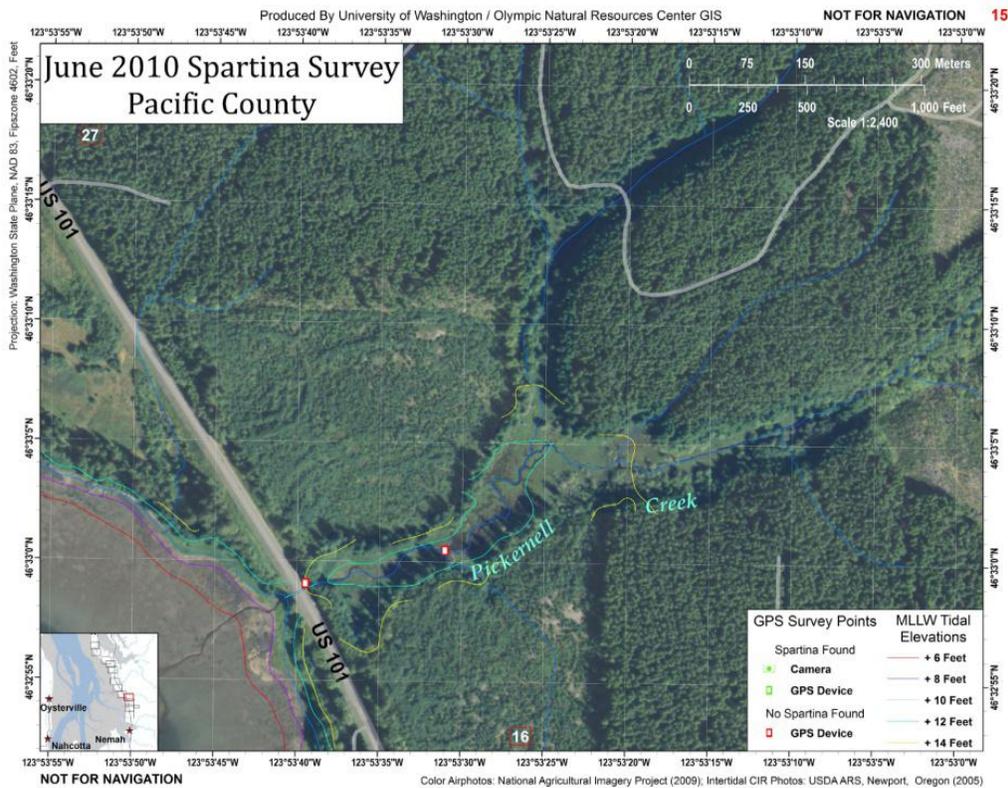
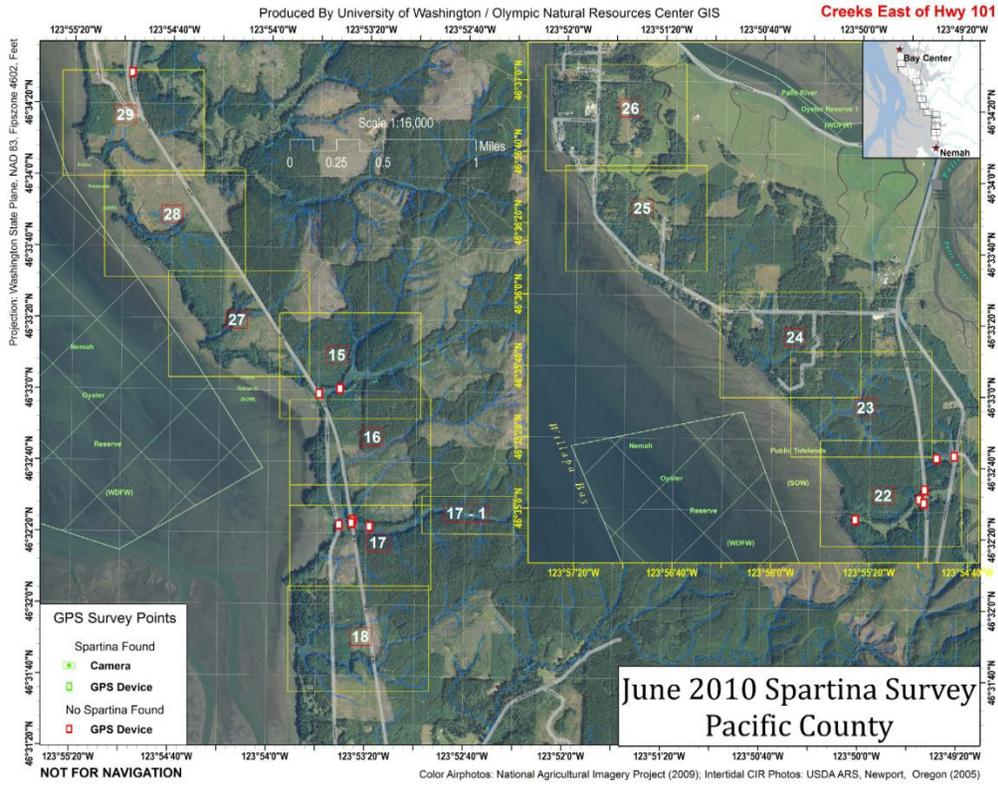


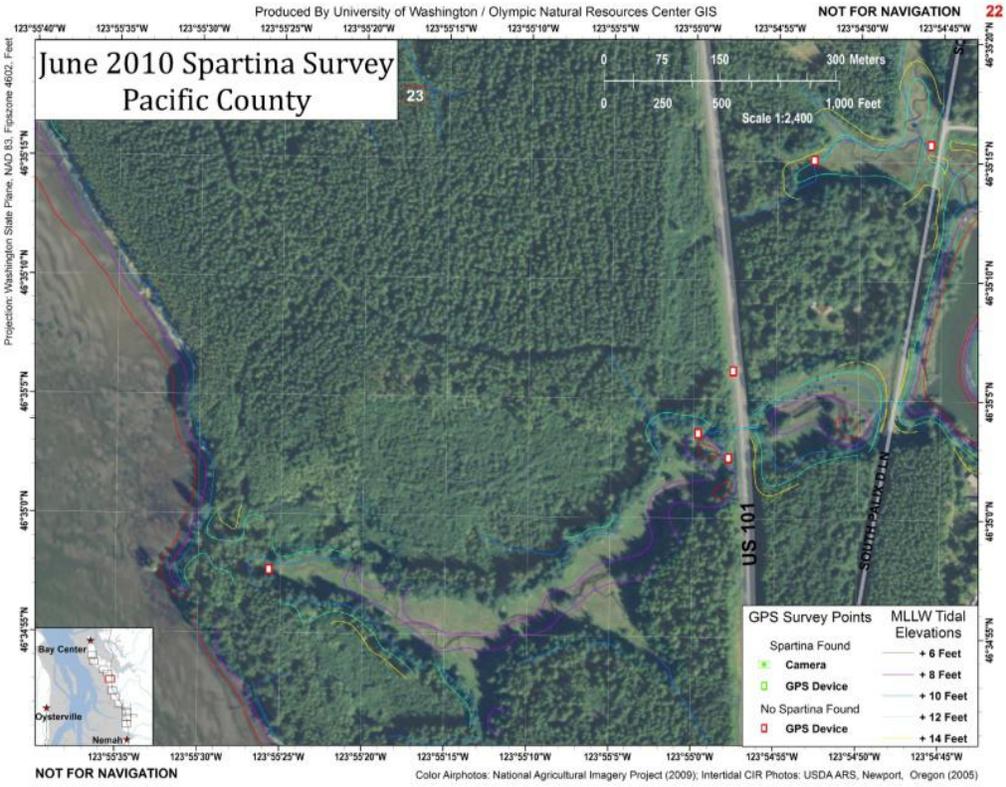
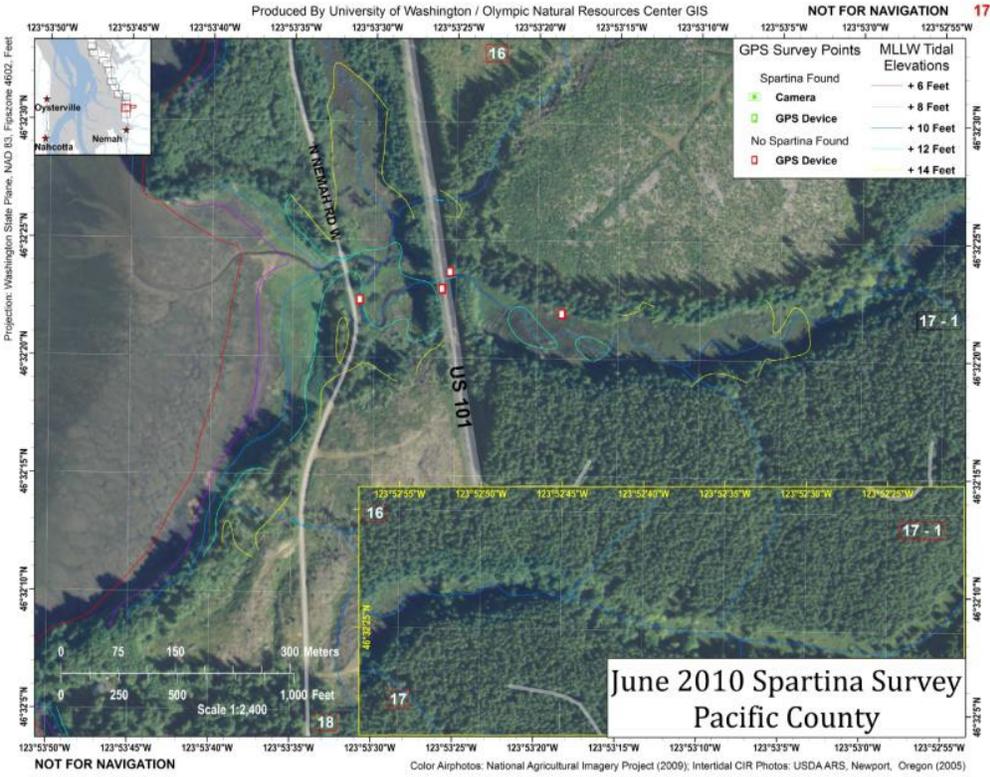
Ellsworth Maps

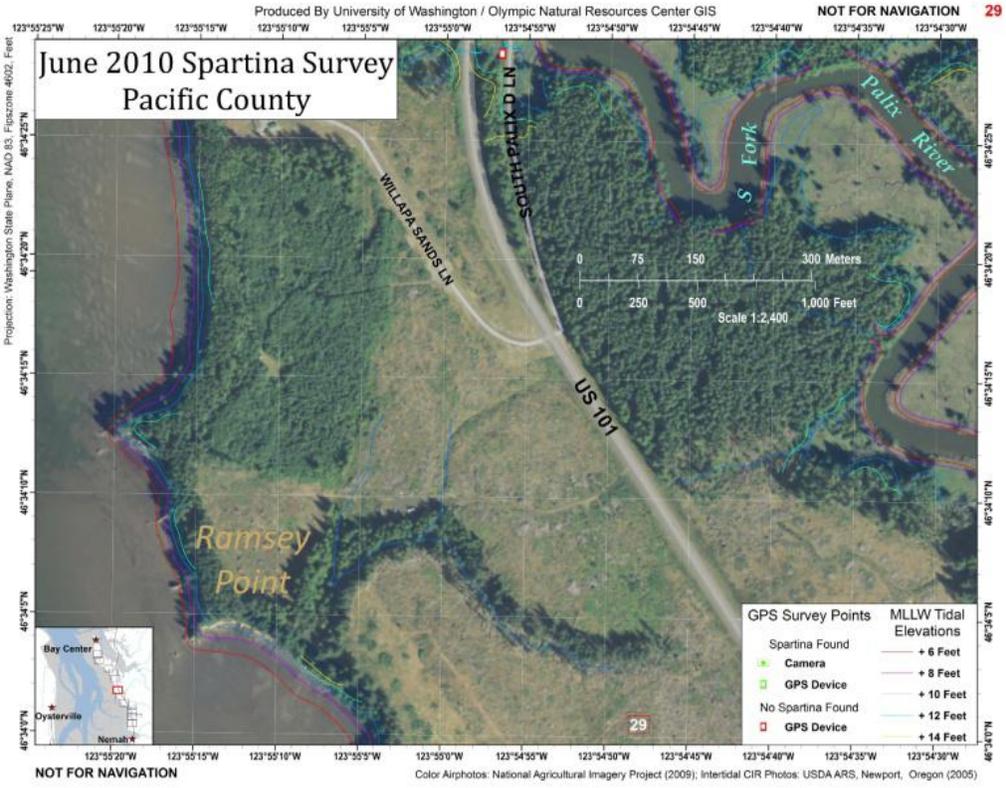




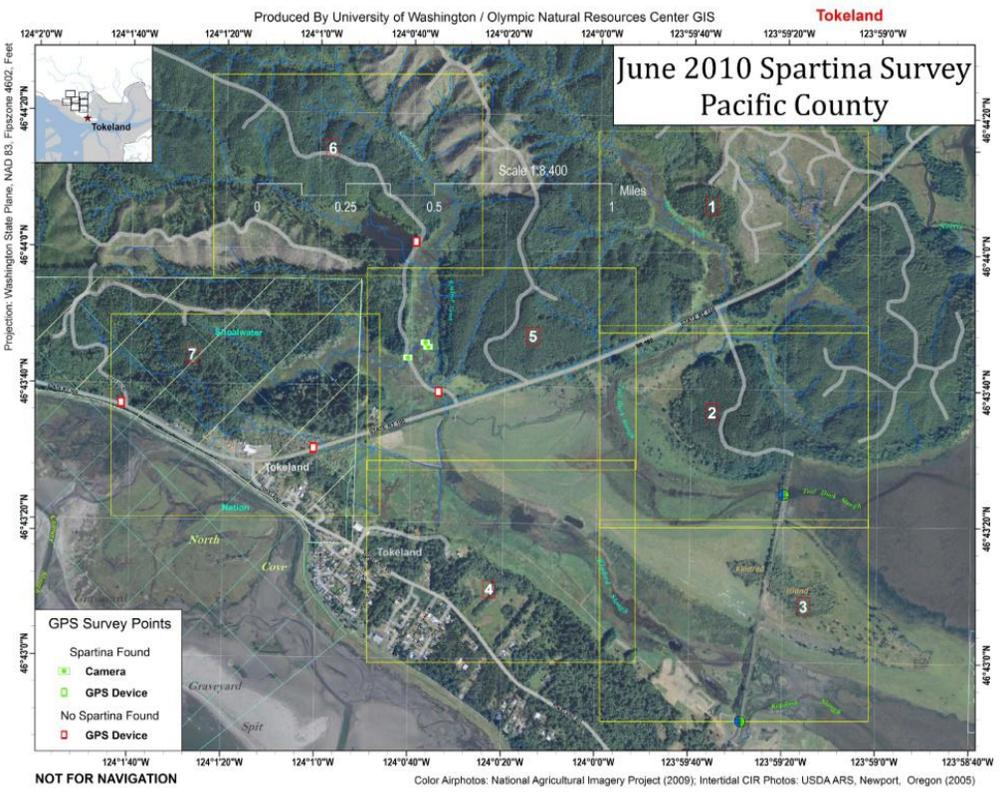
East of 101 Maps

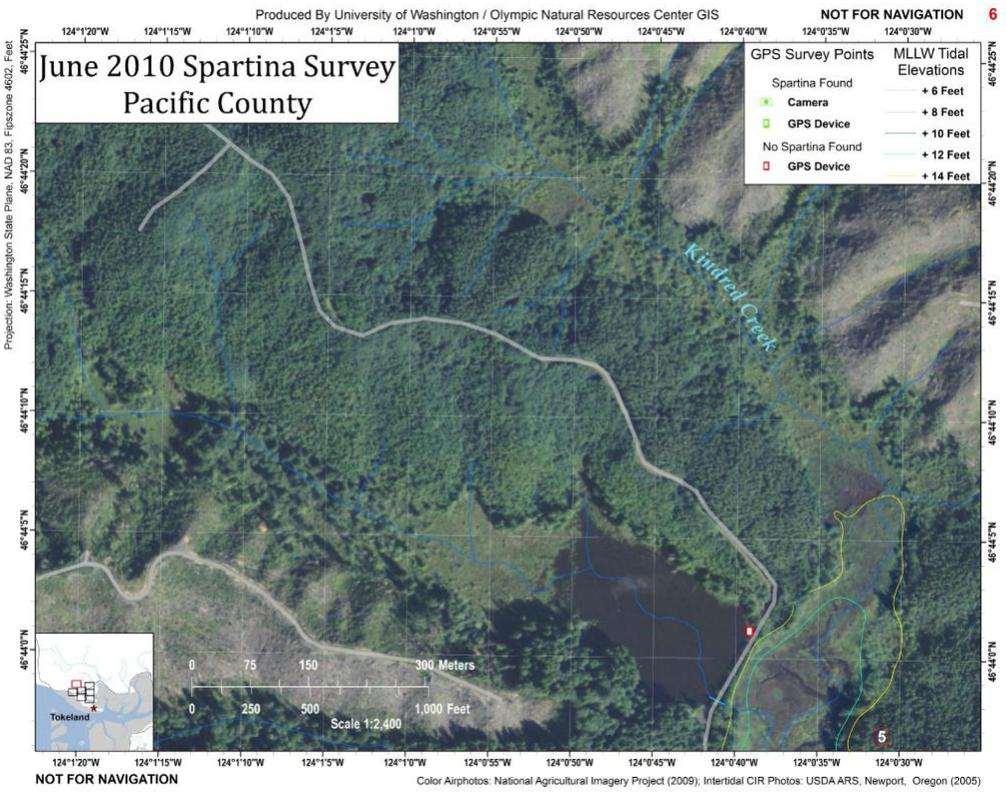
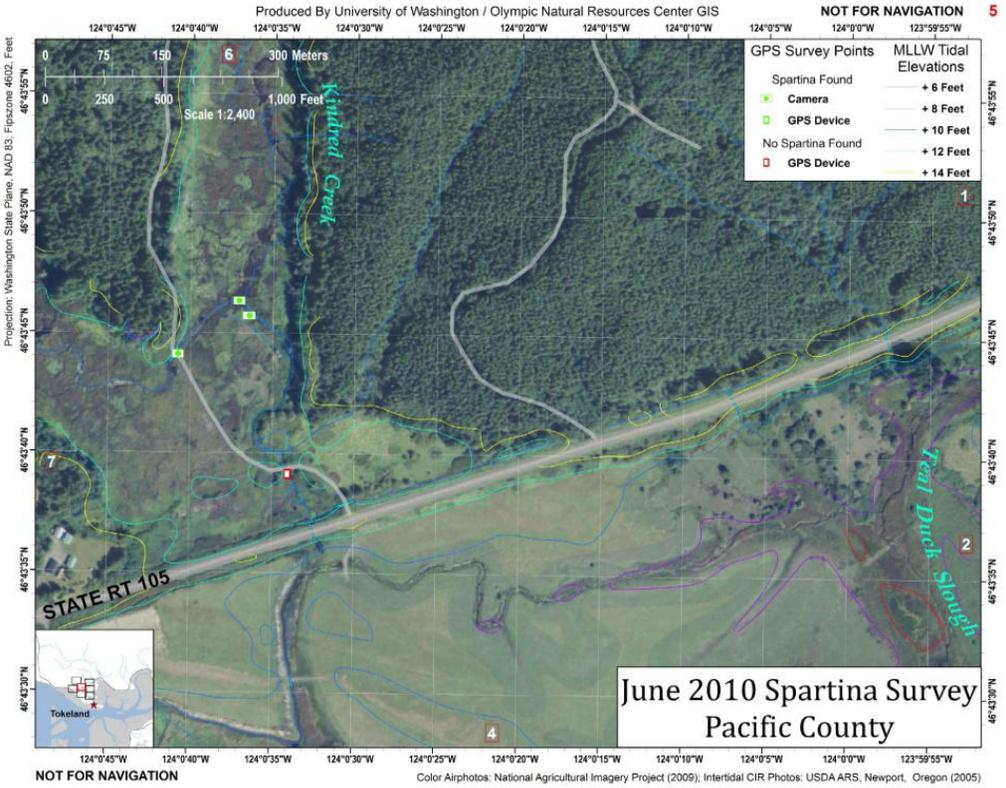


