

Vita

Charles A. SIMENSTAD

Position-Affiliation Address

Research Professor
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Other Information

Birthdate; 22 February 1947
Birthplace; Yakima, Washington, USA

Education

B.S., 1969, Fisheries, University of Washington
M.S., 1971, Fisheries, University of Washington
Thesis title: The feeding ecology of the rock greenling, *Hexagrammos lagocephalus*, in the inshore waters of Amchitka Island, Alaska.

Positions Held

Research Professor, School Aquatic & Fishery Sciences, University of Washington, 2006-present
Research Associate Professor, School Aquatic & Fishery Sciences, University of Washington, 2001-2006
Fisheries Biologist II-Senior Fisheries Biologist, Fisheries Research Institute, University of Washington, 1971-2001; Coordinator, Wetland Ecosystem Team, August 1990-present

Honors and Positions

1993 University of Washington, PSO Award for Excellence
1994 Fellow, American Association for the Advancement of Science
1998-present Editorial Board--Associate Editor, Habitat Restoration and Wetlands, *Estuaries & Coasts*
2008-present Editorial Board, *San Francisco Estuary & Watershed Science*
2008-present Editorial Board, *Revue Paralia*
2009 2009 NOAA-AFS Nancy Foster Award for Habitat Conservation

Professional Membership

American Association for the Advancement of Science (Fellow)	Man and Water Network
American Institute of Fisheries Research Biologists	Pacific Estuarine Research Society
Ecological Society of America	Sigma Xi
Estuarine and Coastal Sciences Association	Society for Ecological Restoration
Coastal and Estuarine Research Federation	Society of Wetland Scientists
	Western Society of Naturalists

Research Interests-Expertise

- Estuarine and nearshore marine ecosystem structure and dynamics, focusing on trophic interactions, especially those of detritus-based food webs; use of stable isotopes to trace trophic pathways
- Landscape ecology of coastal wetlands; influence of landscape structure on fish behavior and ecology
- Coastal wetland restoration ecology; planning and functional assessment of restored, created and enhanced wetlands
- Estuarine ecology and life history diversity of juvenile salmonids, and ecology of their epibenthic (crustacea) prey such as harpacticoid copepods and gammarid amphipods
- Coastal ecosystem management, with emphasis on watershed influences on estuarine processes
- Community ecology of nearshore marine fish assemblages of the North Pacific, especially related to structuring influence of predators

Principal Current Research Activities

- Developing a Nearshore Assessment Tool for Hood Canal*; September 2011-June 2012; Principal Investigator; AECOM/US Navy; provide expert advice to AECOM and the US Navy-NAVFAC to develop a Nearshore Assessment Tool to accurately and precisely estimate the functions and values of the estuarine environment that could be affected by nearshore projects for application in Hood Canal of Puget Sound, WA, as well as provide a science-based screening process to aid in the selection of appropriate mitigation for NAVFAC projects; \$15,000.
- The Contribution of Tidal Fluvial Habitats in the Columbia River Estuary to the Recovery of Diverse Salmon ESUs*; October 2010– September 2015; Principal Investigator; NOAA; investigate estuary-wide (river mouth to Bonneville Dam) patterns of juvenile salmon genetic stock distribution and life history, emphasizing poorly studied tidal-fresh reaches and habitat types of the Columbia River estuary; \$832,025
- Spatial Subsidy and Trophic Connectivity between Nearshore Macrophyte Production and Subtidal Food Webs*; December 2009 – November 2012; National Science Foundation; Co-Principal Investigator w/ D. Duggins, K. Sebens and K. Britton-Simmons, UW/FHL, and J. Eckman, ONR; descriptive, experimental and geochemical evaluations of the source and extent of organic matter subsidies of subtidal food webs by nearshore kelp production; \$893,463.
- BREACH III: Evaluating and Predicting 'Restoration Thresholds' in Evolving Freshwater-Tidal Marshes: University of Washington Tasks*; December 2009 – June 2013; Principal Investigator; CALFED (through US Fish and Wildlife Service); evaluating trajectories and predicting landscape endpoints of passive restoration at Liberty Island, Sacramento River delta; \$530,000
- Ecological Responses to Russian River Estuary Entrance Alternatives*; June 2009 – June 2012; Principal Investigator; Sonoma County Water Agency; develop and implement study to evaluate effects on juvenile salmonids and their prey resources under different conditions of Russian River estuary mouth channel open/closure; \$251,763
- Comprehensive Salmon Habitat Restoration Planning of the Columbia River Estuary: Phase II*; December 2008 – August 2012; Principal Investigator; PC Trask & Assoc., developing a framework for strategic restoration and preservation of juvenile salmon habitat in the Columbia River estuary; \$130,000 (to date)
- Development and Testing of a Comprehensive Research Plan to Assess Juvenile Salmon Life History and Ecology in the Fox River Estuary*; October 2008 – June 2012; Principal Investigator; Alaska Department of Fish and Game; design sampling plan and conduct preliminary studies to assess juvenile salmon utilization of the Fox River delta; \$60,500
- Completion of Columbia River Estuary Ecosystem Classification and Guidance and Support for the 2010 Landcover Dataset*; September 2008 – December 2011; Principal Investigator; Bonneville Power Administration (through Lower Columbia River Estuary Partnership); continued studies to develop a Columbia River Estuary Ecosystem Classification and to complete a community characterization (profile) of tidal forested wetlands in the Columbia River estuary; \$253,077
- Variation in Food Web Connectivity across Intertidal Gradients in Embayment and Fluvially-Dominated Estuaries*; May 2008 – March 2013; Principal Investigator; National Science Foundation; evaluate the length and strength of intertidal food webs under differing estuarine-fluvial forcing; \$460,000
- Puget Sound Nearshore Ecosystem Restoration Program*; October 2004 – June 2012; Principal Investigator; US Army Corps of Engineers and Washington State Department of Fish and Wildlife; participate in and serve as Co-Chair of PSNERP Nearshore Science Team; \$749,276 (to date).
- Shellfish Kinetics* (sub-project of larger Pacific Northwest Center for Human Health & Ocean Studies [H2O Center]); July 2004 – present; Principal Investigator; National Science Foundation/National Institute of Environmental Health; assess intertidal macroinvertebrate assemblage filtration on phytoplankton that can produce toxin (domoic acid); ~\$120,000

Publications

Peer-Reviewed Journal articles:

- Isakson, J. S., C. A. Simenstad, and R. L. Burgner. 1971. Fish communities and food chains in the Amchitka area. *BioScience* **21**:666-670.
- Simenstad, C. A., J. A. Estes, and K. W. Kenyon. 1978. Aleuts, sea otters, and alternate stable-state communities. *Science* **200**:403-411.
- Volk, E. C., R. C. Wissmar, C. A. Simenstad, and D. M. Eggers. 1984. The relationship between otolith microstructure and the growth of juvenile chum salmon under different prey conditions. *Can. J. Fish. Aquat. Sci.* **41**:126-133.
- Simenstad, C. A., and J. R. Cordell. 1985. Structural dynamics of epibenthic zooplankton in the Columbia River Delta. *Verh. Internat. Verein. Limnol.* **22**:2173-2182.
- Simenstad, C. A., and R. C. Wissmar. 1985. $\delta^{13}\text{C}$ evidence of the origins and fates of organic carbon in estuarine and nearshore marine food webs. *Mar. Ecol.-Prog. Ser.* **22**:141-152.
- Wissmar, R. C., and C. A. Simenstad. 1988. Energetic constraints of juvenile chum salmon (*Oncorhynchus keta*) migrating in estuaries. *Can. J. Fish. Aquat. Sci.* **45**:1555-1560.
- Duggins, D. O., C. A. Simenstad, and J. A. Estes. 1989. Magnification of secondary production by kelp detritus in coastal marine ecosystems. *Science* **245**:170-174.
- Shreffler, D. K., C. A. Simenstad, and R. M. Thom. 1990. Temporary residence by juvenile salmon of a restored estuarine wetland. *Can. J. Fish. Aquat. Sci.* **47**:2079-2084.
- Jones, K. K., C. A. Simenstad, D. L. Higley, and D. L. Bottom. 1990. Structure, distribution, and standing crop of benthos, epibenthos, and plankton in the Columbia River estuary. *Prog. Oceanogr.* **25**:211-242.
- Sherwood, C. R., D. A. Jay, R. B. Harvey, P. Hamilton, and C. A. Simenstad. 1990. Historical Changes in the Columbia River Estuary. *Prog. Oceanogr.* **25**:299-357.
- Simenstad, C. A., C. D. McIntire, and L. F. Small. 1990. Consumption processes and food web structure in the Columbia River estuary. *Prog. Oceanogr.* **25**:271-298.
- Simenstad, C. A., L. F. Small, C. D. McIntire, D. A. Jay, and C. R. Sherwood. 1990. An Introduction to the Columbia River Estuary: Brief History, Prior Studies, and the Role of the CREDDP Studies. *Prog. Oceanogr.* **25**:1-14.
- Cordell, J. R., C. A. Simenstad, and C. A. Morgan. 1992. Establishment of the Asian calanoid copepod *Pseudodiaptomus inopinatus* in the Columbia River estuary. *J. Crustacean Biol.* **12**:260-269.
- Cordell, J. R., C. A. Simenstad, and C. A. Morgan. 1992. The Asian calanoid copepod *Pseudodiaptomus inopinatus* in Pacific Northwest rivers--biology of an invasive zooplankter. *N.W. Environ. J.* **8**:164-165.
- Shreffler, D. K., C. A. Simenstad, and R. M. Thom. 1992. Juvenile salmon foraging in a restored estuarine wetland. *Estuaries* **15**:204-213.
- Simenstad, C. A., and J. R. Cordell. 1992. Species and assemblage diversity of nearshore epibenthic harpacticoid copepods--natural and human influences. *N.W. Environ. J.* **8**:154-155.
- Weitkamp, L. A., R. C. Wissmar, C. A. Simenstad, K. L. Fresh, and J. G. Odell. 1992. Gray whales foraging on ghost shrimp (*Callinassa californiensis*) in littoral sand flats of Puget Sound, U.S.A. *Can. J. Zool.* **70**: 2275-2280.
- LMER Coordinating Committee (Boynton, W., J. T. Hollibaugh, D. Jay, M. Kemp, J. Kremer, C. Simenstad, S. V. Smith, and I. Valiela). 1992. Understanding changes in coastal environments: the Land Margin Ecosystems Research Program. *EOS* **73**:481-485.
- Simenstad, C. A., D. O. Duggins, and P. D. Quay. 1993. High turnover of inorganic carbon in kelp habitats as a cause of $\delta^{13}\text{C}$ variability in marine food webs. *Mar. Biol.* **116**: 147-160.

- Hassett, R. P., D. O. Duggins, and C. A. Simenstad. 1993. Egg production rates of the neritic marine copepod *Acartia tumida* Willey in the Aleutian Archipelago. *Polar Biol.* **13**: 515-523.
- Ruckelshaus, M. H., R. C. Wissmar, and C. A. Simenstad. 1994. Scale of habitat quality relevant to mussel growth in a well-mixed, temperate estuary. *Estuaries* **17**: 898-912.
- Boesch, D. F., M. N. Josselyn, A. J. Mehta, J. T. Morris, W. K. Nuttle, C. A. Simenstad, and D. J. P. Swift. 1994. Scientific assessment of coastal wetland loss, restoration and management in Louisiana. *J. Coast. Res.*, Spec. Issue **20**. 103 pp.
- Simenstad, C.A., D.J. Reed, D.A. Jay, J.A. Baross, F.G. Prahl and L.F. Small. 1994a. Land-margin ecosystem research in the Columbia River estuary: investigations of the couplings between physical and ecological processes within estuarine turbidity maxima. Pp. 437-444 in K. Dyer & B. Orth (eds.), *Changing Particle Flux in Estuaries: implications from science to management* (ECSA22/ERF Symposium, Plymouth, September 1992), Olsen & Olsen Press, Fredensborg.
- Simenstad, C.A., C.A. Morgan, J.R. Cordell, and J.A. Baross. 1994b. Flux, passive retention, and active residence of zooplankton in Columbia River estuarine turbidity maxima. Pp. 473-482 in K. Dyer & B. Orth (eds.), *Changing Particle Flux in Estuaries: implications from science to management* (ECSA22/ERF Symposium, Plymouth, September 1992), Olsen & Olsen Press, Fredensborg.
- Baross, J. A., B. Crump and C. A. Simenstad. 1994. Elevated microbial loop activities in the Columbia River estuarine turbidity maxima. Pp. 459-464 in K. Dyer & B. Orth (eds.), *Changing Particle Flux in Estuaries: implications from science to management* (ECSA22/ERF Symposium, Plymouth, September 1992), Olsen & Olsen Press, Fredensborg.
- Simenstad, C. A., and R. M. Thom. 1995. *Spartina alterniflora* as an invasive halophyte in Pacific Northwest estuaries. *Hortus Northwest* **6**:9-12,38-40.
- Simenstad, C. A., and K. L. Fresh. 1995. Influence of intertidal aquaculture on benthic communities in Pacific Northwest estuaries: scales of disturbance. *Estuaries* **18**:43-70.
- Jay, D. A., and C. A. Simenstad. 1996. Downstream effects of water withdrawal in a small, West Coast river basin: erosion and deposition on the Skokomish River delta. *Estuaries* **19**: 501-517.
- Simenstad, C. A., and R. M. Thom. 1996. Assessing functional equivalency of habitat and food web support in a restored estuarine wetland. *Ecol. Appl.* **6**:38-56.
- Paveglio, F. L., K. M. Kilbride, C. E. Grue, C. A. Simenstad, and K. L. Fresh. 1996. Use of Rodeo[®] and X-77[®] Spreader to control smooth cordgrass (*Spartina alterniflora*) in a southwestern Washington estuary: I. Environmental fate. *Environ. Toxicol. Chem.* **15**: 961-968.
- Simenstad, C. A., J. R. Cordell, L. Tear, L. A. Weitkamp, F. L. Paveglio, K. M. Kilbride, K. L. Fresh and C. E. Grue. 1996. Use of Rodeo[®] and X-77[®] Spreader to control smooth cordgrass (*Spartina alterniflora*) in a southwestern Washington estuary: II. Effects on benthic microflora and invertebrates. *Environmental Toxicology and Chemistry* **15**: 969-978.
- Crump, B. C., J. A. Baross and C. A. Simenstad. 1997. Dominance of particle-attached bacteria in the Columbia River estuary, USA. *Aquat. Microb. Ecol.* **14**: 7-18.
- Morgan, C. A., J. R. Cordell, and C. A. Simenstad. 1997. Sink or swim? Copepod population maintenance in the Columbia River estuarine turbidity maxima region. *Mar. Biol.* **129**:309-317.
- Miller, J. A., and C. A. Simenstad. 1997. A comparative assessment of a natural and created estuarine slough as rearing habitat for juvenile chinook and coho salmon. *Estuaries* **20**:792-806.
- Prahl, F. P., L. F. Small, B. Sullivan, J. Cordell, C. A. Simenstad, B. C. Crump, and J. A. Baross. 1998. Biogeochemical gradients in the lower Columbia River. *Hydrobiologia* **361**:37-52.
- Feist, B. E., and C. A. Simenstad. 2000. Expansion rates and recruitment frequency of exotic smooth cordgrass, *Spartina alterniflora* (Loisel) colonizing unvegetated littoral flats in Willapa Bay, Washington. *Estuaries* **23**:267-274.

