

Program for 2006 PERS meeting

Thursday, 16 February

1900 – 2130 President's Welcome followed by Evening Social and a special surprise event

Friday, 17 February

0830 – 0840 Welcome
Ken Sebens; Director, Friday Harbor Laboratory

0840 – 0945 *The loss of nature and the nature of the loss: sense of place Biophilia and the importance of education*
Paul Dayton; Professor, Scripps Institution of Oceanography

0945 – 1000 Break

1000 – 1200 **Oral Session I** (15 minutes each)

Estimating phytoplankton advection at Lofall, Hood Canal using an interdisciplinary technique
Eva Dusek; University of Washington

Results from the regional Spartina dispersal study (September 2004 – January 2006)
Vanessa M. Howard and Mark Sytsma; Portland State University

Salt marsh habitat assessment and restoration in the Gorge Waterway and Portage Inlet
Sarah E. Pearce and Rosaline R. Canessa; University of Victoria

Where the wild fish are: Natural isotope indicators of juvenile Chinook life histories in the Columbia River estuary
Greer Anderson and Charles "Si" Simenstad; University of Washington

Biological invasion threatens habitat essential for young-of-year rockfish in a large urban estuary
Jessica Hayden-Spear, Terrie Klinger, Kevin Britton-Simmons, and Don Gunderson; University of Washington

Characterizing restoration trajectories through food web linkages in San Francisco Bay's estuarine marshes
Emily R. Howe and Charles "Si" Simenstad; University of Washington

Ecosystem-based marine conservation planning in the San Juan Islands
Kirsten Evans and Jody Kennedy; University of Washington and San Juan
County Marine Resources Committee

*An ethnobotanical study of the Kwakwaka'wakw traditional harvesting of
eelgrass, Zostera marina L.; Zosteraceae*
Severn Cullis-Suzuki¹, Chief Adam Dick (Kwaxsistala)², Daisy Sewid-Smith
(Mayanilth)², Nancy Turner³, and Sandy Wyllie-Echeverria⁴; ¹University of
Victoria, ²Kwakwaka'wakw Nation, ³University of Washington

1215 – 1315 Lunch

1315 – 1345 Business Meeting

1400 – 1600 **Poster Session I** (begins with 15 minute overview)

*Using historical data to explore trends in floating kelp along the Strait of Juan
de Fuca and outer coast of Washington State*
Helen Berry, Pete Dowty, Philip Bloch, and Tom Mumford; Washington State
Department of Natural Resources

Plankton dynamics of the lower Columbia River estuary
Rian Hooff¹, Stephen M Bollens¹, Gretchen Rollwagen Bollens¹, Angela
Gibson¹, Ian McComas¹, Olga Kalata¹, and Curtis Roegner²; ¹Washington State
University Vancouver, ²NOAA Fisheries

*Water quality properties of south Puget Sound basin: Spatial and annual
observations 1997-2004*
Julia K. Bos and S.A. Albertson; Washington State Department. of Ecology

*Assessment of seed collection as a method of Zostera marina restoration in
small costal embayments in San Juan County*
Galen Boydston, Emily Bush, Tristan Delahunt, Camilla Loyd, Rebecca Wyllie-
Echeverria, and Tessa Wyllie-Echeverria; Waldron Island Alternative High
School

How mud shrimp Upogebia pugettensis (Dana, 1852) got big new bumps
J.W. Chapman¹, Brett R. Dumbauld², Lee McCoy², Andrew Smith³, John C.
Markham⁴ and Gyo Itani⁵; ¹Oregon State University, ²U.S. Dept. of Agriculture,
³University of Wisconsin-Stout, ⁴Arch Cape Marine Laboratory, ⁵Kochi
University

*Recent results from annual monitoring of eelgrass (Zostera marina) area in
greater Puget Sound*
Pete Dowty¹, Blain Reeves¹, Helen Berry¹, Mike Hannam¹, Tom Mumford¹ and
Sandy Wyllie-Echeverria²; ¹Washington State Department of Natural Resources,
²University of Washington

The interaction of oyster aquaculture and burrowing shrimp in Pacific Northwest coastal estuaries: Spatial and temporal scales

Brett R Dumbauld; U.S. Department of Agriculture

A conceptual model of depositional, rather than erosional, tidal channel development in the rapidly prograding Skagit River Delta (Washington, USA)