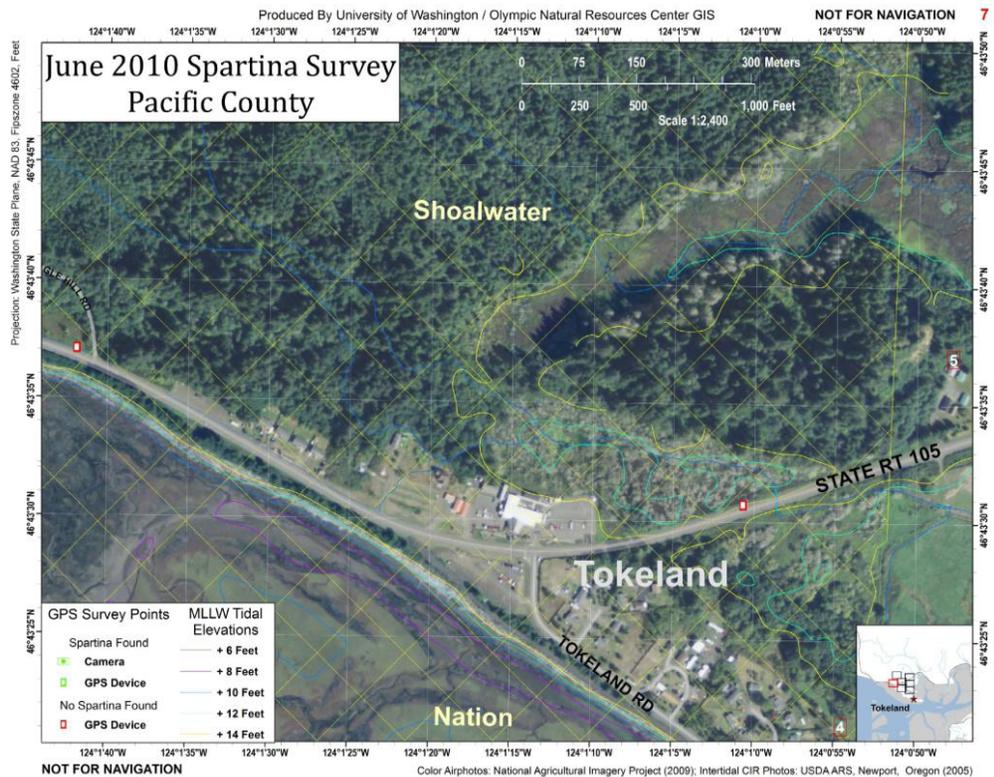




Tokeland Maps







Results

The survey took place during the period beginning June 17 and ending June 22nd. Crews used GPS cameras, GPS devices, bamboo stakes and metal flags to mark the location of live spartina. Notes were also taken on hard copies of high resolution aerial imagery provided by ONRC. The survey was successful in identifying two problem areas for future concentrated attention in the Ellsworth Slough and in Tokeland. The survey also proved to be useful in establishing with confidence the absence of spartina in areas that had rarely been visited by treatment crews.

Ellsworth Survey (June 17, 2010)

Crews devoted an entire day to scouting the Ellsworth Slough saltmarsh. The higher elevation drainage channels held no surprises. Few plants were found. However, one area in the middle of the marsh was found to be infested with clones large enough to present the risk of viable seed production. The infestation site was GPSed and flagged, but no photos were taken. The GPS cameras were being used elsewhere. According to the survey crew, the plants were over 3 feet tall and appeared to be very vigorous. This level of vigor indicates that the plants were probably missed last year. Few untreated clones of this size still exist. The landowner – the Nature Conservancy—has been notified. The County has placed a priority on returning in late July to assure that these clones are treated to eliminate the risk of seed production.

Palix Survey (June 18, 2010)

Crews dedicated a day to surveying the Palix saltmarsh area adjacent to Hwy 101. 36 live spartina plants were found, GPSed, photographed and/or flagged. No large plants were found. This area was identified as a “problem area” last season due to the number of live individual

plants. This year's survey led the crew to conclude that significant progress was made in reducing the number of plants remaining in this area.

Survey of Sloughs East of Hwy 101 (June 21, 2010)

Crews searched creeks and marsh lands associated with rivers that pass under Hwy 101 between Bay Center and the Nemah River. This area has received almost no attention over the years, because it was assumed that spartina is unlikely to have colonized these areas. Crews found no spartina. Through on the ground reconnaissance, crews were also able to definitely confirm that many of the creeks are not within the range of saltwater influence. Therefore it is unnecessary to return to scout for spartina infestations in these areas.

Tokeland Survey (June 22, 2010)

With the permission of the Shoalwater Tribe, crews surveyed areas of the Reservation to ascertain whether riverine / marsh areas north of Hwy 105 were infested. Crews found no spartina and determined that this area is beyond saltwater influence. It will not be necessary to scout these areas again.

Conclusions

The spring survey proved useful in a number of ways. The month of June is an opportune time to map and flag live plants. Many of the remaining plants survived previous treatments and are stunted and short. To optimize efficacy, herbicide treatments should be delayed until the plants have grown enough leaf surface to transmit lethal quantities of herbicide to their root systems. Crews were also able to use this time before treatment begins to lay the groundwork for multi-year efficiency gains. By installing semi-permanent flagging, crews will be able to move quickly between infestation sites. The surveys also allowed crews to identify problem areas and to plan this year's strategy to deter seed production.

The spring survey also made it clear that a fall survey is necessary. The short height of spartina at this time makes it impossible to see plants growing in the high marsh. A late season survey in November-- when spartina is taller and its color contrasts with surrounding vegetation-- would reveal the plants missed during the spring.

The survey also provided support for the concept that we are reaching a phase during which the fate of individual spartina plants becomes important to track over multiple seasons. As the number of plants has declined, tracking individual plants becomes feasible and important. By flagging the spartina that was found and treated, crews will be able to differentiate between those plants and those that are late emerging. In addition, unexpected failures in treatment efficacy can also be tracked.

Task 5: Pacific County Water Quality Survey



Summary Statement

The Pacific County Department of Community Development (DCD) has conducted regular sanitary surveys of on-site septic systems throughout Pacific County in order to protect public and environmental health. The survey process consists of data collection prior to the survey, on-site field work, analysis, and the final reporting in conjunction with on-going public outreach and education. The following sanitary survey was conducted in Tokeland, WA during the winter and spring of 2010. The last survey of this area was performed in 2000. The County currently has a Septic Replacement Loan Program, which has dedicated funds to assist homeowners in replacing their on-site septic systems in areas directly around the Willapa Bay. These funds are collected from the sale of oysters on state oyster reserve land and the funds are administered for the County through Shorebank Enterprise Cascadia, a non-profit financial institution.

The County is helping to ensure that the Willapa Bay stays free of fecal coliforms from failed on-site sewage systems. High nutrient loads exacerbate dead zones, close shellfish beds, and ultimately lead to public and environmental health issues.

Background

Tokeland is located on the north end of Willapa Bay in the north and west portion of Township 14N and Range 11W. Willapa Bay is considered one of the most pristine estuaries in the continental United States and is one of the leading shellfish producing environs in Washington State. Degradation of this bay by compromised on-site sewage systems have the potential to impact public health, safety, and the economy of this region.

Problem Statement

The presence of high water tables, numerous domestic wells, sandy soil, and high rainfall can contribute to the degradation of public and environmental health when combined with poorly performing on-site sewage systems.

Objectives

The objectives of this sanitary survey were to:

1. Evaluate the operation and condition of the existing on-site sewage systems in the Tokeland area;
2. Determine the public health risks to the Willapa Bay and the community resulting from failed or suboptimal on-site sewage systems;
3. Locate and mitigate the effects of failing or non-complying OSS systems, and;
4. Educate on-site septic system owners on ways to prolong the life and effectiveness of their systems.

Methodology

Information and Mobilization

1. Public outreach took place at the beginning of the survey to inform the public of the goals and objectives of this study. This outreach consisted of mailing a letter to the owner-of-record of each property regarding the purpose of the study, timing, and the “field procedures” that would be used to identify the systems.
2. A detailed lot-to-lot survey was conducted of all accessible on-site sewage systems in the designated Tokeland Sanitary Survey Area. The lot-to-lot survey was performed by DCD Environmental Health staff.
The data was gathered by the following activities:
 - a. Reviewed Pacific County Assessor records to identify legal lots of record and developed parcels containing on-site sewage systems;
 - b. Reviewed Pacific County Department of Community Development (DCD) records to ascertain the all available OSS data for each property to be surveyed;
 - c. Contacted and interviewed owners during the field survey to gather information on their on-site sewage systems;
 - d. Evaluated the size, placement, and materials used in each OSS. This consisted of using a septic probe to determine depth, size, and location of drain-fields;
 - e. Recorded accurate horizontal setbacks from on-site sewage systems to wells and surface water. Lot lines and right-of-ways and;
 - f. Located and documented each OSS using GPS technology.

Evaluation

Categorized on-site sewage systems into residential and non-residential waste and then into Satisfactory, Failing, and Sub-Optimal categories by the type of information gathered:

1. *Satisfactory*: an on-site sewage system that does not directly or indirectly discharge sewage or septic tank effluent onto the ground surface or into water or ground water and meets vertical separation criteria as determined by WAC 246-272A (Washington State Administrative Code, On-site Sewage System Regulations).

2. *Failing*: an on-site sewage system that:
 - a. discharges untreated or partially treated effluent directly or indirectly onto the surface of the ground, into water or ground water, into an originating structure or;
 - b. meets the failure definition of Pacific County Ordinance 3E On-site Sewage Systems, Section 17.
3. *Sub-optimal*: an on-site sewage system that may be in danger of failing or that is not providing treatment of effluent as determined by the size and condition of the drain-field, hydraulic, and organic loading of the sewage system, and/or having insufficient vertical separation from the determined water table.

Results & Summary

During the period between February 2nd and April 15th, site visits were conducted and the following data tabulated to include:

- An inventory of the type of on-site septic systems in the Tokeland area;
- GIS mapping of the systems;
- a determination of the current on-site sewage system conditions;
- the percentage of systems that are rated satisfactory, sub-optimal, and failing and;
- an estimate of seasonal and permanently occupied residences, single-family residences, multiple-family residences, and commercial OSS systems.

Results

Total properties visited 288

Full time systems 110
 Part time systems 178
 Access not allowed 29

The first set of results reflects the nature of the residences in the Tokeland Area. Although there is a considerable amount of full time residences, the majority of the properties on the peninsula are vacation properties. Businesses in the area were considered full time since these on-site septic systems were used on a regular basis.

The 13 RV (recreational vehicle) lots were categorized as part time residences. These lots are meant for self-contained vehicles with the capability of storing black and greywater for later disposal and are not lived in full time.

Access was denied on 29 of the 288 lots visited. Denial was a result of direct refusal by the resident, the obvious posting of “no trespassing” signs on the property, or a property where access was blocked by fencing or animal protection.

System Type

Gravity 182
 Pressure 63
 Glendon 11
 Unknown 21
 No System 11

The results reflect that most of the older residences in the survey have their original systems, which are typically gravity systems. The area in this survey has a high water table that would require a more advanced system for new homes and septic repairs due to new regulations and technology. The group of unknowns can be accounted for by lots that denied access or in some cases where lots were abandoned and plant overgrowth hindered the search for the system. The no system group includes some RV lots and a couple of properties that actually had no septic system.

Tank Type

Concrete 224
Metal 5
Plastic 6
Wood 1
Unknown 41
No Tank 11

The majority of the tanks complied with current regulations with only a few non-complying metal and wood tanks.

Access was denied on some properties; therefore the tank type is “unknown”. Other properties had had tanks that were not identifiable with the probing method used. The properties categorized as “no tank” were mostly RV lots.

Drain-field Types

Trench 115
Bed 51
Mound 36
Pods 11
Cesspool 1
Unknown 25
None 9

The preponderance of trench drain-fields again reflects the age of the systems. Most modern or semi-modern systems would require a type of mound or bed drain-field, which is preferable in soils composed of fine sand, which are typically found in this area.

System Condition

Satisfactory 157
Sub-optimal 87
Failure 17
Unable to determine 25

The systems were rated on an objective scale. In general, a failing system would be categorized as one that had no drain-field or was connected to a metal or wooden tank.

The difference between a satisfactory and a sub-optimal system can be difficult to determine. The environmental health officers used Pacific County Board of Health Ordinance 3E, Section 26.8 which outlines these parameters for a septic tank replacement as guidelines.

1. The drain-field needs to be approximately 90 square feet per bedroom. This would amount to 60 linear feet with a trench 3 feet wide and a county minimum requirement of a two-bedroom system.
2. A soil dispersal component consisting of beds or trenches consisting of drain rock and perforated pipe or gravel-less chambers.
3. Public water service to the parcel or private well water at least 100 feet from the edge of any drain-field component.

In addition, the depth of the drain-field was taken into account. A very deep drain-field in an area known to have a high water table would be rated sub-optimal due to the lack of soil beneath the dispersal area to properly treat effluent. In short, systems with very small or very deep drain-fields were considered to be sub-optimal.

Follow-up

1. Letters were sent to landowners with failing systems informing them their on-site sewage system will need to be repaired.
2. Letters were also sent to landowners of non-complying systems informing them that an OSS system with a metal or wood septic tank will be required to be replaced with a complying septic tank.
3. Letters were sent to landowners informing them that their OSS system is at-risk for failure and suggestions for correction.

Summary

The Tokeland area is unique in its geological make-up and residential usage. It is similar to a large sand spit and is influenced by its proximity to the ocean and Willapa Bay. There is little variation in elevation and the water table changes seasonally and even daily with the tides. The population does much the same as people show up for the milder weather in the summer and on week-ends throughout the year when the tides favor recreational fishing and razor clam harvests.

The overall condition of the on-site septic systems on the peninsula is generally good. The older systems, although small, are still functioning and appear to meet the needs of part time residences. Some of the older gravity systems showed signs of minor undocumented repairs or updates. Many newer systems have been installed in the last ten years as a result of development.

System repairs in the area are likely to be expensive since the high water table dictates a more sophisticated on-site sewage system. The cost of these systems can be defrayed with available funds by Pacific County's Septic Replacement Loan Program. Contact has already been made with some of the owners of failing systems. With funds on hand to help the property owners, this will be a good time to repair the failing and marginal systems for future use.

Task 6: State Ocean Caucus (SOC)

Dale Beasley and Mike Nordin have been the representatives from the PCMRC to attend the Washington State Ocean Caucus. One or both have attended every meeting this year. The primary focus of the SOC currently is Marine Spatial Planning. Marine Spatial Planning is a process that results in more proactive, comprehensive state decision-making that supports healthy oceans, coasts, and communities. In March 2010, the Washington State Legislature enacted a new law on marine spatial planning. Ocean and coastal environments in Washington are critical to our economy, culture, and quality of life. They are rich in natural resources and biological diversity. They also support multiple commercial and recreational uses that sustain the economies of nearby communities and the entire state. These multiple uses as well as new emerging uses, such as renewable ocean energy, present a management challenge for sustaining healthy oceans and coasts. Here is a copy of the current (DRAFT) on the report to send to the state legislature:

SOC DRAFT

Summary of Marine Spatial Planning Goals and Objectives in Substitute Senate Bill 6350

Overview: The legislature recently enacted a new state law, Substitute Senate Bill 6350, on marine spatial planning. It requires a team of state agencies to assess and provide recommendations in a report to the legislature. This includes developing recommended goals and objectives for marine spatial planning. To approach this task, this document summarizes the existing goals and objectives from the law as a way to solicit feedback on people's ideas for the recommended goals and objectives for marine spatial planning.

