

# Jonathan P. Williams, M.S.

Vantuna Research Group  
Occidental College  
1600 Campus Road  
Los Angeles, CA 90041

Research Scientist  
Resident Senior Instructor of Biology  
jonwilliams@oxy.edu  
Office: (323) 259-2891

## 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)*

**Eight '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. Starnes, 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. Montaño-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+S1.

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. Freiwald, **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 (*Seriphis 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 (*Seriphis 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/>