W. Gregory Hood; Skagit River System Cooperative

Probabilistic survey of fish tissue contamination in west coast estuaries and coastal waters: Results from the National Coastal Assessment 1999-2003

Janet O. Lamberson, Henry Lee II, and Walter G. Nelson; US Environmental Protection Agency

Enhancement of damaged seagrass habitat: A case study in the potential application of Buoy Deployed Seeding

Jennifer Leach¹, Chris Fairbanks², Sandy Wyllie-Echeverria¹, and Chris Pickerell³; ¹University of Washington, ²Fairbanks Environmental Services, ³Cornell Cooperative Extension

Development of a fish-based index of biotic integrity for eelgrass ecosystems of Pacific Rim, Gwaii Haanas and Gulf Islands National Park Reserves

Clifford K. Robinson and Guy Martel; Parks Canada Agency

Protists in a temperate estuary: Diversity, grazing and consumption by Metazoans

Gretchen Rollwagen-Bollens¹, Scott Gifford², Angela Gibson¹, and Stephen Bollens¹; ¹Washington State University, ²Romberg Tiburon Center for Environmental Studies

Climate-related factors of temperature and sea level affect eelgrass in the Pacific Northwest

R.M. Thom, Amy B. Borde, John A. Southard, and Susan L. Sargeant; Battelle Marine Sciences Laboratory

*Documenting Pacific sand lance (*Ammodytes hexapterus*) spawning habitat in Baynes Sound, East Vancouver Island, British Columbia, and the potential interactions with intertidal shellfish aquaculture*

Pam Thuringer; Archipelago Marine Research Ltd.

The sounds of data: A technique to detect variation

Sandy Wyllie-Echeverria¹, B. Odum², Tina Wyllie-Echeverria³, and Tessa Wyllie-Echeverria⁴; ¹University of Washington ²P.O. Box 832, Shaw Island, WA, ³P.O. Box 111, Shaw Island, WA, ⁴Griffin Bay School

*An ecological analysis of the surfgrass *Phyllospadix scouleri* in the San Juan Archipelago*

Victoria Wyllie-Echeverria¹, Sandy Wyllie-Echeverria² and Kern Ewing²;
¹University of Victoria, ²University of Washington

1615 – 1720 *Toward a Sea Ethic*

Dorinda Dallmeyer, Director, Environmental Ethics Certificate Program;
University of Georgia

1730 – 1930 **Poster Session II** (begins with 15 minute overview)

The Boundaries Project: Mapping Washington's shoreline for public accessibility and public ownership

Jessica A. Archer and Ryan M. McEliece; Washington State Department of Ecology

A comparison of coastal wetland inventories of British Columbia

N. Borecky¹, John Harper¹, Mary Morris², Norm Sloan³, Patrick Bartier³, Todd Golumbia⁴, and Kathleen Moore⁵; ¹Coastal & Ocean Resources Inc.,
²Archipelago Marine Research Ltd., ³Gwaii Haanas National Park Reserve,
⁴Gulf Islands National Park Reserve, ⁵Canadian Wildlife Service

Prioritizing tidal wetland conservation and restoration in midsized estuaries of Oregon, U.S.A.

Laura S. Brophy; Green Point Consulting

How does geoduck aquaculture affect eelgrass in south Puget Sound?

Carrie A. Craig, Kirsten Rowell, and Jennifer L. Ruesink; University of Washington

Measuring the accuracy of seagrass maps produced from video and side scan sonar imagery: Preliminary results for two sites in Yaquina Estuary, Oregon

DeWitt, Theodore H.¹, Andrew Stevens², and Alison Hyde²; ¹US Environmental Protection Agency, ²Oregon State University

Evaluating cumulative ecosystem response to restoration projects in the Columbia River estuary: 2005 field studies

Heida L. Diefenderfer,¹ G. Curtis Roegner², Ronald M. Thom¹, Allan H. Whiting³, Amy B. Borde¹, Earl M. Dawley², Lee M. Miller¹, Gary E. Johnson¹, Ian A. Sinks⁴ and Blaine D. Ebberts⁵; ¹Pacific Northwest National Laboratory, ²NOAA Fisheries, ³Columbia River Estuary Study Taskforce, ⁴Columbia Land Trust; ⁵U.S. Army Corps of Engineers.

