

BIOGRAPHICAL INFORMATION: ELLEN E. WOHL

PRESENT POSITION: Professor of Geology and University Distinguished Professor
Dept of Geosciences
Colorado State University
Ft. Collins, CO 80523

WEBSITES: <https://sites.warnercnr.colostate.edu/ellenwohl/>
<https://sites.warnercnr.colostate.edu/fluvial-geomorphology/>

DEGREES: Arizona State University, Tempe, Arizona
BS in Geology, 1984
University of Arizona, Tucson, Arizona
PhD in Geosciences, 1988

OTHER POSITIONS:

1989-1989 Faculty Research Associate, Dept of Geosciences, University of Arizona
1989-1995 Assistant Professor, Dept of Earth Resources, Colorado State University
1995-2000 Associate Professor, Dept of Earth Resources, Colorado State University

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

Geological Society of America (Fellow)
American Geophysical Union (Fellow)

SCHOLARSHIPS, AWARDS, AND HONORS:

Graduation with honors from Arizona State University, magna cum laude
Sulzer Scholarship (University of Arizona), 1984-1985
Graduate Academic Scholarship (University of Arizona), 1984-1985, 1987-1988
SOCAL Fund Grant (University of Arizona), 1986-1987
Sigma Xi Grant-in-Aid-of-Research, 1986-1987
Geological Society of America Research Grant, 1986-1987
Fulbright-Hays Postgraduate Research Grant, 1986-1987
Butler Scholarship (University of Arizona), 1987-1988
Gladys W. Cole Memorial Award, Geological Society of America, 1995
Fellowship, Japan Society for the Promotion of Science, 1995-1996
Water Center Award for Outstanding Contributions to Interdisciplinary Water Education,
Research, and Outreach (Colorado State University), 2001
G.K. Gilbert Award, Association of American Geographers, 2000 and 2003
Kirk Bryan Award, Geological Society of America, 2009
Distinguished International Fellow, Department of Geography, Durham University, England, 2010
Scholarship Impact Award, Colorado State University, 2015
Outstanding Mentor Award, Warner College of Natural Resources, Colorado State University,
2015

Ralph Alger Bagnold Medal, European Geosciences Union, 2017
CSU University Distinguished Professor, 2017
Distinguished Career Award, GSA Quaternary Geology and Geomorphology Division, 2018
G.K. Gilbert Award, Earth and Planetary Surfaces Section, AGU, 2018
Doctor Honoris Causa, University of Lausanne, Switzerland, 2019
Borland Hydraulics Award, Colorado State University, 2020
Mel Marcus Distinguished Career Award, AAG, 2020
University of Arizona Geosciences, Distinguished Alumni Award, 2020
David Linton Award, British Society for Geomorphology, 2020
Member of Phi Beta Kappa, Phi Kappa Phi, Sigma Xi

Theses and dissertations supervised and completed: 52 MS theses, 29 PhD dissertations

EXTERNAL GRANTS:

66. Assessing the Stream Network on the Old Elk Ranch (2018-2019)
\$95,000 from the Richardson Foundation
65. Longitudinal Variability in Large Wood Along the Merced River, Yosemite National Park
\$70,000 from the US National Park Service (2018-2019)
64. Collaborative Research: Emergent Hydrological Properties Associated with Multiple Channel-Spanning Logjams (2018-2021)
\$265,984 from the National Science Foundation (co-PI Kamini Singha, CO School of Mines & Audrey Sawyer, Ohio State U)
63. Wood-based carbon discharge to the Arctic Ocean (2018-2020)
\$341,379 from the National Science Foundation
62. Assessing the potential for beaver restoration and likely environmental benefits (2017-2018)
\$19,880 from the City and County of Boulder, Colorado
61. Quantifying and predicting the attenuation of downstream fluxes associated with beaver meadows (2016-2018)
\$279,066 from the National Science Foundation (co-PI T. Covino, CSU)
60. Longitudinal patterns of organic carbon storage in mountainous river networks (2016-2019)
\$257,828 from the National Science Foundation
59. Collaborative Research: RAPID: Calibrating Shallow Geophysical Techniques to Detect Large Wood Buried in River Corridors (2016)
\$14,619 from the National Science Foundation (co-PI K. Sinha, CO School of Mines)
58. The 47th Annual Binghamton geomorphology Symposium (2016)
\$42,000 from the National Science Foundation (co-PIs S. Rathburn, CSU, F. Magilligan, Dartmouth)
57. Floodplain carbon storage in mountain rivers (2016-2017)
\$15,749 from the National Science Foundation (DDRI for Nicholas Sutfin)
56. Geophysical characterization of the Sand Creek site
\$27,000 from the National Park Service
55. The active channel and the ordinary high water mark (2015-2016)
\$27,834 from DOD-Army Corps of Engineers
54. Organic carbon storage in beaver meadows (2015-2016)

- \$7,270 from the National Geographic Society
53. Floodplain-instream wood interactions in the Central Yukon River Basin (2014-2015)
\$15,810 from the National Geographic Society
 52. Carbon fluxes to the Arctic Ocean via wood export from the Mackenzie River drainage basin (2012-2013)
\$9,575 from the National Geographic Society
 51. Leaky Rivers: Nutrient Retention and Productivity in Rocky Mountain Streams Under Alternative Stable States (2012-2015)
\$633,745 from National Science Foundation (co-PI D. Walters, USGS)
 51. Tropical Hydrology Workshop (2011)
\$13,070 from the US Army Research Office
 50. Landscapes in the Anthropocene: Exploring the human connections (2010)
\$49,558 from National Science Foundation (co-PI A. Chin, University of Colorado)
 49. Environmental flow strategy validation (2010-2012)
\$45,000 from USDA Forest Service
 48. White River analysis (2009-2012)
\$75,000 from USDA Forest Service
 47. Watershed to local scale characteristics and function of intermittent and ephemeral streams on military lands (2010-2014)
\$1,499,657 from U.S. Army Strategic Environmental Research and Development Program (co-PIs D. Cooper, S. Kampf, CSU)
 46. RAPID: Pre-disturbance surveys of wood loads in headwater streams of the Colorado Front Range (2009-2010)
\$30,435 from National Science Foundation
 45. SGER: Influence of postglacial rebound on river longitudinal profiles in Sweden (2007-2009)
\$35,000 from National Science Foundation
 44. Development of a national protocol for riparian assessment (2007-2009)
\$117,500 from USDA Forest Service
 43. Wood loading in headwater neotropical forest streams (2007-2010)
\$283,030 from National Science Foundation
 42. Measurements of roughness coefficient for steep channels (2007-2009)
\$257,204 from National Science Foundation
 41. Mapping longitudinal distribution of wood along forest streams (2005-2006)
\$21,071 from USDA Forest Service
 40. Testing the existence of a threshold discharge in bedrock channels (2005-2008)
\$203,617 from National Science Foundation
 39. Develop service-wide concepts for riparian habitat and stream restoration (2004-2007)
\$303,692 from National Park Service (co-PI D. Cooper, CSU)
 38. Assessing snow-making impacts to stream channels (2004-2006)
\$75,004 from USDA Forest Service (co-PI B. Bledsoe, CSU)
 37. Geomorphic effects of a jokulhlaup (2004-2005)
\$61,474 from National Science Foundation
 36. Rivers, roads, and people: Complex interactions of overlapping networks in watersheds (2003-2007) \$1,700,000 from National Science Foundation (co-PIs, J. Loomis, J. Ramirez, M.

