



Volunteers Plant Natives at NRNC Bulkhead by Judy Murphy

The Nature Center's two bulkhead garden areas are being transformed into native plant gardens, thanks to the hard work of about 20 volunteers who weeded, dug, hauled, mulched, and planted under sunny skies on Martin Luther King Day, January 16. The work resulted from collaboration between NRNC's Executive



Director Daniel Hull, board president Doug Myers, and Erica Guttman, coordinator of the WSU Extension Native Plant Salvage Project (NPSP).

Long-time volunteers from the WSU-NPSP joined student volunteers from Olympia High School and South Puget Sound Community College. While two groups worked outside, Daniel sat down with a third group inside to talk about the estuarine ecosystem at the Nisqually delta. The three groups rotated so that each group was able to meet with Daniel as well as work outside.

The project originated from Daniel's and Doug's desire to make the landscape on the seaward side of the building both easier to maintain and more beneficial for the marine environment in front of the Center. Erica was brought in to consult based on the WSU-NPSP's experience designing learning landscapes and her experience with marine riparian vegetation and backshore plants.

Some of the native plants on the near side of the building will provide shade over the water, organic matter such as leaves, and habitat for terrestrial invertebrates that drop into the water and serve as food for juvenile Chinook salmon and other small fish. Other plants in this area will create shelter and food for small birds. Native plants on this side include snowberry, ocean spray, thimbleberry, coast strawberry, tall Oregon-

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Aquatic Reserve Planning Moves Forward By Daniel Hull



The planning process continues for the proposed Nisqually Reach Aquatic Reserve, with the goal of a completed plan by fall 2010 for submission to Peter Goldmark, Commissioner of Public Lands.

Planning Commission members include:

BETTY BOOKHEIM (*WA Dept. of Natural Resources*)

BILL DEWEY (*shellfish industry*)

DANIEL HULL (*Nisqually Reach Nature Center*)

DAVID PALAZZI (*WA Dept. of Natural*)

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Dept. of Ecology

A Note from Daniel Hull, NRNC Director

Spring is coming on strong and we are blooming like a vibrant spring flower at NRNC. With the Aquatic Reserve in the planning process, our educational programs

reaching more people than ever, and our citizen monitoring evolving to capture the essence of restoration,

Thank You!

things are looking bright.

All this would not be possible if it were not for our dedicated supporters. We now have 38 active volunteers and about 120 paid members supporting us. We must also acknowledge our grantors and partners that have helped us in our mission, notably, The Russell Family Foundation, U.S. Fish and Wildlife Service, Washington Department of Natural Resources, Washington Department of Fish and Wildlife, South Puget Sound Salmon Enhancement Group, Nisqually River Education Project, Nisqually National Wildlife Refuge, and The Nisqually Tribe.

We are on the verge of creating a lasting conservation management plan that is driven by the proactive community members who are connected with what we do at the Center. Take time to pat yourself on the back. Realize that without your support, these things could not happen and at the same time revitalize your commitment to our South Sound communities and realize we are the change.

New Telescope Donated to NRNC

Big thanks go out to Gary Ouellette for donating a Carl Zeiss telescope to the Center in early March. The optics are great and the light gathering ability really brings distance viewing to a whole new level. We have already had many visitors, young and old, use the scope to look at the many birds that utilize the delta at low tide. One such bird count easily found over 9,000 birds on the mudflat at low tide.

If anyone has some astronomy skills they would like to share with us, we would also like to use the telescope in some night viewing of celestial bodies. Please contact the Center at (360) 459-0387 if you can help us launch an astronomy program.