Definition of marine waters: Marine waters are the aquatic lands and waters under tidal influence, including saltwaters and estuaries to the ordinary high water mark lying within the boundaries of the state. This definition includes Pacific Ocean waters, the portion of the Columbia River bordering Pacific and Wahkiakum counties, Willapa Bay, Grays Harbor, the Strait of Juan de Fuca, and the entire Puget Sound.

Goal:

To protect, sustain, and appropriately utilize the state's marine waters and resources through coordinated decision making in a proactive, comprehensive and ecosystem-based manner.

Objectives:

- Recognize and respect tribal treaty rights.
- Recognize and value existing uses, which includes, but is not limited to, recreational, commercial, and cultural uses.
- Promote protection and restoration of biodiversity and ecosystem processes to a level that will enable long-term sustainable production of ecosystem goods and services.
- Address potential impacts of climate change and sea level rise upon current and projected marine water uses and shoreline and coastal impacts.
- Foster and encourage sustainable uses that provide economic opportunity without significant adverse environmental impacts.
- Preserve and enhance public access, recreational uses, and other values.
- Protect and encourage working waterfronts and support the infrastructure necessary to sustain water-dependent uses such as marine industry, commercial shipping, commercial, tribal and recreational fisheries, and shellfish aquaculture.

- Foster public participation in decision-making and significant involvement of communities adjacent to the state's marine waters.
- Integrate existing management plans and authorities and makes recommendations for aligning plans to the extent practicable.
- Rely on best available science and create a process to adjust plans to incorporate additional science as it is available.

PCMRC Ocean Caucus Reports

Jan 2010 Report

Dale Beasley reported that SB 6350 on Marine Spatial Planning will have a hearing on Jan. 21. For the most part he agrees with the bill, however he recommends that the state CZMA should be extended from the 3 mile mark to possibly the 200 mile mark and should reflect how unique Washington is with its sharing 50/50. SB 6350 is a reaction from the federal government pushing for a national Marine Spatial Plan. This will hopefully protect current uses from new uses or interests, such as ocean energy.

*Feb 2010 Report

Dale Beasley reported that SB 6350 on Marine Spatial Planning has been amended. The major changes were to take the DNR habitat conservation planning out of the bill. For the most part, anyone who needed changes to the bill received it. The bill looks like it is moving forward. Tim Morris explained why the DNR habitat conservation planning was taken out.

*March 2010 Report

Dale Beasley reported that the Ocean Caucus worked on College Fellowships for about half of their meeting and the Marine Spatial Planning the other half. Dale suggested that the Ocean Caucus need to make the Matrix a little bit more palatable for regular folks to be able to participate. Bob Burkle mentioned that the document is hard to remember what you just read. Mike Nordin tried to describe what the Caucus would like to receive from the MRCs, such as local input on local jurisdictions, laws, and zoning. Mike also warned that this is Pacific county's chance for input in something that affects the whole county citizenships and that the opportunity should not be missed. Boyd Keyser suggested that we should have specific interests to work on and focus on. Dick Sheldon reminded the group that the first zoning and spatial planning done in the state was done by the shellfish growers of Willapa Bay in 1896.

April 2010 Report

Dale reported on the State Ocean Caucus meeting. He explained that there will be a state of the coast report that he feels is lacking information on the status of the fishing community. Mike Nordin also commented on the meeting and the conversations about the Ocean Matrix.

May 2010 Report

Dale reported on the State Ocean Caucus meeting and SB 6350. Mike Nordin also commented on the open house meeting at Westport and the conversations about the Ocean Matrix.

Task 7: Science Conference and Focus Group

2010 Coastal Summit: Your Coastal System

“Willapa Bay is currently in very good shape, especially in comparison with others around the nation.”
U of Biology Professor Jenifer Ruesink

Acknowledgements

I would like to thank all the partners who made this Summit possible for the Pacific County citizens and the scientific community: Marine Resource Committee and the Washington Department of Fish and Wildlife.

History

In September 2009, the Marine Resource Committee was formed to develop outreach tools to promote the work of the Marine Resource Committee, sponsor educational or training workshops, support marine and estuarine activities such as mapping and data collection, and promote the development of a water quality assessment educational program supported by the MRC.

In an effort to meet the educational workshop deliverables, the Education Outreach committee was formed and their first action item was to organize and implement a Science Conference focusing on Pacific County’s marine and estuarine issues.

The Committee met to discuss potential topics, dates and locations for the upcoming Summit. Looking for a venue that would provide the most beneficial information to our coastal community citizens and the scientific community, names for presenters and their topics were gathered and an agenda began to form. The Committee began to contact potential presenters and to seek their interest in participating in the Summit. The enthusiasm by the presenters was overwhelming. By mid May the following final agenda was completed for the 1-1/2 day summit which was held on May 20-21, 2010 at the WSU Cranberry Research Station, Long Beach, Washington.

May 20, 2010

8:30 – 9:00 am	<i>Registration- Continental Breakfast - Provided</i>
9:00 – 9:15 am	Welcome and Introductions Kim Patten , Washington State University Jim Neva , President - MRC
9:15-10:00 am	Ecosystem Management in Willapa Bay Jenifer Ruesink , University of Washington
10:00 am	<i>Break</i>
10:15 – 11:30 am	Can you Dig It? Razor Clam Management for the Future Dan Ayres , Washington State Dept. of Fish & Wildlife Anthony Odell , University of Washington Alan Sarich , Washington State Dept. of Fish & Wildlife
11:30 - 11:35 am	Congressman Brian Baird Pre-recorded
11:35 am – Noon	Spartina Eradication – Impact on Shorebird Populations and Native Marsh Succession Kim Patten , Washington State University
Noon	<i>Lunch – Provided</i>

1:00 – 1:45 pm	Coastal Hazards and Tsunamis Pat Corcoran , OSU Coastal Hazards Outreach
1:45 – 2:45 pm	Knowing Pacific County’s Weather Hazards Tyree Wilde , Warning Coordination Meteorologist NOAA’S National Weather Service
2:45 pm	Wrap-up and Discussion
May 21, 2010	
8:30 – 9:00 am	<i>Continental Breakfast – Provided</i>
9:00 – 9:15 am	Welcome Jim Neva , President - MRC
9:15 - 10:00 am	Southwest Washington Coastal Erosion Studies Phil Osborne , Golder Associates Pacific International Engr. George Kaminsky , WA Department of Ecology
10:00 - 10:45 am	Safety First John Didon , Pacific County Sheriff
10: 45 – 11:00 am	Real Time Weather Station Kim Patten , Washington State University
11:00 – 11:45	Observe and Predict to Understand and Manage: SATURN as an asset for Columbia River and Coastal Stakeholders Antonio Baptista, Ph.D. , Director, Coastal Margin Observation and Prediction (CMOP)
11:30 - Noon	Wrap-up Discussion Jim Neva , President – MRC

The summit proved to be a success with over 50 in attendance the first day. The information provided by the presenters was well received and very informative. Each session flowed into the next. Jennifer Ruesink, UW, Biology Professor talked about the action items that could be taken to ensure the good quality of the Willapa Bay watershed continued. Following, Dan Ayres talked about razor clam management along our coastline. US Congressman Brian Baird was unable to personally attend, but he sent a pre-recorded message commending the agencies for their continued efforts in keeping Willapa Bay a pristine estuary and his concerns about the affects of ocean acidification on local shellfish operations. Kim Patten, WSU, talked about Spartina eradication and its impact on the shorebird populations. Today, Willapa Bay is seeing a signification increase in returning shorebirds. More about this effort can be read at

[HTTP://www.chinookobserver.com/main.asp?SectionID=1&subsectionID=12&articleID=34422&Q=3981.725](http://www.chinookobserver.com/main.asp?SectionID=1&subsectionID=12&articleID=34422&Q=3981.725). The afternoon presenters Pat Corcoran, OSU Coastal Hazards Outreach and Tyree Wilde, NOAA’s National Weather Service concluded with Tsunamis planning and preparedness and the extreme weather events our coastal communities are faced with.

The second day was more of a challenge being on a Friday and only half day, we saw the attendance drop off even though the content was well presented. The morning started with Phil Osborne, Golder Associates, PIE and George Kaminsky, WA Department of Ecology talking about coastal erosion studies which our coastal communities are all to familiar with. Next John Didon, Pacific County Sheriff, talked about the county’s preparedness planning and discussion turned to the current gulf oil spill and how Pacific County might be prepared to respond to such

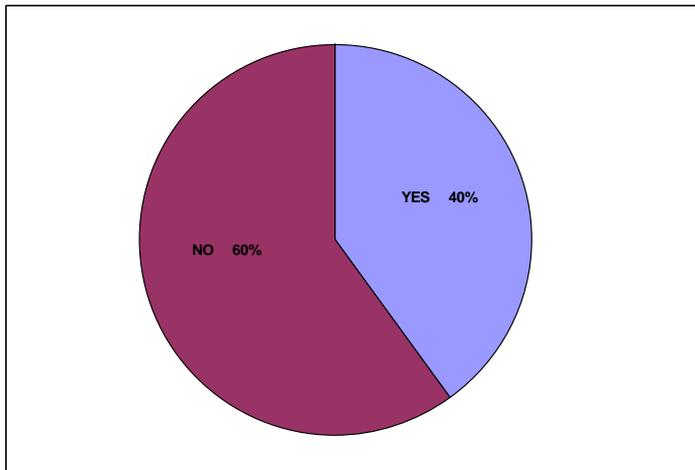
an event. Kim Patten, WSU, talked about the new Real Time Weather Station that was recently installed at Toke Point, Tokeland, WA. This weather information site according to Kim Patten, “will provide read-outs on water temperature, wind speed and direction, relative humidity and other data that will be useful to our oyster growers, fishermen or anyone involved in aquaculture.” This site is <http://weather.wsu.edu/>. The day ended with Antonio Baptista, Ph.D., Coastal Margin Observation and Prediction (CMOP) talking about the data his team is collecting from the Columbia River. It is the mission of CMOP to understand how physical, chemical, and biological conditions and processes vary naturally, and how they may be modified by changes in climate and human activities.

For the 1-1/2 day event, the expertise of the presenters was remarkable and their understanding and dedication to our coastal system was well received.

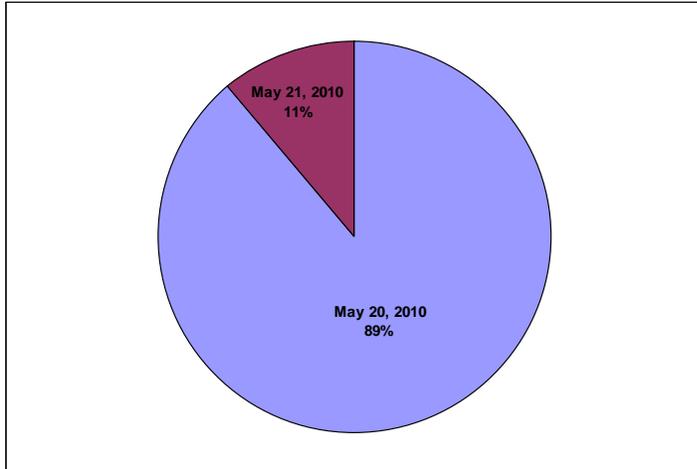
Lessons Learned

On June 23, 2010, the MRC distributed a survey via Survey Monkey, asking the attendees to response to eighth questions. Their responses are as follows:

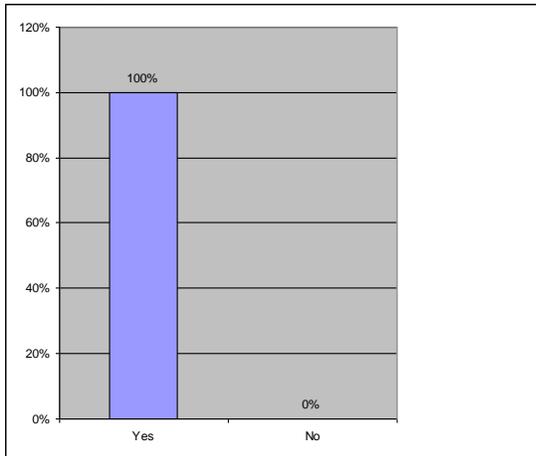
- 1. Did you attend both days of the 2010 Coastal Summit hosted by the Marine Resource Committee on May 20-21, 2010?***



2. If No, which day did you attend?



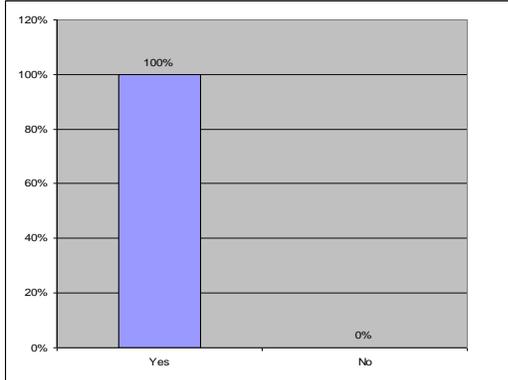
3. Did you find the information provided at the summit to be informative?



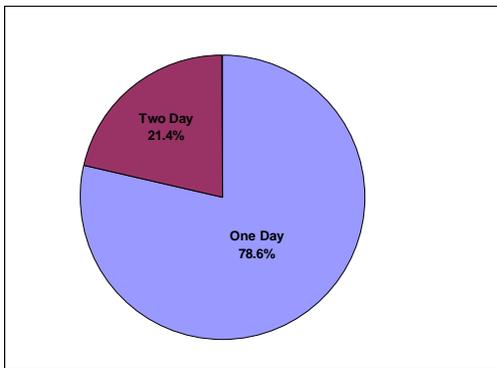
4. Rank the following topics in order of importance from 1-9,

1	Ecosystem Management in Willapa Bay	66.7%
2	Spartina Eradication - Impact of Shorebird Populations and Native Marsh Succession	46.2%
3	Knowing Pacific County's Weather Hazards	33.3%
4	Coastal Hazards and Tsunamis	30.8%
5	Observe and Predict to Understand and Manage: SATURN a an asset for Columbia River and Coastal Stakeholders	30.0%
6	Southwest Washington Coastal Erosion Studies	27.3%
7	Real Time Weather Station	22.2%
8	Safety First	20.0%
9	Can you Dig it? Razor Clam Management for the future	20.0%

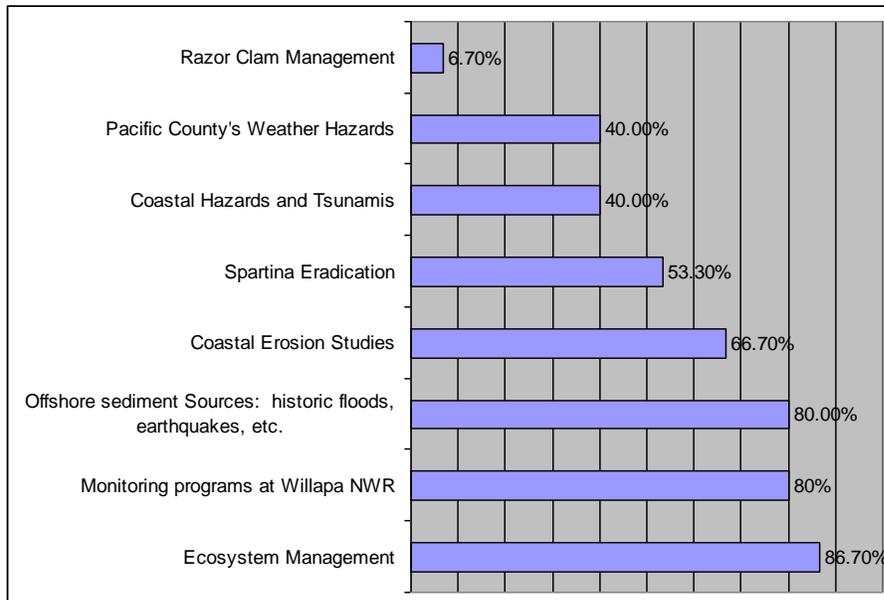
5. If the MRC is able to offer a 2011 Coast Summit would you attend?



6. Would you prefer a one or two day summit?



7. What topics would you like to see at the 2011 summit?



Comments:

- a. I thought it was a good summit/conference.
- b. Alternative energy development; tribal involvement on issues; culvert replacement for fish passage.
- c. The selections I made could be split out into two, one day sessions
- d. Stream restoration – what works, what doesn't work, for fish and water quality incoming species and ballast water, timberland management for more wood and improved species diversity.
- e. Other on-going research programs
- f. Climate change topics, shellfish topics, how we are being affected here in the Willapa Bay?

8. Other Comments or Suggestion.

- a. Keep up the good work.
- b. The committee and MRC did a great job. Thank you.
- c. The information provided was very informative. It provided a great overview without going into such scientific detail that one could not understand.

Conclusion

While the MRC considers their first summit a success, the information gathered from the exit survey will enhance MRC's 2011 Summit and meet the needs of the audience.

In response to the exit survey 100% of the respondents indicated the information provided at the summit to be informative as well as 100% of the indicated they would attend a like summit in 2011. One respondent suggested holding two one-day summits. This is something the committee will have to explore. By holding two one-day summits the MRC will be able to provide further educational outreach to our community.

In conclusion, an overall awareness has been raised about our coastal system and we are encouraged by the news that "Willapa Bay is currently in very good shape, especially in comparison with others around the Nation."

Additional Tasks:

Mussel Watch-

Volunteers collected mussels near the Port of Peninsula by Nahcotta for water quality testing. Samples were sent to New Jersey and to Texas for different testing.