Laituri, CSU)

35. International Collaboration: Flow hydraulics along step-pool channels (2003-2004)
\$6804 from National Science Foundation
34. Assessment of historical and contemporary land-use impacts on pool habitat in the Upper South Platte River drainage basin (2003-2006)
\$73,212 from USDA Forest Service
33. Anabranching channels in jointed bedrock: an integrated flume and field study (2003-2005)
\$124,781 from National Science Foundation (co-PI G. Springer, Ohio University)
32. Flow hydraulics along step-pool channels (2003-2004)
\$8,000 from National Science Foundation
31. Gradient-related trends in mountain channel geometry (2003)
\$11,300 from National Science Foundation
30. Quantifying historical and contemporary coarse sediment input and storage and fine sediment storage along Black Canyon (2002-2003)
\$50,012 from US National Park Service
29. Hierarchical physical classification of western streams (2000-2004)
\$788,144 from EPA (co-PIs B. Bledsoe, L. Poff, C. Watson, CSU)
28. Wetland, Aquatic and Riparian Protocols (2000-2005)
\$142,550 from USDA Forest Service (co-PIs D. Cooper and L. Poff, CSU)
27. North Fork Gunnison River Improvement Project (2000-2001)
\$50,000 from the North Fork River Improvement Association (co-PI D. Cooper, CSU)
26. Quantitative modeling of channelized flow within a karst stream (2000-2002)
\$102,185 from National Science Foundation
25. Hydraulic resistance of large woody debris in step pool channels (2000-2001)
\$2175 from the National Science Foundation (REU supplement)
24. Characterizing channel disturbance regimes in hydroclimatically extreme regions (2000-2003)
\$162,639 from the US Army Research Office
23. Chemical weathering in granitic channels of India and the United States (1999-2001)
\$12,192 from the National Science Foundation
22. Hydraulic resistance of large woody debris in step pool channels (1999-2001)
\$78,200 from the National Science Foundation
21. Acquisition of hydraulics instrumentation for field-based research (1999-2004)
\$54,068 from the National Science Foundation
20. Instrumentation for disturbance regimes of hydrologically extreme regions (1999-2000)
\$122,562 from US Army Research Office
19. Modeling flows for fish habitat maintenance (1998-2000)
\$45,000 from the Colorado Division of Wildlife
18. Inventory of current and historic erosion-control projects in the Rio Puerco basin and quantification of sediment yields (1998-2000)
\$45,150 from the US Bureau of Land Management
17. Mitigation of mountain-channel sedimentation resulting from reservoir sediment releases (1998- 2000)
\$72,670 from the National Science Foundation
16. Channel response to reservoir sedimentation (1997-1998)
\$25,000 from Colorado Water Conservation Board, Trout Unlimited, and U.S. Bureau of

Reclamation

15. Flow resistance of large woody debris in headwater streams (1997-1999)
\$70,400 from NCASI (Ntnl Council of the Paper Industry for Air and Stream Improvement)
14. Lithologic controls on bedrock channel morphology (1995-1996)
\$35,000 from the Japan Society for the Promotion of Science
13. Flood hazards associated with glacier-lakes in the eastern Himalaya Mountains (1994-1997)
\$82,756 from the National Science Foundation
12. Energy expenditure in deep, narrow bedrock canyons (1994)
\$7000 from the Geological Society of America
11. Integrative riparian ecosystem modeling along the Yampa River, Colorado (1994-1996)
\$39,777 from The Nature Conservancy's Ecosystem Research Program
10. Integration of palynological and geomorphological analyses to determine paleoenvironmental conditions at the Hudson-Meng site (1993)
\$11,925 from the USDA Forest Service (co-investigator E. Kelly, CSU)
9. Reconstruction of past river discharge in central Russia (1992)
\$3400 from the National Research Council and the National Academy of Science
8. Regional flood hazard analysis (1991-1993)
\$299,930 from the National Science Foundation (co-investigator J. Salas, CSU)
7. Validation of water yield thresholds on the Kootenai National Forest (1992-1994)
\$110,745 from the USDA Forest Service (co-investigator L. MacDonald, CSU)
6. Paleoflood records in the southern Negev Desert (1991-1992)
\$7200 from the US-Israel Educational Foundation
5. An evaluation of flooding in the vicinity of Harpers Ferry, West Virginia (1991-1992)
\$40,000 from the USDI National Park Service
4. Controls on subalpine channel morphology (1991-1992)
\$20,000 from the USDA Forest Service
3. Fluvial terraces: A tool for integrating geomorphic processes, climatic and tectonic events, and landscape development (1990-1992)
\$102,608 from the National Science Foundation (co-investigator D. Merritts, F&M College)
2. Holocene paleofloods of northern Australia (1989-1991)
\$24,050 from the National Geographic Society (co-investigator V. Baker, U. Az.)
1. Paleoflood history of Redfield Canyon, Arizona (1989)
\$5711 from the Arizona Department of Water Resources

BIBLIOGRAPHY:

Refereed Publications

234. Ortega-Becerril JA, B Livers, E **Wohl**. In press. Regional- to local-scale controls on waterfalls in Rocky Mountain National Park, Colorado. *Journal of Mountain Science*.
233. Hinshaw S, E **Wohl**, D Davis. In press. The effects of longitudinal variations in valley geometry and wood load on flood response. *Earth Surface Processes and Landforms*.
232. **Wohl** E. in press. Rivers in the Anthropocene: the US perspective. *Geomorphology*.
231. Doughty MN, E **Wohl**, AH Sawyer, K Singha. 2020. Mapping increases in hyporheic

- exchange from channel-spanning logjams. *Journal of Hydrology* 587: 124931.
230. Scott DN, E **Wohl**. 2020. Geomorphology and climate interact to control organic carbon stock and age in mountain river valley bottoms. *Earth Surface Processes and Landforms* 45: 1911-1925.
229. Swanson FJ, SV Gregory, A Iroume, V Ruiz-Villanueva, E **Wohl**. In press. Reflections on the history of research on large wood in rivers. *Earth Surface Processes and Landforms*.
228. Scamardo JE, E **Wohl**. 2020. Sediment storage and shallow groundwater response to beaver dam analogs in the Colorado Front Range, USA. *River Research and Applications* 36: 398-409.
227. **Wohl** E. 2020. Wood process domains and wood loads on floodplains. *Earth Surface Processes and Landforms* 45: 144-156.
226. Scott, DN, **Wohl** E, Yochum SE. 2019. Wood jam dynamics database and assessment model (WoodDAM): A framework to measure and understand wood jam characteristics and dynamics. *River Research and Applications* 35: 1466-1477.
225. **Wohl** E, E Iskin. 2019. Patterns of floodplain spatial heterogeneity in the Southern Rockies, USA. *Geophysical Research Letters* 46: 5864-5870.
224. **Wohl** E, KB Lininger, SL Rathburn, NA Sutfin. 2020. How geomorphic context governs the influence of wildfire on floodplain organic carbon in fire-prone environments of the western United States. *Earth Surface Processes and Landforms* 45: 38-55.
223. **Wohl** E. 2019. Forgotten legacies: Understanding and mitigating historical human alterations of river corridors. *Water Resources Research* 55: 5181-5201.
222. Ruiz-Villanueva V, B Mazzorana, E Blade, I Ribarren, L Mao, F Nakamura, D Ravazzolo, D Rickenmann, M Sanz-Ramos, M Stoffel, E **Wohl**. 2019. Characterization of wood-laden flows in rivers. *Earth Surface Processes and Landforms* 44: 1694-1709.
221. Sutfin NA, E **Wohl**. 2019. Elevational differences in hydrogeomorphic disturbance regime influence sediment residence times within mountain river corridors. *Nature Communications* 10: 2221.
220. Lininger KB, E **Wohl**. 2019. Floodplain dynamics in North American permafrost regions under a warming climate and implications for organic carbon stocks: a review and synthesis. *Earth-Science Reviews* 193: 24-44.
219. Lininger KB, E **Wohl**, JR Rose, SJ Leisz. 2019. Significant floodplain soil organic carbon storage along a large high latitude river and its tributaries. *Geophysical Research Letters* 46: 2121-2129.
218. **Wohl** E, SK Hinshaw, JE Scamardo, PE Gutierrez-Fonseca. 2019. Transient organic jams in Puerto Rican mountain streams after hurricanes. *River Research and Applications* 35: 280-289.
217. **Wohl** E, N Kramer, V Ruiz-Villanueva, DN Scott, F Comiti, A Gurnell, H Piegay, KB Lininger, K Jaeger, D Walters, K Fausch. 2019. The natural wood regime in rivers. *BioScience* 69: 259-273.
216. **Wohl** E, G Brierley, D Cadol, TJ Coulthard, T Covino, KA Fryirs, G Grant, RG Hilton, SN Lane, FJ Magilligan, KM Meitzen, P Passalacqua, RE Poeppel, SL Rathburn, and LS Sklar. 2019. Connectivity as an emergent property of geomorphic systems. *Earth Surface Processes and Landforms* 44: 4-26.
215. Laurel D, E **Wohl**. 2019. The persistence of beaver-induced geomorphic heterogeneity

