

# No Educator Left Inside:

Exploring Ocean & Watershed



**2010 Northwest Aquatic & Marine Educators  
35<sup>th</sup> Annual Conference**

July 6 - 10, 2010 | Florence, Oregon





# Welcome to the 35th Annual Northwest Aquatic & Marine Educators Conference

*Leave No Educator Inside: Exploring Ocean and Watershed*



NAME-Oregon welcomes you to the beautiful Central Oregon Coast, and the unique city of Florence, to connect with other marine and aquatic educators. We believe we have created an experience here that will go beyond your expectations both professionally and personally.

## NAME Conference Traditions

With thirty-five conferences under our collective belt, we can't help but have a few traditions. If you are a first time NAME member or conference attendee (and even if you aren't), read on...

- **NAME Board Meeting:** This is a gathering of NAME's leaders (at least, the elected and appointed ones). All NAME members are invited to witness leadership in action (or bring your complaints).
- **SeaFaire:** Consider it an idea and innovation garage sale, except that most of the ideas and innovations are available free of charge. Conference attendees and local organizations are welcome to reserve a table and show off during this event. This year, Sea Faire is being held during the Welcome Reception.
- **Annual NAME Auction:** Always a conference highlight, the auction raises funds for NAME's mini-grant and scholarship programs. Auction items are varied and donated by members and local organizations, and you never know what will be on the table. There is normally both a silent and oral auction.
- **Provincial and State Meetings:** These meetings give each province and state a chance to meet together and plan the upcoming year. Find out what great stuff is happening in your own backyard.
- **NAME General Business Meeting:** U.S. non-profit law requires a general membership meeting once each year, and this is it. Don't miss the opportunity to learn the latest NAME innovations, programs, and plans for the future. Be involved.
- **Annual Photo Contest:** A new tradition. Don't forget to vote in Room 1 – the winners will be announced Friday evening during the banquet.
- **NAME Awards Banquet:** Don't miss a great evening capped off with the auction and music. Fun. Good food. Great auction items. Dancing.

## IMPORTANT CONFERENCE INFORMATION

- **NAME TAGS:** Wear 'em! They are your tickets to events, food, and other cool stuff. Besides, it helps you hide the fact that you can't quite remember that person you met last year, and helps people you meet for the first time remember you next year.
- **Beverage Cups:** We are dedicated to the Green Conference philosophy. We have made the decision to avoid providing beverage cups for breaks and the like. Please, don't forget to CARRY YOUR OWN CUP WITH YOU. We have a prize for the oldest NAME/NMEA cup or mug at the conference.
- **Conference Bags:** Likewise, we are not providing conference bags and hope you remembered yours from...1986 (or whenever) We have prizes for the oldest NAME/NMEA conference bag and the most unique/creative bag.
- **Refillable Water Bottle:** A good idea anyplace. Remember, plastic is a petroleum product – that same stuff that has done so much harm to the Gulf of Mexico!
- **Event Waiver Form:** Just in case you snuck by us, make sure you have a signed Event Waiver Form turned into Registration. These forms are protection for NAME and you!
- **NO SMOKING ANYWHERE IN THE FLORENCE EVENT CENTER, AND ON ANY FIELD TRIP.**
- As you enjoy the conference experience, be aware of your own safety and others safety as you would your students and audiences. It's good practice as we "Leave No Educator Inside."

## PEOPLE WHO MADE THIS CONFERENCE GO

### NAME-OR Planning Committee:

**Fawn Custer**, Marine Educator & NAME-OR Treasurer

**Coral Gehrke**, COSEE Pacific Partners

**Bill Hanshumaker**, Hatfield Marine Science Center

**Sean "Bill" Hastie**, Conference Chair & NAME President

**Theda Hastie**, Marine Educator

**Nancee Hunter**, Oregon Sea Grant

**Vicki Osis**, Marine Educator

**Alan Rammer**, NAME Preident-elect

**Tamara Seymour**, Spring to Sea Studios ([www.springtosea.com](http://www.springtosea.com))—Program Booklet Design

**Joy Tally**, South Slough National Estuarine Research Reserve & NAME-OR Director

**Pat Williams**, Marine Educator

**Pat Willis**, OSU Extension Washington County



A small but hearty group that drove many miles, endured many meetings, phone calls and e-mails, and made the work fun.

And, our auctioneers Rob Coats and Pat Willis, Mr. Auction himself Alan Rammer, and auction worker bees Debbie Smith and Fawn Custer.

# ABOUT NORTHWEST AQUATIC & MARINE EDUCATORS

NAME was founded in 1976 and became a chapter of the National Marine Educators Association in 1980. In the early 1990s NAME expanded its mission and membership to include all aquatic environments, recognizing that marine and aquatic ecosystems, environments, and issues are linked together, and that educators working in both environments share common beliefs and strategies. NAME includes members from Alaska, British Columbia, Washington, and Oregon. Annual NAME conferences rotate through these states and provinces. In addition, each state or province develops local professional development opportunities for formal and non-formal educators.

## You have joined a “family” of educators who believe:

- That every human on Earth needs to be water-literate.
- In sharing our knowledge, experiences, and visions about the world of water with others.
- That the sharing of that vision creates a community, and that this community supports each of us personally and professionally.
- That informed stewardship of the ocean and watersheds of our region is essential for the continued survival of all life, and the cultural and spiritual well-being of the stewards.
- In using the allure of water, both salt and fresh, to enrich and facilitate learning in all subjects and environments.

These are our Core Values, values that drive the work we do. We are also guided by a Strategic Plan, annual education and event plans for each province and state, and an innovative, energetic Board of Directors.

## NAME Conferences through the Years

1976	Poulsbo, WA	1994	Sitka, AK
1977	Sitka, AK	1995	Astoria, OR
1978	Newport, OR	1996	Seattle, WA
1979	Grays Harbor, WA	1997	Vancouver, BC (Joint Conference with NAAEE)
1980	Vancouver, BC	1998	Seward, AK
1981	Sitka, AK	1999	Charleston, OR
1982	Astoria, OR	2000	Port Townsend, WA
1983	Everett, WA	2001	Victoria, BC (NAME hosted NMEA National Conference)
1984	Victoria, BC (NAME hosted NMEA National Conference)	2002	Juneau, AK
1985	Seward, AK	2003	Newport, OR
1986	Newport, OR	2004	Olympia, WA
1987	Bellingham, WA	2005	Bamfield, BC
1988	Campbell River, BC	2006	Steward, AK
1989	Homer, AK	2007	Astoria, OR
1990	Portland, OR	2008	Friday Harbor, WA
1991	Port Townsend, WA	2009	Vancouver, BC
1992	Portland & Newport, OR (NAME hosted NMEA National Conference)	2010	Florence, OR
1993	Cowichan Lake, BC		