- Simenstad, C. A., and J. R. Cordell. 2000. Ecological assessment criteria for restoring anadromous salmonid habitat in Pacific Northwest estuaries. *Ecol. Engineering* **15**:283-302.
- Simenstad, C. A., and R. S. Warren. 2002. Introduction to the special issue on dike/levee breach restoration of coastal marshes. *Restoration Ecology* **10**: i.
- Gray, A., C. A. Simenstad, D. L. Bottom and T. J. Cornwell. 2002. Contrasting functional performance of juvenile salmon in recovering wetlands of the Salmon River estuary, Oregon USA. *Restor. Ecol.* **10**: 514-526.
- Toft, J. D., C. A. Simenstad, J. R. Cordell, and L. F. Grimaldo. 2003. The effects of introduced water hyacinth on habitat structure, invertebrate assemblages, and fish diets. *Estuaries* **26**: 746-758.
- Garono, R. J., C. A. Simenstad, R. Robinson and H. Ripley. 2004. Using high spatial resolution hyperspectral imagery to map intertidal habitat structure in Hood Canal, WA (USA). *Can. J. Remote. Sensing* **30**:54-63.
- Lubetkin, S. C., and C. A. Simenstad. 2004. Two multi-source mixing models using conservative tracers to estimate food web sources and pathways. *J. Appl. Ecol.* **41**: 996-1008.
- Bottom, D. L., K. K. Jones, T. J. Cornwell, A. Gray, and C. A. Simenstad. 2005. Patterns of Chinook salmon migration and residency in the Salmon River Estuary (Oregon). *Est. Coastal Shelf Sci.* **1**:79-93.
- Dean, A. F., S. M. Bollens, C. A. Simenstad and J. R. Cordell. 2005. Marshes as sources or sinks of an estuarine mysid: demographic patterns and tidal flux of *Neomysis kadiakensis* at China Camp marsh, San Francisco estuary. *Est., Coast. Shelf Sci.* **63**: 1-11.
- Orth, K., J.W. Day, D.F. Boesch, E.J. Clairain, W.J. Mitsch, L. Shabman, C. Simenstad, B. Streever, C. Watson, J. Wells and D. Whigham. 2005. Lessons learned: An assessment of the effectiveness of a National Technical Review Committee for oversight of the plan for the restoration of the Mississippi Delta. *Ecol. Engineer.* **25**:153-167.
- Simenstad, C. A., C. Tanner, J. Cordell, C. Crandell and J. White. 2005. Challenges of habitat restoration in a heavily urbanized estuary: Evaluating the investment. *J. Coast. Res.***40**: 6-23.
- Boström, C., E. L. Jackson and C. A. Simenstad. 2006. Seagrass landscapes and their effects on associated fauna: A review. *Est. Coast. Shelf Sci.* **68**: 383-403.
- Reisewitz, S. E., J. A. Estes, and C. A. Simenstad. 2006. Indirect food web interactions: sea otters and kelp forest fishes in the Aleutian archipelago. *Oecologia* **146**:623-631.
- Simenstad, C. A., D. Reed, and M. Ford. 2006. When is restoration not? Incorporating landscape-scale processes to restore self-sustaining ecosystems in coastal wetland restoration. *Ecol. Engineer.* **26**: 27-39.
- Van Cleve, F. B., T. Leschine, T. Klinger, and C. A. Simenstad. 2006. An evaluation of the influence of natural science in regional-scale restoration projects. *Environ. Mgmt.* **37**: 367-379.
- Visintainer, T. A., S. M. Bollens, and C. A. Simenstad. 2006. Community composition and diet of fishes as a function of tidal channel order: A field study in China Camp Marsh, San Francisco Estuary. *Mar. Ecol. Prog. Ser.* **321**: 227-243.
- Koehler, M. E., K. L. Fresh, D. A. Beauchamp, J. R. Cordell, C. A. Simenstad and D. Siler. 2006. Diet and bioenergetics of lake-rearing juvenile Chinook salmon in Lake Washington. *N. Am. J. Fish Mgmt.* **135**: 1580-1591.
- Day, J. W., Jr., D. F. Boesch, E. J. Clairain, G. P. Kemp, S. Laska, W. J. Mitsch, K. Orth, H. Mashriqui, D. R. Reed, L. Shabman, C. A. Simenstad, B. J. Streever, and R. R. Twilley. 2007. Restoration of the Mississippi Delta: lessons learned from Hurricanes Katrina and Rita. *Science* **315**: 1679-1684. [DOI 10.1126/science.1137030]
- Toft, J., J. Cordell, L. Stamatiou and C. A. Simenstad. 2007. Fish distribution, abundance, and behavior along city shoreline types in Puget Sound. *N. Am. J. Fish. Mgmt.* **27**: 465-480. [DOI 10.1577/M05-158.1]