Aquatic Reserve Planning Moves Forward (continued from page 1)

Resources)

DOUG MEYERS (*Nisqually Reach Nature Center*)

JERRY JOHANNES (*Anderson Island*)

KRIS PHELPS (*Nisqually Tribe*)

KYLE MURPHY (*WA Dept. of Natural Resources*)

MARIAN BAILEY (*Nisqually National Wildlife Refuge*)

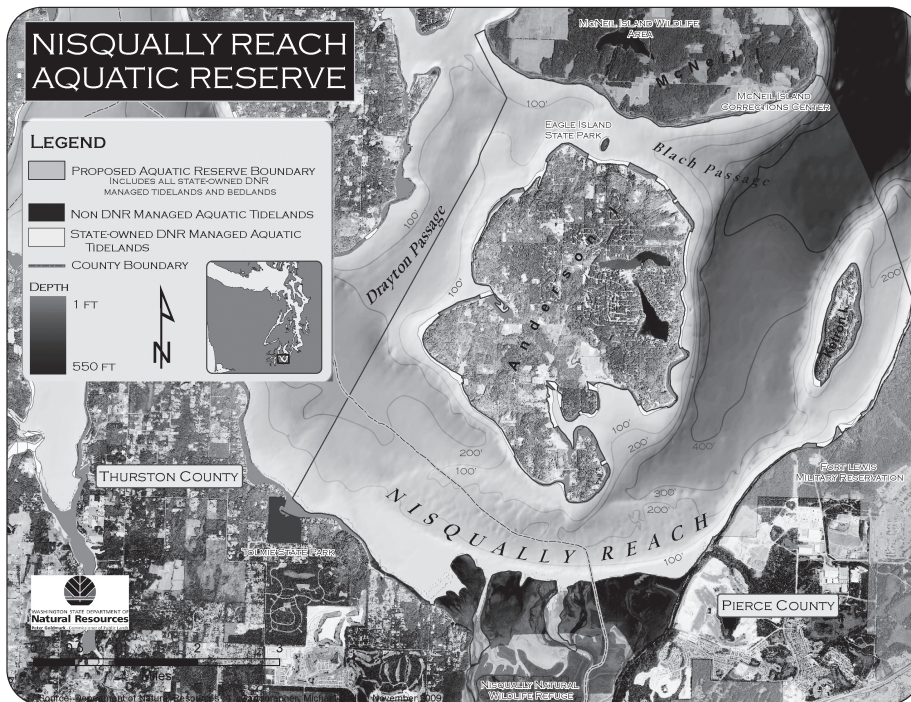
MARK SWARTOUT (*Thurston*)

community members can learn about the proposal and contribute their thoughts and ideas. One of the things I like to say is that it is a great opportunity to exercise your ability to be a civic-minded community member and have an impact. Because Nisqually Reach is surrounded by relatively highly developed areas that are growing,

and invertebrate surveys. Having collected data for the last 5 years, NRNC has a wonderful group of trained volunteers willing to help out with this process. Thus far, we are looking at collaborating with Anderson Island community members to start monitoring around Andes Marine Park and perhaps other beaches as time goes on.

We also are working with local South Sound divers to share data and reef monitoring protocols within the Aquatic Reserve. Some divers may want to locate and map areas of reef substrates not yet identified. In addition, there is a great opportunity for some starter divers and snorkelers to get involved with photography and surveys of eelgrass beds in the Nisqually area.

With the completion of the Beachcrest restoration, we are excited to work with our partners in monitoring the effects of restoring the pocket estuary at Beachcrest (see article, page 4). This type of proactive participation from community members is one of the reasons we are creating an Aquatic Reserve in Nisqually Reach, a unique natural resource that we all hope to keep healthy for generations to come.



Regional Planning Council)

MICHAEL GRILLIOT (*WA Dept. of Natural Resources*)

ROBERT PACUNSKI (*WA Dept. of Fish and Wildlife*)

ROMA CALL (*Puget Sound Partnership*)

TOM KANTZ (*Pierce County Planning*)

A second integral part of the planning process is the Citizen Advisory Committee. NRNC representatives have been pleased and excited to work with the stakeholders in this community-driven process. At regular meetings of the Citizen Advisory Committee, active

stakeholders and community members expect the Reserve to set a precedent that will serve as a model for further conservation activities in the Puget Sound.

