

# Jonathan P. Williams, M.S.

Vantuna Research Group  
Occidental College  
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Research Scientist  
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## CURRENT POSITIONS

**Research Scientist:** *Vantuna Research Group, Occidental College. 2006-present*  
as Research Associate (2006-2011)

**Resident Senior Instructor:** *Biology Department, Occidental College. 2010-present*  
"Ecological Enhancement and Restoration", 2013-present  
"Biodiversity and Organization of Marine Ecosystems", 2015-present  
"Biostatistics", 2023  
"Biology and Environmental Policy", 2010-2013  
"Senior Seminar", 2013

## RELATED PREVIOUS POSITIONS

**Adjunct Instructor:** *Biology Department, Occidental College.*  
"Oceanology", 2007

**Teaching Associate:** *Biology Department, California State University, Northridge*  
"General Biology Laboratory", 2004-2005  
"Biological Principles I Laboratory", 2006  
"Biological Principles II Laboratory", 2003-2006

**Graduate Assistant:** *Biology Department, California State University, Northridge*  
"Life in the Sea", 2006  
"Pelagic Organisms", 2006

## EDUCATION

**M.S. Biology,** California State University, Northridge, 2006

**B.S. Marine Biology,** Chemistry minor, University of North Carolina at Wilmington, 2002

## PROFESSIONAL EXPERIENCE (funding sources italicized)

**A Half-Century of Ichthyoplankton: How Studying Larval Fish Can Improve Food Security in Our Urban Ocean (2024-present)**

*USC Sea Grant*

**Kelp bed restoration monitoring and assessment of urchin barrens on the Palos Verdes Peninsula (2011-present)**

*Montrose Settlements Restoration Program; The Bay Foundation*

**Palos Verdes Reef Restoration Design and Monitoring (2009-Present)**

*Montrose Settlements Restoration Program*

**Ichthyoplankton of King Harbor, Redondo Beach, California (2006-present)**

*Previous funding by: Water Intake Structure Environmental Research (WISER), California Energy Commission, AES Redondo Beach, Southern California Edison*

**Receiving Water Monitoring and Reporting Program (2006-present)**

*Chevron Products Company, El Segundo Refinery*

**Fisheries Inventory and Utilization Study in San Diego Bay (2005-Present)**

*Unified Port of San Diego*

**Supplemental Data Regarding the Behavioral Response of Rock Crabs to the EMF of Subsea Cables and Potential Impact to Fisheries (PC-19-02) (2020-2023)**

*Department of the Interior – Bureau of Ocean Energy Management*

**Characterization of rocky intertidal, kelp forest and deep rocky and sandy ecosystems at San Clemente Island (2012-2015, 2021-2024)**

*United States Navy*

**Receiving Water Monitoring for the Poseidon Resources Carlsbad Desalination Plant (2019)**

*Miller Marine Science and Consultation, Inc.*

**Ocean-side Subtidal Marine Vertebrate and Invertebrate Inventory at Naval Base Point Loma (2018-2019)**

*United States Navy*

**Subsurface Geologic Mapping of Los Angeles Basin (2018)**

*LA Seismic*

**Bight '13: Regional Survey Field Sampling and Laboratory Analyses Project (2012-2017)**

*Southern California Coastal Water Research Project (SCCWRP)*

**Mitigation Monitoring and Reporting, Catalina Sea Ranch (2016-2017)**

*Catalina Sea Ranch, LLC*

**Caulerpa Survey for Ventura Isle Marine Dock Replacement Project (2016)**

*Ventura Harbor*

**Historic Comparisons of Soft Bottom Fishes and Invertebrates from the Bight Trawling Program (2014-2015)**

*California Ocean Science Trust*

**Marine and Hydrokinetic (MHK) Environmental Effects Assessment and Monitoring (2013-2015)**

*Department of the Interior – Bureau of Ocean Energy Management*

**Assessment of the Existing Sylmar Ground Return System Marine Electrode (2015)**

*Los Angeles Department of Water and Power*

**Marine Biological Survey of San Pedro Bay (2013-2014)**

*Ports of Long Beach and Los Angeles*

**Occidental College Faculty Learning Community – Using the iPad as a Teaching Resource (2012-2013)**

*Occidental College – Center for Teaching Excellence/Center for Digital Learning and Research*