## 2009-2010 Northwest Aquatic & Marine Educators Leadership

### Board of Directors

Sean "Bill" Hastie, President, OR  
Linda Maxson, Past-president, WA  
Alan Rammer, President-elect, WA  
Anne Nelson, Secretary, OR  
Rob Coats, Treasurer, OR  
Deborah McArthur, NMEA Representative, WA  
Nora Deans, Alaska Director  
Anne Stewart, British Columbia Co-director  
Eriko Arai, British Columbia Co-director  
Joy Tally, Oregon Director  
Amy Sprenger, Washington Director



### Committee Chairs

Gretchen Glaub, Membership Chair, WA  
Pat Willis, Award Chair, OR  
Debbie Smith, Mini-grants/Scholarships Chair, WA

### Communications Committee

Nora Deans, Co-chair, AK  
Sean "Bill" Hastie, Co-chair, OR  
Kathleen Heidenreich, Flashmail Manager, WA  
Jennifer Magnusson, Webmaster, WA  
Gretchen Glaub, Scuttlebutt Editor, WA  
Tina Kelly, British Columbia Correspondent  
Gordon Green, British Columbia Correspondent  
Nancee Hunter, Oregon Correspondent  
Vicki Osis, Oregon Correspondent



### NAME Presidents Through The Years

80-81 Bill Hastie, OR  
81-82 Andrea Marrett, WA  
82-83 Gene Williamson, OR  
83-84 Rod MacVicar, BC  
84-85 Vicki Osis, OR  
85-86 Jim Kolb, WA  
86-87 Belle Heffner Mickelson, AK  
87-88 Laurie Dumdie, WA  
88-89 Kathleen Heidenreich, WA  
89-90 Vicki Osis, OR  
90-91 Doug Emery, WA  
91-92 Pat Willis, OR  
92-93 Pat Willis, OR  
93-94 Mike Spranger, WA  
94-95 Kristi Silver, WA  
95-96 Susan Wertz, WA

96-97 Bill Hanshumaker, OR  
97-98 Alan Rammer, WA  
98-99 Sally Lider, WA  
99-00 Patricia Williams, OR  
00-01 Tom Gaskill, OR  
01-02 Tom Gaskill, OR  
02-03 Margy Ransford, BC  
03-04 Susan Wertz, WA  
04-05 Susan Wertz, WA  
05-06 Susie Vanderburg, WA  
06-07 Orlay Johnson, WA  
07-08 Debbie Smith, WA  
08-09 Linda Maxson, WA  
09-10 Sean Hastie, OR  
10-11 Alan Rammer, WA

# CONFERENCE AT A GLANCE

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## Tuesday | July 6

3:00 – 9:00	NAME Board Meeting
6:00	NAME Board Dinner

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## Wednesday | July 7

7:00 a.m.	Registration Opens
7:30 a.m.	Continental Breakfast for Workshops
8:30 a.m.	Pre-conference Workshops (start times vary)
12:30 p.m.	Lunch for Pre-conference Workshops
1:00 p.m.	Registration Re-opens for Conference
4:30 p.m.	SeaFaire Set-up
5:30 p.m. – 9:00 p.m.	SeaFaire
6:30 p.m. – 9:00 p.m.	Welcome Reception and SeaFaire
7:30 p.m.	Welcome Reception Presentation

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## Thursday | July 8

7:00 a.m.	Registration Opens
7:30 a.m.	Full Breakfast
8:30 a.m.	Opening Welcome and Plenary Session
9:45 a.m.	Pick up Box Lunch
10:00 a.m.	Field Trips Depart (departure times vary)
6:30 p.m.	BBQ at Woahink Lake (outside activity)

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## Friday | July 9

7:00 a.m.	Registration Opens
7:30 a.m.	Full Breakfast
8:30 a.m.	Plenary Session
9:30 a.m.	Concurrent Sessions
11:45 a.m.	Provincial and State Meetings
12:30 p.m.	Lunch and Plenary Session
2:00 p.m.	Concurrent Sessions
4:05 p.m.	Plenary Session
6:30 p.m.	Annual Banquet and Awards
7:30 p.m.	Annual NAME Auction
8:30 p.m.	Get Down Dance

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## Saturday | July 10

7:30 a.m.	Full Breakfast
8:00 a.m.	NAME Business Meeting
9:15 a.m.	Concurrent Sessions
12:30 p.m.	Lunch and Plenary Session
2:00 p.m.	Farewell and Adjourn

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## TUESDAY | JULY 6

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3:00 p.m. NAME Board of Directors Meeting (Room 5)

All NAME members and conference attendees are invited to this meeting, so stop in and see what really happens at a Board Meeting.

## WEDNESDAY | JULY 7

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A day to get registered for the conference, get the lay of the land (and ocean), and attend a Pre-conference Workshop. Later, discover new ideas and materials at NAME's annual SeaFaire, then attend the Welcome Reception to renew friendships and make new ones, enjoy good food and beverages, and be welcomed by NAME-Oregon and Bonnie Henderson, Oregon author.

7:00 a.m. Registration Opens (Lobby)

7:30 a.m. Continental Breakfast for Pre-conference Workshop Participants (Lobby)

8:30 a.m. – 3:30 p.m. **Workshop A: Communicating Ocean Sciences with Informal Audiences: guided questioning as a strategy for facilitating learning**

- Presenter/Facilitator: Shawn Rowe, Ph.D., Marine Education and Learning Specialist, Oregon Sea Grant, Oregon State University, Corvallis (541-867-0190 or shawn.rowe@oregonstate.edu)
- Suggested Audience: Anyone who works with visitors to the coast whether school groups, adult peer groups on field trips, or casual visitors to museums, zoos, aquariums, parks, or natural areas

8:30 a.m. – 3:30 p.m. **Workshop B: Connecting Young Children to Nature**

- Presenter/Facilitator: LeeAnn Mikkelson, Oregon Natural Resources Education Program (ONREP), Oregon State University, Corvallis (541-737-9121 or leeann.mikkelson@oregonstate.edu)
- Suggested Audience: Formal and non-formal Early Childhood Educators

9:00 a.m. – 3:30 p.m. **Workshop C: Linking Science and Literacy Naturally**

- Presenters/Facilitators: Susan McWilliams, Educator, Bend, OR (541-419-2357 or smcw@bendcable.com) and Adele Schepige, Western Oregon University, Monmouth, OR (503-838-8485 or schepia@wou.edu)
- Suggested Audience: K-8 Teachers and Informal Educators