Future tasks and projects:

Summary of 6/28/2010 subcommittee meeting:

- Reviewed 2009-2010 projects
- Earmarked funds for 2010-2011 projects
 - \$3450 – Garbage Gang
 - \$1600 – Ocean Caucus
 - \$2000 – Science Conference
- Science Conference
 - Possibly need a new science conference committee???
 - Suggestions for science conference
 - One day conference
 - Once or twice per year
 - GH County MRC is in the fall
- Advertising for Applications
 - Newspapers
 - Include mission statement, available funds, due date
 - Board members actively e-mail people
- Range in Grants
 - \$500-10,000
 - Matched projects are preferred, but not required
- Ranking System
 - Need another meeting regarding how we are going to rank projects
- Website
 - Need to create a site w/ grant funds
 - GH MRC has a website
- Facebook
 - Mike N. is willing to setup and administer the facebook page
- Direction of the MRC (10 yr strategic plan)
 - Mike J. will find the MRC a facilitator
 - Fall meeting????
- Timeline
 - July 12th – deadline to have applications done and start advertising
 - Aug 12th @ 4 p.m. – Strategic Planning Committee meeting prior to MRC meeting to look at how projects will be ranked
 - Aug 31st @ 4 pm. – deadline for proposals
 - Sept 2nd @ 4:30 p.m. – Strategic Planning Committee at Doug’s House to discuss and rank applications
 - Sept 9th – present MRC Board Members with ranked projects

We have a number of meetings and deadlines in the next couple of months.

2010-2011 PCMRC Work Plan

Pacific County Marine Resource Committee

Work Plan

July 1, 2010 – June 30, 2011

MRC Coordination

Description: The Pacific Conservation District, through an MOU with Pacific County, will provide MRC coordination support including planning and organizing meetings, leading/facilitating meetings, and recording and distributing meeting and activity summaries to those interested in MRC activities. The MRC coordinator will manage tasks of the MRC, assign work to MRC volunteers, and assure its timely completion including leading or delegating education and outreach, marine and fresh water quality, and sound science activities. The MRC coordinator is also responsible for coordinating with WDFW and for completing contract deliverables. The MRC Coordinator will also maintain and develop additional outreach tools as a means to communicate to the Marine Resource Committee and the public regarding activities and accomplishments.

Implementation:

- 1) Progress report describing coordination activity, priority tasks and projects identified by the MRC, and a MRC work plan for year 2 of the state biennium. (Due October 29, 2010)
- 2) A contract amendment outlining the additional projects and funding through June 30, 2011. (Due October 29, 2010)
- 3) An annual activity report summarizing the work of the MRC under all tasks of this contract and in other areas if applicable, priority future tasks, projects, and products for MRC development, potential challenges and opportunities, and ways to utilize the MRC to implement the recommendations in Washington's "Ocean Action Plan". The report should include draft work plan for year 2 of the state biennium. (Due June 30, 2011)

Budget:

Avg. ~10 hours per week through June 30, 2011	\$18,000.00
Supplies: Documents, Vehicle use, etc through June 30, 2011	\$2,000.00

Beach Clean Up

Description: The Grass Roots Garbage Gang (GRGG) is an all-volunteer, Washington State not-for-profit group that cleans up the Peninsula beaches in SW Washington. Each January, April and July hundreds of volunteers clean the Peninsula's 28-mile beach. Support comes from incredible volunteers, local businesses, [City of Long Beach](#), Pacific County and Washington State Parks. The GRGG promotes the events by providing a venue for a community potluck and speaker. The GRGG then provides a hot meal after the clean-up event.

Background: Starting in November, 2001, a small, friendly group of full and part time residents in Ocean Park, Washington, volunteered time and talents to tackle garbage on the ocean beaches of the Long Beach Peninsula. The Grass Roots Garbage Gang is a grass roots volunteer group of all ages, means and backgrounds, utilizing their talents, learning as they go, and have a very clear direction and mission.

- 1) The Pacific Ocean and the Columbia River are beautiful natural resources to be protected, not abused with uncontrolled littering. A clean ocean beach is beautiful.
- 2) Health and safety there are health and safety concerns for human beach goers, marine wildlife and the beach environment. Plastics are the most notorious for marine wildlife destruction. For example, the large, heavy plastic bags dumped at sea can cover a 4 ft sq area of sand the stops food supply to the razor clams sanded below.
- 3) Community pride and tourism everyone wins when beaches are clean and safe. Visitors to our

peninsula expect to enjoy the ocean beaches. Garbage has a very negative impact upon visitors who ponder why this community tolerates such dumping. They can walk away, never to return.

- 4) Disposal is habit forming and we are creatures of habit, good and bad. Once we can break the bad habit of littering, we see a safer and healthier environment for all to enjoy.

Justification: The PMRC supports the GRBCUG because it promotes healthy communities and resources, complements existing cleanup efforts, builds partnerships and also contributes to several benchmarks (marine life, habitats, water quality and coastal communities).

Implementation: The Pacific MRC would support the GRGG by:

- 1) Payment of Tipping fees, plastic bags, and advertisement for the July 5, 2010, January 2011, and April 2011 clean-up events. Cost \$2600

- 4) A brief progress report on clean-up activities, describing totals, needs of future efforts, and possible deterrents for future littering (educational signage ect.). (Due June 1,

2011)

Budget:

July 5, 2010 bags and advertisement	Cost \$1150.00
January 2011 clean-up	Cost \$1150.00
April 2011 clean-up	Cost \$1150.00

PMRC Share
Cost: \$3450

GRBCUG Share
Volunteers

State Ocean Caucus Attendance

Description: The Governor's Office and state agencies are acting on the Ocean Policy Advisory Group's recommendations, to include involving local and tribal governments, stakeholders, and the general public. The State Ocean Caucus (SOC) provides a way for state agencies to work together to prioritize activities and solve problems related to the ocean environment. The SOC may set up ad hoc committees of broader participants to deal with specific issues, as necessary. The PMRC will be represented by a PMRC board member, or alternate, at the SOC meetings.

Background: The State Ocean Caucus (SOC) is an interagency ocean team founded to act on the recommendations in *Washington's Ocean Action Plan* (December 2006) for improving ocean and coastal management. The Governor's office convened a group to develop this plan, which focuses on ocean and coastal resources and needs of Washington's outer coast. The SOC consists of representatives from state agencies involved in ocean and coastal resource activities. They also created the Ocean Policy Advisory Group, made up of diverse coastal interests to provide feedback on their activities.

Justification: The PMRC supports SOC attendance because of its opportunity to build partnerships, and to increase citizen participation in local and governmental decisions regarding marine and estuarine resources.

Implementation Plan:

The designated PMRC representative (Dale Beasley, PMRC Board Member), or the alternate (Michael Nordin) will attend the State Ocean Caucus Meetings held each month in hopes to:

- 1) To represent PMRC interests and perspectives on behalf of the entire PMRC membership on State Ocean Caucus activities.
- 2) To share updates on local PMRC issues and activities with state agencies.
- 3) To learn about state agency activities, coordinate on shared interests, and communicate key items back to the broader PMRC membership.

Budget:

PMRC share \$1600.00

Key Documents to read:

1. SB 6227
2. SB 6350
3. Pacific County Exploratory Marine Resource Committee Report
4. PCMRC Work Plan 2010

Appendix:

A. Board Members

Marine Resources Committee Board Members:

- | | | |
|--|---|--|
| • Local Government* | Faith Taylor-Eldred (Pac. Co.)
300 Memorial Drive
South Bend WA 98586 | Mike DeSimone-Alt.
300 Memorial Drive
South Bend WA 98586 |
| • Local Citizens* | Doug Kess,
162 Government Rd
Naselle Wa | Key McMurry
550 Mill Creek Rd
Raymond, WA 98577 |
| • Recreational Groups* | Ross Barkhurst
151 N. Nemah Rd. W.
South Bend WA 98586 | Michael Spencer
935 Fowler Street
Raymond, WA 98577 |
| • Economic Groups* | Cathy Russ (EDC)
530 Commercial St.
Raymond WA 98577 | Dan Todd (Port of Chinook) |
| • Conservation/
Environmental Groups* | Ammie Ammer (CREST)
750 Commercial St #205
Astoria, OR 97103 | Micah Russell (CREST)
750 Commercial St #205
Astoria, OR 97103 |
| • Scientific Community* | Kim Patten (WSU)
2907 Pioneer Rd
Long Beach, WA 98631 | Tom Kollacsh (TNC)-Alt.
750 Commercial St # 212,
Astoria, OR 97103 |
| • Tribal Governments* | Mike McGinniss (Shoalwater Tribe), Ray Gardner (Chinook Tribe) | |
| • Aquaculture | Tim Morris
404 Broadway
South Bend, WA 98586 | Dave Nisbet-Alt.
7081 SR 101
Bay Center, WA 98527 |
| • Commercial Fishing | Dale Beasley
PO Box 461
Ilwaco, WA 98624 | Dwight Eager-Alt.
P.O. Box 141
Chinook, WA 98614 |
| • Cities | Will Greene (City of Ilwaco)
P.O. Box 877
Ilwaco WA 98624 | Steve Russell (City of South Bend)
South Bend, WA |
| • State/Federal Gov. | Julie Tennis (State Parks) | Rob Allen (WDFW Forks Hatchery)
Raymond, WA 98577 |

- Education Steve Harbell (WSU Ext.) Boyd Keyser (Ocean Beach S.Dist.)
P.O. Box 88 Long Beach, WA
South Bend, WA 98586
- Agriculture Sue Pattillo Allen "Jim" Goulter-Alt.
2000 Mallis Landing Rd. 889 Chinook Valley Rd.
Raymond, WA 98577 Ilwaco, WA 98624
- Ports Jim Neva (Port of Ilwaco) Mary DeLong (Port of Peninsula)
PO Box 307 Ocean Park, WA
Ilwaco, WA 98624

RED PRINT—Pending Pacific County Commissioner's approval

Name	E-mail	Phone	Cell
Mike Johnson	paccon@willapabay.org	360-875-9424	360-942-7974
Mike Nordin	plutroll@willapabay.org	360-875-9424	360-208-4451
Faith Taylor-Eldred	ftaylor@co.pacific.wa.us	360-875-9356	
Mike DeSimone	mdesimone@co.pacific.wa.us	360-875-9356	360-642-9382
Michael Spencer	michaelspenc57@hotmail.com	360-942-3240	
Ross Barkhurst	rp.barkhurst@hotmail.com	360-875-5080	
Doug Kess	kess-spack@wwest.net	360-484-3427	
Jim Goulter	diamondbar@charter.net	360-642-2266	
Cathy Russ	caruss@pacificedc.org	360-875-9330	
Tom Kollasch	tkollasch@tnc.org	503-325-3896	
Kim Patten	pattenk@wsu.edu	360-642-2031	
Amy Ammer	aammer@columbiaestuary.org	503-325-0435	
Mike McGinnis	mmcginnis@shoalwaterbay-nsn.gov	360-267-3101	
Tim Morris	tim@coastsouthbend.com	360-875-5557	
Dave Nisbet	dnisbet@willapabay.org	360-875-6629	
Dale Beasley	crabby@willapabay.org	360-642-3942	
Dwight Eager	deager@centurytel.net	360-777-8430	
Will Greene	wjgreenejr@gmail.com	360-244-5420	
Steve Harbell	harbell@wsu.edu	360-875-9331	
Sue Pattillo	pattree@willapabay.org	360-942-3048	
Jim Neva	jneva@portofilwaco.com	360-642-3143	
Boyd Keyser	boyd.keyser@ocean.k12.wa.us	425-577-0981	
Bob Burkle	bob.burkle@dfw.wa.gov	360-249-1217	
Ken Connell	kconnell@golder.com	425-883-0777	

Miranda Wecker	mwecker@wwest.net	360-484-7128
Key McMurry	key@keyenvironmentalsolutions.com	360-942-3184
Shelly Pollock	shellyourbeach.org	360-665-5388
Mary DeLong	mary@portofpeninsula.org	360-665-4547
Micah Russell	mrussell@columbiaestuary.org	
Dan Todd	pchinook@willapabay.org	
Steve Russell	sbcity@techline.com	
Julie Tennis	lcic@parks.wa.gov	360-777-8221
Rob Allen	kisutch98@yahoo.com	

B. PCMRC Project Committees

Science Conference and Focus Day:

Kim Patton-Chair
Cathy Russ, Tom Kollasch, Doug Kess

New Directions:

Faith Taylor-Eldred-Chair
Tim Morris, Mike Nordin, Sue Pattillo, Tom Kollasch, Dale Beasley, Key McMurry

State Ocean Caucus, Marine Spatial Planning, Ocean Matrix:

Dale Beasley-Chair
Steve Harbell, Mike Nordin

Pacific County Signage:

Steve Harbell-Chair
Boyd Keyser, Mike Nordin, Tom Kollasch, Jim Neva

PCMRC Projects

Eyes on Willapa Bay-Miranda Wecker

NOAA B-WET (Naselle)-Ammie Ammer

Grass Roots Garbage Gang-Shelly Pollock

Sanitary Survey of Tokeland-Faith Taylor-Eldred

Mussel Watch Program-Mike Nordin, Doug Kess, Mike Johnson, Ted Laler

Ocean Beach School District SOOP Program-Boyd Keyser

Pacific County School Programs-

Willapa-Jay Pearson & Sherrie Wonhoff

Raymond-Lisa DeMontigny
South Bend-Carol Harrison
Naselle-Ammie Ammer & Jim Moten
Ocean Beach-Boyd Keyser

C. PCMRC Minutes

Minutes
Tuesday, November 3, 2009- Meeting 6-8 pm
Seaview Transit Center
Seaview, WA

In Attendance: Miranda Wecker, Ross Barkhurst, Boyd Keiser, Lynn Birman, Steve Harbell, Cathy Russ, Shelly Pollock, Dale Beasley, Sue Pattillo, Bill Ritchie, Tom Kollasch, Michael Spencer, Kim Patton, Doug Kess, Will Greene, Ken Connell, Amy Ammer, Tim Morris, Bob Burkle, Jim Goulter, Mike Johnson, Mike Nordin.

Introductions & Minutes: 10 Board members, 3 Alternates, and 7 guests were present. Introductions were made around the room. Minutes for the MRC meetings will be approved at the next meeting.

Item No. One – MRC Board Structure: Meeting formats were lightly discussed. The group came to a consensus to continue the current meeting in Robert’s Rules Small Board Forum. A decision will be made at the December meeting as to what format will be used for future meetings after the group receives material from Mike Nordin on Robert’s Rules. Motions for Chair, Vice-Chair, and Legislative positions were made and passed with Jim Neva receiving Chair, Doug Kess receiving Vice-Chair, and the Legislative position left open for an As Needed Basis.

Ross Barkhurst asked who approved such items as administrative expenses and board compensations for project participation. Mike Nordin explained that he and other MRC administrative staff report to the county and to WDFW on all expenses and potential expenses, and that there is a “rule book” (MRC Grants Policy & Procedures 2009-2011 Biennium) on what an MRC can and cannot be reimbursed for. The board then asked Mike Nordin to provide a copy of the “rule book”. This conversation led to the Scope of work.

Item No. Two – Review of Scope of Work: **Tabled until the December Meeting** -- Amy Ammer explained that the B-WET program, discussed in the proposed Task 2 of the scope of work, is a grant application through NOAA and could include MRC participation. Sue Pattillo asked when the grant would be awarded or active. Amy Ammer answered that she did not know when the award would happen but if it was awarded the program would hopefully begin in October of 2010. Boyd Keiser, Superintendent of the Ocean Beach School District, then mentioned that he too would like to have a program for his school district educating about marine issues. The board discussed possibly changing Task #2 to be more general for all the schools in Pacific County.

Mike Nordin explained that the document is open for the board to change dollar amounts and add or amend Tasks.

Ross Barkhurst asked if there was anyone who could provide an overview of potential projects or grants. Miranda Wecker then gave a preview to the presentation she would like give at the December meeting on GIS data involving estuary habitat and estuary restoration. It was then suggested that a portion of the next meeting would have anyone who was interested to submit for the December agenda a five minute presentation on a MRC potential issue or grant opportunity.

Item No. Three – Finalize Pacific E(exploratory)MRC Final Report: Tabled until next meeting.

Item No. Four – Potential Grants and Projects: To be continued at December meeting – Dale Beasley spoke on potential debris clean up grants for coastal Washington. He then discussed Ocean Spatial Planning. Currently, there is a mandate to create a Washington plan, of which in the priority list has Ocean Energy Plans #1 on a list of 10 priorities and has Commercial Natural Resource issues #8. Dale’s opinion is that the process is moving too quickly and need to slow down for public opinion and better planning. Dale informed the board that three weeks ago there was an Ocean Spatial Planning Meeting in Seattle, Washington with Senator Rankin and Senator Hargrove during which they proposed an Ocean Spatial Planning Bill. Dale is currently in discussion on the issues. Dale was asked to keep the board informed. Bob Burkle agreed with Dale on the assessment and explained that this is like a speculators open grounds in the ocean zoning.

Dale Beasley would like the PMRC to follow the issue and potentially provide input to the state legislature.

Action Taken:

Motion #1- Cathy Russ motioned for Doug Kess to be appointed Vice-Chair of the Pacific MRC.

Second- Tim Morris.

Discussion- None.

Passed- Unanimous.

Motion #2- Doug Kess motioned to create a Legislative position for the Pacific MRC.

Second- Steve Harbell.

Discussion- Ross Barkhurst pointed out that issues will change in the legislative arena from time to time so it would not make sense to have one individual represent all of the PMRC all the time.

Amendment to Motion #2- Doug Kess motioned to amend the motion to create a Legislative position on a As Needed Basis.

Second- Ross Barkhurst.

Discussion- None.

Passed- Unanimous.

Motion #3- Cathy Russ motioned for Jim Neva to be appointed Chair of the Pacific MRC.

Second- Dale Beasley.

Discussion- Ross Barkhurst said he couldn’t support someone whom he had never met. Cathy Russ explained that most of the people in the room did know Jim Neva and respected him. In addition, Cathy Russ pointed out that Jim Neva had experience in running meetings and processes like the MRC.

Passed- 1 Nay.