The great thing about this process is that it is community driven, and the NRNC is at the center of this community effort. We are poised to create diverse and valuable citizen monitoring efforts inside the Aquatic Reserve. During Citizen Advisory Committee meetings, we talk about opportunities to get people involved with the citizen monitoring, such as fish seining, beach profiling, nature mapping,

Planning Commission Meetings
May 14 and July 9

Citizen Advisory
Committee Meetings
May 20 and July 15

For more information or to help support this process, please see our website at www.NisquallyEstuary.org.

Purple Martins — Live on the Web —



The Purple Martin, our largest swallow, relies on artificial nesting boxes because its natural habitat is being steadily lost, and more aggressive species such as House Sparrows and starlings compete for their nesting sites.

As part of recovery efforts in the Pacific Northwest, the Washington Department of Fish and Wildlife had installed cameras in the nesting boxes on the dock at the Center awhile back, but they have been out of service for some time.

This spring, one camera inside a Purple Martin nesting box on the dock was repaired and is now in operation, and a second camera is scheduled to be replaced. As a result, live action is now viewable on the video monitor at the Center as well as on the web! Many thanks to Chuck Gibilisco of Watchable Wildlife, WDFW, for making this happen.

Check it out at <http://wdfw.wa.gov/wildwatch/martincam/index.html>.



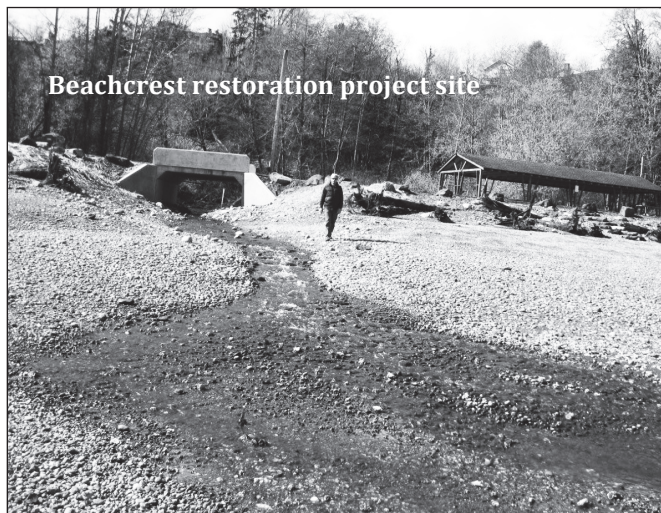
Beachcrest Project Restores Habitat for Salmon

NRNC is participating in an exciting restoration project at Beachcrest, on the west side of Nisqually Reach, aimed at creating new spawning and rearing habitat for salmon. NRNC has been working together with partner organizations to restore fish passage and nearshore habitat to a pocket estuary and spring-fed creek at Beachcrest. Along with NRNC, partners include the Beachcrest Community Association, the South Puget Sound Salmon Enhancement Group, and The Nisqually Tribe. The construction project, which was completed February 25, 2010, removed a barrier standpipe and 150-foot culvert (pictured below) under a private road that had previously impounded an historic



Puget Sound. The benefits include 1) increased estuarine rearing and foraging area, 2) restored fish access to a small, local watershed, and 3) opportunity for forage fish spawning. Natural changes to this habitat will create a diverse, complex habitat to support an array of estuarine fish and wildlife. Restoration activities associated with this project will provide increased spawning habitat for chum and pink salmon and coastal cutthroat trout and will increase rearing capacity of south Puget Sound for Chinook, Coho, chum, and pink salmon, and steelhead and coastal cutthroat.

Project partners are also working together to develop a monitoring plan for the site that will track the response of the estuary and beach



to restoration actions. Project monitoring will include beach profiles of the newly restored shoreline; forage fish spawning surveys of restored beach; adult salmon spawning surveys of the creek; and vegetation plots, insect fall-out trapping, and beach seining surveys in the estuary and on

pocket estuary and restricted fish access to the creek. Installing a 14-foot-span concrete box culvert created a 150-foot tidal channel, and salt marsh vegetation and logs will replace shoreline armor.