8:30 a.m. – 4:30 p.m. **Workshop D: Using the Ocean Curriculum to Teach STEM**

- Presenters/Facilitators: Nancee Hunter, Oregon Sea Grant, Oregon State University, Corvallis, OR (541-867-0357 or nancee.hunter@oregonstate.edu), Kerry Carlin-Morgan, Oregon Coast Aquarium, Newport, OR. (541-867-3474 X5311 or Kerry.Morgan@aquarium.org), and Amy Sprenger, NANOOS Education & Outreach Specialist, U. of Washington Applied Physics Lab, Seattle, WA (asprenge@apl.washington.edu)
- Suggested Audience: Formal and informal educators who want to learn about new resources and opportunities to connect oceans into their STEM curriculum, and relate marine content to Oregon's new science standards

11:00 a.m. – 4:00 p.m. **Workshop E: Oregon Master Naturalist Program: Coast Region Sandy Beaches and Dunes Pilot**

- Presenters/Facilitators: Dr. Stewart Schultz, Professor of Biology, University of Zadar, Croatia and Summer Term Instructor, Oregon Institute of Marine Biology, University of Oregon, Charleston, OR, Coral Gehrke, COSEE-Pacific Partnerships, Oregon Institute of Marine Biology, University of Oregon, Charleston, OR (541-888-2581 X236 or cgehrke@uoregon.edu)
- Cost: Free – sponsored by COSEE-Pacific Partnerships
- Suggested Audience: Intended for people interested in becoming Oregon Master Naturalists, particularly those would like to learn more about the Oregon Coast Ecoregion

12:30 p.m. Lunch for Pre-conference Workshop Participants (Lobby)

1:00 p.m. Registration Opens (Lobby)

4:30 p.m. SeaFaire Set-up (Room 1)

5:30 p.m. – 9:00 p.m. SeaFaire (Room 1)

6:30 p.m. Welcome Reception (Rooms 1-4)

Enjoy the musical styling of **Jim Cameron**, Conductor of the Pacific Coast Wind Ensemble and Yachats Big Band, while browsing and visiting!

7:30 p.m. Welcome Reception Presentation (Rooms 2-4)

**Bonnie Henderson, Author** | Bonnie is a freelance writer from Eugene, OR. She has been a reporter and editor for several newspapers, an associate editor for Sunset Magazine, a public affairs writer, and has written articles for such magazines as Backpacker, Women's Sports and Fitness, and Coastal Living. Her books include Best Hikes with Kids: Oregon, now in its third edition, and Day Hiking: Oregon Coast. Her latest book, Strand, arose from the experience of routinely walking Mile 157 on the central Oregon coast, as a volunteer for Oregon's Coastwatch Program, puzzling over what she found.

A day to get up close and personal with the Oregon coast, a place where weather is a constant subject of conversation and something to prepare for. But before we hit the road, we'll hear one of Oregon's best educators share his thoughts about why it makes sense to take our students and audiences into the field.

- 7:00 a.m. Registration Opens (Lobby)
- 7:30 a.m. Breakfast (Lobby)
- 8:30 a.m. Opening Plenary Session (Rooms 2-4)

***Beyond the Walls*** | Ryan Shaffer, Ponderosa Elementary School, Bend, OR

In his book, *Last Child in the Woods*, Richard Louv discussed the consequences of children spending more time indoors, and the benefits of spending time outside. Ryan will highlight Louv's research, and present ways to put Louv's research into practice. Having taken his students on over 20 field trips during this school year alone, Ryan will share why it's vital to get students learning outside, and give suggestions for overcoming potential barriers to moving beyond the walls of a classroom.

- 9:45 a.m. Pick up box lunches (Lobby)

- 10:00 a.m. Field Trips Depart (Parking Lot)  
Be sure to check departure times on pages 9 and 10. Transportation for most field trips is provided, but a few are carpools. Please note those starred (\*), and offer to be a driver if you can. Check again that you have your box lunch, water, binoculars, camera, and appropriate clothing and enjoy your day. REMEMBER, weather along the Oregon Coast can be unpredictable and variable. Dress in layers for wind and rain. In summer as the day progresses wind typically becomes quite strong. All field trips involve active participation so sturdy shoes are recommended. Trips will continue through rain or shine.

- 6:30 p.m. Lake Woahink BBQ  
Relax after a day in the field with a traditional western BBQ at Lake Woahink, a part of Honeyman State Park. The Florence Salmon-Trout Enhancement Program (STEP) Group is our host for this event. The Florence STEP volunteers have one of the most active youth education programs in the state, a thriving fish hatchery managed entirely by volunteers, and do numerous habitat improvement projects in the Siuslaw River Basin. Please thank them for their great service to education and to NAME.

Also on tap is an informal jam session – bring your instruments, voice or whatever you deem musical to join the fun.

***Woahink Lake*** is 820 acres in size and, at 72 feet, is the deepest lake on the central Oregon Coast. Much of the shoreline is in private residential ownership, however, the Woahink Lake unit of Honeyman State Park provides ample access including a boat ramp and large day-use area with covered picnic shelters.

The lake is popular for boating, waterskiing, and fishing. The elevation of the lake is near sea level.

*Driving Directions:* Woahink Lake is located about 3 miles south of Florence on Hwy 101. The lake lies to the east of the highway opposite Honeyman State Park. You will turn left from Hwy. 101 – look for the signs.



## Thursday Field Trips

### **1. South Slough NERR Paddle Exploration** | 10 a.m. – 5:30 p.m.

Join South Slough's Education Coordinator, Tom Gaskill, for an interpretive paddle of the Winchester Arm of the estuary. Travel with the tide as you float alongside salt marshes and salmon streams, and visit the recently updated South Slough Interpretive Center and trails. Canoes, PFDs, and paddles will be provided.

### **2. Sea Lion Caves & Cape Perpetua** | 10 a.m. – 5:30 p.m.

Enjoy a guided tour of Florence's famous Sea Lion Caves, home for wild sea lions and a variety of sea birds and the world's largest sea cave. After a morning with the sea lions, have lunch and explore Cape Perpetua Scenic Area Hike down to the tidepools and explore the world revealed by low tide.

### **3. Hatfield Marine Science Center & Marine Discovery Tours** | 10 a.m. – 5:30 p.m.

In this hands-on field trip, participants will visit the Hatfield Marine Science Center (HMSC) where they will be given a behind the scenes tour of the Wecoma, an Oregon State University Research Vessel, and the HMSC Visitor Center. In addition to a picnic lunch on the Yaquina Bay estuary, participants will have time to explore different areas of the estuary through a fun, innovative Quest. Then travel to Newport's working bay front to view California sea lions and check in at Marine Discovery Tours. Once on board the Discovery, you will receive a narrated ocean and bay cruise with naturalist guides on hand to help you find and view sea life. You'll enjoy interactive labs that include plankton tows, video microscopy, and much more.