Action Required of Pacific MRC Facilitator:

1. Distribute the minutes for the November 3 meeting.
2. Distribute copies of Robert's Rules or at least Robert's Rules Small Board Forum.
3. Distribute copy of the MRC Grants Policy & Procedures 2009-2011 Biennium.
4. Distribute copy of the Willapa Bay Water Resources Coordinating Council work plan.
5. Call Brie Van Cleve and acquire the complete biennium budget and then distribute a copy of the budget.
6. Re-distribute Dale Beasley's information on Marine Spatial Planning.
7. When finished, distribute copies of the Task 1, 1a & 1b reports.
8. Find out when and where the Washington Ocean Caucus meetings are held and find out if the Pacific MRC could participate.
9. Distribute the December Agenda with the Presentation list.

Adjourn: 8:04 PM

NEXT MEETING: Next meeting will be December 10, 2009. Meeting will be held at the South Bend Annex Building, from 6:00PM – 8:00PM.

QUESTIONS: For further questions or comments, contact Mike Nordin or Mike Johnson of the Pacific Conservation District at (360) 875-9424, cell (360) 942-7974, or by email at plutroll@willapabay.org. Thank you and I look forward to hearing from you.

Minutes
Thursday, December 10th, 2009- Meeting 6-9 pm
County Annex Building
South Bend, WA

In Attendance: Bob Burkle, Jim Neva, Brie Van Cleve, Brett Dumbauld, Faith Eldred, Kim Patten, Doug Kess, Tim Morris, Ross Barkhurst, Cathy Russ, Cindy Burton, Boyd Keyser, Tom Kollasch, William Ritchie, Miranda Wecker, Kevin Eldred, Amy Ammer, Lee McCoy, Mike Johnson, Mike Nordin.

Introductions & Minutes: 8 Board members, 1 Alternate, and 11 guests were present. Introductions were made around the room. Minutes for the 11-3-09 MRC meeting were approved. One addition to the agenda - Brett Dumbauld presentation.

Item No. One – Presentations:

The National Mussel Watch Program- Brie Van Cleve introduced herself and commented on how great it was to see the formation of a Pacific County MRC. Brie talked about the National Mussel Watch Program with NOAA, a monitoring program taking samples from three sites, two in Pacific County and one in Grays Harbor County, of bivalves for contaminants. The two MRCs from Pacific and Grays Harbor

are being looked at for taking over the three sample sites. Sampling occurs once every two years requiring 6-7 individual volunteers with one trained individual overseeing the sampling. Training will require 1-5 hours. \$800 will be funded to train for all three sites.

State Ocean Caucus Invitation- Mike Nordin informed the board of the invitation from the State Ocean Caucus for participation in their meetings. Mike explained how important attendance at these meetings are and how the marine spatial planning that will be discussed at those meetings. Kim Patten made a motion to have Dale Beasley be the Pacific MRC legislative lead for these meetings. Doug Kess seconded. All voted in favor.

Willapa GIS Systems- Miranda Wecker talked about the history of the program and the data that has been collected since 1991. Willapa Alliance was one of the first to collect GIS. The Alliance turned over data to ONRC in 1997. The data is now housed at the UW website called "Clearing house for the Olympic Peninsula", which is storage of Metadata for the coast area. Miranda presented maps of Willapa Bay spartina infestations and eel grass. Miranda presented through several maps that included estuary assessments, oyster lands, ect.

Brett Dumbauld and Lee McCoy presentation- Brett is working on projects in Willapa Bay. Brett turned the presentation over to Lee McCoy. The presentation described work on monitoring and mapping of eel grass, japonica, burrowing shrimp, oyster agriculture, and sedimentation. There has been collection of elevations for the tidal areas also. The study, which is still in progress, is about the interrelations between all these biological functions.

Ocean Beach School District- Boyd Keyser (Ocean Beach Superintendent) explained how he wants to see environmental program that includes all facets of education with an open learning process with modern technology, GIS ect. MRC could help with training educators, provide supplies, and find outdoor study sites. Boyd provided the group with a two page proposal on the programs plans. Boyd has a pilot project set for next year; however he has needs for this year to get it set up.

Columbia River Barbless Proposal- Ross Barkhurst gave a presentation on why the potential barbless hook program was not a good thing. Bob Burkle rebutted, explaining that he had good success with barbless hooks and that they were safer. The topic went stagnant.

National Estuary of Recognition Program-Amy Ammer spoke in favor for researching the possibility of having Willapa Bay become an Estuary of Recognition and possibly start a 5 year process. Mike Nordin asked if there were any negative restrictions. Amy said she did not know of any. Amy thought this might be a way to get more funding for the area. Tim Morris had concerns that the negatives might outweigh the positives. The Board agreed that more information would be needed.

Item No. Two – Meeting Structure: Jim Neva suggested that the board stay as a fairly loose board and to stick with motions, seconds, yeas and nays ect., and to stick with simple majority voting. The group agreed by consensus.

Item No. Three – Scope of Work: Brie Van Cleve explained that the Pacific MRC has \$40,000 for its July 2009 to June 2010 budget, of which \$20,000 to run the program and \$20,000 for projects. This is a ballpark breakdown and it is up to the board with the guidance of WDFW how the money is spent. Brie explained that she needed a scope of work ASAP. The Board decided they needed more time to work on the scope of work and asked Brie if they could have two weeks, which would be worked on and voted on via email, to complete the scope of work. Brie agreed that process is very important and granted the two weeks. Mike Nordin apologized for not keeping the Board apprised of the schedule of tasks from WDFW.

Some suggestion of projects were supporting the Grass Roots Garbage Gang, a Bay Watch Program, Spartina Watch Program, a science conference, and supporting educational programs with educational outreach.

Action Taken:

Motion #1- Doug Kess motioned to approve the 11-3-09 meeting minutes.

Second- Cathy Russ.

Discussion- None.

Passed- Unanimous.

Motion #2- Kim Patten motioned to create a Legislative position for the Pacific MRC specifically for the Ocean Caucus Meetings and that Dale Beasley would fill said position.

Second- Doug Kess.

Discussion- None.

Passed- Unanimous.

Action Required of Pacific MRC Facilitator:

1. Call Garrett Dalan, Grays Harbor MRC, and coordinate possible activity on the Mussel Watch Program.
2. Call Dale Beasley and ask him if he accepts the Ocean Caucus Legislative position.
3. Send out MRC work timeline.
4. Send out link or information on the National Estuary of Recognition Program.
5. Work with MRC Board on the Scope of Work, distribute, and collect votes.

Adjourn: Jim Neva called for adjournment at 8:25 PM.

NEXT MEETING: Next meeting will be January 14th, 2010. Meeting will be held at the Seaview Transit Center, from 6:00PM – 8:00PM.

QUESTIONS: For further questions or comments, contact Mike Nordin or Mike Johnson of the Pacific Conservation District at (360) 875-9424, cell (360) 942-7974, or by email at plutroll@willapabay.org. Thank you and I look forward to hearing from you.

Minutes
Thursday, January 14, 2010 Meeting 6-8 pm
Seaview Transit Center
Seaview, WA

In Attendance: Steve Harbell, Dennis Wilson, Ed Bennet, Mike DeSimone, Cathy Russ, Shelly Pollock, Dale Beasley, Sue Pattillo, Tom Kollasch, Kim Patton, Doug Kess, Will Greene, Tim Morris, Jim Goulter, Jim Neva, Mike Johnson, Mike Nordin.

Introductions & Minutes: 9 Board members, 3 Alternates, and 5 guests were present. Introductions were made around the room. Minutes for the MRC meetings was approved.

Item No. One – MRC Board Structure:

Mike Nordin discussed filling the vacant board alternates with; Dan Todd (Port of Chinook) for Economic Groups, Micah Russell (CREST) for Conservation Groups, Steve Russell (City of South Bend) for Cities, Boyd Keyser (Ocean Beach School Dist.) for Education, Mary DeLong (Port of Peninsula) for Ports, and move Michael Spencer from Local Citizen Alt. to Recreational Groups Alt. since the Local Citizen Alt. would be easier to fill and Michael Spencer can represent the Anglers Assoc. from upper Willapa. A search to fill the citizen at large alt. position, and replace Charlie Stenvall, plus fill the State/Fed alt. position will continue. A potential replacement would be a state park supervisor from the Cape Disappointment park. A motion to recommend new alternates was made by Kim Patton and seconded by Cathy Russ. No discussion followed and was passed unanimously.

Item No. Two – Work Plan:

Mike Nordin reported that the email vote to approve using email voting, and approving the July 1, 2009 to June 30, 2010 PMRC Work Plan both passed. The email voting passed 13 yea, 0 nay, 1 absent, and the PMRC Work Plan passed 12 yea, 1 nay, 1 absent.

Jim Neva apologized for the process but explained that the PMRC was under the gun to get a finished product in place, however, it did work and had full participation. Cathy Russ thanked everyone involved in working on the document. Mike Nordin reminded everyone that the process will start again in March for the 2010/2011 Work Plan. Cathy Russ suggested that a standard form for project requests should be created. Mike Nordin said that would be great and would simplify the process. Mike DeSimone suggested that the PMRC should define themselves by creating a mission statement with goals.

Item No. Three – Sub-Committee Reports–

Grass Roots Garbage Gang-

Shelly Pollock with the Grass Roots Garbage Gang (GRGG) gave a power point presentation on their clean-up activities. She is very thankful for the PMRC help. Here is a website on their work www.ourbeach.org. Potentially the organization could be expanding to Benson Beach and Chinook. Not only is the group working to clean up Long Beach but also help reduce ocean garbage.

State Ocean Caucus-

Dale Beasley reported that SB 6350 on Marine Spatial Planning will have a hearing on Jan. 21. For the most part he agrees with the bill, however he recommends that the state CZMA should be extended from the 3 mile mark to possibly the 200 mile mark and should reflect how unique Washington is with its sharing 50/50. SB 6350 is a reaction from the federal government pushing for a national Marine Spatial Plan. This will hopefully protect current uses from new uses or interests, such as ocean energy.

Strategic Planning, Science Conference/Focus Group, PMRC Signage Sub-Committee-

Strategic Planning sub-committee will consist of Faith Eldred (chair), Tim Morris, and Dale Beasley.

Science Conference and Focus Group sub-committee will consist of Kim Patton (chair), Doug Kess, Cathy Russ, and Tom Kollacsh.

PMRC Signage sub-committee will consist of Steve Harbell (chair), Mike Nordin, and Boyd Keyser.

Sanitary Survey of Tokeland-

Mike DeSimone reported on the current and future work on the septic surveys in the Tokeland area. This is a continuation of an older program.

Mussel Watch Program-

Mike Nordin will be trained along with 4 other volunteers on collecting sampling at Nahcotta and sending mussel samples to a National Program. Doug Kess and Mike Johnson volunteered for the program.

Eyes on the Willapa Bay and School Programs did not report this month.

Action Taken:

Motion #1- Motion to approve the minutes from the December meeting, Doug Kess.

Second- Cathy Russ

Discussion- None.

Passed- Unanimous.

Motion #2- Kim Patton made a motion to make a recommendation to the county commissioners for new alternate board positions for the PMRC.

Second- Cathy Russ

Discussion- None.

Passed- Unanimous.

Action Required of Pacific MRC Facilitator:

1. Send out agenda for the Feb. meeting.
2. Send out minutes for the Jan. meeting.
3. Send out the Coastal MRC website link.

Adjourn: 7:50 PM

NEXT MEETING: Next meeting will be February 11, 2010. Meeting will be held at the South Bend Annex Building, from 6:00PM – 8:00PM.

QUESTIONS: For further questions or comments, contact Mike Nordin or Mike Johnson of the Pacific Conservation District at (360) 875-9424, cell (360) 942-7974, or by email at plutroll@willapabay.org. Thank you and I look forward to hearing from you.

Minutes
Thursday, February 11, 2010 Meeting 6-8 pm
South Bend County Annex Building
South Bend, WA

In Attendance: Cathy Russ, Dale Beasley, Kim Patton, Doug Kess, Tim Morris, Jim Goulter, Jim Neva, Mike Johnson, Mike Nordin, Michael Spencer, Dwight Eager, Faith Taylor-Eldred, Bob Burkle, Doug Miller, Kathy Greer, Ken Connell, Phil Osborne, Boyd Keyser, Douglas Nordin, Jim Karnofski.

Introductions & Minutes: 10 Board members, 1 Alternates, and 8 guests were present. Introductions were made around the room. The Minutes for the MRC meeting was approved.

Item No. One – MRC Board Structure:

A search to fill the citizen at large alt. position, and replace Charlie Stenvall, plus fill the State/Fed alt. position will continue.

Item No. Two – Golder Assc. Presentation for their IDSS Phase II:

Phil Osborne, Ken Connell, and Doug Miller provided a presentation on the IDSS Phase II, the same presentation given to Bonneville Power. This presentation was to inform the PCMRC of Golder Assc. web based mapping tool and to garner support from the PCMRC to help Golder Assc. received funds from Bonneville Power. This web based tool is mostly for mapping tidal currents so to find the best (if any) locations to establish the test sites for renewable energy. Doug Miller explained that the PUD is by law supposed to seek out potential green power. He also explained the different levels of development for different types of renewable power. Doug requested a letter of support from the PCMRC to support Phase II of the project. Cathy Russ moved to write the letter of support and Faith Taylor-Eldred seconded, 6 yeah votes 4 abstentions, 0 nays.

Item No. Three – Sub-Committee Reports–

Grass Roots Garbage Gang-

Shelly Pollock with the Grass Roots Garbage Gang (GRGG) sent a thank you card to the PCMRC for their support on the beach clean-up.

State Ocean Caucus-

Dale Beasley reported that SB 6350 on Marine Spatial Planning has been amended. The major changes were to take the DNR habitat conservation planning out of the bill. For the most part, anyone who needed changes to the bill received it. The bill looks like it is moving forward. Tim Morris explained why the DNR habitat conservation planning was taken out.

Strategic Planning sub-

Committee will consist of everyone. No report at this time.

Science Conference and Focus Group sub-

Consisting of Kim Patton (chair), Doug Kess, Cathy Russ, and Tom Kollacsh. Kim Patton gave 6 choices for speakers; Jenifer Ruesink and Alan Trimble on ecosystem based management in Willapa Bay, Pat Corcoran on coastal hazards and tsunamis, Phil Osborn on coastal erosion studies, WDFW and UW/ONRC on PSP/ORHAB, Brian Baird on ocean acidification, or someone on marine spatial planning. Sometime in mid to late May is the preferred time for the conference. Kim suggested selecting 3-4 topics. Beach erosion, and Mr. Baird if possible were at the top of the list.

PMRC Signage-

Consists of Steve Harbell (chair), Mike Nordin, and Boyd Keyser.

Sanitary Survey of Tokeland-

Faith Taylor-Eldred reported on the current work on the septic surveys in the Tokeland area, which is going well.

Mussel Watch Program-

Mike Nordin along with others will be trained and collect mussels at Nahcotta. New Directions, Eyes on the Willapa Bay and School Programs did not report this month.

Item No. Four—Wash-a-way Beach & Corp. Jetty Project-

Faith Taylor-Eldred reported upon request of the group on the situation and clean-up at Wash-a-way Beach. Mike Nordin and Mike Johnson gave testimony on their visit to the site. Also Bob Burkle gave an explanation about the drift cells affecting the beach and the history. Phil Osborne also gave expert opinion. Discussion followed with an explanation as to the new notice of input and work for the Army Corp. of Engineering.

Action Taken:

Motion #1- Motion to approve the minutes from the January meeting, Doug Kess.

Second- Michael Spencer

Discussion- None.

Passed- Unanimous.

Motion #2- Cathy Russ made a motion to draft and send a letter of support for the IDSS Phase II.

Second- Faith Taylor-Eldred

Discussion- None.

Passed- 6 yes, 4 abstained, 0 no.

Action Required of Pacific MRC Facilitator:

1. Send out agenda for the March. meeting.
2. Send out minutes for the Feb. meeting.
3. KMUN nomination for Shelly Pollack.

Adjourn: 7:53 PM

NEXT MEETING: Next meeting will be March 11, 2010. Meeting will be held at the South County Building, from 6:00PM – 8:00PM.

QUESTIONS: For further questions or comments, contact Mike Nordin or Mike Johnson of the Pacific Conservation District at (360) 875-9424, cell (360) 942-7974, or by email at plutroll@willapabay.org. Thank you and I look forward to hearing from you.

Minutes
Thursday, March 11, 2010 Meeting 6-8 pm
South County Building
Long Beach, WA

In Attendance: Jim Neva, Doug Kess, Steve Harbell, Will Green, Cathy Russ, Sue Pattillo, Tim Morris, Dale Beasley, Kim Patton, Faith Taylor-Eldred, Michael Spencer, Mike Nordin, Mike Johnson, Jim Goulter, Boyd Keyser, Kevin Eldred, Dick Sheldon, Ken Connell, Bob Burkle, Tom Kollasch, Eric Delvin.

Introductions & Minutes: 11 Board members, 3 Alternates, and 7 guests were present. Introductions were made around the room. The Minutes for the February MRC meeting were approved.

Item No. One – MRC Board Structure:

A search to fill the citizen at large alt. position, and replace Charlie Stenvall, plus fill the State/Fed alt. position will continue. Some names suggested were Key McMurry and Marshall Tate for the Citizen at Large Alt. position, and Julie Tennis, Marianna or the new manager with US Fish & Wildlife, or Rob Allen for the State/Fed Position.

Item No. Two – Eric Delvin, TNC, Strategic Planning Grant:

Eric Delvin, who is a board member for the Grays Harbor County Marine Resource Committee, spoke about finding grant dollars for strategic planning for each coastal MRC's. The first grant he looked at was with the Wildlife Conservation Society, however it will not be the best fit, but Eric did talk with the PCMRC about other opportunities. One other source could be the Packard Foundation (Hewlett Packard). The PCMRC board was open to work, in the future, with the other coastal MRC's on strategic planning.

Eric also suggested working on a comprehensive project list over all the coastal MRC's to show shared goals and directions so the MRC's could possibly work collaboratively on grants and projects.