- and organic carbon stock in river corridors. *Earth Surface Processes and Landforms* 44: 342-353.
214. Scott DN, E **Wohl**. 2019. Bedrock fracture influences on geomorphic process and form across process domains and scales. *Earth Surface Processes and Landforms* 44: 27-45.
213. **Wohl** E, KB Lininger, DN Scott. 2018. River beads as a conceptual framework for building carbon storage and resilience to extreme climate events into river management. *Biogeochemistry* 141: 365-383.
212. Scott DN, EE **Wohl**. 2018. Geomorphic regulation of floodplain soil organic carbon concentration in watersheds of the Rocky and Cascade Mountains, USA. *Earth Surface Dynamics* 6: 1101-1114.
211. Wollheim WM, S Bernal, DA Burns, JA Czuba, CT Driscoll, AT Hansen, RT Hensley, JD Hosen, S Inamdar, SS Kaushal, LE Koenig, YH Lu, A Marzadri, PA Raymond, D Scott, RJ Stewart, PJ Vidon, E **Wohl**. 2018. River network saturation concept: factors influencing the balance of biogeochemical supply and demand of river networks. *Biogeochemistry* 141: 503-521.
210. Scott DN, EE **Wohl**. 2018. Natural and anthropogenic controls on wood loads in river corridors of the Rocky, Cascade, and Olympic Mountains, USA. *Water Resources Research* 54: 7893-7909.
209. **Wohl** E. 2018. The challenges of channel heads. *Earth-Science Reviews* 185: 649-664.
208. **Wohl** E, DN Scott, KB Lininger. 2018. Spatial distribution of channel and floodplain large wood in forested river corridors of the Northern Rockies. *Water Resources Research* 54: 7879-7892.
207. **Wohl** E. 2018. Geomorphic context in rivers. *Progress in Physical Geography* 42: 841-857.
206. Herdrich AT, DL Winkelman, MP Venarsky, DM Walters and E **Wohl**. 2018. The loss of large wood affects Rocky Mountain trout populations. *Ecology of Freshwater Fishes* 27: 1023-1036.
205. Venarsky MP, DM Walters, RO Hall, B Livers, E **Wohl**. 2018. Shifting stream planform state decreases stream productivity yet increases riparian animal production. *Oecologia* 187: 167-180.
204. **Wohl** E and A Pfeiffer. 2018. Organic carbon storage in floodplain soils of the U.S. prairies. *River Research and Applications* 34: 406-416.
203. **Wohl** E, D Cadol, A Pfeiffer, K Jackson, and D Laurel. 2018. Distribution of large wood within river corridors in relation to flow regime in the semiarid western US. *Water Resources Research* 54: 1890-1904.
202. Lininger KB, E **Wohl**, and JR Rose. 2018. Geomorphic controls on floodplain soil organic carbon in the Yukon Flats, interior Alaska, from reach to river basin scales. *Water Resources Research* 54: 1934-1951.
201. Pfeiffer A and E **Wohl**. 2018. Where does wood most effectively enhance storage? Network-scale distribution of sediment and organic matter stored by instream wood. *Geophysical Research Letters* 45. <https://doi.org/10.1002/2017GL076057>.
200. Livers B, E **Wohl**, KJ Jackson and NA Sutfin. 2018. Historical land use as a driver for alternative states of stream form and function in forested mountain watersheds of the Southern Rocky Mountains. *Earth Surface Processes and Landforms* 43: 669-684.
199. **Wohl** E, KB Lininger, M Fox, B Baillie and WD Erskine. 2017. Instream large wood loads across bioclimatic regions. *Forest Ecology and Management* 404: 370-380.

198. Wegener P, T Covino and E **Wohl**. 2017. Beaver-mediated lateral hydrologic connectivity, fluvial carbon and nutrient flux, and aquatic ecosystem metabolism. *Water Resources Research* 53: 4606-4623.
197. **Wohl** E, KB Lininger and JS Baron. 2017. Land before water: the relative temporal sequence of human alteration of freshwater ecosystems in the conterminous United States. *Anthropocene* 18: 27-46.
196. **Wohl** E. 2017. Connectivity in rivers. *Progress in Physical Geography* 41: 345-362.
195. Righini M, N Surian, E **Wohl**, L Marchi, F Comiti, W Amponsah, and M Borga. 2017. Geomorphic response to an extreme flood in two Mediterranean rivers (northeastern Sardinia, Italy): analysis of controlling factors. *Geomorphology* 290: 184-199.
194. **Wohl** E. 2017. The significance of small streams. *Frontiers of Earth Science* 11: 447-456.
193. Garrett KK and EE **Wohl**. 2017. Climate-invariant area-slope relations in channel heads initiated by surface runoff. *Earth Surface Processes and Landforms* 42: 1745-1751.
192. Sutfin NA and E **Wohl**. 2017. Substantial soil organic carbon retention along floodplains of mountain streams. *Journal of Geophysical Research Earth Surface* 122: 1325-1338.
191. **Wohl** E, RO Hall, KB Lininger, NA Sutfin, and DM Walters. 2017. Carbon dynamics of river corridors and the effects of human alterations. *Ecological Monographs* 87: 379-409.
190. **Wohl** E and D Scott. 2017. Transience of channel head locations following disturbance. *Earth Surface Processes and Landforms* 42: 1132-1139.
189. Scott DN and EE **Wohl**. 2017. Evaluating carbon storage on subalpine lake deltas. *Earth Surface Processes and Landforms* 42: 1472-1481.
188. Rathburn SL, GL Bennett, EE **Wohl**, C Briles, B McElroy and N Sutfin. 2017. The fate of sediment, wood, and organic carbon eroded during an extreme flood, Colorado Front Range, USA. *Geology* 45: 499-502.
187. Lininger KB, E **Wohl**, NA Sutfin and J Rose. 2017. Floodplain downed wood volumes: a comparison across three biomes. *Earth Surface Processes and Landforms* 42: 1248-1261.
186. Kramer N, E **Wohl**, B Hess-Homeier and S Leisz. 2017. The pulse of driftwood over multiple timescales in a great northern river. *Water Resources Research* 53: 1928-1947.
185. Kramer N and E **Wohl**. 2017. Rules of the road: A qualitative and quantitative synthesis of large wood transport through drainage networks. *Geomorphology* 279: 74-97.
184. Ortega J, M Gómez-Heras, R Fort and E **Wohl**. 2017. How does anisotropy in bedrock river granitic outcrops influence pothole genesis and development? *Earth Surface Processes and Landforms* 42: 956-968.
183. Laurel D and E **Wohl**. 2017. Examining the effect of geomorphic characteristics on pool temperatures for native fish habitat management in mountainous stream networks. *Earth Surface Processes and Landforms* 42: 1299-1307.
182. Ortega-Becerril JA, A Jorge-Coronado, G Garzon and E **Wohl**. 2017. Sobrarbe Geopark: an example of highly diverse bedrock rivers. *Geoheritage* 9: 533-548.
181. **Wohl** E. 2016. River geomorphic complexity. *Progress in Physical Geography* 40, 598-615.
180. Records R, E **Wohl** and M Arabi. 2016. Phosphorus in the river corridor. *Earth-Science Reviews* 158: 65-88.