The Green Shores Project – A voluntary assessment and ratings program to facilitate sustainable approaches to coastal development

Brian Emmett¹, John Harper², John Readshaw³ and Gretchen Harlow⁴;

¹Archipelago Marine Research Ltd., ²Coastal and Oceans Resources Inc.,

³Sandwell Inc., ⁴The Canadian Wildlife Service

Sawmills, sulfides, and seagrasses: The environmental legacy of historic Tacoma lumber mills and its implications for seagrass restoration

Erin Spear¹, Joel Elliott¹, and Sandy Wyllie-Echeverria²; ¹University of Puget Sound, ²University of Washington

The San Juan County Marine Stewardship Area: Developing a voluntary marine management regime that recognizes the social, economic and ecological values of county water

J. Kennedy and Mary Masters; San Juan County Marine Resource Committee

The Nuu-chah-nulth root garden research project, Clayoquot Sound, Vancouver Island

J.C. Pukonen¹, E. Richard Atleo², and Nancy J. Turner¹; ¹University of Victoria, ²University of Manitoba

Comparison of two methods of rogue creosote log removal in Padilla Bay, Washington

Sharon R. Riggs and Mary Anderson; Washington State Department of Ecology

Coastal homogenization through oyster introductions: Causes and consequences

J.L. Ruesink and Alan C. Trimble; University of Washington

*Assessment of eelgrass (*Zostera marina*) loss in the San Juan Archipelago*

T. Whitman¹, J. Slocumb¹, S. Buffum-Field¹, S. Wyllie-Echeverria², E. Grossman³, R. Takesue³, T. Mumford⁴, H. Berry⁴, J. Newton⁵, V. Wyllie-Echeverria⁶, and A. Boettcher⁷; ¹Friends of the San Juans, ²University of Washington, ³U.S. Geological Survey, ⁴Washington State Department of Natural Resources, ⁵University of Washington, ⁶University of Washington Friday Harbor Laboratory, ⁷University of South Alabama.

Communities connecting to place: A strategy for eelgrass restoration in British Columbia

Nikki Wright; Seagrass Conservation Working Group

Educational outreach for young boaters

Tessa Wyllie-Echeverria¹ and Rebecca Mason²; ¹Griffin Bay School, ²Spring Street International School

1945 – 2100

Banquet, Friday Harbor Laboratory Dinning Hall

Saturday, 18 February

0830 – 1030 **Oral Session II** (15 minutes each)

Restoration of seagrass communities using seeds: Conservation issues
Jesse J. Campbell and Sandy Wyllie-Echeverria; College of William and Mary,
Gloucester, University of Washington

*Assessing the ecological connectivity of eelgrass habitats and protected areas:
A tail of the population genetic structure of the bay pipefish, *Syngnathus
leptorhynchus*.*
Ramona C. de Graaf; University of British Columbia

*Japanese eelgrass, *Zostera japonica*, in Oregon estuaries*
Chana M. Dudoit and Daniel O'Leary; Oregon State University

*The effects of black brant herbivory and fecal addition on the animal community
within an eelgrass bed of Humboldt Bay, CA*
Adam J. Frimodig, Susannah L. Ferson, Frank J. Shaughnessy and Jeffrey M.
Black; Humboldt State University

*Assessing eelgrass transplants in the Squamish Estuary, British Columbia: A
case study for community-based coastal restoration*
Margot Hessing-Lewis¹, Edith Tobe², and Cynthia Durance³; ¹ Oregon State
University, ²Squamish River Watershed Society, ³Precision Identification

*Science and management of the introduced seagrass *Zostera japonica* in the
Pacific Northwest*
Deborah J. Shafer¹ and Sandy Wyllie-Echeverria²; ¹University of South
Alabama, ²University of Washington

*The effect of nutrient limitation on eelgrass (*Zostera marina* L.) shoot density in
Humboldt Bay, California*
Ginger Tennant¹, Frank J. Shaughnessy¹, and Susan Schlosser²; ¹Humboldt State
University, ²University of California Sea Grant

*Assessing the importance of early life history stages of eelgrass (*Zostera marina*
L.) in response to aquaculture disturbance*
Lorena Wischart and Sally Hacker; Oregon State University