### **4. Paleodune Tour** | 10 a.m. – 5:30 p.m.

Curt Peterson, Department of Geology at Portland State University, will lead you on a visit to a number of dune areas to highlight sand movement on the continental shelf and its impact on dune development on the coast. The coastal dunes currently hold great importance as aquifers, and contain the majority of coastal upland wetland areas in Oregon. Vegetative stabilization of foredune areas serve to keep sand from traveling further inland, but does little to prevent coastal erosion from winter storms.

### **5. \*Sandy Beach & Foredune Exploration** | 10 a.m. – 2 p.m.

Join Naturalist Marty Giles of Wavecrest Discoveries on an exploration of Oregon's dynamic beach geology and shoreline processes while learning about some of the treasures of the sandy beach Wavecrest Discoveries specializes in engaging and enlightening "mind-refreshing" excursions that give participants a meaningful understanding of this fascinating region. \*First ten participants will ride with Marty, the remainder will carpool.

### **6. Forest Ecology & Estuarine Wetlands** | 2:30 p.m. – 5:30 p.m.

Travel up the Siuslaw River with Naturalist Marty Giles of Wavecrest Discoveries to explore both fringing salt marshes and coastal forests for a solid introduction to two contrasting local habitats. Participants will hike the short Pawn Trail, to learn about Oregon coast Old Growth forest (as permitted by the USFS, Siuslaw National Forest). Wavecrest Discoveries Forests specializes in engaging and enlightening "mind-refreshing" excursions that give participants a meaningful understanding of this fascinating region.

*Field Trips continued on next page...*

### *Thursday Field Trips continued...*

#### **7. \*Horseback Beach Tour** | 10 a.m. – 1 p.m.

This guided horseback beach tour with C&M takes you through scenic dunes and coastal pines to the beach for a breathtaking ride along the shoreline. Walking and trotting is allowed on the beach. Riders of all skill levels, beginner through advanced, are welcome. Children 8 years of age and older are allowed on this ride. Suggestions: Dress warmly for beach rides. Please NO hats without chin-straps on the beach, due to windy conditions. Minimum age 8yrs.

#### **8. Sandland Adventures Dune Buggy Tour** | 10 a.m. – 12 p.m.

The Sandland Adventures Giant Dune Buggy Tour is a fun and exciting way to see the scenic Oregon dunes. This informative tour is operated by professional drivers and covers approximately 8 miles of dunes and 2 miles of beach where you will view an impressive natural wonder of endless shifting sand, unique tree islands, various wildlife, the spectacular Siuslaw River, and beautiful Pacific Ocean beach. After your dune ride, you can have fun bumping and splashing on the Sandland Adventures Bumper Boats, race on their Grand Prix style Go-Kart track, play Miniature Golf, or take a ride on the Cloverline Railroad.

#### **9. Umpqua Discovery Center and Dean Creek Elk Viewing Area** | 10 a.m. – 2 p.m.

Take a different look at how to teach the public about watersheds and habitats by exploring “Tidewater Communities” at the Umpqua Discovery Center. The interactive exhibits and programs illustrate how land, water and people have shaped each other over time. We’ll also go up to the Dean Creek Elk Viewing Area to learn how the Bureau of Land Management is providing pastureland for elk, wetlands for waterfowl and the struggle between the two.

#### **10. Dune & Plover Restoration Ecology & Dune Geomorphology** | 10 a.m. – 2 p.m.

This hiking trip provides an introduction to Pacific Northwest coastal dune ecology and geomorphology. On a hike across coastal dunes, learn about this unique environment, how it has changed, and the efforts for plover restoration. This hike is moderate with some easy sections - there are some sections of open, loose sand with some shorter hills. The activities on this hike include (1) walking to plover restoration areas, (2) running a coastal dunes transect with plant identification and measuring dune elevation profiles (depending on interest and time permitting). Almost all hiking is in open area so participants should bring plenty of water, sunscreen, sunglasses, hats, and good walking shoes (sneakers are ok) that they don’t mind getting sand in. Sunny but windy conditions are likely, and blowing sand is common.

#### **11. Crabbing Trip with Captain Greg Helmer** | 12:30 p.m. – 5:30 p.m.

This trip will take you down the scenic Siuslaw River where you’ll view the diversity of wildlife that is common to the coast. The bridge that spans the Siuslaw River is ornate and worth getting a picture from the river. The Siuslaw River bridge and beautiful sand dunes are worth a few mega pixels as we travel the river. Crossing the “BAR” is a memorable occasion, followed by the setting of crab pots by the crew, usually fairly close to shore (within 1/2 mile). The deck hand will be on board to assist or do the setting or retrieving of the pots. The crew will clean the crabs upon docking the boat. Be sure to have a container to put your crabs in for the trip home. The crabs should be kept on ice and boiled soon after getting home. Once boiled, they are great with drawn butter or you can freeze the cooked crab and it will be good for approx. 6 months. NOTE: Trip is contingent on ocean conditions.

#### **12. \*Siltcoos River Paddle** | 10 a.m. – 2 p.m.

From the shimmering waters of the lake, the Siltcoos river slips peacefully through dense coastal forest and tall sand ridges of the Oregon Dunes, then loops into a wide estuary that leads to the Pacific Ocean. Share this river trail with wildlife as you gently make your way from river to the sea. Double kayaks, paddles, and PFDs will be provided.

Hopefully, you slept well because today is chalk full of learning and enjoyment. You'll have to make some choices today from our menu of great concurrent sessions (*see pages 16 through 21 for details on each session*). But you'll hear great speakers no matter what you choose, and cap off a day of learning and discoveries with a great meal, the always outrageous NAME Annual Auction, and some swingin' music.

7:00 a.m. Registration Opens (Lobby)

7:30 a.m. Full Breakfast (Lobby)

8:30 a.m. Plenary Session (Rooms 2-4)

***Climate Change, Marine Food Webs and Salmon: How Variability in Ocean Conditions Affects Salmon Survival*** | Dr. Bill Peterson, Oceanographer, NW Fisheries Science Center, Newport Research Station, Newport, OR

Ocean conditions important to salmon depend upon large-scale factors such as wind and weather across the entire North Pacific, and local factors such as upwelling strength during the summer and the condition of the food chain upon which salmon feed. In warm years, the food chain is impoverished whereas in cold years, a very productive food chain supports vast number of marine biota, including salmon. Dr. Peterson will explain how the ocean works, and how events far away from Oregon affect us (and salmon) locally. He will also show that changes in ocean conditions affect marine food chains and salmon in predictable ways that enable qualitative forecasts of the number of salmon returning to their natal streams, one year in advance.

