JEFF OPPERMAN

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EDUCATION

University of California, Berkeley, Berkeley, CA 2002

Ph.D. from the division of Ecosystem Science in the department of Environmental Science, Policy and Management. **Duke University,** Durham, NC 1993

B.S.in Biology, 1993. Cum Laude

RECENT PROFESSIONAL EXPERIENCE

- The Nature Conservancy, Chagrin Falls, Ohio2006 -presentSenior Advisor for Sustainable Hydropower.Currently lead TNC's strategy forenvironmentally sustainable hydropower.Provide technical, policy, and strategic support tomultiple projects and programs that seek to improve the environmental sustainability ofhydropower.hydropower.Develop partnerships with water management institutions such as the USArmy Corps of Engineers and China Three Gorges Project Corporation, academic centersand other non-governmental organizations.
- Center for Watershed Sciences, UC Davis, Davis, California 2003 2006 CALFED Science Fellow (2003-2006). Post-doctoral fellowship with three primary components: (1) studied growth of juvenile chinook salmon across floodplain vegetation communities; (2) wrote a series of review papers and developed conceptual models focused on restoration of Central Valley floodplains; (3) defined ecologically productive floods and mapped the corresponding floodplains in the Sacramento Valley. Research Associate (2006-present)

CONSULTING PROJECTS AND TECHNICAL AND POLICY ADVISORY PANELS

- California Energy Commission Instream Flow Assessment Program (2008)
- Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) (Sacramento, CA; 2007-2009) – developed floodplain conceptual model
- Independent Review Panel on Flood Risk and Floodplain Management to the California Department of Water Resources (2007)
- Natural Heritage Institute (San Francisco; 2001-2005)
- Packard Foundation (Los Altos, CA; 2002-2003)
- National Center for Environmental Decision-making Research (Knoxville, TN; 1998)

TEACHING EXPERIENCE

- University of California, Davis 2006
- UC Berkeley, Dept. of Landscape Architecture and Env. Planning, 2002

PEER-REVIEWED PUBLICATIONS (selected)

Opperman, J. J., R. Luster, B. A. McKenney, M. Roberts, and A. W. Meadows. *In press.* Ecologically functional floodplains: connectivity, flow regime, and scale. *Journal of the American Water Resources Association*.

- Esselman, P. and **J. Opperman**. 2010. Overcoming information limitations for developing an environmental flow prescription for a Central American River. *Ecology and Society* 15: article 6 (online)
- Opperman JJ, Galloway GE, Fargione J, Mount JF, Richter BD, Secchi S. 2009 Sustainable floodplains through large-scale reconnection to rivers. *Science* 326: 1487-1488.
- Williams, P., E. Andrews, **J. Opperman**, S. Bozkurt, and P. Moyle. 2009. Quantifying activated floodplains on a lowland regulated river: its application to floodplain restoration in the Sacramento Valley. *San Francisco Estuary and Watershed Science* 7: http://repositories.cdlib.org/jmie/sfews/vol7/iss1/art4
- Jeffres, C. A., J. J. Opperman, and P. B. Moyle. 2008. Ephemeral floodplain habitats provide best growth conditions for juvenile Chinook salmon in a California river. *Environmental Biology of Fishes* 83(4):449-458.
- Opperman, J. J., M. Meleason, R. A. Francis, and R. Davies-Colley. 2008. "Livewood": geomorphic and ecological functions of living trees in river channels. *BioScience* 58(11):1069-1078.
- Lohse, K. A., D. A. Newburn, J. J. Opperman, and A. M. Merenlender. 2008. Forecasting the relative impacts of land use on fine sediment in anadromous fish habitat. *Ecological Applications* 18: 467-482.
- Opperman, J. J. and A. Merenlender. 2007 Living trees provide stable large wood in streams. *Earth Surface Processes and Landforms* 32: 1229-1238

POPULAR MEDIA ARTICLES, REPORTS AND EXTENSION PUBLICATIONS (selected)

- Blog on freshwater conservation on "Cool Green Science" (Conservation blog of The Nature Conservancy). http://blog.nature.org/author/jopperman/
- Opperman, J. J. 2009. In the beginning: a river on fire; blaze on the Cuyahoga marked start of an era that needs to be celebrated. Op-ed in the Cleveland Plain Dealer, 06/21/2009.
- Opperman, J. J. 2008. Floodplain conceptual model. Delta Regional Ecosystem Restoration Implementation Plan, Sacramento, CA.
- Harrison, D., J. J. Opperman, and B. Richter. 2007. Can hydro power be sustainable? *Water Power & Dam Construction* 59: 22-25.
- Opperman, J., A. Merenlender, and D. Lewis. 2006. Maintaining wood in streams: a vital action for fish conservation. University of California Division of Agriculture and Natural Resources. <u>http://anrcatalog.ucdavis.edu/pdf/8157.pdf</u>
- Opperman, J., J. Mount, and P. Moyle. 2004. The rivers tell us how to reduce the flood peril. Op-ed in the Sacramento Bee, 4/25/2004.

CONTRIBUTED PAPERS AT CONFERENCES (selected)

- Opperman, J. J. and N. Andrews, 2008. A virtual reoperation of Glen Canyon Dam. International Symposium on the Three Gorges Dam and the Yangtze River, Yichang, China, October 2008.
- Opperman, J. J. 2008. Ecologically functional floodplains: connectivity, flow regime and scale. *AWRA 2008 Summer Specialty Conference Riparian Buffers and Ecosystems*. American Water Resources Association, Virginia Beach, VA, June 2008.
- Opperman, J. J. 2008. Living rivers and functional floodplains. Association of State Floodplain Managers Annual Conference, Reno, Nevada, May, 2008.
- Opperman, J. J. 2008. A conceptual model for Central Valley floodplains for the Delta Regional Ecosystem Restoration Implementation Program. California Environmental and Water Modeling Forum. Asilomar, Pacific Grove, CA, February, 2008.
- Opperman, J. J., D. Harrison, B. Richter, N. Silk, A. Warner. 2007. A framework for promoting the environmental sustainability of present and future dams.

Riversymposium, Brisbane, Australia, September, 2007.