The Beachcrest project will provide ecological benefits for all nearshore-dependent species in

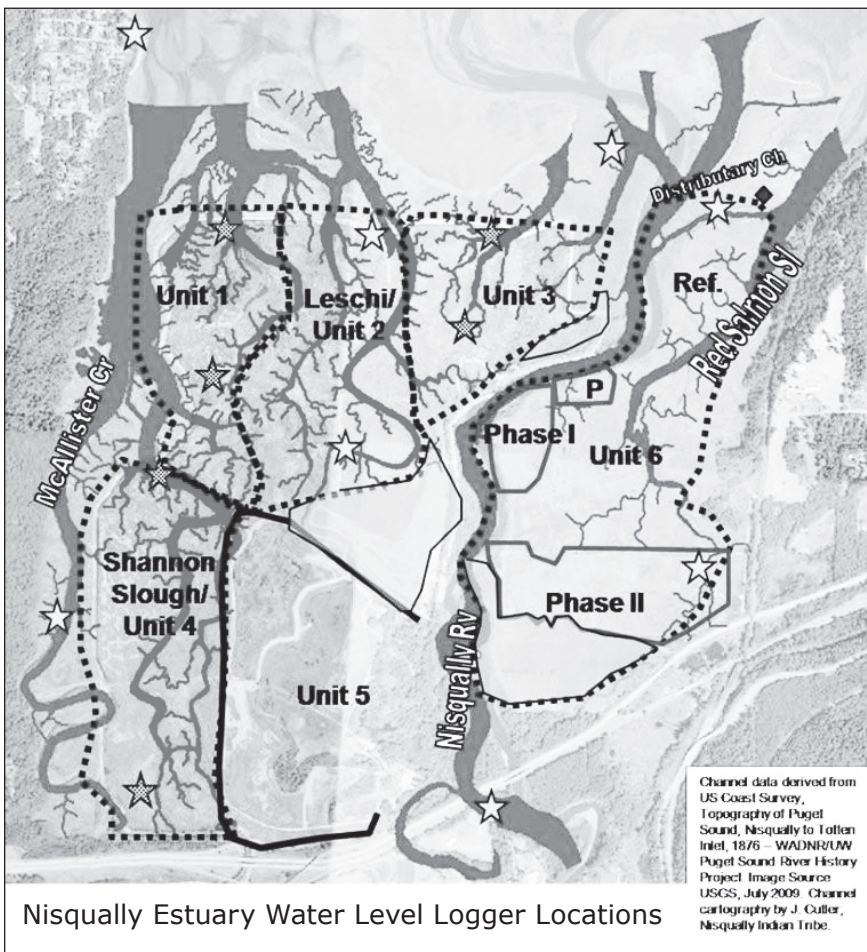
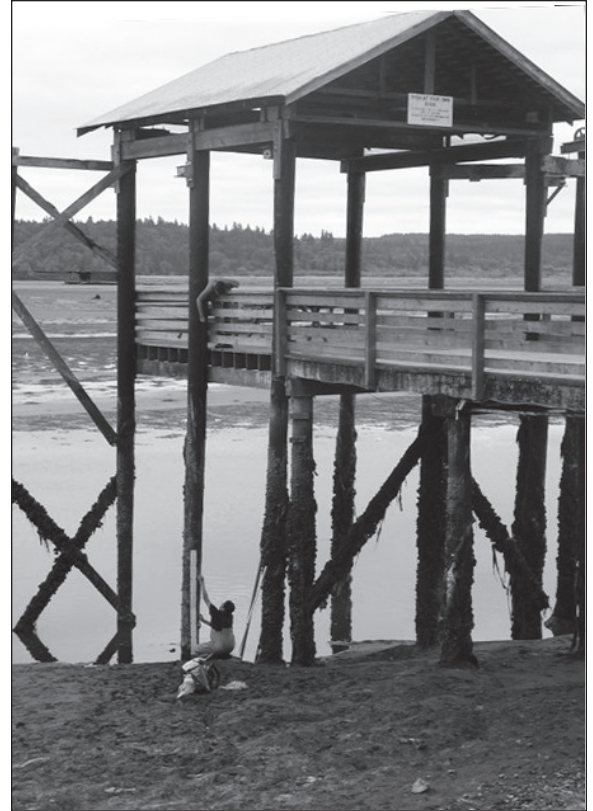
the beach. The monitoring work will be managed by project partners and completed by volunteers from the local community and schools.