- Howe, E.R., and C. A. Simenstad. 2007. Characterizing restoration trajectories through food web linkages in San Francisco Bay's estuarine marshes: A manipulative translocation experiment. *Mar. Ecol. Prog. Ser.* **351**:65-76. [DOI 10.3354/meps07120]
- Peterson, C.H., K. W. Able, C. F. DeJong, M.F. Piehler, C. A. Simenstad, and J. B. Zedler. 2008. Practical proxies for tidal marsh ecosystem services: Application to injury and restoration. *Adv. Mar. Biol.* **54**:221-266. [DOI 10.1016/S0065-2881(08)00004-7]
- Bottom, D. L., K. K. Jones, C. A. Simenstad, and C. L. Smith. 2009. Reconnecting social and ecological resilience in salmon ecosystems. *Ecol. Society* **14**: 5. [online] URL: <http://www.ecologyandsociety.org/vol14/iss1/art5/>
- Gardner, R. C., J. Zedler, A. Redmond, R. E. Turner, C. A. Johnston, V. R. Alvarez, C. A. Simenstad, K. L. Prestegaard, and W. J. Mitsch. 2009a. Compensating for wetland losses under the Clean Water Act (Redux): Evaluating the Federal Compensatory Mitigation Regulation. *Stetson Law Rev.* **38**:213-249.
- Gardner, R. C., J. Zedler, A. Redmond, R. E. Turner, C. A. Johnston, V. R. Alvarez, C. A. Simenstad, K. L. Prestegaard, and W. J. Mitsch. 2009b. Compensating for wetland losses under the Clean Water Act (Redux): Evaluating the Federal Compensatory Mitigation Regulation. *Natl. Wetl. Newsletter* **31**:1, 3-7,20. [synopsis of Gardner *et al.* 2009a]
- Maier, G. O., and C. A. Simenstad. 2009. The role of marsh-derived macrodetritus to the food webs of juvenile Chinook salmon in a large altered estuary. *Estuaries Coasts* **32**: 984-998. [DOI 10.1007/s12237-009-9197-1]
- Borja, A., D.M. Dauer, M. Elliott and C.A. Simenstad. 2010. Medium and long-term recovery of estuarine and coastal marine ecosystems—an approach for new scenarios to restore ecological integrity. *Est. Coasts* **33**: 1249-1260. [DOI 10.1007/s12237-010-9347-5]
- Sobocinski, K. L., J. R. Cordell, and C. A. Simenstad. 2010. Effects of shoreline modifications on supratidal macroinvertebrate fauna on Puget Sound, Washington beaches. *Estuaries Coasts* **33**:699-711 [DOI 10.1007/s12237-009-9262-9]
- Volk, E. C., D. L. Bottom, K. K. Jones, and C. A. Simenstad. 2010. Reconstructing juvenile Chinook salmon life history in the Salmon River estuary, Oregon using otolith microchemistry and microstructure. *Trans. Am. Fish. Soc.* **139**:535-549. [DOI: 10.1577/T08-163.1]
- Boström, C., S. Pittman, C. A. Simenstad, and R. T. Kneib. 2011. Seascape ecology of coastal biogenic habitats: advances, gaps and challenges. *Mar. Ecol. Prog. Ser.* **427**:191-217.
- Howe, E.R. and C.A. Simenstad. 2011. Isotopic determination of food web origins in restoring and ancient estuarine wetlands of the San Francisco Bay and Delta. *Estuaries Coasts* **34**:597-617. [DOI 10.1007/s12237-011-9376-8]
- Maier, G. O., J. D. Toft, and C. A. Simenstad. 2011. Variability in isotopic ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$, $\delta^{34}\text{S}$) composition of organic matter contributing to detritus-based food webs of the Columbia River estuary. *Northwest Sci.* **85**:41-54.
- Miller, J. A., V. L. Butler, C. A. Simenstad, D. H. Backus, and A. J. R. Kent. 2011. Persistent life history variation in Columbia River Chinook salmon (*Oncorhynchus tshawytscha*): a comparison using modern and ~500 yr-old archaeological otoliths. *Canadian J. Fish. Aquat. Sci.* **68**:603-617. [DOI 10.1139/F11-002]
- Pittman, S.J., R.T. Kneib, and C.A. Simenstad. 2011. Practicing coastal seascape ecology. *Mar. Ecol. Prog. Ser.* **427**:187-190.
- Spilseth, S. A., and C. A. Simenstad. 2011. Seasonal, diel, and landscape effects on resource partitioning between juvenile Chinook salmon (*Oncorhynchus tshawytscha*) and threespine stickleback (*Gasterosteus aculeatus*) in the Columbia River estuary. *Estuaries Coasts* **34**:159-171. [DOI 10.1007/s12237-010-9349-3]
- Simenstad, C. A., and T. Yanagi (eds.). 2012. Chap. 1—Introduction to Classification of Estuarine and Nearshore Coastal Ecosystems, *Treatise on Estuarine and Coastal Science*, Elsevier.

[http://www.extranet.elsevier.com/homepage_about/mrwd/esco/Treatise%20on%20Estuarine%20and%20Coastal%20Science.pdf]

In press/revision or submitted:

- Feist, B. E., R. Hilborn, and C. A. Simenstad. *In revision*. The connection between ocean sea surface temperature and the invasion of non-indigenous smooth cordgrass, *Spartina alterniflora* (Loisel) in an eastern Pacific estuary. *Aquat. Conserv. Mar. Freshwat. Ecosystems*
- Gray, A., C. A. Simenstad, D. L. Bottom and D. A. Beauchamp. *In review*. Bioenergetics modeling of wild juvenile Chinook salmon performance: Determining relative success of restoring tidal wetlands at the Salmon River estuary, Oregon USA. *N. Am. J. Fish. Mgmt.*
- Johnson, L. K., and C. A. Simenstad. *In review*. Variation in the flora and fauna of tidal freshwater forest ecosystems along the Columbia River estuary gradient: controlling factors and the role of flow regulation and other historical changes. *Estuaries Coasts*
- Krogstad, F. T.O., E. Dusek, E. M. Vigoren, M. S. Parker, W. C. Griffith, C. A. Simenstad, E. M. Faustman. *In review*. Domoic acid depuration rates of several Puget Sound bivalve species: Integrating DA depuration and assay models to quantify depuration rates and public health outcomes.
- Maier, G. O., C. A. Simenstad, and L. Campbell. *In revision*. Interpreting life history diversity of juvenile Chinook populations using stable isotopes. *Est. Coast. Shelf Sci.*
- Ono, K., and C. A. Simenstad. *In revision*. Application of a mixed effect model to assess shoaling behavior changes in migrating juvenile salmon. *Behavioral Ecol.*

Manuscripts in preparation:

- Dusek-Jennings, E., C.A. Simenstad, and M.S. Parker, Clearance rate measurements on thirteen intertidal bivalves for the purpose of estimating consumption of the toxin-producing diatom *Pseudo-nitzschia*. *In Prep.*
- Dusek-Jennings, E., C.A. Simenstad, and M.S. Parker, Domoic acid uptake and depuration by ten intertidal bivalves fed on toxin-producing *Pseudo-nitzschia* multiserries. *In Prep.*
- Ramirez, M., M. A. Lott, and C. A. Simenstad. *In prep.* The dominant role of emergent chironomids in estuarine wetland habitat support of juvenile Chinook salmon in the Columbia River estuary.
- Simenstad, C. A., D. L. Bottom, T. Cornwall, K. K. Jones, A. Gray, and R. Frenkel. *In prep.* Response of fishes to differential vegetation and geomorphic restoration of emergent marshes in the Salmon River estuary.

