

G. MATHIAS KONDOLF, PhD

Professor of Environmental Planning, Dept Landscape Architecture & Environmental Planning
University of California Berkeley CA 94720 USA
kondolf@berkeley.edu

EDUCATION

The Johns Hopkins University. PhD, Geography and Environmental Engineering 1988.

University of California at Santa Cruz. MS, Earth Sciences 1982.

Princeton University. AB *cum laude*, Geology 1978.

PROFESSIONAL EXPERIENCE

University of California at Berkeley

Professor of Environmental Planning and Geography: July 2007 to present

(Associate Professor: 1994 to 2006, Assistant Professor: 1988-1994)

Director, Sustainable Environmental Design Major: 2015-present

Chair, Faculty of College of Environmental Design: 2015-present

Chair, Department of Landscape Architecture and Environmental Planning: Jan 2011-Dec 2013

Chair, Center for Portuguese Studies 2001-present.

Co-Director, Environmental Sciences Program: 2008-2011

Oak Ridge National Laboratory Graduate Researcher, Environmental Sciences Division: 1985-1987

US Geological Survey Hydrologic Field Assistant, Colorado River: 1985

Consultant to various government and international agencies, 1980-present.

SERVICE ON GOVERNMENT ADVISORY BOARDS (SELECTED)

Independent Science Review Panel for the Russian River Sonoma and Mendocino County Water Agencies, California.
Chair, 2012-2016

National Research Council Committee on Strategic Research Integrated Water Resources Management. Member: 2013.

US Army Corps of Engineers Technical Review Committee for the Greater Mississippi Basin Post-Flood
Assessment. Member: 2012-2014

National Research Council Committee on Hydrology, Ecology, and Fishes of the Klamath River Basin
Member: 2006-2007

Federal Interagency Flood Risk Management Committee Member: 2005-2007

Environmental Advisory Board to the Chief of the US Army Corps of Engineers: Member: 2002-2007

CALFED Bay-Delta Program Ecosystem Restoration Program Science Board: Member: 1999-2005

LANGUAGES & COUNTRY EXPERIENCE

Languages: English (native), French (fluent), Spanish (basic), Experience: Cambodia, China, Ecuador, Egypt, France, Laos, Morocco, Nicaragua, Nigeria, Portugal, Spain, Switzerland, UK, US, Vietnam.

PUBLICATIONS (SELECTED RECENT)

Pinto, PJ, and GM Kondolf. 2016. Evolution of two urbanized estuaries: environmental change, legal framework, and implications for sea-level rise vulnerability. *Water* 8:535 doi:10.3390/w8110535

Kondolf, GM, and H Piégay. 2016. *Tools in fluvial geomorphology*. 2nd edition. John Wiley & Sons, Chichester UK.

Kondolf, GM and P Pinto. 2017. The social connectivity of rivers. *Geomorphology* 277:182-196.

<http://dx.doi.org/10.1016/j.geomorph.2016.09.028>

Zhao, G, GM Kondolf, X Mu, M Han, Z He, Z Rubin, F Wang, P Gao, W Sun. 2016. Sediment yield reduction associated with land use changes and check dams in a catchment of the Loess Plateau, China. *Catena*
<http://dx.doi.org/10.1016/j.catena.2016.05.010>

Podolak, K, and GM Kondolf. 2016. The line of beauty in river designs: Hogarth's aesthetic theory on capability Brown's eighteenth-century river design and twentieth-century river restoration design. *Landscape Research* 41:149-167. DOI:10.1080/01426397.2015.1073705

- Lopez-Llombart, P, and GM Kondolf. 2015. Encroachments in floodways of the Mississippi River and Tributaries Project. *Natural Hazards* DOI: 10.1007/s11069-015-2094-y
- Piégay, H., G.M. Kondolf, J.T. Minear, L. Vaudor. 2015. Trends in publications in fluvial geomorphology over two decades: A truly new era in the discipline owing to recent technological revolution? *Geomorphology* 248: 489–500. <http://dx.doi.org/10.1016/j.geomorph.2015.07.039>
- Ock, G, D Gaeuman, J McSloy, and GM Kondolf. 2015. Ecological functions of restored gravel bars, the Trinity River, California. *Ecological Engineering* 83:49-60. <http://dx.doi.org/10.1016/j.ecoleng.2015.06.005>
- Beagle, JR, GM Kondolf, L Marcus, and RM Adams. 2015. Anticipatory management for instream habitat: application to Carneros Creek, California. *River Research and Applications*. DOI: 10.1002/rra.2863
- Deitch, MJ, and GM Kondolf. 2015. The incendiary mix of salmon and water in Mediterranean-climate California, Chapter 12 in *Sustainable Water: Challenges and Solutions from California*, pp.269-291, A Lassiter, ed, University of California Press, Berkeley.
- Rubin, ZK, GM Kondolf, and P Carling. 2014. Anticipated geomorphic impacts from Mekong basin dam construction. *International Journal of River Basin Management* doi: 10.1080/15715124.2014.981193
- GM Kondolf, ZK Rubin, JT Minear. 2014. Dams on the Mekong: Cumulative sediment starvation. *Water Resources Research* 50, doi:10.1002/2013WR014651
- Rios-Touma, B, C Prescott, S Axtell, and GM Kondolf. 2014. Habitat restoration in the context of watershed prioritization: the ecological performance of urban streams restoration projects in Portland, OR. *River Research and Applications* DOI: 10.1002/rra.2769
- Habersack, H, D Haspel, and GM Kondolf. 2014. Large rivers in the Anthropocene: insights and tools for understanding climatic, land-use, and reservoir Influences. *Water Resources Research* 50: 3641–3646, doi:10.1002/2013WR014731.
- Kondolf, GM, Y Gao, GW Annandale, GL Morris, E Jiang, R Hotchkiss, P Carling, B Wu, J Zhang, C Peteuil, H-W Wang, C Yongtao, K Fu, Q Guo, T Sumi, Z Wang, Z Wei, C Wu, CT. Yang. 2014. Sustainable sediment management in reservoirs and regulated rivers: experiences from five continents. *Earth's Future* doi: 10.1002/ef2 2013EF000184 online at <http://onlinelibrary.wiley.com/doi/10.1002/2013EF000184/pdf>
- Wang, H-W, and GM Kondolf. 2013. Upstream sediment-control dams: five decades of experience in the rapidly-eroding Dahan River Basin, Taiwan, *Journal of the American Water Resources Association*, DOI: 10.1111/jawr.12141
- Kondolf, GM, and K Podolak. 2013. Space and time scales in human-landscape systems. *Environmental Management* DOI 10.1007/s00267-013-0078-9
- Podolak, K, GM Kondolf, L Mazingo, K Bowhill, and M. Lovell. 2013. Designing with nature? The persistence of Capability Brown's 18th century water features. *Landscape Journal* 32:51-64. doi:10.3368/lj.32.1.95
- Kondolf, GM, K Podolak, and TE Grantham. 2013. Restoring Mediterranean-climate rivers. *Hydrobiologia* 719:527-545. DOI 10.1007/s10750-012-1363-y
- Deitch, M.J., and G. M. Kondolf. 2012. Consequences of variations in magnitude and duration of an instream environmental flow threshold across a longitudinal gradient. *Journal of Hydrology* 420–421: 17–24. DOI:10.1016/j.jhydrol.2011.11.003
- Ludy, J. and G.M. Kondolf. 2012. Flood risk perception in lands 'protected' by 100-year levees. *Natural Hazards* 61(2):829-842. DOI: 10.1007/s11069-011-0072-6
- Kondolf, G.M. 2012. The espace de liberté and restoration of fluvial process: When can the river restore itself and when must we intervene? *River Conservation and Management*, P. Boon & P. Raven, editors. John Wiley & Sons, pp.225-242