1030 – 1045 **Break**

1045 – 1200 **Poster Session III** (begins with 15 minute overview)

Depth profiles of Zostera marina throughout the greater Puget Sound: Results from 2002-2004 monitoring data

J.R. Selleck III, Helen Berry*, and Pete Dowty; Washington State Department of Natural Resources

Evaluating factors contributing to tidal wetland community distribution in the Columbia River estuary

Amy B. Borde¹, Heida L. Diefenderfer¹, Kathryn L. Sobocinski¹, Ronald M. Thom¹, Shon A. Zimmerman¹, Allan H. Whiting², Lucinda Tear³, and Blaine D. Ebberts⁴; ¹Pacific Northwest National Laboratory, ² Columbia River Estuary Study Taskforce, ³Independent Consultant, ⁴ US Army Corps of Engineers

The interactive effects of propagule pressure and disturbance regulate invasion by the Japanese seaweed Sargassum muticum

Kevin Britton-Simmons; University of Washington

Distribution of eelgrasses and macroalgae in Padilla Bay, Washington in 1989, 2000, and 2004

Douglas A Bulthuis and Suzanne Shull; Washington Department of Ecology

Invasive tunicates in Puget Sound: An early warning system

Andrea Copping and Simon Geerlofs; University of Washington

Demographic similarities and differences between Zostera japonica in its native (Korea) and introduced (Willapa Bay) habitats

Stacey L. DeAmicis¹, Jae-Sang Hong² and Jennifer L. Ruesink¹; ¹University of Washington, ²Inha University

Web-based ShoreZone mapping and imagery: Gulf Islands National Park

John R. Harper, Bill Henwood, Todd Golumbia, Brad Mason, Mary Morris and Tara Sharma; Coastal & Ocean Resources Inc., Parks Canada, Fisheries and Oceans Canada, Archipelago Marine Research Ltd. and Parks Canada

Structural complexity of native, naturalized, and invasive ecosystem engineers influence habitat use by subadult Dungeness crab (Cancer magister).

Kirsten H. Holsman, P. Sean McDonald, and David A. Armstrong; University of Washington

Energetic trade-offs among potential habitats of an invasive crab: Reconciling a model with empirical results

P. Sean McDonald¹, K.K. Holsman¹, D.A. Beauchamp¹, B.R. Dumbauld², and D.A. Armstrong¹; ¹University of Washington, ²USDA/ARS

Invasive Spartina patens at Dosewallips State Park (WA, USA): An eradication success story ... ?

David H. Milne; Evergreen State College

Effects of temperature on growth of the introduced seagrass Zostera japonica from two Pacific Northwest Estuaries

Deborah J. Shafer¹ and Sandy Wyllie-Echeverria²; ¹University of South Alabama, ²University of Washington

The use of high resolution remotely sensed imagery in conjunction with field surveys to determine vegetation communities in the tidal freshwater reach of the Columbia River

Kathryn L. Sobocinski , Lee M. Miller and Amy B. Borde; Battelle Marine Sciences Laboratory

Factors preventing the recovery of Ostreola conchaphila in Washington

A. Trimble and Jennifer Ruesink; University of Washington

The effects of the invasive seagrass Zostera japonica on ecosystem processes

Lisa C. Turnbull and Scott D. Bridgham; University of Oregon

Factors influencing the germination of eelgrass (Zostera marina L.): Salinity, temperature, location, seed color and sulfide concentrations

J. Wilkerson¹, Ben Lee¹, Joel Elliott¹, and Sandy Wyllie-Echeverria²; ¹University of Puget Sound, ²University of Washington

Will the European green crab persist in Pacific Northwest estuaries?

Sylvia Behrens Yamada¹, Andrea Randall² and Graham E. Gillespie³; ¹Oregon State University, ²Chinook, WA, ³Fisheries & Oceans Canada

Dissolved sulfides stress on eelgrass Zostera marina in Yaquina Bay estuary, Oregon

David R Young¹ and Richard S. Caldwell²; ¹U.S. Environmental Protection Agency, ²Northwestern Aquatic Science

1215 – 1400 Lunch and Student Awards

1400 –1630 Informal Discussion and Networking

MEETING ADJOURNED