Books/proceedings chapters:

- Simenstad, C. A., J. S. Isakson, and R. E. Nakatani. 1977. Marine fish communities of Amchitka Island, AK. Pp. 451-492 in M. L. Merritt and R. G. Fuller (eds.). **The Environment of Amchitka Island, Alaska**. U.S. ERDA, TID-26712. 682 pp.
- Simenstad, C. A., K. L. Fresh, and E. O. Salo. 1982. The role of Puget Sound and Washington coastal estuaries in the life history of Pacific salmon: An unappreciated function. Pp. 343-364 in V. S. Kennedy (ed.) **Estuarine Comparisons**. Academic Press, New York. 709 pp.
- Wissmar, R. C., and C. A. Simenstad. 1984. Surface foam chemistry and productivity in the Duckabush River estuary. Pp. 331-348 in V. Kennedy (ed.), **The Estuary As A Filter**. Academic Press, Orlando, Florida. 511 pp.
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- Simenstad, C.A., M. Ramirez, J. Burke, M. Logsdon, H. Shipman, C. Tanner, J. Toft, B. Craig, C. Davis, J. Fung, P. Bloch, K. Fresh, S. Campbell, D. Myers, E. Iverson, A. Bailey, P. Schlenger, C. Kiblinger, P. Myre, W. Gerstel, and A. MacLennan. 2011. Historical Change of Puget Sound Shorelines: Puget Sound Nearshore Ecosystem Project Change Analysis. Puget Sound Nearshore Ecosystem Restoration Project Report No. 2011-01. Published by Washington Department of Fish and Wildlife, Olympia, Washington, and U.S. Army Corps of Engineers, Seattle, Washington.
- Fresh K., M. Dethier, C. Simenstad, M. Logsdon, H. Shipman, C. Tanner, T. Leschine, T. Mumford, G. Gelfenbaum, R. Shuman, J. Newton. 2011. Implications of Observed Anthropogenic Changes to the Nearshore Ecosystems in Puget Sound. Prepared for the Puget Sound Nearshore Ecosystem Restoration Project. Technical Report 2011-03. Published by Washington Department of Fish and Wildlife, Olympia, Washington, Seattle, Washington.

Direct Involvement in Committees, Symposia and Meetings

Current Membership:

- Scientific Advisory Board, Port Townsend Marine Science Center, April 1986-present
- Research Advisory Committee, Padilla Bay National Estuarine Research Reserve, 1989-present
- Winchester Tidelands Restoration Advisory Group, South Slough National Estuarine Research Reserve, June 1993-present
- Board of Advisors, University of Washington Educational Outreach Certificate Program in Wetland Science and Management; April 1994-present
- Scientific Advisory Group (SAG), Interagency Ecological Program (IEP), San Francisco Bay; December 1998-present
- Man and Water AB, International Network (MAWN); 1999-present
- Northwest Estuary Science Committee, The Nature Conservancy, April 2005-present
- Volume Co-Editor, "Treatise on Estuarine and Coastal Science", Elsevier, April 2008-present
- Member, Louisiana Technical Advisory Committee on Predictive Models, June 2010-present
- Member, National Program Committee, 6th National Conference on Coastal and Estuarine Habitat Restoration (Restore America's Estuaries), October 2012; September 2011-present

Past Membership/Involvement, and Invited Presentations:

- Co-chairman, 1976 and 1978 Fish Food Habits workshops (GUTSHOP 1976 and 1978) at Astoria, Oregon, October 1976, and Lake Wilderness, WA, October 1978, respectively
- Convener, Ecological Implications of Enhancement session, 1979 Annual Meeting, Pacific N.W. Chapter, American Fisheries Society, February 1979, Bellingham, WA
- Chairman, Estuarine, and Nearshore Influences upon Pink and Chum Salmon Run Variability session, 1980 NE Pac. Pink and Chum Salmon Workshop, Sitka, AK. February 1980
- Co-Chairman, GUTSHOP '81 Fish Food Habits Studies Workshop, 6-9 December 1982, Pacific Grove, CA.
- Chairman, Mini-symposium on Fish Stomach Contents Analyses. Oct. 20, 1982. Inst. Freshwat. Res., Drottningholm, Sweden
- Co-Chairman, 1982-1983 N.E. Pac. Pink and Chum Salmon Workshop, Rosario, Orcas Island, WA. January, 1983
- Delegate, Estuarine Research Federation Delegation on Estuarine Research to People's Republic of China, March 24-April 9, 1983
- Panel Member, Marine and Aquatic Ecosystems Panel; First Glacier Bay Science Symposium, Glacier Bay Lodge, AK. September 23-26, 1983.
- Co-Chairman, Working Group on Estuaries and Inlets. Salmonid Oceanography Workshop, 8-10 November 1983, Oregon State Univ., Mar. Sci. Center, Newport, OR
- Co-Chairman, Gutshop '84 Fish Food Habits Workshop, 2-6 December 1984, Pacific Grove, CA.
- Member, Technical Advisory Committee, "Wetland Functions, Rehabilitation, and Creation in the Pacific Northwest: The State of Our Understanding," April-May 1986 Workshop, Port Townsend, WA. Wash. State Dept. Ecology
- Member, Ad-hoc Committee on Mitigation Strategies in Urbanized Estuaries of the Pacific Northwest, April 1986-1991
- Resource Expert, Ocean Use Planning for the Exclusive Economic Zone, invitation-only workshop, January 1986