179. **Wohl** E, S Rathburn, S Chignell, K Garrett, D Laurel, B Livers, et al. 2017. Mapping longitudinal stream connectivity in the North St. Vrain Creek watershed of Colorado. *Geomorphology* 277: 171-181.
178. **Wohl** E. 2017. Bridging the gaps: an overview across time and space of wood in diverse rivers. *Geomorphology* 279: 3-26.
177. Livers B and E **Wohl**. 2016. Sources and interpretation of channel complexity in forested subalpine streams of the Southern Rocky Mountains. *Water Resources Research* 52, 3910-3929.
176. **Wohl** E and DN Scott. 2017. Wood and sediment storage and dynamics in river corridors. *Earth Surface Processes and Landforms* 42, 5-23.
175. **Wohl** E, BP Bledsoe, KD Fausch, N Kramer, KR Bestgen, and MN Gooseff. 2016. Management of large wood in streams: an overview and proposed framework for hazard evaluation. *Journal of the American Water Resources Association* 52, 315-335.
174. Chin A, L An, JR Florsheim, LR Laurencio, RA Marston, AP Solverson, GL Simon, E Stinson, and E **Wohl**. 2016. Investigating feedbacks in human-landscape systems: lessons following a wildfire in Colorado, USA. *Geomorphology* 252, 40-50.
173. **Wohl** E, SN Lane, and AC Wilcox. 2015. The science and practice of river restoration. *Water Resources Research* 51, 5974-5997.
172. Sutfin N, E **Wohl**, and K Dwire. 2016. Banking carbon: a review of organic carbon reservoirs in river systems. *Earth Surface Processes and Landforms* 41, 38-60.
171. Kramer N and E **Wohl**. 2015. Driftcretions: the legacy impacts of driftwood on shoreline morphology. *Geophysical Research Letters* 42, 5855-5864.
170. **Wohl** E. 2015. Particle dynamics: the continuum of bedrock to alluvial river segments. *Geomorphology* 241, 192-208.
169. **Wohl** E. 2015. Legacy effects on sediments in river corridors. *Earth-Science Reviews* 147, 30-53.
168. **Wohl** E. 2015. Of wood and rivers: bridging the perception gap. *WIREs Water* 2, 167-176.
167. Jackson KJ and E **Wohl**. 2015. Instream wood loads in montane forest streams of the Colorado Front Range, USA. *Geomorphology* 234, 161-170.
166. **Wohl** E, BP Bledsoe, RB Jacobson, NL Poff, SL Rathburn, DM Walters, and AC Wilcox. 2015. The natural sediment regime: broadening the foundation for ecosystem management. *BioScience* 65, 358-371.
165. Livers B and E **Wohl**. 2015. An evaluation of stream characteristics in glacial versus fluvial process domains in the Colorado Front Range. *Geomorphology* 231: 72-82.
164. Caskey ST, TS Blaschak, E **Wohl**, E Schnackenberg, DM Merritt, and KA Dwire. 2015. Downstream effects of stream flow diversion on channel characteristics and riparian vegetation in the Colorado Rocky Mountains, USA. *Earth Surface Processes and Landforms* 40, 586-598.
163. **Wohl** E. 2014. A legacy of absence: wood removal in U.S. rivers. *Progress in Physical Geography* 38: 637-663.
162. Yochum SE, BP Bledsoe, E **Wohl**, and GCL David. 2014. Spatial characterization of roughness elements in high-gradient channels of the Fraser Experimental Forest, Colorado, USA. *Water Resources Research* 50: 6015-6029.
161. Sutfin NA, J Shaw, E **Wohl**, and D Cooper. 2014. A geomorphic classification of ephemeral channels in a mountainous, arid region, southwestern Arizona, USA.

- Geomorphology 221: 164-175.
160. **Wohl** E. 2014. Time and the rivers flowing: fluvial geomorphology since 1960. *Geomorphology* 216: 263-282.
159. Scott DN, DR Montgomery, and E **Wohl**. 2014. Log step and clast interactions in mountain streams in the central Cascade Range of Washington State, USA. *Geomorphology* 216: 180-186.
158. Polvi LE, E **Wohl** and DM Merritt. 2014. Modeling the functional influence of vegetation type on streambank cohesion. *Earth Surface Processes and Landforms* 39, 1245-1258.
157. Kramer N and E **Wohl**. 2014. Estimating fluvial wood discharge using timelapse photography with varying sampling intervals. *Earth Surface Processes and Landforms* 39, 844-852.
156. Beckman N and E **Wohl**. 2014. Carbon storage in mountainous headwater streams: the role of old-growth forest and logjams. *Water Resources Research* 50, 2376-2393.
155. Beckman N and E **Wohl**. 2014. Effects of forest stand age on the characteristics of logjams in mountainous forest streams. *Earth Surface Processes and Landforms* 39, 1421-1431.
154. Chin A, LR Laurencio, MD Daniels, E **Wohl**, MA Urban, KL Boyer, A Butt, H Piegay, and KJ Gregory. 2014. The significance of perceptions and feedbacks for effectively managing wood in rivers. *River Research and Applications* 30, 98-111.
153. **Wohl** E and N Beckman. 2014. Controls on the longitudinal distribution of channel-spanning logjams in the Colorado Front Range, USA. *River Research and Applications* 30, 112-131.
152. Chin A, JL Florsheim, E **Wohl**, and BD Collins. 2014. Feedbacks in human-landscape systems. *Environmental Management* 53, 28-41.
151. Harden CP, A Chin, MR English, R Fu, KA Galvin, AK Gerlak, PF McDowell, DE McNamara, JM Peterson, NL Poff, EA Rosa, WD Solecki, and EE **Wohl**. 2014. Understanding human-landscape interactions in the “Anthropocene.” *Environmental Management* 53, 4-13.
150. **Wohl** E and N Beckman. 2014. Leaky rivers: implications of the loss of longitudinal fluvial disconnectivity in headwater streams. *Geomorphology* 205, 27-25.
149. Ortega JA, M Gómez-Heras, R Perez-López, and E **Wohl**. 2014. Multiscale structural and lithologic controls in the development of stream potholes on granite bedrock rivers. *Geomorphology* 204, 588-598.
148. **Wohl** E, AK Gerlak, NL Poff, and A Chin. 2014. Common core themes in geomorphic, ecological, and social systems. *Environmental Management* 53, 14-27.
147. Cadol D and E **Wohl**. 2013. Variable contribution of wood to the hydraulic resistance of headwater tropical streams. *Water Resources Research* 49, 4711-4723.
146. **Wohl** E. 2013. Landscape-scale carbon storage associated with beaver dams. *Geophysical Research Letters* 40, 1-6.
145. Ortega JA, E **Wohl** and B Livers. 2013. Waterfalls on the eastern side of Rocky Mountain National Park, Colorado, USA. *Geomorphology* 198, 37-44.
144. **Wohl** E. 2013. Migration of channel heads following wildfire in the Colorado Front Range, USA. *Earth Surface Processes and Landforms* 38, 1049-1053.
143. **Wohl** E. 2013. Floodplains and wood. *Earth-Science Reviews* 123, 194-212.
142. **Wohl** E. 2013. Wilderness is dead: Whither critical zone studies and geomorphology in