**The ecosystem impacts of kelp forest habitat restoration, including important fishery species (2012-2015)**

*USC Sea Grant*

**Kelp and Shallow-Reef Ecosystems: Baseline Data and Long-Term Trends Using Historical Data for the South Coast (2011-2015)**

*California Sea Grant*

**Sea Urchin Gonad Index: A Key to Understanding Secondary Production in the Restoration of Giant Kelp Forests off Palos Verdes (2011-2013)**

*California Sea Grant*

**Green Abalone Restoration in Southern California: Developing Tools for Genetic and Disease Risk Management (2011-2013)**

*NOAA Species of Concern National Program*

**Bight '08: Regional Survey Field Sampling and Laboratory Analyses Project (2008-2013)**

*Southern California Coastal Water Research Project (SCCWRP)*

**Caulerpa Survey for Ventura Harbor Boat Launching Facility Rehabilitation Project (2012)**

*Ventura Harbor*

**Monitoring and Research of the Rocky Reef Resources in Santa Monica Bay (2008-2010)**

*Santa Monica Bay Restoration Commission (SMBRC)*

**Investigation of Life History Parameters of Common Nearshore Marine Fishes (2006-2010)**

*Water Intake Structure Environmental Research (WISER), California Energy Commission*

**Least Tern Foraging Study (2008-2009)**

*United States Navy*

**Rocky Reef Resources of the Port of Los Angeles (2008-2009)**

*Port of Los Angeles*

**Assessment of Subtidal Rocky Reef Resources in Santa Monica Bay (2007-2008)**

*Santa Monica Bay Restoration Commission (SMBRC)*

**Determination of Fish Assemblages in Morro Bay, CA (2006-2008)**

*San Luis Obispo Science and Ecosystem Alliance (SLOSEA)*

**White Seabass Gill Net Sampling Program (2003-2006)**

*Ocean Resource Enhancement and Hatchery Program (OREHP), California Department of Fish and Game*

**Study of Fish Assemblages in the Port of Los Angeles (2003-2006)**

*Port of Los Angeles*

**Coastal Impact Assistance Program (CIAP) Nearshore Survey (2004-2005)**

*Cooperative Research and Assessment of Nearshore Ecosystems (CRANE)*

**Bight '03: Regional Survey Field Sampling and Laboratory Analyses Project (2003)**

*Southern California Coastal Water Research Project (SCCWRP)*

**Intern/Aquarist, Shedd Aquarium, Chicago, IL (2001)**

**SCUBA TRAINING AND CERTIFICATIONS**

2600+ logged dives with 69,000+ min of bottom time (up to 35 meters)

PADI Open Water Diver (2004)

NAUI Master Scuba Diver (2004)

American Academy of Underwater Sciences (AAUS) Scientific Diver (2004)

*Caulerpa taxifolia* Control Protocol Certification (2006)

PADI Enriched Air Diver (2017)

**OTHER CERTIFICATIONS**

Bathymetric Survey and Field Operations Training (EdgeTech 6205, SonarWiz) (2018)

**SELECT PUBLICATIONS**

Kitchel, Z.J., J.T. Claisse, D.J. Pondella, C.M. Williams, **J.P. Williams**, D.M. Schroeder. 2025.

Community structure of southern California's subtidal rocky reefs and implications for artificial reef design. *Marine Ecology Progress Series*. 774: 91-108.

Pondella, D.J., J.T. Claisse, C.M. Williams, **J.P. Williams**, D. Witting. 2025. Palos Verdes Reef: A test of artificial reef design criteria to increase regional fish production in southern California. *Bulletin of Marine Science*. 101(4): 1827-1846.