9:30 a.m. Concurrent Session Track A (*choose one*)

- ▶ ***Marine Reserves and Conservation issues in Oregon's State Waters***  
Paul Englemeyer, Dave Lacey, Ten Mile Creek Sanctuary (Room 4)
- ▶ ***Becoming a Paleobotanist to Study Ancient Climate*** | Fawn Custer (Room 2)
- ▶ ***Learning About Marine Debris Through Ongoing Research, Inquiry, and Cross-curricular Activities*** | Helen Farr and Trish Mace, Coos Bay (Room 3)
- ▶ ***NOAA's Pacific Northwest B-WET Grants Program: Making Education Meaningful*** | Robert Steelquist, NOAA, Pacific Northwest B-WET (Room 5)

10:30 a.m. Concurrent Session Track B (*choose one*)

- ▶ ***Connecting Community & Schools to a Large-scale urban Watershed Enhancement Program*** | Anne Nelson, City of Portland (Room 2)
- ▶ ***Return of the Plankton: A Video Overview of the Seasons Underwater***  
John F. Williams, Still Hope Productions (Room 3)
- ▶ ***Teaching at the Beach*** | Amy Stephenson, Vancouver Aquarium (Room 4)
- ▶ ***Tsunamis in Oregon*** | Alicia Lyman-Holt, Hinsdale Wave Research Lab (Room 5)

11:45 a.m.

Provincial and State Meetings

NAME-Alaska (Room 2)  
NAME-British Columbia (Room 4)  
NAME-Washington (Room 5)  
NAME-Oregon (Room 3)



12:30 p.m.

Luncheon and Plenary Session (Rooms 2-4)

***Ocean Acidification and Pacific Oysters*** | Dr. Burke Hales, Associate Professor, College of Oceanographic and Atmospheric Sciences, Oregon State University, Corvallis, OR

Ocean acidification, the change in seawater chemistry as a result of invasion of anthropogenic CO<sub>2</sub> into ocean waters, is expected to alter open ocean chemistry significantly by the end of the century. Its effects are already exacerbating extreme conditions in systems that experience coastal upwelling. Recent results off the Oregon coast show a strong relationship between natural fluctuations of CO<sub>2</sub> and oyster larval survival failure. The *C. gigas* oyster is the basis of the commercial oyster industry on the Pacific Coast of North America. Dr. Hales will discuss what ocean acidification means to Oregon's oyster industry, and to the ocean ecosystem.

2:00 p.m.

Concurrent Session Track C (*choose one*)

- ▶ ***Integrating On-line Learning with Hands-on Volunteer Training***  
Giovannina Souers, Janice Mathisen, Seattle Aquarium (Room 2)
- ▶ ***Hypoxia in Oregon and Washington: Using Data to Understand the "Dead Zones"*** | Sarah Mikulak, Amy Sprenger, NANOOS (Room 4)
- ▶ ***The Oregon Coast Education Program – Bringing the Coast into Your Classroom*** | Tom Gaskill, Jenna Kulluson, Brianna Patterson, Zach Allen, South Slough National Estuarine Research Reserve (Session continues in Track D) (Room 3)
- ▶ ***Connecting Students, Science, and Stream Restoration*** | Cara Ianni, Stilly-Snohomish Fisheries Enhancement Task Force (Room 5)

3:00 p.m.

Concurrent Session Track D (*choose one*)

- ▶ ***Teaching in Place: Addressing Nature Deficit Disorder Through Community Partnerships*** | Patrick Willis, OSU Extension Faculty (Room 2)
- ▶ ***Teaching Science Content and Process through Classroom Experiments and Field Explorations*** | Trish Mace, Oregon Institute of Marine Biology (Rm. 4)
- ▶ ***Youth and Field Research – A WIN WIN*** | Virginia Tafdaewether and Jack Chapman, Mid-Coast Watersheds Council (Room 5)
- ▶ ***Continued: The Oregon Coast Education Program – Bringing the Coast into Your Classroom*** | Tom Gaskill, Jenna Kulluson, Brianna Patterson, Zach Allen, South Slough National Estuarine Research Reserve (Room 3)

4:05 p.m.

Plenary Session (Rooms 2-4)

***Harnessing Energy and Protecting Places in Oregon's Ocean***

Robin Hartmann, Oregon Program Director, Oregon Shores Conservation Coalition, Roseburg, OR

A changing climate is bringing not only impacts, such as sea level rise and ocean acidification, to Oregon's coast, but is attracting proposed renewable energy solutions, including wave and offshore wind, as well. How is Oregon preparing to welcome and evaluate these new technologies while protecting important marine ecosystems and historical fishing grounds? Hartmann will demonstrate the use of "interpretive principles" and learning theory as she helps answer this question in her presentation.

6:30 p.m.

NAME Annual Awards Banquet (Rooms 2-4)

7:30 p.m.

NAME Annual Auction (Rooms 2-4)

8:30 p.m.

Get Down Dance (Rooms 2-4)

Swing to the music of ***Bill Belknap, Premium DJ***. Bill has been collecting music since he was eleven, the beginnings of a 50 year career in music, and Convertible DJ, a full-service mobile music company. Bill plays it all, and as he likes to point out, he was there. ([www.convertibledj.com](http://www.convertibledj.com))



## SATURDAY | July 10

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Even though we celebrated last night, we aren't finished bringing you quality learning experiences. Enjoy breakfast and the NAME general membership meeting, then settle in for more great concurrent sessions (see pages 16 through 21 for details on each session), and cap the day with a great luncheon and speaker.