- the Anthropocene? *Anthropocene* 2: 4-15.
141. **Wohl** E. 2013. Redistribution of forest carbon caused by patch blowdowns in subalpine forests of the Southern Rocky Mountains, USA. *Global Biogeochemical Cycles* 27, 1205-1213.
 140. Polvi L and E **Wohl**. 2013. Biotic drivers of stream planform – implications for understanding the past and restoring the future. *BioScience* 63, 439-452.
 139. **Wohl** E. 2013. The complexity of the real world in the context of the field tradition in geomorphology. *Geomorphology* 200, 50-58.
 138. Jimenez MA and E **Wohl**. 2013. Solute transport modeling using morphological parameters in step-pool reaches. *Water Resources Research* 49, 1-15, doi:10.1002/wrcr.20102.
 137. **Wohl** E and FL Ogden. 2013. Organic carbon export in the form of wood during an extreme tropical storm, Upper Rio Chagres, Panama. *Earth Surface Processes and Landforms* 38, 1407-1416.
 136. Rathburn SL, ZK Rubin, and EE **Wohl**. 2013. Evaluating channel response to an extreme sedimentation event in the context of historical range of variability: Upper Colorado River, USA. *Earth Surface Processes and Landforms* 38, 391-406.
 135. David GCL, CJ Legleiter, E **Wohl** and SE Yochum. 2013. Characterizing spatial variability in velocity and turbulence intensity using 3-D acoustic Doppler velocimeter data in a plane-bed reach of East St. Louis Creek, Colorado, USA. *Geomorphology* 183: 28-44.
 134. Dubinski IM and E **Wohl**. 2013. Relationships between block quarrying, bed shear stress, and stream power: A physical model of block quarrying in a jointed bedrock channel. *Geomorphology* 180-181: 66-81.
 133. **Wohl** E, K Dwire, N Sutfin, L Polvi and R Bazan. 2012. Mechanisms of carbon storage in mountainous headwater rivers. *Nature Communications* 3:1263, doi:10.1028/ncomms2274.
 132. Ethridge FG, **Wohl** E, Gellis A, Germanoski D, Hayes BR, Ouchi S. 2012. Memorial to Stanley A. Schumm (1927-2011). *Geological Society of America Memorials* 41, 51-56.
 131. Dust D and E **Wohl**. 2012. Characterization of the hydraulics at natural step crests in step-pool streams via weir flow concepts. *Water Resources Research* W09542, doi:10.1029/2011WR011724.
 130. **Wohl** E. 2012. Identifying and mitigating dam-induced declines in river health: Three case studies from the western United States. *International Journal of Sediment Research* 27, 271-287.
 129. **Wohl** E et al. 2012. The hydrology of the humid tropics. *Nature Climate Change* 2, 655-662.
 128. **Wohl** E, S Bolton, D Cadol, F Comiti, JR Goode, and L Mao, 2012. A two end-member model of wood dynamics in headwater neotropical rivers. *Journal of Hydrology* 462-463, 67-76.
 127. Cadol D, S Kampf and E **Wohl**. 2012. Effects of evapotranspiration on baseflow in a tropical headwater catchment. *Journal of Hydrology* 462-463, 4-14.
 126. Sabo JL, K Bestgen, W Graf, T Sinha and E **Wohl**. 2012. Dams in the Cadillac Desert: downstream effects in a geomorphic context. *The Year in Ecology and Conservation Biology* 1249, 227-246.

125. Yochum S, GCL David, B Bledsoe, and E **Wohl**. 2012. Velocity prediction in high-gradient channels. *Journal of Hydrology* 424-425, 84-98.
124. Polvi LE and E **Wohl**. 2012. The beaver-meadow complex revisited – the role of beaver in post-glacial floodplain development. *Earth Surface Processes and Landforms* 37, 332-346.
123. Rubin Z, SL Rathburn, E **Wohl**, and DL Harry. 2012. Historic range of variability in geomorphic processes as a context for restoration: Rocky Mountain National Park, Colorado, USA. *Earth Surface Processes and Landforms* 37, 209-222.
122. Dust D and E **Wohl**. 2012. Conceptual model for complex river responses using an expanded Lane's relation. *Geomorphology* 139-140, 109-121.
121. Kramer NR, E **Wohl**, and D Harry. 2012. Using ground penetrating radar to 'unearth' buried beaver dams. *Geology* 40, 43-46.
120. **Wohl** E and D Dust. 2012. Geomorphic response of a headwater channel to augmented flow. *Geomorphology* 138: 329-338.
119. **Wohl** E. 2011. What should these rivers look like? Historical range of variability and human impacts in the Colorado Front Range, USA. *Earth Surface Processes and Landforms* 36: 1378-1390.
118. Wilcox AC, EE **Wohl**, F Comiti and L Mao, 2011. Hydraulics, morphology, and energy dissipation in an alpine step-pool channel. *Water Resources Research* 47: W07514, doi: 10.1029/2010WR010192.
117. David GCL, EE **Wohl**, SE Yochum, and BP Bledsoe, 2011. Comparative analysis of bed resistance partitioning in high gradient streams. *Water Resources Research* 47: W07507, doi:10.1029/2010WR009540.
116. Jaeger KL and E **Wohl**, 2011. Channel response in a semi-arid stream to removal of tamarisk and Russian olive, *Water Resources Research* 47: W02536, doi:10.1029/2009WR008741.
115. Cadol D and E **Wohl**, 2011. Coarse sediment movement in the vicinity of a logjam in a neotropical gravel-bed stream, *Geomorphology* 128: 191-198.
114. **Wohl** E. 2011. Threshold-induced complex behavior of wood in streams. *Geology* 39: 587-590.
113. Henkle JE, E **Wohl** and N Beckman, 2011. Locations of channel heads in the semiarid Colorado Front Range, USA. *Geomorphology* 129: 309-319.
112. Polvi LE, EE **Wohl**, and DM Merritt, 2011. Geomorphic and process domain controls on riparian zones in the Colorado Front Range. *Geomorphology* 125: 504-516.
111. **Wohl** E, LE Polvi, and D Cadol, 2011. Wood distribution along streams draining old-growth floodplain forests in Congaree National Park, South Carolina, USA. *Geomorphology* 126: 108-120.
110. **Wohl** E and D Cadol, 2011. Neighborhood matters: patterns and controls on wood distribution in old-growth forest streams of the Colorado Front Range, USA. *Geomorphology* 125: 132-146.
109. **Wohl** E. 2010. A brief review of the process domain concept and its application to quantifying sediment dynamics in bedrock canyons. *Terra Nova* 22: 411-416.
108. Sabo JL, T Sinha, LC Bowling, GHW Schoups, WW Wallender, ME Campana, KA Cherkauer, PL Fuller, WL Graf, JW Hopkins, JS Kominoski, C Taylor, SW Trimble, RH Webb, and EE **Wohl**. 2010. Reclaiming freshwater sustainability in the Cadillac