**Williams, J.P.**, E.M. Jaco, Z. Scholz, C.M. Williams, D.J. Pondella, M.K. Rasser, D.M. Schroeder. 2023. Red rock crab (*Cancer productus*) movement is not influenced by electromagnetic fields produced by a submarine power transmission cable. *Continental Shelf Research*. 269: 105145

Allen, L.G., **J.P. Williams**, J. Bredvik-Curran, D.J. Pondella II, S. Graham, N. Martinez-Takeshita. 2022. A quarter century of monitoring the fish assemblages of San Diego Bay, California from 1995 to 2019. *Southern California Academy of Sciences*. 121(3): 111-134.

**Williams, J.P.**, C.M. Williams, D.J. Pondella, Z.M. Scholz. 2022. Rebirth of a reef: As-built description and rapid returns from the Palos Verdes Reef Restoration Project. *Frontiers in Marine Science*. 9:1010303.

Martin, G., S. Stamnes, N. Henderson, J. Lum, N. Rubin, **J.P. Williams**. 2021. Hemocyte activation and nodule formation in the giant keyhole limpet, *Megathura crenulata*. *Invertebrate Biology*. 140(4): e12355.

**Williams, J.P.**, J.T. Claisse, D.J. Pondella II, C.M. Williams, M.J. Robart, Z. Scholz, E.M. Jaco, T. Ford, H. Burdick, D. Witting. 2021. Sea urchin mass mortality rapidly restores kelp forest communities. *Marine Ecology Progress Series*. 664: 117-131.

Pondella, D.J. II, **J.P. Williams**. 2020. Sea basses, groupers, temperate basses, and wreckfishes. Pages 218-228 in M.S. Love and J.K. Passarelli, editors. *Miller and Lea's guide to the coastal marine fishes of California*, 2<sup>nd</sup> ed. Davis: UC Agriculture and Natural Resources Publication 3556.