- Member, Habitat Monitoring Subcommittee, Puget Sound Water Quality Authority, March-May 1987
- Resource Expert, "Saving Our Bays, Sounds, and Great Lakes: An Activists' Agenda", Save the Bay Conference, 19-23 October 1987, Warwick, RI
- Session Leader, Habitat Modification Session, First Symposium on Puget Sound Research, Puget Sound Water Quality Authority, March 1988
- Participant, Freshwater Inflow/San Francisco Bay Workshop, Interagency Ecological Study Program, 12-14 July, 1988, Sausalito, CA
- Convener, Effects of Dredging Upon Anadromous Fishes on the Pacific Coast, workshop, 8-9 September 1988, Seattle, WA
- Organizer, Estuarine Wetland Mitigation Protocol Development Workshop, 16-19 April 1989, Port Townsend, WA
- Co-Convener, "Wetlands and Seagrass Beds as Critical Habitats" session, Tenth Biennial International Estuarine Research Conference, 8-12 October 1989, Baltimore, MD
- Member, Technical Subcommittee, Pacific Northwest OCS Task Force, 1989-1991
- Expert Witness, US-NOAA, Office of General Counsel, GCNW, US vs. City of Seattle and METRO, March 1990-September 1991
- Member, Scientific Resource Panel, Lower Columbia River Bi-State Water Quality Program, November 1990-December 1996
- Member, Washington Department of Ecology, Oil Spill Compensation Schedule Scientific Advisory Committee; Marine Habitats and Salmon Subcommittees; 1991-1992
- Participant, Entrapment Zone Workshop, Interagency Food Chain Working Group, 16 December 1991, Concord, CA
- Member, W. Alton Jones Panel on Coastal Marsh Loss and Restoration in Louisiana, September 1993-March 1994
- Member, Technical Resource Panel, An Ecosystem Approach to Understanding Coastal Resources Workshop, Research and Education for Managing the Coastal Resources of the Olympic Peninsula, November 16-17, 1993
- Technical Program Co-chair, Society of Wetland Scientists, 15th National Meeting, May 30-June 3, 1994
- Session Chair, The Terrestrial/Marine Interface, Conference on the Environment and People of the Coastal Temperate Rainforest, Whistler, BC, Canada, August 29-31, 1994
- Panelist, Workshop on Ecological Carrying Capacity for Columbia Basin Salmon Habitats, Portland, OR, September 6-7, 1995
- Panelist, 1st Workshop on Restoration of the San Francisco Bay-Delta-River: Choosing Indicators of Ecological Integrity, October 28, 1995
- Co-chair, Land Margin Ecosystem Research session, Estuarine Research Federation 13th International Conference, Corpus Christi, Texas, November 12-16, 1995
- Co-Chair, Biological Importance of Flocculation/Aggregation session, ECSA27/ERF'96, Middleburg, NL, September 16-20, 1996
- Member, Technical Team, Chinook River Basin Restoration Plan, August-December 1996
- Member, Corresponding Scientific Committee, 3rd International Congress Limnology-Oceanography, "Interfaces: Oceans, Rivers and Lakes--energy and substance transfers at Interfaces session, Nante, France, October 7-9, 1996; Co-Chair, Interface Between Nutrients and Physical Medium session
- Member, Tillamook Bay National Estuary Project Scientific/Technical Advisory Committee, March 1994-June 1996
- Member, Fish and Wildlife Work Group, Lower Columbia River Bi-State Water Quality Program, 1993-1996
- Committee of Science Advisors (CSA), San Francisco Estuary Institute; May 1996-December 1997

- Invited speaker; "Ecological Assessment Criteria for Restoring Anadromous Salmonid Habitat in Pacific Northwest Estuaries," w/ JR Cordell, Goal Setting and Success Criteria for Coastal Habitat Restoration conference, 12-15 January 1998, Charleston, SC.
- Plenary speaker; "Evaluating Coastal Wetland Restoration: Structure, Process or Function," Recent Research in Coastal Louisiana: Natural System Function and Response to Human Influences, 3-5 February 1998, Lafayette, LA.
- Review Panel, San Francisco Estuary-River-Ecosystem Restoration Project; October 1995-October 1998
- ISRP Peer Review Group, Columbia River Basin Fish and Wildlife Plan, Bonneville Power Authority; November 1998-April 1999
- Representative, Coastal Environment Science and Technology (CEST) Panel meeting, US-Japan Agreement on Natural Resources (UNJR), 17-20 March 1998, Yokosuka, Japan
- Long-term Monitoring Subcommittee, Lower Columbia River Estuary Program, May 1997-March 1999
- Science Review Group, San Francisco Bay Area Wetlands Ecosystem Goals Project, December 1996-May 1999
- University of Washington Professional Staff Organization, Board, June 1995-June 1999
- *Ex officio*, University of Washington Faculty Council on Research, November 1995-June 1999
- Nearshore Technical Committee, Central Puget Sound Watershed Forum; January 2000-December 2000
- Participant, Environmental Windows for Dredging Workshop, National Academy of Sciences (NAS), National Research Council (NRC); March 2001
- Committee on Mitigating Wetland Losses, National Academy of Sciences (NAS), National Research Council (NRC); January 2000-October 2001
- Citizens Advisory Committee for Central Waterfront Master Plan, City of Seattle; October 2000-February 2002
- CALFED Scientific Peer-Review; February 2002
- Participant, Environmental Windows Workshop: Achieving Dredging Decisions That Balance Economic and Environmental Concerns, U.S. Section 100th Anniversary Conf. International Navigation Association, Vicksburg, MI; April 2002
- Chair, Scientific Review Panel, USGS San Francisco Place-Based Program, Salt Pond Studies, September 2002
- Coastal Environment Science and Technology (CEST) Panel, US-Japan Agreement on Natural Resources (UNJR); January 1998-December 2002
- Scientific Program Co-Chair (w/ S. Bollens), Estuarine Research Federation Biennial Meeting, September 2003, Seattle, Washington; September 2000-2003
- Member, Louisiana Coastal Area (LCA), National Technical Review Committee (NTRC), US Army Corps of Engineers and State of Louisiana; 2001-2003
- Participant, "The Science of Eelgrass Forum," Port Townsend Marine Science Center, Port Townsend, Washington; April 2004
- Session Chair, "Estuarine and Tidal Wetlands" session, and panel member, "The Next 25 Years: Your Future Career in Wetland Science" symposium; Society of Wetland Scientists, 25th Anniversary Meeting, July 2004, Seattle, Washington
- Plenary Speaker and session co-chair, "Towards an Integrated Knowledge and Management of Estuarine Systems," ECSA Local Meeting Symposium; September 2004, Lisbon, Portugal
- Session Chair, "Re-Emergence of Shallow Water Ecosystems across the Bay and Delta" session, and presenter; 3rd Biennial CALFED Bay-Delta Program Science Conference; October 2004, Sacramento, California
- Testimony, "Intertidal Distribution and Ecological Function of Eelgrass (*Zostera marina*) in Hood Canal, Washington;" Washington State House of Representatives, Select Committee on Hood Canal, 24 February 2005, Olympia, WA

- Science Advisor Panel, Environmental Law Institute project on wetland mitigation performance standards, September 2003 – December 2004
- Pacific Estuarine Ecosystem Indicator Research Consortium (PEEIR), Science Advisory Committee; May 2002 - December 2004
- Scientific Peer Review Panel for Tidal Wetlands Restoration Handbook project, California State Coastal Conservancy, August 2002-October 2004
- Scientific Working Group, Toward a New Framework for Planning the Future of Coastal Louisiana after the Hurricanes of 2005, November 2005-December 2005
- Scientific Advisory Committee, Sea Resources; September 2001-December 2006
- Executive Steering Committee, University of Washington Earth Initiative, May 2004-January 2007
- National Scientific Advisory Panel, San Francisco Bay Salt Pond Project, California Coastal Conservancy, March 2003-April 2007
- ESA Compliance Science Panel, Washington Department of Natural Resources, June-December 2006
- Fireside Chat speaker, 53rd annual Eastern Pacific Ocean Conference, Timberline Lodge, Oregon; 29 September 2006
- Program Committee, Steering Committee, 2nd National Conference on Ecosystem Restoration (April 2007), May 2006-April 2007
- Review Panel, Mid-Term Review of Plum Island Ecosystem Long-Term Ecological Research (PIE-LTER) program; National Science Foundation, October 2007
- Contributing author, Synthesis and Assessment Product (SAP 4.4), Strategic Plan of the U.S. Climate Change Science Program, September 2006-May 2008
- Core Working Group member, Puget Sound Partnership, Biodiversity/Species/Food Web Topic Forum, February-April 2008
- Session co-chair, “Medium and Long-Term Recovery of Marine and Estuarine Ecosystems—A Guide to Providing Useful Information in New Scenarios to Restore Ecological Integrity”, ASLO 2009, Nice, FR, January 2008
- Louisiana Coastal Protection and Restoration Authority Integrated Planning Team (IPT), Science and Engineering Review Team (SERT), August 2006-December 2008
- Board of Advisors, University of Washington Educational Outreach Program in Environmental Regulation; April 2001-April 2008
- Member, USACE Engineer Research and Development Center, Environmental Benefits Assessment program review panel, March-April 2009
- Member, USACE Engineer Research and Development Center, Environmental Program, recruitment review panel, July-August 2009
- Member, CALFED Science Program Independent Review Panel, 2-Gates Fish Protection Demonstration Project, August 2009
- Program Committee, Plenary Committee, Steering Committee, 3rd National Conference on Ecosystem Restoration (July 2009), August 2007-July 2009
- Member, USACE Engineer Research and Development Center, Ecosystem Restoration Recruitment review panel, March-August 2009
- University of Washington, Restoration Ecology Network (UW-REN) faculty steering committee, March 2008-2010
- Member, National Program Committee, 5th National Conference on Coastal and Estuarine Habitat Restoration (Restore America’s Estuaries), November 2010; September 2009-November 2010
- Member, Estuarine Coastal Sciences Association Council, 2005-2010
- Chair, Puget Sound Nearshore Ecosystem Restoration Project, Nearshore Science Team; January 2002-June 2011