- Desert. *Proceedings of the National Academy of Sciences* 107: 21263-21270.
107. Goode JR and E **Wohl**, 2010. Coarse sediment transport in a bedrock channel with complex bed topography. *Water Resources Research* 46: W11524.
 106. Graf WL, E **Wohl**, T Sinha and JL Sabo, 2010. Sedimentation and sustainability of western American reservoirs. *Water Resources Research* 46: W12535.
 105. David GCL, E **Wohl**, SE Yochum, and BE Bledsoe. 2010. At-a-station hydraulic geometry of steep mountain streams, Colorado, USA. *Earth Surface Processes and Landforms* 35: 1820-1837.
 104. Dust DW and E **Wohl**. 2010. Quantitative technique for assessing the geomorphic thresholds for floodplain instability and braiding in the semi-arid environment. *Natural Hazards* 55: 145-160.
 103. Goode JR and E **Wohl**, 2010. Substrate controls on the longitudinal profile of bedrock channels: implications for reach-scale roughness. *Journal of Geophysical Research Earth Surface* 115: F03018.
 102. Cadol D and E **Wohl**. 2010. Wood retention and transport in tropical, headwater streams, La Selva Biological Station, Costa Rica. *Geomorphology* 123: 61-73.
 101. Pike AS, FN Scatena and E **Wohl**. 2010. Longitudinal patterns in stream channel geomorphology in the tropical montane streams of the Luquillo Mountains, Puerto Rico. *Earth Surface Processes and Landforms* 35: 1402-1417.
 100. **Wohl** E, DA Cenderelli, KA Dwire, SE Ryan-Burkett, MK Young, and KD Fausch, 2010. Large instream wood studies: a call for common metrics. *Earth Surface Processes and Landforms* 35: 618-625.
 99. Jaeger KL, E **Wohl**, and A Simon. 2010. A comparison of average rates of fluvial erosion between the south-western and south-eastern United States. *Earth Surface Processes and Landforms* 35: 447-459.
 98. David GCL, E **Wohl**, SE Yochum, and BP Bledsoe. 2010. Controls on spatial variations in flow resistance along steep mountain streams. *Water Resources Research* 46: W03513.
 97. **Wohl** E and K Jaeger. 2009. Geomorphic implications of hydroclimatic differences among step-pool channels. *Journal of Hydrology* 374: 148-161.
 96. **Wohl** E, F Ogden, and J Goode. 2009. Episodic wood loading in a mountainous neotropical watershed. *Geomorphology* 111: 149-159.
 95. Cadol D, E **Wohl**, JR Goode, and KL Jaeger. 2009. Wood distribution in neotropical forested headwater streams of La Selva, Costa Rica. *Earth Surface Processes and Landforms* 34: 1198-1215.
 94. Comiti F, D Cadol, and E **Wohl**. 2009. Flow regimes, bed morphology, and flow resistance in self-formed step-pool channels. *Water Resources Research* 45: W054424, 18 pp.
 93. Pollen-Bankhead N, A Simon, K Jaeger, and E **Wohl**. 2009. Destabilization of streambanks by removal of invasive species in Canyon de Chelly National Monument, Arizona. *Geomorphology* 103: 363-374.
 92. Chin A, S Anderson, A Collison, BJ Ellis-Sugai, JP Haltiner, JB Hogervorst, GM Kondolf, LS O'Hirok, AH Purcell, AL Riley and E **Wohl**. 2009. Linking theory and practice for restoration of step-pool streams. *Environmental Management* 43:645-661.
 91. Thompson DM and E **Wohl**. 2009. The linkage between velocity patterns and sediment entrainment in a forced-pool and riffle unit. *Earth Surface Processes and Landforms* 34: 177-192.

90. **Wohl** E and KL Jaeger. 2009. A conceptual model for the longitudinal distribution of wood in mountain streams. *Earth Surface Processes and Landforms* 34: 329-344.
89. David G, BP Bledsoe, DM Merritt, and E **Wohl**. 2008. The impacts of ski slope development on stream channel morphology in the White River National Forest, Colorado, USA. *Geomorphology* 103: 375-388.
88. **Wohl** E and JR Goode. 2008. Wood dynamics in headwater streams of the Colorado Rocky Mountains. *Water Resources Research* 44, W09429.
87. **Wohl** E and GCL David. 2008. Consistency of scaling relations among bedrock and alluvial channels. *Journal of Geophysical Research - Earth Surfaces* 113: F04013.
86. Nowakowski AL and E **Wohl**. 2008. Influences on wood load in mountain streams of the Bighorn National Forest, Wyoming, USA. *Environmental Management* 42: 557-571.
85. Oswald EB and E **Wohl**. 2008. Wood-mediated geomorphic effects of a jökulhlaup in the Wind River Mountains, Wyoming. *Geomorphology* 100: 549-562.
84. Chin A, MD Daniels, MA Urban, H Piegay, KJ Gregory, W Bigler, AZ Butt, JL Grable, SV Gregory, M Lafrenz, LR Laurencio and E **Wohl**. 2008. Perceptions of wood in rivers and challenges for stream restoration in the United States. *Environmental Management* 41: 893-903.
83. **Wohl** E. 2008. Substrate influences on the formation of straths in the Poudre River drainage, Colorado Front Range. *Journal of Geophysical Research – Earth Surfaces* 113: F01007, 12 pp.
82. **Wohl** E. and DM Merritt. 2008. Reach-scale channel geometry of mountain streams. *Geomorphology* 93: 168-185.
81. **Wohl** E. 2007. Channel-unit hydraulics on a pool-riffle channel. *Physical Geography* 28: 233-248.
80. **Wohl** E and DJ Merritts. 2007. What is a natural river? *Geography Compass* 1: 871-900.
79. Comiti F, L Mao, A Wilcox, EE **Wohl**, and MA Lenzi. 2007. Field-derived relationships for flow velocity and resistance in high-gradient streams. *Journal of Hydrology* 340: 48-62.
78. **Wohl** E, D Cooper, NL Poff, F Rahel, D Staley and D Winters. 2007. Assessment of stream ecosystem function and sensitivity in the Bighorn National Forest, Wyoming. *Environmental Management* 40: 284-302.
77. Dubinski IM and E **Wohl**. 2007. Estimates of coarse sediment mobility in the Black Canyon of the Gunnison River, Colorado. *Environmental Management* 40: 147-160.
76. Goode JR and E **Wohl**. 2007. Relationships between land-use and forced-pool characteristics in the Colorado Front Range. *Geomorphology* 83: 249-265.
75. Rengers FK and E **Wohl**. 2007. Grain-size trends of gravel bars on the Rio Chagres, Panama. *Geomorphology* 83: 282-293.
74. Legleiter CJ, TL Phelps and E **Wohl**. 2007. Geostatistical analysis of the effects of stage and roughness on reach-scale spatial patterns of velocity and turbulence intensity. *Geomorphology* 83: 322-345.
73. Wilcox AC and E **Wohl**. 2007. Field measurements of three-dimensional hydraulics in a step-pool channel. *Geomorphology* 83: 215-231.
72. Springer GS, S Tooth and E **Wohl**. 2006. Theoretical modeling of stream potholes based upon empirical observations from the Orange River, Republic of South Africa. *Geomorphology* 82: 160-176.
71. Kondolf GM, AJ Boulton, S O'Daniel, GC Poole, FJ Rahel, EH Stanley, E **Wohl**,

- A Bång, J Carlstrom, C Cristoni, H Huber, S Koljonen, P Louhi and K Nakamura. 2006. Process-based ecological river restoration: visualizing three-dimensional connectivity and dynamic vectors to recover lost linkages. *Ecology and Society* 11 (2): 5 [online].
70. **Wohl** E. 2006. Human impacts to mountain streams. *Geomorphology* 79: 217-248.
69. Flores AN, BP Bledsoe, CO Cuhaciyan and E **Wohl**. 2006. Channel-reach morphology dependence on energy, scale, and hydroclimatic processes with implications for prediction using geospatial data. *Water Resources Research* 42: W06412.
68. Wilcox AC and E **Wohl**. 2006. Flow resistance dynamics in step-pool streams channels: 1. Large woody debris and controls on total resistance. *Water Resources Research* 42: W05418.
67. Wilcox AC, JM Nelson, and E **Wohl**. 2006. Flow resistance dynamics in step-pool streams channels: 2. Partitioning between grain, spill, and woody debris resistance. *Water Resources Research* 42: W05419.
66. Merritt DM and EE **Wohl**. 2006. Plant dispersal along rivers fragmented by dams. *River Research and Applications* 21: 1-26.
65. Sable KA and E **Wohl**. 2006. The relationship of lithology and watershed characteristics to fine sediment deposition in streams of the Oregon Coast Range. *Environmental Management* 37: 659-670.
64. Springer GS, S Tooth and EE **Wohl**. 2005. Geometry and dynamics of pothole growth as defined by field data and modeling. *Journal of Geophysical Research – Earth Surface* 110: F04010.
63. Stewart G, A Anderson and E **Wohl**, 2005. Two-dimensional modeling of habitat suitability as a function of discharge on two Colorado rivers. *River Research and Applications* 21: 1061-1074.
62. Chin A and E **Wohl**. 2005. Toward a theory for step pools in stream channels. *Progress in Physical Geography* 29: 275-296.
61. Jaquette C, E **Wohl** and D Cooper. 2005. Establishing a context for river rehabilitation, North Fork Gunnison River, Colorado. *Environmental Management* 35: 593-606.
60. **Wohl** E. 2005. Compromised rivers: understanding historical human impacts on rivers in the context of restoration. *Ecology and Society*.
59. **Wohl** E, PA Angermeier, B Bledsoe, GM Kondolf, L MacDonnell, DM Merritt, NL Poff, MA Palmer and D Tarboton. 2005. River restoration. *Water Resources Research* 41: 10.1029/2005WR003985, 12 p.
58. **Wohl** E and DM Merritt. 2005. Prediction of mountain stream morphology. *Water Resources Research* 41: 10.1029/2004WR003779, 10 p.
57. **Wohl** E and A Wilcox. 2005. Channel geometry of mountain streams in New Zealand. *Journal of Hydrology* 300: 252-266.
56. **Wohl** E. 2004. Limits of downstream hydraulic geometry. *Geology* 32: 897-900.
55. **Wohl** E, JN Kuzma and NE Brown. 2004. Reach-scale channel geometry of a mountain river. *Earth Surface Processes and Landforms* 29: 969-981.
54. Zelt RB and EE **Wohl**. 2004. Channels and organic debris in adjacent burned and unburned watersheds a decade after wildfire, Park County, Wyoming. *Geomorphology* 57: 217-233.
53. Rathburn S and E **Wohl**. 2003. Predicting fine sediment dynamics along a pool-riffle