- Pondella, D.J. II, S.E. Piacenza, J.T. Claisse, C.M. Williams, **J.P. Williams**, A.J. Zellmer, J.E. Caselle. 2019. Assessing drivers of rocky reef fish biomass density from the Southern California Bight. *Marine Ecology Progress Series*. 628: 125-140.
- Williams, J.P.**, C.M. Williams, C.A. Blanchette, J.T. Claisse, D.J. Pondella II, J.E. Caselle. 2018. Where the weird things are: A collection of species range extensions in the Southern California Bight. *Bulletin of the Southern California Academy of Sciences*. 117(3): 189-202.
- Pondella, D.J. II, **J.P. Williams**, C.M. Williams, J.T. Claisse, D. Witting. 2018. Restoring a nearshore rocky reef ecosystem in the challenge of an urban setting. Pages 165-186 in S. A. Bortone, editor. *Marine artificial reef research and development: integrating fisheries management objectives*. American Fisheries Society, Symposium 86, Bethesda, Maryland.
- Obaza, A.K. and **J.P. Williams**. 2018. Spatial and temporal dynamics of the overwater structure fouling community in southern California. *Marine and Freshwater Research*. 69: 1771-1783.
- Pondella, D.J. II, M.J. Robart, J.T. Claisse, **J.P. Williams**, C.M. Williams, A.J. Zellmer and S.E. Piacenza. 2018. Spatial and temporal fishing patterns at the outer banks of the Southern California Bight. *Western North American Naturalist* 78(3): 341-357.
- Claisse, J.T., C.A. Blanchette, J.E. Dugan, **J.P. Williams**, J. Friewald, D.J. Pondella II, N.K. Schooler, D.M. Hubbard, K. Davis, L.A. Zahn, C.M. Williams, J.E. Caselle. 2018. Biogeographic patterns of communities across diverse marine ecosystems in southern California. *Marine Ecology*. 39: e12453.
- Ebert, T.A., L.M. Barr, J.L. Bodkin, D. Burcham, D. Bureau, H.S. Carson, N.L. Caruso, J.E. Caselle, J.T. Claisse, S. Clemente, K. Davis, P.M. Detwiler, J.D. Dixon, D. O. Duggins, J.M. Engle, J.A. Estes, S.D. Groth, B.M. Grupe, P. Halmay, K.P. Hebert, J.C. Hernández, L.J. Jurgens, P.E. Kalvass, M.C. Kenner, B. Konar, D.J. Kushner, L.C. Lee, D.L. Leighton, G. Montañó-Moctezuma, J.E. Munk, I. Olguin, J.S. Palleiro, D.O. Parker, J.S. Pearse, D.J. Pondella, L. Rogers-Bennett, S.C. Schroeter, A.O. Shelton, J. Sonnenholzner, I.K. Taniguchi, G.R. VanBlaricom, J.C. Watson, B.P. Weitzman, **J.P. Williams**, J. Yakimishyn, Z. Zhang. 2018. Size, growth, and density data for shallow-water sea urchins from Mexico to the Aleutian Islands, Alaska, 1956-2016. *Ecology*. 99(3): 761+51.
- Winston, M.S., J.T. Claisse, C.M. Williams, **J.P. Williams**, D.J. Pondella II. 2018. Age and growth of the Giant Kelpfish, *Heterostichus rostratus* Girard 1854, in Southern California, USA. *Journal of Applied Ichthyology*. 34: 91-96.
- Zahn, L.A., J.T. Claisse, **J.P. Williams**, C.M. Williams, D.J. Pondella II. 2016. The biogeography and community structure of kelp forest macroinvertebrates. *Marine Ecology*. 37: 770-785.
- Pondella, D.J., II, **J.P. Williams**, J.T. Claisse, R. Schaffner, K. Ritter, K. Schiff. 2015. The physical characteristics of nearshore rocky reefs in the Southern California Bight. *Bulletin of the Southern California Academy of Sciences* 114(3): 105-122.
- Mikovari, A., **J.P. Williams**, F. Oakes, R.B. Lincicum, A.J. Zellmer, G.G. Martin. 2015. Radula development in the giant key-hole limpet, *Megathura crenulata*. *Journal of Shellfish Research* 34(3): 893-902.
- Marks, L.M., P. Salinas-Ruiz, D.C. Reed, S.J. Holbrook, C.S. Culver, J.M. Engle, D.J. Kushner, J.E. Caselle, J. Friewald, **J.P. Williams**, J.R. Smith, L.E. Aguilar-Rosas and N.J. Kaplanis. 2015. Range expansion of a non-native, invasive macroalga *Sargassum horneri* (Turner) C. Agardh, 1820 in the eastern Pacific. *BioInvasions Records* 4(4): 243-248.
- Claisse, J.T., D.J. Pondella II, M. Love, L.A. Zahn, C.M. Williams, J.P. Williams, A.S. Bull. 2014. Oil platforms off California are among the most productive marine fish habitats globally. *Proceedings of the National Academy of Sciences* 111(43): 15462-15467.
- Gruenthal, K.M., D.A. Witting, T. Ford, M.J. Neuman, **J.P. Williams**, D.J. Pondella II, A. Bird, N. Caruso, J.R. Hyde, L.W. Seeb, W. A. Larson. 2014. Development and application of genomic tools to the restoration of green abalone in southern California. *Conservation Genetics* 15(1): 109-121.