7:30 a.m. Full Breakfast (Lobby)

8:00 a.m. NAME General Membership Meeting (Rooms 3-4)

9:15 a.m. Concurrent Session Track E (*choose one*)

- ▶ ***Using Science, Technology, Engineering and Mathematics (STEM) to Explore Creeks and the Fish in Them*** | Mark Gullickson, Grades 4-5 Teacher, Central Elementary School, Albany, OR (Rooms 3-4)
- ▶ ***Better Catch: Sustainable Seafood Activities for Formal and Informal Educators*** | Wade Janzen, Curriculum Coordinator, School Programs, Vancouver Aquarium, Vancouver, BC (Room 5)
- ▶ ***Open-source Curriculum: Creating an Inquiry-based Marine Science Education Program on the Olympic Coast*** | Kent Chapple, Olympic Park Institute (Room 2)
- ▶ ***Investigating Sociocultural Processes within the Context of Place-Based Learning*** | Noreene M. Ignelzi@San Juan Nature Institute (Room 1)

10:15 a.m. Concurrent Session Track F (*choose one*)

- ▶ ***From Screens to Streams: Using Web-based Technology as a Bridge to the Outdoors*** | Ryan Johnson, Traci Price, Freshwater Trust (Room 2)
- ▶ ***New Marine Fisheries Curriculum from the Northwest Center for Sustainable Resources*** | Wynn W. Cudmore, Northwest Center for Sustainable Resources, Chemeketa Community College (Rooms 3-4)
- ▶ ***Exploring Communities through Quests*** | Cait Goodwin@Oregon Sea Grant (Room 5)

11:15 a.m. Concurrent Session Track G (*choose one*)

- ▶ ***Beyond the Beach: Creating a Sense of Wonder with Pier Peer Nighttime Adventures*** | Gabrielle Byrne, People for Puget Sound (Room 2)
- ▶ ***Strategies for Culturally Relevant Marine Education about the Changing Ocean*** | Marilyn Sigman, Nora Deans, COSEE Alaska (Room 3-4)
- ▶ ***Salmon Watch and Student Stewardship Projects*** | Kim Carson, Freshwater Trust (Room 5)

12:30 p.m. Luncheon and Closing Plenary Session (Rooms 2-4)

***Using Local Contexts for Learning: Marine Education and Place*** | Dr. Greg Smith, Professor of Teacher Education, Lewis and Clark College, Portland, OR

Water is essential to peoples' welfare and draws together diverse strands of our experience of the human and more-than-human worlds. It provides a starting point for understanding natural systems and the impact peoples' behaviors can have on them. Introducing children to water, the way it's used and misused, the way it contributes to human decision-making and history, and the way it has captured our imagination and sense of the beautiful can offer a powerful vehicle for teaching students about the world and themselves. Dr. Smith will describe how educators and schools are creating learning experiences that move beyond the classroom and provide children and youth with direct experiences of water and the lives it supports. This approach enables educators to connect students to their places and communities, and opens paths for them to make significant contributions to the health of their watersheds and coastal regions and the people and other beings who live in them.

1:50 p.m. Closing Remarks (Rooms 3-4)

2:00 p.m. Conference Closes



## NAME 2010 Concurrent Sessions (Friday and Saturday)

### Track A Sessions | Friday, 9:45 a.m. – 10:35 a.m.

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#### ***Marine Reserves and Conservation issues in Oregon's State Waters***

Paul Englemeyer, Dave Lacey, Audubon's Ten Mile Creek Sanctuary, Yachats, OR

Oregon is in the middle of establishing a system of marine reserves in state waters. We will show Common Ground III, an 18 minute video, then give an update on the conservation effort now underway in our coastal communities. We will continue with a discussion on key issues, cooperative monitoring efforts and public participation. Audience: grades 7-12, college, general public and families (pengelmeyer@peak.org)

#### ***Becoming a Paleobotanist to Study Ancient Climate***

Fawn Custer, Environmental Educator, Newport, OR

This activity allows students to use the same techniques as paleobotanists to study various plant species impacted by climate change. This is an activity developed by the EPA in the early 90's but is very relevant today. Students will look through various soil samples, identifying 'pollen' of different species. Students will then interpret data to determine past climates. Audience: grades 4-12 (envtgsldrfawn@aol.com)

#### ***Learning about Marine Debris through Ongoing Research, Inquiry, and Cross-curricular Activities***

Helen Farr, Elementary Teacher, Coos Bay Public Schools, Coos Bay, OR, and Trish Mace, K-12 Coordinator, Oregon Institute of Marine Biology, Charleston, OR

I will share the experiences of my fifth grade students through a year-long study of the ocean, and how plastics and other marine debris affect marine life as well as our own lives. I will share examples of how science content requirements were addressed through the integration of other content areas, and describe the process of preparing lessons and activities guided by the interest and inquiry of my students. Audience: K-6 (Helenf@coos-bay.k12.or.us)

#### ***NOAA's Pacific Northwest B-WET Grants Program: Making Education Meaningful***

Robert Steelquist, Manager, NOAA, Pacific Northwest B-WET, Olympic Coast National Marine Sanctuary, Port Angeles, WA

Since 2008, NOAA's Bay Watershed Education And Training Grants have awarded \$1.4 million in Oregon and Washington in support of "meaningful watershed education experiences." This presentation will explain how B-WET works, the program's funding priorities, furnish tips on developing a successful proposal and answering your questions. Audience: general (robert.steelquist@noaa.gov)

***Connecting Community & Schools to a Large-scale Urban Watershed Enhancement Program***

Anne Nelson, Environmental Program Coordinator, Bureau of Environmental Services, City of Portland

The City of Portland is implementing a large-scale urban watershed enhancement program that will install 500 green storm water facilities, 3,500 trees, remove invasives and manage storm water on private property in SE Portland. The City is integrating education, partnerships and evaluation into this program to ensure long-term success of the green infrastructure. Through bike tours, art exhibits, hands-on classroom activities and many other activities, we're engaging, educating and having fun with the community to improving watershed health. Audience: grades 4-12, college, general public, families (anne.nelson@portlandoregon.gov)

***Return of the Plankton: A Video Overview of the Seasons Underwater***

John F. Williams, President, Still Hope Productions, Suquamish, WA

Art and science come together in an exciting video journey underwater in Puget Sound. This rare, first-hand look at our local marine ecosystem and food web has proven a valuable addition to classes from 3rd grade to college graduate courses. This presentation will introduce teachers to the 27 minute movie "Return of the Plankton", to the study aids included on the DVD, and to some unique uses of the movie in the classroom setting. Audience: grades 7-12 (jw@StillHopeProductions.com)

***Teaching at the Beach***

Amy Stephenson, Curriculum Program Coordinator, Vancouver Aquarium, Vancouver, BC

This hands-on, interactive workshop will provide you with tools and strategies to conduct effective place-based education in the outdoor marine environment. Topics discussed will include group management strategies for maximum participation and engagement, creating themes and interdisciplinary beach and tide pool explorations, and useful resources for learners of all ages. Learn how to use your local marine environment to amaze and engage while promoting conservation! Audience: grades K-12, college, general public, families, aquaria/museum/nature center (amy.stephenson@vanaqua.org)

***Tsunamis in Oregon***

Alicia Lyman-Holt, Education and Outreach Coordinator, O.H. Hinsdale Wave Research Lab, Oregon State University, Corvallis, OR

