

Jonathan Adam Warrick, Ph.D.

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USGS Coastal and Marine Geology
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EDUCATION

- Ph.D.** University of California, Santa Barbara (2002)
Interdepartmental Program in Marine Science
- M.S.** University of Wisconsin-Madison (1995)
Civil and Environmental Engineering
- B.S.** California Polytechnic State University, San Luis Obispo (1993)
Soil Science

PROFESSIONAL EXPERIENCE

Research Geologist (4/04-present)
Coastal and Marine Geology Program
U.S. Geological Survey, Santa Cruz, CA

USGS Mendenhall Postdoctoral Fellow (10/02-4/04)
Coastal and Marine Geology Program
U.S. Geological Survey, Menlo Park, CA

Assistant Professor (9/01-9/02)
Earth Sciences Department
Whittier College, Whittier, CA

Instructor (4/99-6/99)
Department of Geography
University of California, Santa Barbara

Hydrologist (6/97-1/98)
Komex-H₂O Science
Huntington Beach, CA

Staff Engineer (2/96-6/97)
Woodward-Clyde Consultants
Santa Ana, CA

Research Assistant (9/93-12/95)
Civil and Environmental Engineering Department
University of Wisconsin-Madison, WI

AWARDS

NSF Research Grant [2007-2011]

NSF 06-514, OCE – Carbon and Water in Earth Science

Collaborative Research: Delivery and Burial of POC on Ocean Margins Dominated by Small, Mountainous Rivers: the Role of Effective Discharge.

PI's: Goni (OSU), Wheatcroft (OSU), Warrick (USGS), Pasternack (UCD), Borgeld (HSU).

(Amount: \$1,577,000 / 4 yrs)

NASA Oceans & Ice Research Grant NRA-04-OES-02 [2004-2008]

Coastal Ocean Biological Response to Urbanization and Climate Variability in the Southern California Bight: Impact of Terrestrial Runoff in the Santa Monica and San Pedro Shelf Systems.

PI's: DiGiacomo (JPL), Jones (USC), Stein (SCCWRP), Stolzenbach (UCLA), Warrick (USGS)

(Amount: \$970,000 / 3 yrs) [Award ranked in top 5 of 120]

USGS Mendenhall Postdoctoral Fellowship [2002-2004]

Sedimentology in urban ocean areas

United States Geological Survey (Amount: \$200,000 / 2 yrs)

Merck/AAAS Undergraduate Science Research [2002-2005]

Influence of plant ecology on water chemistry in the San Gabriel River

Whittier College (Amount: \$60,000 / 3 yrs)

NASA Earth System Science Ph.D. Fellowship [1998-2001]

River dispersal of runoff from the western Transverse Range, California

University of California, Santa Barbara (Amount: \$66,000 / 3 yrs)

NSF - Graduate Research Training Grant [1997-1998]

Coastal Ocean Processes

University of California, Santa Barbara (Amount: \$16,000 / 1 yr)

SELECTED PUBLICATIONS

Warrick JA, GR Cochrane, Y Sagy, G Gelfenbaum, 2008. Nearshore substrate and morphology offshore of the Elwha River. *Northwest Science*, vol. 82, p. 153-163.

Hunsinger GB, Mitra S, **Warrick JA**, and Alexander CR. 2008. Oceanic loading of wildfire-derived organic compounds from a small mountainous river. *Journal of Geophysical Research – Biogeosciences*. v. 113, G02007, doi:10.1029/2007JG000476

Warrick JA, J Xu, M Noble, HJ Lee. 2008. Rapid formation of hyperpycnal sediment gravity currents offshore of a semi-arid California river. *Continental Shelf Research*. v. 28, p. 991-1009, doi: 10.1016/j.csr.2007.11.002

Farnsworth KL and **Warrick JA**. 2008. Sources, Dispersal and Fate of Fine-Grained Sediment for Coastal California. *U.S. Geological Survey Scientific Investigations Report: SIR 2007-5254*. [available at: <http://pubs.usgs.gov/sir/2007/5254/>]

Warrick JA, PM DiGiacomo, SB Weisberg, NP Nezhlin, M Mengel, BH Jones, JC Ohlmann, L Washburn, EJ Terrill and KL Farnsworth. 2007. River plume patterns and dynamics within the Southern California Bight. *Continental Shelf Research*, v. 27, p. 2427-2448, doi:10.1016/j.csr.2007.06.015

Warrick JA and D Rubin. 2007. Suspended-sediment rating-curve response to urbanization and wildfire, Santa Ana River, California. *Journal of Geophysical Research – Earth Surface*. 112, F02018, doi:10.1029/2006JF000662.

Warrick JA, Washburn L, Brzezinski MA, Siegel DA. 2005. Nutrient contributions to the Santa Barbara Channel, California, from the ephemeral Santa Clara River. *Estuarine, Coastal and Shelf Science*. 62:559-574.

Warrick JA, Mertes LAK, Siegel DA, Wasburn L. 2004. A conceptual model for river water and sediment dispersal in the Santa Barbara Channel, California. *Continental Shelf Research*. 24(17):2029-2043.

Warrick JA, Fong DA. 2004. Dispersal scaling from the world's rivers. *Geophysical Research Letters*. 34(4):L04301. DOI: 10.1029/2003GL019114. [2004 AGU Journal Highlight]

Warrick JA, Mertes LAK, Siegel DA, Wasburn L. 2004. Dispersal forcing of a southern California river plume, based on field and remote sensing observations. *Geo-Marine Letters*. 24(1):46-52.

Warrick JA, Mertes LAK, Siegel DA, MacKenzie C. 2004. Estimating suspended sediment concentrations in turbid coastal waters of the Santa Barbara Channel with SeaWiFS. *International Journal of Remote Sensing-Remote Sensing Letters*. 25(10):1995-2002.

Warrick JA, Milliman JD. 2003. Hyperpycnal sediment discharge from semi-arid southern California rivers - implications for coastal sediment budgets. *Geology*. 31(9):781-784.

Warrick JA. 2002. *Short-term (1997-2000) and Long-term (1928-2000) Observations of River Water and Sediment Discharge to the Santa Barbara Channel, California*. Ph.D. Dissertation. University of California, Santa Barbara. 337 pp.

Mertes, LAK and **JA Warrick**. 2001. Measuring flood output from 110 coastal watersheds in California with field measurements and SeaWiFS. *Geology*. 29(7):659-662.