- Williams, C.M., **J.P. Williams**, J.T. Claisse, D.J. Pondella II, M.L. Domeier, L.A. Zahn. 2013. Morphometric relationships of marine fishes common to central California and the Southern California Bight. *Bulletin of the Southern California Academy of Sciences* 112(3): 217-227.
- Claisse, J.T., **J.P. Williams**, T. Ford, D.J. Pondella II, B. Meux, L. Protopapadakis. 2013. Kelp forest habitat restoration has the potential to increase sea urchin gonad biomass. *Ecosphere* 4(3): 38.
- Pondella, D.J., II, **J.P. Williams**, J.T. Claisse, E.F. Miller. 2012. The ichthyoplankton of King Harbor, Redondo Beach, California 1974-2009. *California Cooperative Oceanic Fisheries Investigations Report* 53: 95-106.
- Williams, J.P.**, J.T. Claisse, D.J. Pondella II, L. Medeiros, C.F. Valle, M.A. Shane. 2012. Patterns of Life History and Habitat Use of an Important Recreational Fishery Species, Spotfin Croaker, and Their Potential Fishery Implications. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* 4(1): 71-84.
- Claisse, J.T., D.J. Pondella II, **J.P. Williams**, J. Sadd. 2012. Using GIS mapping of the extent of nearshore rocky reefs to estimate the abundance and reproductive output of important fishery species. *PLoS ONE* 7(1): e30290.
- Miller, E.F., **J.P. Williams**, D.J. Pondella II. 2011. Queenfish (*Seriphus politus*) and white croaker (*Genyonemus lineatus*) larval growth parameters. *California Cooperative Oceanic Fisheries Investigations Report* 52: 75-79.
- Williams, J.P.**, D.J. Pondella II, B.M. Haggin, L.G. Allen. 2011. New record of Pacific sierra (*Scomberomorus sierra*) with notes on previous California records. *California Fish and Game* 97(1): 44-47.
- Miller, E.F., **J.P. Williams**, D.J. Pondella II, K.T. Herbinson. 2009. Life history, ecology and long-term demographics of queenfish (*Seriphus politus*). *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* 1: 187-199.
- Williams J.P.**, L.G. Allen, M.A. Steele, D.J. Pondella II. 2007. El Niño periods increase growth of juvenile white seabass (*Atractoscion nobilis*) in the Southern California Bight. *Marine Biology* 152(1): 193-200.

#### **REPRESENTATIVE TECHNICAL REPORTS**

- Williams, J.P.**, C.M. Williams, D.J. Pondella II. 2025. Palos Verdes Reef Restoration Project Annual Report: Project Year 2 (2024). A report to the California Coastal Commission, California State Lands Commission, and Department of the Army. Vantuna Research Group, Occidental College, Los Angeles, CA. 62p + iii.
- Pondella, D.J., II, **J.P. Williams**. 2025. Annual Receiving Water Monitoring Report. Chevron Products Company, El Segundo Refinery (NPDES permit No. CA000337).
- Williams J.P.**, E.M. Jaco, Z. Scholz, C.M. Williams, D.J. Pondella, M.K. Rasser, D.M. Schroeder. 2022. Supplemental data regarding the behavioral response of rock crabs to the EMF of subsea cables and potential impact to fisheries. Camarillo (CA): US Department of the Interior, Bureau of Ocean Energy Management. 24 p. Report No.: OCS Study BOEM 2023-005.
- Williams, J.P.**, C.M. Williams, M.J. Robart, Z. Scholz, D.J. Pondella II. 2019. Fisheries Inventory and Utilization of San Diego Bay, San Diego, California for Surveys conducted in April and July 2019. Unified Port of San Diego, San Diego, CA.
- D.J. Pondella II, **Williams, J.P.**, M.J. Robart, C.M. Williams, Z. Scholz. 2019. Ocean-side subtidal Marine Vertebrate and Invertebrate Inventory at Naval Base Point Loma, 2018-2019. United States Navy, Naval Facilities Engineering Command Southwest Division (NAVFAC SW).
- Walther, S.M., **J.P. Williams**, A. Latker, D.B. Cadien, D.W. Diehl, K. Wisenbaker, E. Miller, R. Gartman, C. Stransky and K. Schiff. 2017. Southern California Bight 2013 Regional Monitoring Program: Volume VII. Demersal Fishes and Megabenthic Invertebrates. Southern California Coastal Water Research Project. Costa Mesa, CA.