This session will address three topics, the tsunami hazard in Oregon, ongoing tsunami research at the O.H. Hinsdale Wave Research Laboratory and field trip opportunities to the laboratory. The Cascadia Subduction Zone is an active area approximately 50 miles off of the Oregon Coast, creating a significant hazard zone for Oregon Coastal communities. There is a 1 in 7 chance for a mega-thrust earthquake in the next 50 years, therefore tsunami impact is an important research topic. The Hinsdale Lab is considered the premiere U.S. coastal and tsunami research laboratory where the tsunami hazard is researched on several fronts. The laboratory also has an active education program which host over 4000 visitors a year, including 5-12th grade school groups. Audience: grades 4-college, general public, families, aquaria/museum/nature center (alicia.lyman-holt@oregonstate.edu)

***Integrating On-line Learning with Hands-on Volunteer Training***

Giovannina Souers, Janice Mathisen, Seattle Aquarium

The Seattle Aquarium trains over 300 interpretive volunteers a year to be naturalists in the aquarium and on local beaches. Learn about the Seattle Aquariums most recent addition to our volunteer training program, “E-Learning”. What does it take to create an interactive on-line volunteer training? We will discuss the process of development and integration of this new training element into our hands-on interpretive volunteer training and our field-based Beach Naturalist Program. What’s working and what have we learned so far? Audience: aquaria/museum/nature center (giovannina.souers@seattle.gov)

***Hypoxia in Oregon and Washington: Using Data to Understand the “Dead Zones”***

Sarah Mikulak, Amy Sprenger, NANOOS, Seattle, WA

Dead zones off the coast of Oregon and in Hood Canal in Washington have been making headlines frequently in recent years. The culprit of these die-offs is hypoxia, or low oxygen, events in areas that have not historically had events of this magnitude. In this session, we will share the most up-to-date science from NANOOS scientists involved with understanding the processes behind these new trends, as well as the NANOOS hypoxia education efforts and products. Audience: grades 4-12, general public and families (smikulak@uw.edu)

***The Oregon Coast Education Program – Bringing the Coast into Your Classroom***

Tom Gaskill, Jenna Kulluson, Brianna Patterson, Zach Allen, South Slough National Estuarine Research Reserve, Charleston, OR (Session continues in Track D).

The Oregon Coast Education Program is designing curriculum modules to integrate watershed, estuary, and ocean concepts. The project provides access to outstanding activities, scientific data and resources to support meaningful field experiences for students. Participants will create a map using a sense of place and then explore the tools students and teachers have been using as they pilot the coastal education modules. Presenters will also share information about upcoming teacher training workshops. Audience: grades K-12 (tom.gaskill@state.or.us)

***Connecting Students, Science, and Stream Restoration***

Cara Ianni, Education Program Manager, Stilly-Snohomish Fisheries Enhancement Task Force, Everett, WA

Restoration Ecology for Young Stewards (REYS) is an inquiry- and project-based curriculum that increases environmental literacy by integrating stream restoration with science education. Through fieldtrips and classroom lessons, REYS teaches students to think critically about watershed ecology and challenges in salmon conservation. Students learn about riparian ecosystems and salmon by evaluating data and performing experiments. Following, students implement a riparian planting and perform student-driven research to support restoration efforts. We will outline methods, including demonstrations. Audience: grades 4-8 (cara@stillysnofish.org)

## Track D Sessions | Friday, 3:00 p.m. – 3:50 p.m.

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### ***Teaching in Place: Addressing Nature Deficit Disorder Through Community Partnerships***

Patrick Willis, OSU Extension Faculty, Washington County, OR

Almost every school in our country has a natural area or access to rich local cultural heritage nearby. These community resources serve as points of entry for student involvement through hands-on learning opportunities and also as concrete sources of curriculum. Place-based education is an ideal strategy providing opportunities for learners to become involved in authentic community work. Five case examples of placed-based programs will be discussed that provide insight to creating programs in any community. Audience: grades K-12, aquaria/museum/nature center (patrick.willis@oregonstate.edu)

### ***Teaching Science Content and Process through Classroom Experiments and Field Explorations***

Trish Mace, K-12 Coordinator, Oregon Institute of Marine Biology, Charleston, OR

I will present various in-class and in-field inquiry-based lessons using easy to obtain sandy beach organisms. We will learn a bit about the biology of beach hoppers, mole crabs and hermit crabs, and see how these widespread animals can be used to expose young students to the process of science. Curricula will be provided. Suggestions of how these lessons can be altered when these beach organisms are not available will also be presented. Audience: grades K-12 (tmace@uoregon.edu)

### ***Youth and Field Research – A WIN WIN***

Virginia Tafdaewether and Jack Chapman, Mid-Coast Watersheds Council, Newport, OR

Scientists need field data, students need hands on science field experiences that matter, community gets a more prepared workforce and completed service projects, youth get paid and/or students earn science credit, career related learning credit and work experience credit. How can you make this happen in your community? Audience: grades 4-12 (mcwceduc@midcoastpartners.org)

### ***The Oregon Coast Education Program – Bringing the Coast into Your Classroom*** (Continued from Track C)

## Track E Sessions | Saturday, 9:15 a.m. – 10:05 a.m.

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### ***Using Science, Technology, Engineering and Mathematics (STEM) to Explore Creeks and the Fish in Them***

Mark Gullickson, Grades 4-5 Teacher, Central Elementary School, Albany, OR

Meet Oregon's Technology Educator of the Year and learn how he engages creativity and higher-order thinking skills in students by providing opportunities to learn, explore, integrate, and collaboratively use a wide variety of technology inside and outside the classroom, regardless of student's first language, gender, economic background, or special needs. Among Mark's many honors, he was also selected as an Oregon "Promising Practices" best practices educator. Discover how Mark uses technology to help students meet Oregon grade level annual yearly progress scores in both math and reading each year, and how he ties in natural resource education to specific Department of Fish and Wildlife programs such as the Salmon-Trout Enhancement Program (STEP). Audience: upper elementary to middle school

***Better Catch: Sustainable Seafood Activities for Formal and Informal Educators***

Wade Janzen, Curriculum Coordinator, School Programs, Vancouver Aquarium, Vancouver, BC

This workshop will focus on interdisciplinary activities to effectively engage youth in the topics of stewardship, sustainability, seafood and human relationships with the sea. It will include small group activities and games; sourcing for low-cost props and videos; construction of mock fishing gear and foodstuffs; and additional strategies for community engagement. Participants will walk away with a comprehensive tool kit to implement in their own practice. Audience: grades 4-12 (wade.janzen@vanaqua.org)

***Open-source Curriculum: Creating an Inquiry-based Marine Science Education Program on the Olympic Coast*** | Kent Chapple, Marine Education Specialist, Olympic Park Institute, Port Angeles, WA