Kondolf, G.M. 2011. Setting goals in river restoration: when and where can the river ‘heal itself’? in Simon, A. et al (eds) *Stream Restoration in Dynamic Fluvial Systems: Scientific Approaches, Analyses, and Tools*. Geophysical Monograph Series Vol.194 pp.29-43. American Geophysical Union, Washington DC. DOI: 10.1029/2010GM001020.

Kondolf, G.M., S. Anderson, R. Storesund, M. Tompkins, and P. Atwood. 2011. Post-project appraisals of river restoration in advanced university instruction. *Restoration Ecology* 19(6):696-700. doi: 10.1111/j.1526-100X.2011.00803.x

Michalková, M., H. Piégay, G.M. Kondolf, and S.E. Greco. 2011. Lateral erosion of the Sacramento River, California (1942–1999), and responses of channel and floodplain lake to human influences. *Earth Surface Processes and Landforms* 36:257-272. DOI:10.1002/esp.2106.

Lassette, N.S. and G.M. Kondolf. 2011. Large wood in urban stream channels: re-defining the problem. *River Research and Applications*. DOI: 10.1002/rra.1538

Kondolf, G.M. River restoration and meanders. 2006. *Ecology and Society*. [online] URL: <http://www.ecologyandsociety.org/vol11/iss2/art42/>

Kondolf, G.M., A. Boulton, S. O'Daniel, G. Poole, F. Rahel, E. Stanley, E. Wohl, A. Bang, J. Carlstrom, C. Cristoni, H. Huber, S. Koljonen, P. Louhi, and K. Nakamura. 2006. Process-based ecological river restoration: Visualising three-dimensional connectivity and dynamic vectors to recover lost linkages. *Ecology and Society* 11 (2): 5. [online] URL: <http://www.ecologyandsociety.org/vol11/iss2/art5/>

Kondolf, G.M., and R.J. Batalla. 2005. Hydrological effects of dams and water diversions on rivers of Mediterranean-climate regions: Examples from California. In C. Garcia and R.J. Batalla (eds.) *Catchment dynamics and river processes: Mediterranean and other climate regions*. Elsevier, London. pp.197-211.

AWARDS

EURIAS (European Institute for Advanced Study), senior scholar award to ENS Lyon, 2017.

Landscape Architecture Foundation, Fellow, 2013

Institute for Water Resources, US Army Corps of Engineers, Washington DC, Clarke Scholar, 2011.

Council of Educators in Landscape Architecture. Award of Distinction, 2007.

Fulbright Commission, senior scholar award for research on environmental river management in Portugal, University of Lisbon, Mar-May 2001.

Fulbright Commission, senior scholar award for research on the Eygues River, France, 1997-1998.

EXPERT TESTIMONY

US Supreme Court, Washington DC. Provided written expert testimony and deposition regarding channel change on the Apalachicola River, Florida (Florida vs Georgia), 2016.

Permanent Court of Arbitration on the Indus Waters Kishenganga Arbitration, the Hague. Provided written expert testimony regarding environmental flow requirements of the Kishenganga River, India-Pakistan, 2013.

International Court of Justice, the Hague. Provided written and oral expert testimony regarding environmental impacts of road construction and historical channel changes, Rio San Juan, Nicaragua and Costa Rica, 2012-2015.

California State Water Resources Control Board, Sacramento. Testified regarding water diversions and measurements of streamflow in Napa and Sonoma counties, 2010.

US District Court, San Francisco. Provided written expert testimony regarding the feasibility of restoring salmon in the San Joaquin River below Friant Dam (Natural Resources Defense Council et al. vs US Bureau of Reclamation and Friant Water Users), 2005.