Item No. Three—Work Plan 2010-2011:

Mike Nordin suggested that a standard project request form would be good for standardizing requests. It was suggested that Mike Nordin make the form and have the board approve it.

The Board also requested that Mike Nordin let each project coordinator know what the report requirements are and when they are needed.

The board also talked about the need to get started on the 2010-2011 work plan. Cathy Russ requested a status update on current projects.

Item No. Four—Logo/Mission Statement:

Jim Goulter produced a potential logo and passed it around the room. Faith Taylor-Eldred also passed around potential logos. Boyd Keyser also suggested that his students could draft up a final logo using other suggested logos.

The mission statement will be worked on via emails during the next month. Faith gave a potential mission statement to start with using words that are commonly used at our meetings, "Facilitates sustainable policies, research, and education relating to marine resource conservation that are economically and ecologically viable for our communities." A couple of options will be brought to the next meeting.

Item No. Five – Sub-Committee Reports:

Grass Roots Garbage Gang-

No report at this time.

State Ocean Caucus-

Dale Beasley reported that the Ocean Caucus worked on College Fellowships for about half of their meeting and the Marine Spatial Planning the other half. Dale suggested that the Ocean Caucus need to make the Matrix a little bit more palatable for regular folks to be able to participate. Bob Burkle mentioned that the document is hard to remember what you just read. Mike Nordin tried to describe what the Caucus would like to receive from the MRCs, such as local input on local jurisdictions, laws, and zoning. Mike also warned that this is

Pacific county's chance for input in something that affects the whole county citizenships and that the opportunity should not be missed. Boyd Keyser suggested that we should have specific interests to work on and focus on. Dick Sheldon reminded the group that the first zoning and spatial planning done in the state was done by the shellfish growers of Willapa Bay in 1896.

Strategic Planning sub-

No report at this time.

Science Conference and Focus Group sub-

Kim Patton (chair) reported that the Conference and Focus Day will be May 20 & 21. Brian Baird cannot come but will do either a prepared message or teleconference. Kim also reported that the conference will be much cheaper than anticipated.

Jim Neva reported that Lower Columbia Solutions will be have their own conference in Ilwaco and he was wondering if the PCMRC would help with some of their costs.

Cathy Russ was searching for a title for the Conference.

PMRC Signage-

Consists of Steve Harbell (chair), Mike Nordin, and Boyd Keyser reported that they have a meeting the next day, 2:00 in Chinook, on signage. Steve requested some ideas for the boards.

One other signage idea was painting drainage warnings for pollutants harming salmon at drainages throughout the county.

Sanitary Survey of Tokeland-

Faith Taylor-Eldred reported on the current work on the septic surveys in the Tokeland area, which is going well.

Mussel Watch Program-

Mike Nordin reported that he, along with others, were trained and collected mussels at Nahcotta.

Education Outreach-

Boyd reported that his school program is moving forward and going well. Mike Nordin reported that he is contacting people from all the schools for their programs.

Eyes on the Willapa Bay-Kim Patton reported for Miranda Wecker that the program needed some volunteers for research and searching for spartina.

Jim Neva also reported on the progress on the new coastal Doppler Radar System here off Pacific County's coast.

Action Taken:

Motion #1- Motion to approve the minutes from the February meeting, Doug Kess.

Second- Dale Beasley

Discussion- None.

Passed- Unanimous.

Motion #2- None

Second-

Discussion-

Passed-

Action Required of Pacific MRC Facilitator:

1. Send out agenda for the March. meeting.
2. Send out minutes for the Feb. meeting.
3. Create form for project requests.
4. Contact potential new board members.
5. Create form for Ocean Matrix concerns.

Adjourn: 7:58 PM

NEXT MEETING: Next meeting will be April 8, 2010. Meeting will be held at the South Bend County Annex Building, from 6:00PM – 8:00PM.

QUESTIONS: For further questions or comments, contact Mike Nordin or Mike Johnson of the Pacific Conservation District at (360) 875-9424, cell (360) 942-7974, or by email at plutroll@willapabay.org. Thank you and I look forward to hearing from you.

Minutes
Thursday, April 8, 2010 Meeting 6-8 pm
South Bend County Annex Building
South Bend, WA

In Attendance: Jim Neva, Doug Kess, Cathy Russ, Sue Pattillo, Dale Beasley, Faith Taylor-Eldred, Michael Spencer, Amy Ammer, Tom Kollasch, Mike Nordin, Mike Johnson, Key McMurry, Jennifer Hennesy, Bob Burkle.

Introductions & Minutes: 9 Board members, 1 Alternates, and 2 guests were present. Introductions were made around the room. The Minutes for the March MRC meeting were approved.

Item No. One – MRC Board Structure:

Mike Nordin reported that both Rob Allen with WDFW would like to accept the State/Fed Alternate position and Key McMurry for the Citizen at Large Alternate position. Cathy Russ made a motion to recommend them to the County Commissioners for their positions. It passed

unanimously after Michael Spencer seconded it. We are still seeking a board position for State/Fed position.

Item No. Two – Jennifer Hennessy (DOE) Ocean Matrix and Ocean Caucus:

Jennifer Hennessy spoke on behalf of the State Ocean Caucus and their work on Marine Spatial Planning and the Ocean Matrix. Looking to map and plan for uses in coastal waters. Jennifer explained about the new Senate Bill 6350, which does two things 1. The Ocean Caucus will make recommendations for marine spatial planning 2. If there are funds(outside funding), collect, compile, map, and perform spatial planning.

The spatial planning will potentially be used to solve conflicts over uses in marine waters. One way to do that is the Ocean Matrix. The Ocean Caucus will be sending out a questionnaire to ask what do we need to plan for, what is already there, what are the existing uses, and what are your goals and objectives. The MRC's will be used as a contact list for potential responses.

There will also be an open house in Westport Washington for the next Ocean Caucus meeting on April 27th at 5:30pm.

Item No. Three—Work Plan 2010-2011:

Mike Nordin completed a standard project request form that would be good for standardizing requests. Mike Nordin was seeking the board to approve it. The board suggested that the new mission statement should be on the form.

Jim Neva suggested that the MRC should generate an article for the local papers and that the MRC should advertise through the article that we are seeking projects. Cathy Russ suggested that Mike Nordin should look into the legal process for announcing the seeking of projects.

Mike Johnson suggested that the PCMRC should move to support the Grass Roots Garbage Gang for the next year. Doug Kess motioned to do so with Tom Kollasch seconding, which passes unanimously.

Item No. Four—Logo/Mission Statement:

Boyd Keyser has had his students working on a final logo using other suggested logos.

The mission statement will be

“The Pacific County Marine Resource Committee serves as a steward for the marine and estuarine resources in our county by facilitating science based policies, research, and education that enhance the sustainability of the economy and ecology of our communities.”

Item No. Five – Sub-Committee Reports:

Grass Roots Garbage Gang-

A clean-up is planned for April 17th.

State Ocean Caucus-

Dale reported on the State Ocean Caucus meeting. He explained that there will be a state of the coast report that he feels is lacking information on the status of the fishing community. Mike Nordin also commented on the meeting and the conversations about the Ocean Matrix.

Strategic Planning sub & New Directions-

Dale Beasley requested that we should make sure who is on this committee and start meeting. Dale also mentioned that he had spoke with Steve Harbell about the Ocean Matrix. Steve volunteered leading a group to go over the Ocean Matrix and come up with a unified input for the Ocean Caucus. Cathy Russ suggested that we collaborate with the other coastal MRC's to find common ground.

Science Conference and Focus Group sub-

Cathy Russ reported on the progress of the Conference. She is searching for an invite list from board members.

PMRC Signage-

Steve Harbell (chair), Mike Nordin, and Boyd Keyser had a meeting in Chinook.

Mike Nordin reported on the progress of the planning. The group suggested to the board that 3 roll up banners and a three sided KIOSK be constructed. Locations were discussed by the PCMRC board and it was suggested that the Signage group meet one more time to work on a location. Jim Neva suggested that a location for the KIOSK could be down at the Port of Ilwaco. Mike Nordin also mentioned that if there were extra funds, the signage group suggests that the PCMRC start a stencil signage by drainages that affect Salmon.

Sanitary Survey of Tokeland-

Faith Taylor-Eldred reported on the current work on the septic surveys in the Tokeland area, which should be done in a week.

Education Outreach-

Mike Nordin reported on the five schools and their projects and field trips using the PCMRC money. Amy Ammer described the Naselle program. Dale Beasley and Jim Neva suggested other sources of funds for marine education in schools, and how the PCMRC could be a landing spot for funds for those programs.

Eyes on the Willapa Bay-

No report at this time.

Action Taken:

Motion #1- Motion to approve the minutes from the March meeting, Doug Kess.

Second- Cathy Russ

Discussion- None.

Passed- 8 yes, 1 nay.

Motion #2- Motion to recommend to the Pacific County Commissioners Rob Allen for the Alternate position for the State/Fed and Key McMurry for the Alternate position for Citizen at Large.

Second- Michael Spencer

Discussion-

Passed- Unanimous

Motion #3- Doug Kess motioned to support the Grass Roots Garbage Gang for the next year 2010-2011 year for the same amount as the 2009-2010 year.

Second- Cathy Russ

Discussion- None.

Passed- Unanimous.

Motion #4- Doug Kess motioned to accept the PCMRC mission statement as “The Pacific County Marine Resource Committee serves as a steward for the marine and estuarine resources in our county by facilitating science based policies, research, and education that enhance the sustainability of the economy and ecology of our communities.”

Second- Tom Kollasch

Discussion-
Passed-Unanimous

Action Required of Pacific MRC Facilitator:

1. Send out agenda for the May meeting.
2. Send out the minutes for the April meeting.
3. Send out the updated member list and committee lists.
4. Send out the revised Project Guidance and Request Form.
5. Call and coordinate with Cathy Russ on the PCMRC article.
6. Attend Ocean Caucus meeting.

Adjourn: 7:31 PM

NEXT MEETING: Next meeting will be May 13, 2010. Meeting will be held at the South County Building, from 6:00PM – 8:00PM.

QUESTIONS: For further questions or comments, contact Mike Nordin or Mike Johnson of the Pacific Conservation District at (360) 875-9424, cell (360) 942-7974, or by email at plutroll@willapabay.org. Thank you and I look forward to hearing from you.

Minutes
Thursday, May 13, 2010 Meeting 6-8 pm
South County Building
Long Beach, WA

In Attendance: Doug Kess, Cathy Russ, Dale Beasley, Faith Taylor-Eldred, Tim Morris, Kim Patten, Steve Harbell, Will Greene, Ross Barkhurst, Julie Tennis, Shelly Pollock, Kathy Greer, Kevin Eldred, Dennis Wilson, Mike Nordin, Mike Johnson.

Introductions & Minutes: 10 Board members, 0 Alternates, and 6 guests were present. Introductions were made around the room. The Minutes for the April MRC meeting were approved.

Item No. One – MRC Board Structure:

Cathy Russ motioned to recommend to the County Commissioners Julie Tennis with Washington State Parks for the State/Fed Board position. Will Greene seconded the motion and it passed unanimously.

Mike Nordin will create an excel spreadsheet to keep track of attendance. Under the Willapa Bay Water Resource Coordinating Council's bi-laws and RCW's (as pointed out by Will Greene and Mike Johnson) if a board member is absent for three consecutive meetings the current board may vote to remove and replace that board member. Dale Beasley suggested the PCMRC should try harder to make sure board members are attending.

Item No. Two – Disaster Preparation Discussion:

The board discussed possible reaction(s) in response to the oil spill in the Gulf of Mexico and how or what we can do off the coast of Pacific County to prevent a similar event here. Dale Beasley lead the conversation, explaining that prevention is the only real option, that if the event happens with no plan in place it will already be too late. Possible suggestions were to find out if the PCMRC could support the region in acquiring or outfitting a vessel capable of towing a tanker. Ross Barkhurst pointed out that money should be available to help with the loss of income to fisherman or businesses that live off ocean industries. The group decided it needed more information about what response programs were in place and what possible options were available in case of an oil spill event before a decision could be made to what direction to take.

Item No. Three – Sub-Committee Reports:

Grass Roots Garbage Gang-

Preparation for the July 5th clean up is in progress.

State Ocean Caucus-

Dale reported on the State Ocean Caucus meeting and SB 6350. Mike Nordin also commented on the open house meeting at Westport and the conversations about the Ocean Matrix.

Strategic Planning-

Faith advised the board that the “New Directions” committee will now be called the “Strategic Planning” committee and that Doug Kess will be co-chairing the committee. Faith will be sending out a Survey Monkey survey to find out how the board would like to allocate the 20K for the 2010-2011 work year.

Science Conference and Focus Group sub-

Kim Patten and Cathy Russ reported on the progress of the Conference. With some minor additions, everything is ready to go.

PMRC Signage-

Steve Harbell (chair), reported that the location for the KIOSK will be down at the Port of Ilwaco. Work will begin soon.

Sanitary Survey of Tokeland-

Faith Taylor-Eldred reported on the current work on the septic surveys in the Tokeland area are finished, with only a couple of failures. Loan programs are available for failures to be replaced.

Education Outreach-

No report at this time.

Eyes on the Willapa Bay-

Kim Patten reported that Miranda Wecker and her team were preparing for project action to take place in a couple of weeks.

Action Taken:

Motion #1- Motion to approve the minutes from the April meeting, Dale Beasley.

Second- Faith Taylor-Eldred

Discussion- None.

Passed- Unanimous.

Motion #2- Motion to recommend to the Pacific County Commissioners Julie Tennis for the board position for the State/Fed was made by Cathy Russ.

Second- Will Greene
Discussion-None
Passed-Unanimous

Action Required of Pacific MRC Facilitator:

1. Send out agenda for the June meeting.
2. Send out the minutes for the May meeting.
3. Work with Faith to send out funding allocation percentage sheet.
4. Call Boyd or Mark Simmons about signage.
5. Contact Stephanie Fritz about oil spill response.
6. Attend Ocean Caucus meeting.

Adjourn: 7:25 PM

NEXT MEETING: Next meeting will be June 10, 2010. Meeting will be held at the South Bend County Annex Building, from 6:00PM – 8:00PM.

QUESTIONS: For further questions or comments, contact Mike Nordin or Mike Johnson of the Pacific Conservation District at (360) 875-9424, cell (360) 942-7974, or by email at plutroll@willapabay.org. Thank you and I look forward to hearing from you.

D. Education Outreach Committee

March 16, 2010

Pacific County Marine Resources Committee

Education Outreach Sub-Committee Report

These projects are intended to promote education about marine and estuarine environments and habitat. The projects will be completed and reported on by June 15, 2010. Each school districts report will consist of 2 pages, one of which will consist of photos from the event or project.

School Districts Participating:

Ocean Beach School District
Naselle School District
South Bend School District
Raymond School District
Willapa Valley School District

Award: \$2500.00 (\$500.00 per school district)

South Bend School District

Proposal for PCMRC money, submitted by Carol Harrison, science teacher South Bend Middle School

Field trip for 8th grade students to Westport

Subject of field trip:

1. Look at erosion near Wash-a-way Beach, and discuss mechanism of sand depletion and accretion.
2. Use GPS units to plot invasive species around Westport and the Bay, discuss impact of spartina and

other species on the ecosystem.

3. Look at other examples of geology near the beach.

Costs:

Bus and Driver to Westport.	\$250 (about \$3/mile)
2 GPS units	about \$250
total	\$500

Our class studied populations and ecosystems the first semester and now we are studying earth history. By visiting the beach and investigating the problems mentioned, the students will have a greater understanding of some of the important issues that scientists, resource managers, government, citizens, and the fishing industry are facing. Also, the students have studied about the use of technology to solve problems and get more information about the natural world. This field trip would introduce students to the GIS/GPS system. In the classroom we would also look at the opportunities for training and employment using GIS. At the end of the field trip, the school would have 2 GPS units to use for other units of study.

I will be attending a 2 day workshop with the Pacific Education Institute to learn how to use the GIS/GPS. I will also get curriculum to use with my students. I plan to use this on the field trip.

If you have any questions, please call or Email.

Thank You, Carol Harrison 360-875-5707

Raymond School District

Proposal for PCMRC money, submitted by Lisa DeMontigny, Science TOSA Raymond Elementary School

Field trip for 7th grade students to Westport

Subject of field trip:

1. Look at erosion near Wash-a-way Beach, and discuss mechanism of sand depletion and accretion.
2. Use GPS units to plot invasive species around Westport and the Bay, discuss impact of spartina and other species on the ecosystem.
3. Look at other examples of geology near the beach.

Costs:

Bus and Driver to Westport.	\$250 (about \$3/mile)
2 GPS units	about \$250
total	\$500

Our class studied populations and ecosystems the first semester and now we are studying earth history. By visiting the beach and investigating the problems mentioned, the students will have a greater understanding of some of the important issues that scientists, resource managers, government, citizens, and the fishing industry are facing. Also, the students have studied about the use of technology to solve problems and get more information about the natural world. This field trip would

introduce students to the GIS/GPS system. In the classroom we would also look at the opportunities for training and employment using GIS. At the end of the field trip, the school would have 2 GPS units to use for other units of study.

I will be attending a 2 day workshop with the Pacific Education Institute to learn how to use the GIS/GPS. I will also get curriculum to use with my students. I plan to use this on the field trip.

If you have any questions, please call or Email.

Thank You, Lisa DeMontigny 360-942-2435

Naselle School District

Submitted by Jim Moten and Ammie Ammer, Naselle School District and CREST

This project is to work with 7-8 grade students to create potting benches to transplant native estuarine and riverine plants from the Ellsworth site near the 101 Naselle bridge. This is in hopes to take native plants, increase their numbers and then replant. This is also intended to promote habitat and ecology education. This is part of the School to River Greenhouse Program and is also supported by the NFWF grant (of which the remainder of the project cost will be funded).

