

CURRICULUM VITAE

WILLIAM SCOTT PEGAU

Oil Spill Recovery Institute
Box 705
Cordova, AK 99574
work tel. (907) 424-5800 x222
cell (907) 453-7786
email wspegau@pwssc.org

EDUCATION:

B.S.	University of Alaska Fairbanks (Physics, Magna cum laude)	1990
Ph.D.	Oregon State University (Oceanography)	1996

EXPERIENCE:

Electricians Mate, US Navy (submarines)	1979-1985
Research Assistant, University of Alaska (Dr. Knut Stamnes)	1987-1990
Graduate Research Assistant, Oregon State University (Dr. J. Ronald V. Zaneveld)	1990-1996
Research Associate (Post Doc.), Oregon State University	1996-1997
Research Associate, Oregon State University	1997-1998
Assistant Professor, Oregon State University	1998-2002
Research Assistant Professor, Oregon State University	2002-2009
Senior Scientist, Kachemak Bay Research Reserve	2002-2003
Research Coordinator, Kachemak Bay National Estuarine Research Reserve	2003-2007
Research Program Manager, Oil Spill Recovery Institute	2007-present
Coordinator Herring Research and Monitoring program	2009-present
Chief Operations Officer, Prince William Sound Science Center	2017-2020

RESEARCH INTERESTS:

Application of research to management issues. To develop novel oil spill detection and tracking approaches. Understanding the fate and behavior of oil spilled in cold water environments. Development of response options for oceans with sea ice present. Circulation in Prince William Sound, Cook Inlet and the Gulf of Alaska, and the associated larval transport. Relationship between oceanographic conditions and fisheries. Application of remote sensing for understanding coastal processes.

PUBLICATIONS:

National Academies of Sciences, Engineering, and Medicine, 2019. *The Use of Dispersants in Marine Oil Spill Response*. Washington, DC: The National Academies Press. DOI 10.17226/25161

Aderhold, D. G. R., M. R. Lindeberg, K. Holderied, and W. S. Pegau, 2018. Spatial and temporal ecological variability in the northern Gulf of Alaska: What have we learned since the *Exxon Valdez* oil spill? *Deep Sea Research II*. **147**, 3-8. DOI 10.1016/j.dsr2.2017.11.015

Gorman, K. B., T. C. Kline, M. E. Roberts, F. F. Sewall, R. A. Heintz, and W. S. Pegau, 2018. Spatial and temporal variation in winter condition of juvenile Pacific herring (*Clupea pallasii*) in Prince William Sound, Alaska: Oceanographic exchange with the Gulf of Alaska. *Deep Sea Research II*. **147**, 116-126. DOI 10.1016/j.dsr2.2017.10.010

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- Jarosz, E., D. Wang, H. Wijesekera, W.S. Pegau, and J.N. Moum. 2017. Flow Variability within the Alaska Coastal Current in winter, *Journal of Geophysical Research: Oceans*, **122**, 3884-3906. DOI 10.1002/2016JC012102
- Batten, S.D., S. Moffitt, W.S. Pegau, and R. Campbell. 2016. Plankton indices explain interannual variability in Prince William Sound herring first year growth, *Fisheries Oceanography*, **25**, 420-432.
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- Wilkinson, J. P., T. Boyd, B. Hagen, T. Maksym, S. Pegau, C. Roman, H. Singh, and L. Zabilansky, 2015. Detection and quantification of oil under sea ice: the view from below, *Cold Regions Science and Technology*, **109**, 9-17.
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- Musgrave, D.L., M.J. Halverson, and W.S. Pegau, 2013. Seasonal Surface Circulation, Temperature, and Salinity in Prince William Sound, Alaska, *Cont. Shelf Res.*, **53**, 20-29. doi:10.1016/j.csr.2012.12.001.
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Montes-Hugo, M. A., K. Carder, R. J. Foy, J. Cannizzaro, E. Brown, and S. Pegau, 2005. Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing, *Remote Sens. Environ.* **98**, 481-493.

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Gardner, W. D., J. C. Blakey, I. D. Walsh, M. J. Richardson, S. Pegau, J. R. V. Zaneveld, C. Roesler, M. C. Gregg, J. A. MacKinnon, H. M. Sosik, and A. J. Williams, III, 2001. Optics, particles, stratification, and storms on the New England continental shelf, *J. Geophys. Res.*, **106**, 9473-9498.

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Barnard, A. H., J. R. V. Zaneveld, W. S. Pegau, J. L. Mueller, H. Maske, R. Lara-Lara, S. Alvarez-Borrego, and E. Valdez-Holguin, 1999. The determination of PAR levels from absorption coefficient profiles at 490 nm, *Ciencias Marinas*, **25**, 487-507.

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MANUSCRIPTS SUBMITTED

Suryan, et al. Submitted. Ecosystem response persists after a prolonged marine heatwave. *Nature Scientific Reports*

Arimitsu, et al. Submitted. Reduced quality and synchronous collapse of forage species disrupts energy transfer during a prolonged marine heatwave. *Deep Sea Res. II*.

AWARDS

Alan Berman Research Publication award for Wijesekera, H. W., D. W. Wang, E. Jarosz, W. J. Teague, J. N. Moum, and W. S. Pegau, 2017. Turbulent large-eddy momentum flux divergence during high winds events, *Journal of Physical Oceanography*. **47**, 1493-1517. DOI 10.1175/JPO-D-16-0286.1

Best new technology poster for “Balloon Based Oil Spill Surveillance”, by Pegau and Green presented at the International Oil Spill Conference in 2011.

College of Oceanic and Atmospheric Sciences, Excellence in Mentoring Award, 2002.

Best of session award for “Detection of subsurface internal waves via remote sensing” by Weidemann et al. presented at the fifth international conference on remote sensing for marine and coastal environments.