This project was funded by the state Salmon Recovery Funding Board, the US Fish and Wildlife Service, and the National Fish and Wildlife Foundation.

The Changing Delta at Nisqually Reach Nature Center

Over five months have passed since the restoration at Nisqually National Wildlife Refuge was completed and the picture we see on the delta is definitely changing. It is amazing to look out toward the twin barns and see water from the tide reaching much further into the refuge. The new restoration is moving sediments and creating or restoring channels that have not seen the energy of the tide in over 100 years. Things are changing fast. Folks who are familiar with what the delta looked like prior to restoration are now surprised to see all the changes. Mainly we are noticing the salt marsh bluffs shifting with the advent of much more tidal energy on the delta, and the water is traveling further into new places. U.S. Geologic Survey is poised to

monitor the changes with Eric Grossman gathering a team of USGS scientists to monitor the effects of restoration. The NNWR is also working with USGS and the Nisqually Tribe to continue to expand monitoring protocols that started in 2002 with the tribal restoration. Kelley L. Turner, a new employee working with NNWR, is spearheading several new monitoring programs to assess the response to the restoration. At the Center we are very excited about getting an active tide station located on our dock. For the first three months of restoration we were broadcasting live



Albert (from USGS) and Daniel Hull (NRNC) setting up the water logger at Luhr Beach

data onto the web so people could look at actual tide information at our location. This is beneficial for us in our student and citizen monitoring of actual tide data, which is much more precise than predicted tide data and can be used to get a clearer picture of how tide is affecting biologic response on the delta. If you would like to know more about restoration and would like to check out the local tide conditions at Luhr Beach, please check out our website at www.NisquallyEstuary.org and follow the links to *Check current tide conditions at NRNC*.

We are excited to continue our monitoring at Luhr Beach to see the effects of this large restoration and the effects on adjacent beaches like ours.

Volunteers Plant Natives at NRNC Bulkhead (continued from page 1)

grape, red-flowering currant and one shore pine. Volunteers began by removing unwanted plants and weeds, after which the heavy, somewhat rocky soil was covered with cardboard mulch, and a final layer of tree chip mulch.

The bulkhead area on the far side of the building will contain low-growing plants such as native dune grass, entire-leaved gumweed/*Grindelia*, and silver burweed/

organisms in the water below. The backshore demonstration garden will teach visitors about plants that are not often appreciated along our beaches, but these plants help support ecosystems on both the seaward and upland sides, stabilize sandy substrates, and sequester a lot of carbon in their extensive below-ground root systems.”

The Center greatly appreciates the donation of materials from the



Ambrossia, which thrive in the sandy substrate of Puget Sound's backshore. After weeds were removed, the ground was prepared with a layer of cardboard mulch over the soil, followed by a thick layer of sand. Plants will be added later in the spring and next fall when they become available from nurseries.

Erica commented about the project, “We were delighted to be able to partner with the Center on this educational planting. Visitors will learn about different options for marine riparian plantings, and the Center is demonstrating that even with a bulkhead, landowners can add plants that will benefit the

following businesses, which made the planting possible:

Tree chip mulch: MOORE TREES, INC.

Sand: HOLROYD COMPANY, INC.

Plants: WSU NATIVE PLANT SALVAGE PROJECT

Big thanks are due to The Russell Family Foundation for help with funding for both partners, and to the WSU Native Plant Salvage Project and its AmeriCorps member Guy Maguire for providing expertise and supervision, shovels, wheelbarrows, gloves, and strong backs!