2 - 40' by 3' potting benches

1 - 30' by 4' potting bench

80 - bags soil

Lumber (quoted from City Lumber)

Quantity	Dimension	Price	Total
25	4x4x8'	\$8.27	\$206.75
5	2x4x12'	\$2.60	\$13.00
22	2x4x10'	\$2.19	\$48.18
4	2x4x8'	\$1.99	\$7.96
80	2 cu ft	\$4.95	\$396.00

\$500.00 MRC + 171.89 NFWF = \$671.89

Ocean Beach School District

Submitted by Boyd Keyser, Superintendent Ocean Beach School District

PMRC Funding Request

The Ocean Beach School District requests funding for a Field Trip to the Point Defiance Zoo and Marine Science Center in Tacoma Washington. The trip will take 25 students to the venues, pay for the admission costs and the transportation of the students and two chaperones. The students are in grades 2 – 6 and are a part of our Highly-Capable program that is focusing its studies on environmental and natural resource education.

The learning objectives for the students include identification of native species that live in the estuarine and marine biomes in our region. Additionally, students will learn about the habitat of these animals and the pressures that human activity are applying to them.

Admission costs \$150 + Travel costs \$341 = total cost \$491

Willapa Valley School District

Our 4th grade class will be taking a field trip to the Willapa National Wildlife Refuge in May, after a 4 lesson Unit provided by visiting instructors from the Friends of Willapa National Wildlife Refuge. We would like to use the money to pay for transportation to the refuge for an on-site lesson.

We would also, in May, take the 3rd and 4th graders to go to Grays Harbor college for a field study of the Chehalis Watershed. We would like to use money to pay for this outing also.

\$250.00 for travel to the Willapa National Wildlife Refuge

\$250.00 for travel to Grays Harbor College

E. Beach Clean Up Sign-up sheets and articles

Beach Cleanup — volunteers sand blasted but successful!

Our gratitude and admiration — a huge thank you to those who helped make our Earth Day cleanup a success!

First, to several businesses and organizations that support our cleanups on a regular basis: Peninsula Senior Activity Center, Jack's Country Store, The Berry Patch Restaurant, LANTHEMAN Productions, Long Beach Coffee Roasters, Sid's Market, Thriftway, and 42nd Street Cafe ... and, as always, to the *Chinook Observer* for helping to spread the word with announcements and articles (awareness is so critical to our success). An extra special thanks to those businesses who highlighted the cleanup in print or on their reader boards or displayed our banners: *Chinook Observer*, Pioneer Market, FunBeach.com, Long Beach Visitors Bureau, Taft Plumbing, Box K Auto, City of Long Beach, Ocean Park Elementary and the senior center — thank you!

Our very special thanks to our dozens of key volunteers who come and clean as well as the many who organize, develop newsletters, create signs and flyers, make soup, set up, clean up, make gorgeous signs, make phone calls, answer e-mails, and our newest efforts from our team of trucks and ham



SHELLY POLLOCK photo

radio operators. The level of organization they bring to our cleanup has truly raised the bar — as far as I know, there is no other cleanup effort that is so highly efficient. Occasionally, we have unusual items that can't be moved without the special help of folks like Chuck Parker with Active Enterprises — those cranes really came in handy this go-around, on a freezer and several sofas. It truly takes a community, a wonderful one, to pull this off.

Extra thanks to Alan Rammer for his gifts and support of the cleanup effort, for Russ Lewis for always going above and beyond, to Debby for finding great speakers like Teresa (thank you Teresa!), to Linda Bierma for heading up the truck brigade and for never saying "no" to an editing job needed right away (like this one).

To our Adopt-A-Beach groups and approach coordinators — thank you for your ongoing commitment, enthusiasm and caring. To our newest member, Lesley Ferguson's Farmers Insurance (and donor of free coffee).

Friends of Columbia Gateway, Breakers Condominium Associations, Surfside Homeowners Association, Peninsula Senior Activity Center, John and Rita Sporseen, Frank and Nancy Logan, Joe Johns Neighbors, Kiwanis Club, Life's a Beach, Lighthouse Resort, North Ocean Park Neighbors, Ken and Kathie Grover, Charlton and West family and friends, Shoalwater Birders, the Larys, Schroeders and Lorientes, Marcia Romito, Peninsula Rotary, Ilwaco H. S. Honor Society, Eerie 8's, Moens, Magnusons, the Frosts, Debby Moggio, Pat McAfee, Bev Arnoldy and Kelly Rupp, Tom and Sue Kennedy, Cheri and Russ Lewis, Candy Cullen and Al Crawford (some of you were missed this clean up — we'll see you July 5) and all the wonderful volunteers and supporters — so many left unnamed but never unappreciated!

The soup feed was extra special with our cooks (and cleanup crew), Steve Pollock, Gayle Borchard, Susan Clark, Karen King, Darrell Andrews, Emily Brown, Carol Nordquist, Debbie Halliburton, Sandy Nelson. Desserts from Ellen Anderson and a regular volunteer from Tacoma (remind me of your name!) Thanks all!

Lastly, we had several groups, dozens and dozens of people who were repeat volunteers, and some visitors who were first-timers or recently moved to the area, including the softball team from Vancouver — the CRUSH — and Woodland and Ilwaco high schoolers! What a difference each pair of hands made toward our clean beach. We so hope everyone who participated enjoyed themselves, feels a great sense of satisfaction and connection to this community and beach, and will join us whenever they can.

My apologies to those I've missed, and I know I've missed some important efforts. Please know that we couldn't have had nearly the success without you. My thanks to everyone for doing all you've done and will do to keep our beaches and waters clean, safer for the birds, wildlife and us.

The Grass Roots Garbage Gang is an all-volunteer, Washington state not-for-profit group that cleans up the Peninsula beaches in Southwest Washington. Each January, April and July hundreds of volunteers clean the Peninsula's 25-mile beach. Support comes from incredible volunteers, local businesses, City of Long Beach, Marine Resource Committee and Washington State Parks. For more information visit www.ourbeach.org.

SHELLY POLLOCK, 665-5388
Shelly@OurBeach.org
Very proud member of this community

Golden Sands staff and residents would like to thank Pacific County Fire District No. 1 and the Peninsula Senior Activity Center for your assistance in making our practice evacuation a success. We know we are able to be safely evacuated in the event of an emergency, thanks to your efforts and assistance.

GOLDEN SANDS ASSISTED LIVING AT KLIPSAN BEACH

ORDER

Get ready to hit the beach for this Saturday's big cleanup

Everyone please: Rain or shine (hopefully, shine!) come out this Saturday for the beach cleanup.

Volunteers are needed starting at 9:30 a.m. for several hours to help collect garbage on the beach. Just wear appropriate clothes, bring gloves, wear waterproof shoes and head to any of the major beach approaches (Seaview, Bolstad, Cranberry, Klipsan, Bay Avenue, Oyster-ville Road) where a cleanup coordinator will help get you started.

There's also a potluck this Friday night at 5 p.m. which will be followed by a presentation from Sharnell Fee, director of the Wildlife Center of the North Coast. It'll be an informative and wonderful program — everyone is welcome.

The thank you soup feed for all the wonderful volunteers has moved to the Peninsula Baptist Church (huge thanks to them for jumping in to help us!). Free soup will be served from 11:30 a.m. to about 1:30 p.m. at 23802 Pacific Way.

This is the yearly cleanup that produces the most "off shore" garbage that washes in with our winter storms. Make sure you have good gloves and dress for the

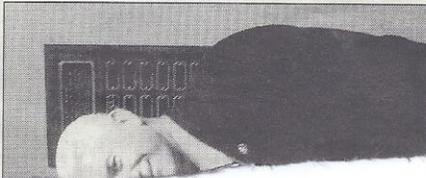
beach cleanup is a good way for these high school students to get some community service credit at school. If they bring the community service note with them, beach approach coordinators will be happy to sign the note after the student has participated in the beach cleanup. They may even be surprised at how much garbage sits on our beach — a first-hand way to learn about littering impacts.

See you on Saturday!
SHELLY POLLOCK
Grassroots Garbage Gang



Contributed photo
Young people from LaCenter came to the Peninsula and helped with an earlier beach cleanup.

IN BRIEF...



Contributed photo
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...porter of law

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Seven tons of trash removed from shore during mid-winter cleanup

PENINSULA — Streams of volunteers poured onto the beach Saturday morning, Jan. 23, as clear skies and calm air was the most welcoming beach cleanup weather in anyone's recent memory.

Although the beach cleanup didn't officially begin until 9:30 a.m., many volunteers were out there early, working hard to clean our beach. Adopt-A-Beach groups attacked their sections with their usual vigor and many volunteers came from out of town just to help clean our beach.

"Anyone seeing this display of pure love of this place couldn't help but smile," organizer Shelly Pollock said. "I found it personally very heartwarming to see scores of white bags in the distance and know each was filled by a person who cares about this place."

More than 400 volunteers collected four 30-yard dumpsters full of primarily marine debris, weighing in at seven tons. The debris, for numerous reasons, ended up in the ocean currents only to find its way onto our shores by riding the winter tides ashore buffeted by the strongest westerly winds. The largest items came in off the ocean.

Volunteers collected miles of rope, large Styrofoam chunks, tires from docks, tires from semi-trucks, a bottom of a septic tank, a freezer with a door and just a freezer door. Still coming up through the sand are thousands of dark grey pieces from the missile fireworks that blast off 100, 500 or even 1,000 pieces of plastic in one compact box, as well as the broken down pieces of all kinds of brightly colored plastic that one could only guess what they once might have been.

There was some local dumping too, always a shame, including a water heater that apparently

couldn't do its job any longer and lumpy, old, musty mattresses and things you just don't want to

know about.

"Thanks again for one of the best cleanups yet," Pollock said.



January beach cleanup volunteers dig out the bottom of a septic tank, some of the seven tons of garbage removed from the Peninsula's glorious seashore.

SHELLEY POLLOCK photo

Tom Geha, MAOM
acupuncture

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 Quality Healthcare*

Tom Geha, MAOM
 Licensed Acupuncturist

Family Health Center at North Beach
 21610 Pacific Hwy, Ocean Park, WA - 665-3000
www.northbeachacupuncture.com

the SHELBURN inn
 hotel • pub

**Coming Soon -
 New Menus!**

Beach Section Low-STAR, each Volunteer worked 3 hrs unless otherwise noted.
 PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives new slitter Yes/No	Picker upper #
Pen Wilker	308 11 th St N			
Audi Shotwell	chayster@willapa bay.org			
Tom Shotwell				
Ray Shotwell				
Cynthia Blue				
Mike Hawkins				
Donna Marshman				
Steven S.				
Blaise C.				
Shelby B.				
Alec C.				
Tyler				
Jeff Holloway				
Eugene S.				
Josh R.				
Cody W.				
Dillion J.				
Colby K.				
Lee-Hannah J.				
KEN + KARY ROO	KROO@ROSLINBIRGARDIA.COM			
Annette Baslar	netlicame00@yahoo.com			
Natisha Cooper				
Karinda Cooper				

Beach Section Crofton, each Volunteer worked 3 hrs unless otherwise noted.
 PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives new slitter Yes/No	Picker upper #
Charles Parker	parkercharles@att.net	AEI	Y	
Doreen Parker	Active Enterprises LLC		Y	
JEFF PEARSON	Pierce Street Action N.R.		Y	
JANET HENSON	jeff@amars.com		Y	
ERDIE HENSON	" "		Y	
Kim Petersen	kpetersen@uphal.com		Y	
Jae Bauepla	selahway@gmail.com		Y	
Robert + Ann Mai	mai205@gmail.com		Y	
Elaine Maclester			Y	
Helen Mike Sliott	Michael R.H. Postupalski		Y	
Jessam Clark	angusia.centurystreetbusiness		Y	
LEONA A. CLARK	leona@leonaclark.com		Y	
Quil Sney	me just		Y	
Doug + Gail West			Y	
Patricia J. Montecchia			Y	
James Williamet Parks			Y	
Christal J. Ashby			Y	
Kate			Y	
Del + Bronie			Y	

24

25 06/26/20

Beach Section Bowling, each Volunteer worked 3 hrs unless otherwise noted.

PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
Kris Fowler				2
Tara Magowan				
Guy Olson		Rosary		1
David George		Palmyra		1
PRESCILLA S. ANDRIS		USCB		1
Melinda Green				
KRISTIE BATES				
Michele Davidson				
Mark Roloff	mark@totalhealthfood.com			
Julie Moore				
HATHEW SMITH		Kiwanis		1
Sandra McKay	christymckay@comcast.net			
Steve Whitely				
Miriam Aherne	miriamaherne@verizon.net			3
Jacques Sheldon	jacques@verizon.net			
Dominic Vargas	mexidodge@yahoo.com			
Tony Casella				
Clay Chalet				2
Heather Matic				
Leslie Brophy	leslie@pacreal.com			
Tommy Blain				
Bertha Hoopes				
Harold Hoopes				
Carrie Hoopes				
Nancy + Steve Chiswick				

26

Beach Section Boston, each Volunteer worked 3 hrs unless otherwise noted.

PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
Dillon (NYC)				
Kyjae				
Ryan				
Cody				
Cody				
MIKE HAWKINS	hawk@wpsd.com	WA		
(WYC)				
Ken Hays	ken@haysarch.com			
Joanna Hays	joanna@haysarch.com			
Chris Hawkey				
Tyler Smith				
Kai Thriot	Kai.Thriot@yaho.com			
GARET CHADNEY	GCHADNEY@GMAIL.COM			2
Jerry Wiseman	JerryWiseman@comcast.net			2
CHERYL HOLTRY	dcenterprizes@charter.net			
CRYSTAL HOLTRY				2

15

Beach Section Seaview, each Volunteer worked 3 hrs unless otherwise noted.

20

PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
JULY & ICE ROSEN				
Michael Rosen				
Sue Skinner	skuesue@mtgday.org			8
Clive M... ..				
Dana M... ..				
John M... ..				
Sally Whelan	✓ jwhelan@pacnet.com			
Michael Britton	✓ mkb@seabird.net		yes	
David Stephenson	✓ Crabbly DS @hotmail	Kimanas	yes	
Tranquille Valentine				
Alan F... ..			no	
ANONICA DE FREITAS	✓ kyf14r1@pacnet.com		✓	2
Donna M... ..				
Rickon Dawson			✓	1
LARRY V. WITZ	✓ v.witz@pacnet.com		✓	
Wendy (a) (a) (a)			no	
Wendy (a) (a) (a)			no	
Philippe D... ..				
Wendy M... ..				
Amanda M... ..	✓ ammand@pacnet.com		yes	
Stille Lindemann				
Lori Christiansen				
Steven Boice				
Lee Loschke				
Shelley Loschke				

28

Beach Section Seaview, each Volunteer worked 3 hrs unless otherwise noted.

21

PLEASE, each individual's name MUST be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
CHRIS ROSEN	chrissy@pacnet.com		✓	
Jane H... ..	ADINE			
B...@pacnet.com			
BOB FRINK	Frinks@pacnet.net		yes	
AMANDA FRINK				
Tracy B... ..				
W... ..				
Christina Beck	SEABEAK@pacnet.net			
W...@pacnet.com		✓	✓
Pat & Maureen Smith				
Wendy Murray@pacnet.com	Seaview	✓	✓
Wendy Murray	Wendy@pacnet.net			
Dustin Salisbury				XX
Megan, Aaron, Sandra	salisbury4life@gmail.com			XX
Ken K... ..				XX
Drew G... ..				
AUBREY FREEMANTLE	AGREEMAN@pacnet.net			TRUCK
STYLER WALKER@pacnet.com		✓	
Wendy M...@pacnet.com		✓	
Sybil K...@pacnet.com		✓	
Wendy M... ..				
Donna M...@pacnet.com		yes	
Larry Truett	lnt-truett@yahoo.com			
Marian Beckman			yes	

31

Beach Section Ocean Park (7 total), each Volunteer worked 3 hrs unless otherwise noted.