- Claisse, J.T., D.J. Pondella, C.M. Williams, L.A. Zahn, and **J.P. Williams**. 2015. Current ability to assess impacts of electromagnetic fields associated with marine and hydrokinetic technologies on marine fishes in Hawaii. Final Technical Report, OCS Study BOEM 2015-042. U.S. Department of Energy, Energy Efficiency and Renewable Energy, Golden, Colorado.
- Williams, J.P.**, D.J. Pondella II, K.C. Schiff. 2015. Analysis of Soft-Bottom Fish and Invertebrate Communities from the Southern California Bight, 1994-2013. California Ocean Science Trust, Sacramento, CA.
- Pondella, D.J., II, **J.P. Williams**. 2009. The Rocky Reef Resources of the Port of Los Angeles: A Progress Report on Research Activities in Conjunction with SCCWRP's Bight '08 Rocky Reef Program.

#### **SELECT PROFESSIONAL PRESENTATIONS**

- Williams, J.P.**, C.M. Williams, D.J. Pondella. Building an artificial reef to withstand oceanographic, urban, and geological impacts. GeoHab 22nd International Symposium – Arendal, Norway, 2024
- Williams J.P.**, E.M. Jaco, Z. Scholz, C.M. Williams, D.J. Pondella, M.K. Rasser, D.M. Schroeder. Behavioral response of rock crabs to artificial electromagnetic fields produced by subsea cables. Ocean Sciences Meeting – New Orleans, LA, 2024
- Williams, J.P.**, C.M. Williams, D.J. Pondella. Restoring a buried reef: using benthic habitat mapping to design, build, and monitor an artificial reef. GeoHab 21<sup>st</sup> International Symposium – Saint-Gilles-les-Bains, La Réunion Island (FR), Indian Ocean, 2023
- Williams J.P.**, C.M. Williams, E.M. Jaco, Z. Scholz, D.J. Pondella, M.K. Rasser, D.M. Schroeder. Behavioral response of rock crabs to artificial electromagnetic fields produced by subsea cables. Ecological Society of America – Portland, OR, 2023
- Williams, J.**, J. Claisse, D. Pondella II, C.M. Williams, M. Robart. Long-term monitoring and preliminary evaluation of subtidal marine protected area performance at Palos Verdes Peninsula. Ocean Sciences Meeting – Portland, OR, 2018
- Williams, J.**, D. Pondella II, J. Claisse, C. Williams, M. Robart. Long-term monitoring of kelp forest and tidepool communities: before, during, and after sea star wasting in southern California. Western Society of Naturalists – Monterey, CA, 2016
- Williams, J.**, J. Claisse, D. Pondella II, C. Williams. Characterization of kelp forest fish populations at San Clemente Island, California. American Society of Ichthyologists and Herpetologists – Reno, NV, 2015
- Williams, J.**, D. Pondella II. The Underwater 18th Hole: Assessing the restoration potential of a buried reef at Bunker Point, Palos Verdes Peninsula. Western Society of Naturalists – Oxnard, CA, 2013
- Williams, J.**, J. Claisse, T. Ford, D. Pondella II, L. Fink. Declining kelp forest ecosystem health and potential fisheries losses due to destructive urchin grazing at Palos Verdes Peninsula. Southern California Academy of Sciences – Los Angeles, CA, 2012
- Williams, J.**, D. Pondella II, E. Miller. Life history of the Spotfin Croaker (*Roncador stearnsii*): an otolith-based update to a 47-year-old study. International Otolith Symposium – Monterey, CA, 2009.
- Williams, J.** The relationship between El Niño/Southern Oscillation events and growth of juvenile White Seabass (*Atractoscion nobilis*). American Society of Ichthyologists and Herpetologists - New Orleans, LA, 2006.

### **POPULAR MEDIA**

*Rebirth of a Reef: Palos Verdes Reef Restoration Project*. A short film directed by Shaun Wolfe, Shaun Wolfe Photography, 2022. Running time: 6m38s. <https://youtu.be/UGg0hm06v7c>

*CBS This Morning*. 10 April 2021. Interviewed by Jeff Berardelli, Meteorologist and Climate Specialist at CBS News. Running time: 5m49s. Video: <https://www.cbsnews.com/video/toxic-dumpsite-wreaking-havoc-on-pacific-ocean-ecosystems/> ... Associated article: <https://www.cbsnews.com/news/california-environmental-disaster-ocean-ddt-sea-lions/>