This past year Olympic Park Institute created a marine curriculum track for 3-5 day residential outdoor science education experiences in and around Olympic National Park. Learn more about the process of creating a new curriculum track from the gathering of information to the final evaluation. We will be sharing information about designing an inquiry-focused, place-based curriculum, training staff, building partnerships and running pilot programs. Participants will even have an opportunity for some hands-on learning! Audience: grades 4-12, general public, aquaria/museum/nature center (kchapple@naturebridge.org)

***Investigating Sociocultural Processes within the Context of Place-Based Learning***

Noreene M. Ignelzi, San Juan Nature Institute, Friday Harbor, WA

I will highlight the development of the Shaw Island Intertidal Field Guide, a collaborative effort between Shaw School and The San Juan Nature Institute, as a template that can be utilized in formal and informal learning venues. The evolution of this place-based, sociocultural tool became a vehicle for the growth of island stewardship. Students invited community participation and used this project as a means to involve the larger island community in conservation stewardship. Audience: grades K-8, aquaria/museum/nature center (zoologist714@aol.com)

**Track F Sessions | Saturday, 10:15 a.m. – 11:05 a.m.**

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***From Screens to Streams: Using Web-based Technology as a Classroom Bridge to the Outdoors***

Ryan Johnson and Traci Price, The Freshwater Trust, Portland, OR

Freshwater ecosystems are steadily degrading. 35% of rivers and streams in the U.S. fail to fully support aquatic life. Meanwhile, our youth are increasingly disconnected from the natural world, spending most of their time indoors and “plugged in” to a variety of electronic media. To meet these challenges head-on, The Freshwater Trust is developing StreamWebs™, a web-based tool designed to get students outside and engaged in authentic, locally-based freshwater research and restoration projects.

Audience: grades 4-12 (ryan@thefreshwatertrust.org)

***New Marine Fisheries Curriculum from the Northwest Center for Sustainable Resources***

Wynn W. Cudmore, Northwest Center for Sustainable Resources, Chemeketa Community College, Salem, OR

The Northwest Center for Sustainable Resources (NCSR) is a National Science Foundation-funded center for curriculum products supporting undergraduate natural resource programs. NCSR has recently completed a comprehensive series of curriculum modules that examines marine fisheries issues. The NCSR Marine Fisheries Series addresses the historical context, current status, causes for decline, management approaches and anticipated future of marine fisheries. Although primarily designed for college faculty, most materials can be easily adapted for high school and informal science education audiences.

Audience: grades 9-12, college, aquaria/museum/nature center (wynn.cudmore@chemeketa.edu)

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### ***Exploring Communities through Quests***

Cait Goodwin, Coordinator, Oregon Coast Quests, Oregon Sea Grant, Newport, OR

Oregon Coast Quests is a place-based education program that uses clue-directed hunts to encourage people to explore and discover the natural and cultural treasures in local communities. All that is needed to go on a Quest is a pencil, a set of directions, and a sense of adventure. Find out Quests are used by youth groups and families, and how to become a Quest-builder. Audience: grades 4-12, general public, families, aquaria/museum/nature center (cait.goodwin@oregonstate.edu)

### **Track G Sessions | Saturday, 11:15 a.m. – 12:05 p.m.**

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### ***Beyond the Beach: Creating a Sense of Wonder with Pier Peer Nighttime Adventures***

Gabrielle Byrne, Community Educator, People for Puget Sound, Olympia, WA

Learn about Pier Peer - an ongoing People For Puget Sound event in which the community is invited to a floating dock at night. Submersible lights are dropped into the water and, alongside a naturalist, people can collect swimming marine life and learn about them. These popular events are in their third year and participation has had to be capped to keep docks floating! Pier Peer is a great opportunity for the public experience the marine environment, but also to remind them of their unique responsibility to protect marine habitats. Audience: grades 4-12, adults and families (gbyrne@pugetsound.org)

### ***Strategies for Culturally Relevant Marine Education about the Changing Ocean***

Marilyn Sigman, Program Manager, Alaska COSEE, and Nora Deans, Outreach Coordinator, North Pacific Research Board, Anchorage, AK

Recognition is growing about that traditional and local knowledge is important to polar ocean and climate science research and that “place-based” knowledge and a “sense of place” are important outcomes of “Leave No Child Inside.” Learn how COSEE Alaska is pursuing its theme of People, Ocean, and Climate Change through ocean science fairs, professional development workshops for teachers and scientists, and multi-media resources that combine and integrate western science, Alaska Native, and local knowledge. Audience: grades 4-12, aquaria/museum/nature center (msigman@alaska.edu) (nora.deans@nprb.org)

### ***Salmon Watch and Student Stewardship Projects***

Kim Carson, The Freshwater Trust, Corvallis, OR

Watersheds are an integrated context for interdisciplinary learning. Salmon Watch, the Freshwater Trust’s award-winning education program enables students to witness spawning salmon and gain hands-on streamside education, learning the value of native wild fish, watershed conservation and environmental stewardship. An offshoot of Salmon Watch, the Student Stewardship Program guides students through the development of project ideas that address local issues related to watershed health, ranging from scientific investigations to creative arts explorations. Audience: grades 4-12 (kim@thefreshwatertrust.org)

## *A Special Thank You to the Following Contributors:*

*Honeyman State Park (Shirley Stentz and Grant Christensen)*

*Florence Salmon-Trout Enhancement Program (STEP), Ron Caputo, Jack Armer, and their merry band of fish heads (Lake Woahink BBQ)*

*South Slough National Estuarine Research Reserve (Joy Tally and Tom Gaskill)*

*Red Rose Catering, Florence, Toni Evans, Proprietor (Good Food!)*

*Florence Events Center, Kevin Rhodes, Director; Lis Farm, Community Outreach Coordinator, Bob Collinge, Operations Coordinator*

*Oregon Sea Grant*

*COSEE Pacific Partnerships (Center for Ocean Sciences Education Excellence)  
OIMB, Charleston*

*Hatfield Marine Science Center, Newport*

*Rogue Brewery, Newport*

*Three Rivers Casino, Florence*

*Marine Discovery Tours, Newport*

*Oregon State University Extension – Washington County*

### **AND, NOWHERE NEAR LEAST...**

*Our Wonderful Plenary Session Presenters who inspired us all.*

*Our Fantastic Concurrent Session Presenters who shared their ideas and insights with us.*

*Our Field Trip Leaders and drivers who did not lead us astray, and delivered us to Oregon's central coast beauty.*

*Everyone who brought auction items to help NAME continue to support local innovative education projects through NAME mini-grants and scholarships.*

*Everyone who shared themselves with us at SeaFaire, and brought their photos for our first NAME Annual Photo Contest.*