24

PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
Ed Hansen				✓
Al Henry				
Margie Johnson				✓
Kelly Wilkes				✓
Henry Tom Reuke	Hc Reuke			✓
Francis a Marie Hughes				
Jean Tarr				
Bob Peters				
Julia Zander	jzander@comcast.net			✓
Justus Steckman				✓
Bille Sharon Halstrom				
Pat Plouffe	plouffe@yahoo.com			✓
Kristi Kramer				
Doc Pearce				
Doc George	claugdy@earthlink.net			✓
Minnie Simpson	msimpson@earthlink.net			✓
Shylah John	sljcarter@hotmail.com			✓
Richard Willis #1				
Richard Willis #2				

24 (740p)

Beach Section Ocean Park, each Volunteer worked 3 hrs unless otherwise noted.
 PLEASE, each individual's name MUST be listed to be covered on insurance

27

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
Ed Hansen				✓
Nancy Swallow				AA
Jen Henderson				
Stacie Cook	grndgears9-11@msn.com		Yes	
Leslie Porter				
Mikel Haase				
Don Mitchell				
Mike & Patti Thompson	mrt602@earthlink.net		Yes	
CORINE STRICKER				
Sandy Stone mechin				
ANNE RIBER	ariber@msn.com		Yes	
Gumbley Dennis Page		PSA	No	
Kimmy Gibb	kgibb@earthlink.net		No	
helen				
Michael			Yes	10
John Tom	john.tom@earthlink.net			
Robert Frost	rbfrost@gte.net		Yes	
Edgar				
Shelaj Res				
Ann				
Ann				
Instal				
ce He, TCB				

27

Beach Section Ocean Park, each Volunteer worked 3 hrs unless otherwise noted.
PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
KARL SCHELLA	schella@centurytel.net	OP	yes	1
R. J. Schell	rschella@haima.com	OP	yes	
Cassie Cost	cllcassie@bancor.com	OP	yes	1
TED LIDEN	tedliden@tchad.com	OP	?	
Jack Coffey	coffeyj@comcast.net	OP		
Dad Coffey				
Regin & Andrew Mike	events@longbeachwa.gov			2
Mike Meyers	mikemeyers@msn.com	OP	yes	
Grace Bruncke			yes	
Michelle Lee-Bruncke	leebruncke@yahoo.com		yes	
David Tobin	dtobin@yahoo.com		yes	
Kathy & Randy Krell	krkrell@yahoo.com	OP	no	2
Kate, Michael, Andy	KSILVER@u.washington.edu		yes	3
Sid LARRABEE	slarrabee@coastalnet.net			1
Jennifer Mackley	jmackley@comcast.net		no	2
Apple Reime		NOPN	YES	
Ed Archer	KTWAT@cox.com	OP	NO	

23

Beach Section Sunside 1-23-10, each Volunteer worked 3 hrs unless otherwise noted.
PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
Harry/Pat Rea	bpm@heavenet.net	OP		
Sandra A. Appel				
RODRA WALLA	wallasons@earthlink.net			
Ann Walla				
Kerry & Harry Amundson	opklarr@centurytel.net			
Carol Brang	webange@centurytel.net			X-2
Larry & Mary Cook	larrymcook@centurytel.net	hous	✓	1
Pat & Mary	none			
Clay & Larry Oguri	clayoguri@hotmail.com		✓	
Mark & Suzanne Smith	tkachuk55@yahoo.com		NO	
Chris & Myrcela Hanson			✓	
Len & Brenda Wilmer				2
Rita & Ken Gollong	none			
John & Marianne Lee	johnlee@earthlink.net		yes	2
David & Rebecca Bestman	rebeccaab33@aol.com		NO	2
Candy Cullen				
Alison Gausford				
Alison Gausford				1
Ed & Laura	tedlaurer@aol.com		✓	
Stacy Lane	stakings77@comcast.net		NO	
Nick Long			NO	
Vishnu/Doreen	vishnu@comcast.net		no	

37 68 Sunside

Total ~~31~~

Beach Section Suspeide 1-23-10, each Volunteer worked 3 hrs unless otherwise noted.
 Total 31 PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives new slett or Yes/No	Picker upper #
31				
BUB CLARK	Res: 1100 6th St. Yreka, CA			
WAVE V. HARRIS	7			
Kathleen Sayer	none			
Mike O'Leary				
Danielle Ruden				
Bill Fackell				
BOB Mathews	Ram 33701 @ yahoo.com			
Matt Watkins				
William HOAH Watkins				
Martin & Jan Jenkins	grannyjansgarden@gmail.com			
Helmi Schiel	com com 411.net			
Ann Thoreson	getorganized@aol.com			
Jane Gault	katencrawford@aol.com			
Lucas A. Tucker				
DeAntay Kallagy				
Rayburn & Eugene	eugene@earthlink.net			
John Jones				
Chuck Schuster				
Jane Schuster				
Bob O'Leary	Bob.O'Leary@yahoo.com			
Ray & Rita Jensen	Eastez Rock @hotmail.com			
Eva Long / Alvin Hansen				
Walter Smith	adlan.roth@comcast.net			

31

Beach Section Sid Smet, each Volunteer worked 3 hrs unless otherwise noted.

PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
John Jones	vintranansa@yahoo.com	Reteng	yes	
Janet Gault	JanetGault@aol.com		No	
Bob O'Leary		Reteng	Yes	
John DeLaune	my-zephyr@excite.com			
Marquetta Pella	MarquettaPella@historical.com			4
Janine Keys	JJKkeys@yahoo.com			
Kelli Nichols	kelnichols@peoplepc.com		NO	

7

Beach Section Benson Beach; each Volunteer worked 3 hrs unless otherwise noted.

PLEASE, be listed to be covered on insurance

Inside of Columbia River Mouth

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
Tina Trevarthen	ttrevarth@msn.com	Benson	Yes	
Lona Niemi	lananiemi@centurytel.net	"	"	
Normandie Hand	nhand@gd.com	Benson	NO	
Janet Easton	eastonj@centurytel.net	"	No	
Neil Cook	neilcook@willapack.org	Willapa	NO	
Daddy Self	selfd@willapack.org	Willapa	Yes	

Beach Section Sid Sneyd; each Volunteer worked 3 hrs unless otherwise noted.
PLEASE, each individual's name MUST be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
LINDA BENVENISTE	✓LMBENV@yahoo.com	NO	NO	1
Arden			Yes	1
Shirley (Linda)	wiskid@bessu@opticon		Yes	4
Will Greene (RM10)	willgreenejre@gmail.com	ILWACO	NO	2
John & Joyce Epl	Kuwani	Kuwani	Yes	1
Carol Joyce Belfer		Kuwani	Yes	1
M. Matern	↑	↑	↑	1
S. Saunders	✓anybody@centurytel.net	Chinook	NO	2
M. Rest	" "	" "	" "	" "
Shirley Papp Pym		Ruby	No	1
Sheila Mullins	✓guesnetk@tds.net	NO	Yes	5
Shirley Snipe	✓shirleysniper25@gmail.com	NO	NO	1
Jason Hermans		NO	NO	3
Carol Taylor		No	No	3
LARRY SWENSON		No	↓	1
CES SWENSON		No	↓	1
Doug Beeman	✓beeman.dw@att.net	NO	Y	2
Maree Forbes	✓mforbes@att.net	NO	U	1
Chuck Webster	✓chuckjwebster@hotmail.ca	NO	Y	1
Rick Anderson		N	N	2
KEYS FAMILY	✓JK Keys@kaha.com	NO	N	4
Kate Kasprzyk/Mike Ruet	✓kasprzyk@msn.com	No	No	2
Aue Munson		N	N	1

- 28 (35-53)

42

Beach Section Seaview, each Volunteer worked 3 hrs unless otherwise noted.

PLEASE, be listed to be covered on insurance

NAME	EMAIL (only if they don't receive our emails)	Adopt-A- Beach Group or City	# of cleanups	Picker upper #
Nichole Lopez	✓ n-lopez93@live.com	NHS		
Mary Marshall	✓ mary.marshall21@yahoo.com	NHS		
Jeanne Hampton	✓ neener3@comcast.net	"		
Ann Honan	✓ ann.honan@hotmail.com	OBH		
Pat Honan	✓ pat.honan@hotmail.com	OBH		
Matt Mulendict	✓ Matt.Mulendict@gmail.com	NHS		
Amy Huntley		NHS		
Zoan Huntley-Stern		NHS		
Jessie Huntley-Stern		NHS		
Dea Hesel				
Gina Hugel				
Parvina Dickson				
Dan Roden				
Nelson Malin	✓ nelson.malin@datacorp.com			
Brett Malin	✓ brett.malin@datacorp.com			
Kristina Perez				
Lexi Nelsen		WHSFFA		
Lori Nilson		WHSFFA		
ME Nettek		WHSFFA		
Kaia Peterson		WHSFFA		
Shelisha Truffie		WHSFFA		
Bram Kennedy		WHSFFA		
Derek Fitzgerald		WHSFFA		

24

Beach Section Seaview Seaview total (NHS)

PLEASE, be listed to be covered on insurance

NAME	EMAIL	Adopt-A- Beach Group or City	Receives newsletter Yes/No	Picker upper #
Zach Wilson	✓ zach.wilson@seaview.com	NHS	NO	
Raya Loresa Stettner	✓ rstettne@gmail.com	Stettner	YES	2
Sarah Marshall	✓ s.marshall3@yahoo.com		NO	
Olivia Hampton	✓ neener3@comcast.net		NO	
Penley Edwards	✓ lovesstx11@yahoo.com		NO	
Caithly Cole	✓ ccole@comcast.net		NO	
Grady King	✓ evergreenallstar2005@yahoo.com		NO	
Hulu Hirsantky	✓ hulu@hirsantky.com		NO	
Taylor Jauwsma	✓ roxyhks@qjphoo.com		NO	
John Cole	✓ john.cole@comcast.net		NO	
Heather Cole	Same		NO	
Samantha Wright	✓ samantha.wright@seaview.com	NHS	NO	
A. Hilly			NO	
A. Button			NO	
P Ripley			NO	
G Ripley			NO	
Eric Bowen	✓ P.O. Box 143 Seaview	3	YES	
Jill Garcia	✓ jfullagar@hotmail.com		YES	
Amber Wehert	✓ amberwehert@gmail.com		NO	
Kiki Kistner		WHSFFA		
Amanda Kusar		WHSFFA		
Amanda Dife	✓ amandadife@yahoo.com	WHSFFA		
Ashley Dye		WHSFFA		
Jenna Swanson		WHSFFA	NO	
Evan Keating		WHSFFA	NO	

25

Beach Section Seaview, each Volunteer worked 3 hrs unless otherwise noted.

PLEASE, be listed to be covered on insurance

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper
Ben Noyes	leftear99@hstmail.com	NHS	NO	N/A
Ryan Kukula	r.kukula@yahoo.com	NHS	NO	N/A
Jenna Rose	jenna-rose@hotmail.com	NHS	N/A	N/A
Kathryn Hulbehart	khulbehart9@aol.com	N/A	NO	N/A
Alicia Hugg	alicia.hugg@yahoo.com	N/A	NO	N/A
Chloe Hall	chloeoutrage@aol.com	N/A	NO	N/A
Kasay Woiniewicz	softballplayer18@gmail.com	N/A	NO	N/A
Lindsay Szwed	TeamFaith13@gmail.com	N/A	NO	N/A
Tor Marshall	tor_marshall@comcast.net	N/A	NO	N/A
Mike	Mike35@aol.com	N/A	NO	YES
Kevin C. Park	KevinPark82@yahoo.com	N/A	NO	N/A
Kevin L. Park	LEPINDER@NETSCAPE.NET	N/A	NO	YES
Danyla MacTalla	dofanyle@ymail.com	N/A	NO	YES
Ryan Moore	moore21@aol.com	N/A	NO	N/A
Sara Kristian		FFA	NO	FFA
Broke Mar		FFA	N/A	FFA
Page Bong		FFA	NO	FFA
Sophia Hallstrom		FFA	NO	FFA
Krista Hulme		FFA	NO	FFA
Rachel Hallstrom		FFA	NO	FFA
Nicole Grandbill		FFA	NO	FFA
Bobbi Lee Kerning		FFA	NO	FFA
Michelle Clark & Tyler Cooper	1934 12th Ave W Seattle			

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Beach Section Bolstad, each Volunteer worked 3 hrs unless otherwise noted.

NAME	EMAIL	Adopt A Beach Group or City	Receives newsletter Yes/No	Picker upper #
Rhonda Huffman	RHUFFMAN@MSN.COM			
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Tyler Mowlds				
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Josh Berry				
Chris Berry				
Charmae Leino				
Justin Leino				
JD Woldewicz				
Jordan Thibodeau				
Anthony Leino				
Clark Jacobson				
Michelle Lomax				
Jessica Bonk				
Dawn McKay				
Philip Doyle	VICTORIA, BC CANADA			
Samuel Douglas				
Chris Lewis				
Jo Ellen Sarvis				
Kiwi Goodling				

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This Newsletter is funded by the Coastal Resources Alliance, a local non-profit organization based in Pacific County, Washington and the US Fish and Wildlife Service's Puget Sound Coastal Program. Founded in 1982, CRA is devoted to rigorous applied research, resource management, and educational programs to address priority natural resource problems in coastal Washington.

Spartina Control News

“Eyes on the Bay” Monitoring The End Game

Eradication Goal Nearing

In 2003, Willapa Bay and its future looked quite different. Spartina meadows stretched across thousands of acres. Willapa's prime nearshore shorebird feeding grounds were dominated by the tall dense grass. Up to that point, the state's million dollar per year control program had only succeeded in slowing the pace of spread. Now, after years of highly-effective herbicide treatments, the progress is visible and encouraging. Roughly 70 net acres remained in 2009. Less than 30 net acres of spartina are likely to regrow this summer.

Past newsletters have discussed the challenges posed by the final stage of an eradication program. The remaining infestation is composed of tens of thousands of small patches and individual plants tucked into the complex drainage sloughes that wind their way through an estimated 10,000 acres of saltmarsh terrain. Only patient and thorough scouting by foot can find all those outliers. While success is finally on the horizon, it is clear that complete eradication is still years of hard and meticulous work away. It will be difficult to know when all plants have been found and eliminated.

Several years ago, the Coastal Resources Alliance launched its *Eyes on the Bay* project to enlist local residents to help with the final stage of the spartina battle. With funding from the US Fish and Wildlife Service, the *Eyes on the Bay* project also sponsored yearly surveys to assess progress baywide. Each year, CRA works with local leaders to design the assessment approach to be taken in response to changes in the eradication effort. Following the 2008 treatment season, a new survey approach was tested using cameras equipped with global positioning system (GPS) devices. The fall survey generated 3,500 photos of spartina infestations of varying sizes throughout the Bay. Though not intended to be an exhaustive inventory, the survey revealed a sobering picture of the challenge ahead: it showed that thousands of infestation sites remain around the Bay. This was a reminder that if the spartina were left untreated, it would readily expand from these thousands of footholds throughout the Bay.

Design Features of the 2010 Spring Survey

The purpose of the 2010 survey is different from the previous baywide inventories. This year the survey is designed to assess the prevalence of difficult-to-find spartina by sampling representative saltmarshes around the Bay. The survey will also contribute to improved treatment efficiency by flagging live plants and taking their GPS locations.

An analysis of the extent of the marsh habitat that may be infested with spartina was carried out by UW Geographic Information System (GIS) Specialist Keven Bennett. He determined that

approximately 10,000 acres of marsh are within the range of saltwater influence. It is impossible to meticulously scout an area that large in a single summer. Some plants emerge late and are not visible until August. Therefore the spring survey team will focus its efforts on the places where the early growth will be most visible— inside the tidal guts or drainage sloughs. To allow the maximum growth and visibility, the spring survey will take place just weeks before the treatments begin in early July. Sites were selected to focus attention on areas that have received little attention in the past— the far upland reaches of selected saltmarshes. Because they have not been visited frequently by crews, these areas may still harbor seed-producing clones. Chosen for this year’s reconnaissance were areas around Tokeland, the Palix River, the riverine marshes that cross Highway 101 south of Bay Center, and the Ellsworth Slough area.

The county will supply 6 -8 crew members to conduct the surveys. Crews will carefully check each drainage slough starting from points that are clearly upland of saltwater influence moving downstream towards the Bay. Crews will walk both sides of each drainage channel and check both banks. They will flag and GPS the infestations they find. Tall bamboo stakes will be used to mark the infestations. Bamboo was selected because it is likely to last more than one season, but will decompose over time.

An objective of this monitoring is to allow the eradication program to determine whether complete eradication in subregions of the Bay has been achieved. Once blocks of terrain are designated as “spartina free,” they can be quickly revisited or skipped entirely the next year. Attention can then be directed elsewhere. This patient and meticulous approach will allow the program’s resources to be allocated efficiently.

Above: Example of Survey Base Map in the Ellsworth Slough area.

CRA Spartina Project
PO Box 160
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Newsletter Editor: Miranda Wecker To request this newsletter call: 360-484-7128 or email mwecker@wwest.net

Your assistance is needed this summer.

When you are working on the bay, walking the beach, fishing, hunting or boating, please keep your eyes peeled for spartina. If you find plants that may be overlooked, call us or call the county.

CRA – 360-484-7128

Pacific County Weed Management — 360-875-9425 or 642-9425

To distinguish spartina from other similar plants, feel the stem and use this rhyme:
“Sedges have edges, rushes are round, and grasses have holes all the way to the ground.”

G. Science Conference Sign-up Sheets and Article

Coastal Summit looks toward Peninsula's future

By CATE GABLE
Observer correspondent

LONG BEACH — Fifty people attended the one and a half day Coastal Summit last week sponsored by the Pacific County Marine Resources Committee (PCMRC) at the Washington State University Crumbeary Research Station in Long Beach.

Jim Neva, PCMRC president, and Jon Kaino, Pacific County commissioner, were present to welcome the crowd.

Willapa Bay ecosystem

The programs began with a summary of steps that could be taken immediately to ensure the continued good quality of the Willapa Bay watershed, presented by University of Washington biology professor Jennifer Ruesink.

"The Willapa Bay Watershed is currently in very good shape, especially in comparison with others around the nation," said Ruesink. "But there are several actions that could be taken now to ensure that this continues to be the case."

Ruesink indicated the importance of guarding against increasing impervious surfaces around the bay. An impervious surface is any street, black topped parking lot, driveway or other surface that water cannot penetrate in its return to the bay.

"One of the indicators of watershed quality is to keep impervious surfaces adjacent to the watershed at less than 10 percent," Ruesink explained. "That is a threshold past which degradation can begin."

"The second action is to cut down on



CUT DOWN ON POLLUTION. THE LOCAL BEACH CLEAN UP IS AN EXCELLENT EXAMPLE OF HOW TO MITIGATE TRASH."

JENNIFER RUESINK
UNIVERSITY OF WASHINGTON

pollution. The local beach clean-up effort is an excellent example of how to mitigate trash, for instance."

Ruesink also stated that another prudent action is to identify new invasive species and clear them out before they become a problem. She mentioned specifically a snail (*Batillaria*), which can be seen during low tide around the bay.

"A couple hundred people working at low tide could have a big effect in clearing out this snail now," she said.

Ruesink also mentioned the increased acidification of the ocean, a problem that requires more attention as global warming increases.

Ruesink's presentation was followed by a review of razor clam management by a panel including Miranda Wecker, Dan Ayres, Anthony Ockell and Alan Sandt.

A pre-recorded message from U.S. Rep. Brian Baird emphasized the many environmental projects undertaken around Willapa Bay and Pacific County. He also mentioned his concern about the affects of ocean acidification on local shellfish operations.

Quake and tsunami inevitable

The afternoon programs emphasized the need for personal and family emergency planning in preparation for the inevitable tsunami, earthquake or other extreme weather events that will hit our area in the years to come.

See SUMMIT on Page A10

OBSERVER

the Discovery Coast since 1900

Long Beach, WA 98631

Week of Wednesday, May 26, 2010