- Member, Program Committee, 4th National Conference on Ecosystem Restoration, August 1-5, 2011; December 2009-August 2011
- Science Work Group, Lower Columbia River Estuary Program; April 2000-November 2011
- Member, Review Panel, NSF Long-Term Ecological Research, Palmer (Antarctica) LTER review; December 2011
- Plenary Speaker, WISER Final Conference, Tallinn, Estonia; January 2012
- Member, External Review Panel, Pacific Northwest National Laboratory Marine Science Laboratory, Seattle and Sequim, Washington; March 2012

Reviewer

Manuscripts:

American Naturalist
American Zoologist
Biological Conservation
BioScience
Bulletin of Marine Science
CALFED Science Program
Canadian Journal of Fisheries and Aquatic Sciences
Canadian Journal of Zoology
Coastal Management Journal
Marine Ecology-Progress Series
Coastal Shelf Research
Copeia
Ecological Applications
Ecological Engineering
Ecological Monographs
Ecology
Ecosystems
Environmental Biology of Fishes
Environmental Conservation
Environmental Management
Estuaries & Coasts

Estuarine, Coastal and Shelf Science
Fishery Bulletin
Hydrobiologia
Journal of Animal Ecology
Journal of Applied Ecology
Journal of Experimental Marine Biology and Ecology
Limnology and Oceanography
Marine Biology
Northwest Environmental Journal
Northwest Science
Oecologia
Oikos
Restoration Ecology
Science
Southeastern Naturalist
Sustainability Science, Practice and Policy
Transactions of the American Fisheries Society
Vegetatio

Proposals & Other Documents:

Alaska Sea Grant Program
 CALFED
 California Coastal Commission
 California Sea Grant Program
 Canadian Foundation for Climate and Atmospheric Sciences
 Coastal Restoration and Enhancement through Science and Technology (CREST)
 Fonds Wetenschappelijk Onderzoek – Vlaanderen (Research Foundation-Flanders)
 Georgia Sea Grant Program
 Hudson River Foundation
 Maryland Sea Grant Program
 Mississippi-Alabama Sea Grant Program
 National Science Foundation
 National Estuarine Research Reserve Program
 National Fish and Wildlife Federation

National Marine Fisheries Service-National Science Foundation (US GLOBEC)
 National Sea Grant Program
 Natural Environment Research Council (UK)
 Natural Sciences and Engineering Research Council of Canada
 NOAA-West Coast National Undersea Research Center
 New Hampshire Sea Grant Program
 New Jersey Sea Grant Program
 North Carolina Sea Grant Program
 North Pacific Research Board
 Olympic Natural Resource Center
 Oregon Sea Grant Program
 People for Puget Sound
 Research Foundation Flanders
 Science Council of British Columbia

Texas Sea Grant Program
Tillamook Bay National Estuary Program
University of Washington-Royalty Research
Fund
USGS National Climate Change and Wildlife
Service Center
Virginia Sea Grant Program

Washington Sea Grant Program
Western Regional Center, National Institute for
Global Environmental Change
William H. Donner Foundation
Woods Hole Oceanographic Institution Sea Grant
Program

Teaching

- A Landscape Understanding of Wetland Processes, Stresses and Preservation*; University of Washington, Certificate Program in Wetland Science and Management; Winter Quarters 1995-1999 (co-taught with J. Karr, G. Hood or M. Logsdon), 2000-2012
- Puget Sound Nearshore: Understanding the Past and Assessing the Future*; University of Washington, School of Marine Affairs, SMA550b, Fall Quarter 2006 (co-taught with T. Leschine, M. Logsdon and J. Burke)
- Nearshore Habitats and Food Webs*; Port Townsend Marine Science Center and Washington Sea Grant Workshop Series; 10 April 2004
- Watershed to Estuary: The Restoration Continuum*; University of Washington, School of Aquatic and Fishery Sciences; FISH513, Fall Quarter 2001 (co-taught with R. Wissmar),
- Applied Ecology and Management of Wetlands*; University of Washington, Extension; Fish507U, Winter Quarter 1993 (co-taught K. Kunz)
- Seminar Series: How Can We Better Integrate Behavior and Ecology into Fisheries Management*; School of Fisheries, Fish507S, Winter Quarter 1992 (co-taught with D. Stouder)
- Applied Ecology and Management of Wetlands*; University of Washington, Extension; Fish507TA, Winter Quarter 1992 (co-taught with F. Weinmann and K. Kunz)
- Wetlands: Function, Mitigation and Restoration*; 2-day short course, NOAA Coastal Resource Coordinators, Seattle, Washington, May 1991 (co-taught with R. M. Thom)
- Applied Ecology of Wetlands*; School of Fisheries, University of Washington; Fish507C, Summer Quarter 1990 (co-taught with R. M. Thom)
- Estuarine Fishes of the Pacific Northwest: Love, Life and Death on the Flats*; Western Washington University Continuing Education 478E-850, Spring 1989, Padilla Bay National Estuarine Research Reserve (short course)
- Estuaries of the Pacific Northwest*; School of Fisheries, University of Washington; Fish 522C Seminar Series, Winter Quarter 1985 (co-taught with R. C. Wissmar)
- Estuarine Dynamics of the Pacific Northwest*; School of Fisheries, University of Washington; Fish 499E/507E Estuaries Select Program, Spring Quarter 1985 (co-taught with R. C. Wissmar)
- Wetlands Restoration Training Course*; 3-day short course, NOAA Restoration Center, Silver Spring, Maryland, (co-taught with R. Thom and C. Hackney)

Chair/Member-Graduate Student Committees

Current:

Caren Crandell, Ph.D., Forest Resources, Univ. Washington
Aaron David, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**)
Emily Davis, M.S., Aquatic and Fishery Sciences, Univ. Washington
Eva Dusek Jennings, Ph.D., Aquatic and Fishery Sciences, Univ. Washington (**Chair**)
Aaron Gallaway, Ph.D., Aquatic and Fishery Sciences, Univ. Washington
Pascale Goertler, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**)
Sarah Heerhartz, Ph.D., Aquatic and Fishery Sciences, Univ. Washington (**Chair**)
Emily Howe, Ph.D., Aquatic and Fishery Sciences, Univ. Washington (**Chair**)
Kristen Lee, Ph.D., Oceanography, Univ. Washington (Graduate School Representative)
Dennis Martin, Ph.D., Oceanography, Univ. Washington (Graduate School Representative)

Stuart Munsch, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**)
Halley Nelson, M.S., Aquatic and Fishery Sciences, Univ. Washington
Elizabeth Sosik, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**)
Jessica Silver, Ph.D., Aquatic and Fishery Sciences, Univ. Washington

Completed:

Greer (Anderson) Maier, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2006)
Alisa Bieber, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2005)
Justin Boevers, M.S., Marine Affairs, Univ. Washington (2008)
Troy W. Buckley, M.S., Fisheries, Univ. Washington (1995)
Sahrye Cohen, M.S., Romberg Tiburon Center for Environmental Studies, San Francisco State Univ. (2006)
Bethany Craig, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2010)
Caren Crandell, M.S., Urban Horticulture—Forest Resources, Univ. Washington (1999)
Byron Crump, Ph. D., Oceanography, Univ. Washington (1999)
Molly Cobligh, M.S., Aquatic and Fishery Sciences, Univ. Washington (2003)
Jeffery R. Cordell, M.S., Fisheries, Univ. Washington (1986)
Elizabeth Duffy, M.S., Aquatic and Fishery Sciences, Univ. Washington (2003)
Christopher Eaton, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2010)
Crystal Elliot, M.S., Urban Horticulture—Forest Resources, Univ. Washington (2004)
Amy Federline, M.S., Romberg Tiburon Center for Environmental Studies, San Francisco State Univ. (2004)
Blake E. Feist, Ph.D., Fisheries, Univ. Washington (1999)
David Finlayson, Ph.D., Oceanography, Univ. Washington (2006)
Maureen Goff, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2010)
Deborah Goodwin, M.S., Biology for Teachers, Univ. Washington (2004)
Ayesha L. Gray, Ph.D., Aquatic and Fishery Sciences, Univ. Washington (**Co-Chair**; 2005)
Melora Haas, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2002)
Danelle Heatwole, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2004)
Sarah Heerhartz, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2010)
Noble Hendrix, Ph.D., Aquatic and Fishery Sciences, Univ. Washington (2003)
William G. Hood, Ph.D., Fisheries, Univ. Washington (2000)
Emily Howe, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2006)
Laura Johnson, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2010)
Michele Koehler, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Co-chair**; 2002)
Errin Kramer-Wilt, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2010)
Ilon Logan, M.S., Marine Affairs, Univ. Washington (2011)
Mary-Austill Lott, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**, 2004)
Susan Lubetkin, M.S., QUERM, Univ. Washington (1997)
Chris M. Luecke, Ph.D., Zoology, Univ. Washington (1986)
Robert M. Mayer, M.S., Fisheries, Univ. Washington (1980)
Jessica A. Miller, M.S., Fisheries, Univ. Washington (1993)
Cheryl A. Morgan, M.S., Fisheries, Univ. Washington (1993)
Barbara Nightengale, M.S., Marine Affairs, Univ. Washington (2002)
Kotaro Ono, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2010)
Mary Ramirez, M.S., Aquatic and Fishery Science, Univ. Washington (**Chair**; 2008)
Stephen Ratchford, M.S., Fisheries, Univ. Washington (1995)
Shauna Reisewitz, M.S., Univ. California-Santa Cruz (2002)
Casey Rice, Ph.D., Fisheries, Univ. Washington (2007)
Lauren E. Rich, M.F.R., Urban Horticulture, Univ. Washington (1993)
Mary H. Ruckleshaus, M.S., Fisheries, Univ. Washington (1988)
Lisbeth Seebacher, M.S., Urban Horticulture, Univ. Washington (1997)
Erin Seghesio, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2011)
David K. Shreffler, M.S., Fisheries, Univ. Washington (1989)
Kathryn Sobocinski, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2003)
Sarah Spilseth; M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2008)

Curtis D. Tanner, M.M.A., School for Marine Affairs, Univ. Washington (1990)
Lucinda Tear, M.S., Fisheries, Univ. Washington (1995)
Jason Toft, M.S., Aquatic and Fishery Sciences, University of Washington (2000)
Daniel M. Tonnes, M.M.A, Marine Affairs, Univ. Washington (2008)
Frances Van Cleve, M.A.A., Marine Affairs, Univ. Washington (2004)
Stacey M. Wenger, M.S., Urban Horticulture, Univ. Washington (1995)
Alicia Wick, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2002)
Victoria Zipperer, M.S., Fisheries, Univ. Washington (1996)
Tammie A. Visintainer, M.S., San Francisco State Univ. (2003)
Carl Young, M.S., Aquatic and Fishery Sciences, Univ. Washington (**Chair**; 2009)

Advising and Consulting, Expert Witness

With Renumeration:

Battelle Northwest Laboratories, Marine Sciences Laboratory
CALFED
Cascade Land Conservancy
CH2M-Hill
City of Tacoma, Dept. of Public Works
Columbia River Estuary Study Taskforce
Dames and Moore
Day Island Club, Shoreline Committee
Envirosphere Co.
Gahagan & Bryant Associates, Inc.
Mathematical Sciences Northwest
Native American Rights Fund (Evergreen Legal Services)-Muckleshoot Indian Tribe, Skokomish Indian Tribe
Northwest Power Planning Council
Philip Williams & Associates, LTD (PWA)
Rust, Assoc. Engineers
Suquamish Indian Tribe
Tetra Tech
U. S. Army Corps of Engineers-Waterways Experiment Station
U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Damage Assessment Center
U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Coastal Sciences Center
U. S. Department of Justice-Environmental Enforcement Section
U. S. Fish and Wildlife Service-Coastal Ecosystems Team
Washington State Department of Fish and Wildlife
Washington Department of Ecology
Woodward-Clyde Consulting, Inc.

Without Renumeration

American Oceans Campaign
Earthjustice
Friends of the Earth
Friends of Gray Harbor
Mary E. Theler Community Wetland Committee
Mendocino County (CA) Resource Conservation District
National Academy of Sciences-National Research Council
Natural Resources Defense Council
Port Townsend Marine Science Center
Save the Resources Committee
Sea Resources
Seattle Audubon Society-WETNET
The Nature Conservancy
U.S. Army Corps of Engineers-Seattle District
U.S. Fish and Wildlife Service-Nisqually Refuge

Washington Department of Fish and Wildlife
Washington State House of Representatives (Select Committee on Hood Canal)