Please stop by and view the new garden spaces. The plants look tiny now, but they will no doubt be impressive by summer.

NOAA and NRNC Outreach to Yelm Schools

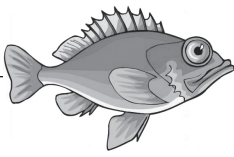
Through a 2009 grant from the National Oceanic and Atmospheric Administration (NOAA), we were able to engage more than 500 students at Yelm Prairie Elementary School in beach surveys.

Stephanie Ehinger, National Marine Fisheries Biologist with NOAA, was instrumental in securing NOAA monies and connecting with Yelm school teachers to help NRNC staff with programs on the beach. All together, we generated close to 200 data sheets of shore crab data, looking at the sex of the crabs and how many were found in a 33 cm square on the beach.

Some students had so much fun with the data collection, they did not want to stop. They just wanted to keep moving their quadrates and starting another sample.

We look forward to working with our neighbors over in Yelm more often and are grateful for the extra funding and support NOAA gave us to accomplish some great educational programs.





Who Supports the Nisqually Reach Nature Center?

We are a nonprofit organization supported by grants from private foundations, government agencies, and most importantly, from individual contributors. It is our members and donors who keep the doors open.

If you like what you read in *Luhr Lore* and believe, as we do, in understanding and preserving our South Sound environment, please consider supporting our education, research, and citizen science programs.

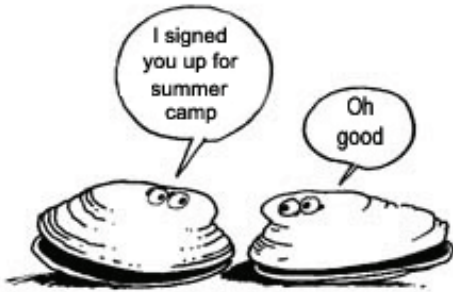
It's easy! Here's how:

Become a member. Fill out the membership application and mail it to the address below. Members receive a subscription to our newsletter, priority consideration for Center activities and events, and volunteer and docent opportunities.

Make a tax-deductible contribution of any amount without becoming a member. Simply send a check to:

Nisqually Reach Nature Center
4949 D'Milluhr Rd. NE
Olympia WA 98516

We appreciate all of our generous supporters!



MEMBERSHIP APPLICATION

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MEMBERSHIP CATEGORIES

PLEASE CHECK ONE

- Senior 25.00
- Student 25.00
- Individual 35.00
- Household 50.00
- Supporting 75.00
- Patron 100.00
- Benefactor 250.00
- Sponsor 500.00

On occasion, NRNC receives requests from like-minded nonprofit organizations for the use of our mailing list. If you do not want us to provide your address to others, please check the box below:

Please do not release my name to other organizations.



Nisqually Reach Nature Center 2010 Summer Day Camp

Join us this summer for estuarine adventures at the Nisqually Reach Nature Center! Now in our ninth year of summer camp programming, our tried-and-true, hands-on activities will introduce campers to many fundamental biological and ecological principles in a science-based curriculum.

NRNC Member Fee - \$85 per camper
NRNC Non-Member Fee - \$95 per camper

Information and registration forms available at our website: www.NisquallyEstuary.org

Session	Dates	Grade Level	Ages
1	June 28-30	1-3	7-9
2	July 12-14	3-5	9-11
3	July 21-23	6-8	11-14
4	July 26-28	2-4	8-10
5 (Advanced)	Aug 9-11	5-8	11-14

The Nisqually Reach Nature Center (NRNC) is a private, nonprofit 501(c)(3) organization dedicated to environmental education, outreach, and research. All contributions are tax deductible. The Center is located at Luhr Beach on the west side of the Nisqually delta. Our facilities are provided by the Washington Dept. of Fish and Wildlife. No state funds are provided for the operation of the Center.

The Center is open to the public Wednesday, Saturday, and Sunday from 12:00 noon to 4:00 pm.

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