- mountain channel. *Geomorphology* 55: 111-124.
52. Springer GS, EE **Wohl**, JA Foster, and DG Boyer. 2003. Testing for reach-scale adjustments of hydraulic variables to soluble and insoluble strata: Buckeye Creek and Greenbrier River, West Virginia. *Geomorphology* 56: 201-217.
 51. Steinberger N and E **Wohl**. 2003. Impacts to water quality and fish habitat associated with maintaining natural channels for flood control. *Environmental Management* 31: 724-740.
 50. **Wohl** E and S Rathburn. 2003. Mitigation of sedimentation hazards downstream from reservoirs. *International Journal of Sediment Research* 18: 97-106.
 49. Merritt DM and EE **Wohl**. 2003. Downstream hydraulic geometry and channel adjustment during a flood along an ephemeral, arid-region drainage. *Geomorphology* 52: 165-180.
 48. Phippen SJ and E **Wohl**. 2003. An assessment of land use and other factors affecting sediment loads in the Rio Puerco watershed, New Mexico. *Geomorphology* 52: 269-287.
 47. MacFarlane WA and EE **Wohl**. 2003. The influence of step composition on step geometry and flow resistance in step-pool streams of the Washington Cascades. *Water Resources Research* 39: ESG3-1 to ESG3-13.
 46. **Wohl** E and CJ Legleiter. 2003. Controls on pool characteristics along a resistant-boundary channel. *Journal of Geology* 111: 103-114.
 45. Cenderelli DA and EE **Wohl**. 2003. Flow hydraulics and geomorphic effects of glacial-lake outburst floods in the Mount Everest region, Nepal. *Earth Surface Processes and Landforms* 28: 385-407.
 44. Curran JH and EE **Wohl**. 2003. Large woody debris and flow resistance in step-pool channels, Cascade Range, Washington. *Geomorphology* 51: 141-157.
 43. **Wohl** E and H Achyuthan. 2002. Substrate influences on incised channel morphology. *Journal of Geology* 110: 115-120.
 42. Ehlen J and E **Wohl**. 2002. Joints and landform evolution in bedrock canyons. *Transactions, Japanese Geomorphological Union* 23: 237-255.
 41. Merritt DM and EE **Wohl**. 2002. Processes governing hydrochory along rivers: hydraulics, hydrology, and dispersal phenology. *Ecological Applications* 12: 1071-1087.
 40. Springer GS and EE **Wohl**. 2002. Empirical and theoretical investigations of sculpted forms in Buckeye Creek Cave, West Virginia. *Journal of Geology* 110: 469-481.
 39. **Wohl** EE and DM Merritt. 2001. Bedrock channel morphology. *Geological Society of America Bulletin* 113: 1205-1212.
 38. Cenderelli DA and EE **Wohl**. 2001. Peak discharge estimates of glacial lake outburst floods and "normal" climatic floods in the Mount Everest region, Nepal. *Geomorphology* 40: 57-90.
 37. Rathburn SL and EE **Wohl**. 2001. One-dimensional sediment transport modeling of pool recovery along a mountain channel after a reservoir sediment release. *Regulated Rivers* 17: 251-273.
 36. Trayler CR and EE **Wohl**. 2000. Seasonal changes in bed elevation in a step-pool channel, Rocky Mountains, Colorado, USA. *Arctic, Antarctic, and Alpine Research* 32: 95-103.
 35. **Wohl** EE and DM Thompson. 2000. Velocity characteristics along a small step-pool channel. *Earth Surface Processes and Landforms* 25: 353-367.
 34. **Wohl** EE and DA Cenderelli. 2000. Sediment deposition and transport patterns following a reservoir sediment release. *Water Resources Research* 36: 319-333.
 33. **Wohl** EE. 2000. Substrate influences on step-pool sequences in the Christopher Creek

- drainage, Arizona. *Journal of Geology* 108: 121-129.
32. Thompson DM, EE **Wohl** and RD Jarrett. 1999. Velocity reversals and sediment sorting in pools and riffles controlled by channel constrictions. *Geomorphology* 27: 229-241.
 31. Thompson DM, JM Nelson and EE **Wohl**. 1998. Interactions between pool geometry and hydraulics. *Water Resources Research* 34: 3673-3681.
 30. Blizard CR and EE **Wohl**. 1998. Relationships between hydraulic variables and bedload transport in a subalpine channel, Colorado Rocky Mountains, USA. *Geomorphology* 22: 359-371.
 29. Kelly EF, SW Blecker, CM Yonker, CG Olson, EE **Wohl** and LC Todd. 1998. Stable isotope composition of soil organic matter and phytoliths as paleoenvironmental indicators. *Geoderma* 82: 59-81.
 28. Pruess J, EE **Wohl** and RD Jarrett. 1998. Methodology and implications of maximum paleodischarge estimates for mountain channels, upper Animas River basin, Colorado, USA. *Arctic and Alpine Research* 30: 40-50.
 27. **Wohl** EE. 1998. Uncertainty in flood estimates associated with roughness coefficient. *ASCE Journal of Hydraulic Engineering* 124: 219-223.
 26. **Wohl** EE and H Ikeda. 1998. Patterns of bedrock channel erosion on the Boso Peninsula, Japan. *Journal of Geology* 106: 331-345.
 25. **Wohl** EE and H Ikeda. 1998. The effect of roughness configuration on velocity profiles in an artificial channel. *Earth Surface Processes and Landforms* 23: 159-169.
 24. **Wohl** EE, SM Madsen and LH MacDonald. 1997. Characteristics of log and clast bed steps in step-pool streams of northwestern Montana, USA. *Geomorphology* 20: 1-10.
 23. Fanok SF and EE **Wohl**. 1997. Assessing the accuracy of paleohydrologic indicators, Harpers Ferry, West Virginia. *Journal of the American Water Resources Association* 33: 1091-1102.
 22. **Wohl** EE and H Ikeda. 1997. Experimental simulation of channel incision into a cohesive substrate at varying gradients. *Geology* 25: 295-298.
 21. Hammack L and **Wohl**, E. 1996. Debris-fan formation and rapid modification at Warm Springs Rapid, Yampa River, Colorado. *Journal of Geology* 104: 729-740.
 20. **Wohl** EE, DJ Anthony, SW Madsen and DM Thompson. 1996. A comparison of surface sampling methods for coarse fluvial sediments. *Water Resources Research* 32: 3219-3226.
 19. Thompson DM, EE **Wohl** and RD Jarrett. 1996. A revised velocity-reversal and sediment-sorting model for a high-gradient, pool-riffle stream. *Physical Geography* 17: 142-156.
 18. Grimm MM, EE **Wohl** and RD Jarrett. 1995. Coarse-sediment distribution as evidence of an elevation limit for flash flooding, Bear Creek, Colorado. *Geomorphology* 14: 199-210.
 17. Hilmes MM and EE **Wohl**. 1995. Changes in channel morphology associated with placer mining. *Physical Geography* 16: 223-242.
 16. **Wohl** EE. 1995. Estimating flood magnitude in ungaged mountain channels, Nepal. *Mountain Research and Development* 15: 69-76.
 15. **Wohl** EE and AG Georgiadi. 1994. Holocene paleomeanders along the Sejm River, Russia. *Zeitschrift fur Geomorphologie* 38: 299-309.
 14. Mejia-Navarro M and EE **Wohl**. 1994. Geological hazard and risk evaluation using GIS:

- Methodology and model applied to Medellin, Colombia. *Bulletin of the Association of Engineering Geologists* XXXI: 459-481.
13. **Wohl** EE, SJ Fuertsch and VR Baker. 1994. Sedimentary records of late Holocene floods along the Fitzroy and Margaret Rivers, Western Australia. *Australian Journal of Earth Sciences* 41: 273-280.
 12. **Wohl** EE, N Greenbaum, AP Schick, and VR Baker. 1994. Controls on bedrock channel incision along Nahal Paran, Israel. *Earth Surface Processes and Landforms* 19: 1-13.
 11. **Wohl** EE and T Grodek. 1994. Channel bed-steps along Nahal Yael, Negev desert, Israel. *Geomorphology* 9: 117-126.
 10. **Wohl** EE, RH Webb, VR Baker and G Pickup. 1994. Sedimentary flood records in the bedrock canyons of rivers in the monsoonal region of Australia. *Colorado State University Water Resources Paper* 107, 102 pp.
 9. Adenlof KA and EE **Wohl**. 1994. Controls on bedload movement in a subalpine stream of the Colorado Rocky Mountains, USA. *Arctic and Alpine Research* 26: 77-85.
 8. Merritts DJ, KR Vincent, and EE **Wohl**. 1994. Long river profiles, tectonism, and eustasy: A guide to interpreting fluvial terraces. *Journal of Geophysical Research (Special Issue on Tectonics and Topography)* 99(B7): 14,031-14,050.
 7. O'Connor JE, LL Ely, EE **Wohl**, LE Stevens, TS Melis, VS Kale and VR Baker. 1994. A 4500-year record of large floods on the Colorado River in the Grand Canyon, Arizona. *The Journal of Geology* 102: 1-9.
 6. **Wohl** E. 1993. Bedrock channel incision along Piccaninny Creek, Australia. *The Journal of Geology* 101: 749-761.
 5. **Wohl** EE, KR Vincent and DJ Merritts. 1993. Pool and riffle characteristics in relation to channel gradient. *Geomorphology* 6: 99-110.
 4. **Wohl** E. 1992. Gradient irregularity in the Herbert Gorge of northeastern Australia. *Earth Surface Processes and Landforms* 17: 69-84.
 3. **Wohl** EE. 1992. Bedrock benches and boulder bars: Floods in the Burdekin Gorge of Australia. *Geological Society of America Bulletin* 104: 770-778.
 2. Murray A, E **Wohl** and J East. 1992. Thermoluminescence and excess ^{226}Ra decay dating of late Quaternary fluvial sands, East Alligator River, Australia. *Quaternary Research* 37: 29-41.
 1. **Wohl** E and PA Pearthree. 1991. Debris flows as geomorphic agents in the Huachuca Mountains of southeastern Arizona. *Geomorphology* 4: 273-292.

Book Chapters

31. **Wohl** E, PR Bierman and DR Montgomery. 2017. Earth's dynamic surface: the past 50 years in geomorphology. In, M.E. Bickford, ed., *The Web of Geological Sciences: Advances, Impacts, and Interactions: New Papers to Celebrate GSA's 125th Anniversary*, Geological Society of America Special Paper 523. Geological Society of America, Boulder, Colorado, doi:10.1130/2016.2523(01).
30. **Wohl** E. 2015. Rivers in the critical zone. In, J.R. Giardino and C. Houser, eds., *Principles and Dynamics of the Critical Zone*, Elsevier, pp. 267-293.
29. **Wohl** E. 2014. Dryland channel networks: resiliency, thresholds, and management

- metrics. In, R.S. Harmon, S.E. Baker, and E.V. McDonald, eds., *Military Geosciences in the Twenty-First Century*, Geological Society of America, Boulder, CO, pp. 147-158.
28. **Wohl** E. 2011. Seeing the forest and the trees: wood in stream restoration in the Colorado Front Range, United States. In, A. Simon et al., eds., *Stream Restoration in Dynamic Fluvial Systems: Scientific Approaches, Analyses, and Tools*, AGU Press, Washington, D.C., p. 399-418.
 27. **Wohl** E. 2011. Water follows the people: analysis of water use in the western Great Plains and Rocky Mountains of Colorado, USA. In, I.P. Martini and W. Chesworth, eds., *Landscapes and Societies*. Springer, p. 391-406.
 26. **Wohl** E, A Chin, JP Haltiner and GM Kondolf. 2011. Managing stream morphology with check dams. In, C. Conesa Garcia and M.A. Lenzi, eds., *Check dams, morphological adjustments and erosion control in torrential streams*. Nova Publishers, NY, p. 135-149.
 25. **Wohl** E. 2010. Analysing a natural system. In, N. Clifford, S. French, and G. Valentine, eds., *Key Methods in Geography*, 2nd edition. SAGE Publications, London, p. 253-273.
 24. Rathburn SL, DM Merritt, EE **Wohl**, JS Sanderson and HAL Knight. 2009. Characterizing environmental flows for maintenance of river ecosystems: North Fork Cache la Poudre River, Colorado. In, L.A. James, S.L. Rathburn, and G.R. Whittecar, eds., *Management and restoration of fluvial systems with broad historical changes and human impacts*. Geological Society of America Special Paper 451, Boulder, Colorado, p. 143-157.
 23. **Wohl** E, D Egenhoff and K Larkin. 2009. Vanishing riverscapes: a review of historical channel change on the western Great Plains. In, L.A. James, S.L. Rathburn, and G.R. Whittecar, eds., *Management and restoration of fluvial systems with broad historical changes and human impacts*. Geological Society of America Special Paper 451, Boulder, Colorado, p. 131-142.
 22. **Wohl** E, MA Palmer and GM Kondolf. 2008. The US experience. In, G. Brierley and K. Fryirs, eds., *River futures*. Island Press, Washington, D.C., p. 174-200.
 21. **Wohl** E. 2007. Hydrology and discharge. In, A. Gupta, ed., *Large rivers of the world*. Wiley and Sons, p. 29-44.
 20. **Wohl** E. 2007. Review of effects of large floods in resistant-boundary channels. In, H. Habersack, ed., *Gravel-bed rivers: from process understanding to river restoration*. Elsevier, pp. 181-212.
 19. **Wohl** E. 2005. Downstream hydraulic geometry along a tropical mountain river. In, R. Harmon, ed., *The Rio Chagres: A multidisciplinary profile of a tropical watershed*. Kluwer Academic Publishers, p. 169-188.
 18. **Wohl** E and G Springer. 2005. Bedrock channel incision along the Rio Chagres, Panama. In, R. Harmon, ed., *The Rio Chagres: A multidisciplinary profile of a tropical watershed*. Kluwer Academic Publishers, p. 189-209.
 17. Montgomery DR and EE **Wohl**. 2004. Rivers and riverine landscapes. In, A. Gillespie, S.C. Porter, and B.F. Atwater, eds., *The Quaternary period in the United States*. Elsevier, Amsterdam, pp. 221-246.
 16. **Wohl** E and T Oguchi. 2004. GIS and mountain hazards. In, M.P. Bishop, ed., *Geographic Information Science and Mountain Geomorphology*. Praxis Scientific Publishing, Chichester, UK, pp. 309-341.
 15. Rathburn SL and EE **Wohl**. 2003. Sedimentation hazards downstream from reservoirs. In, W.L. Graf, ed., *Dam removal research: status and prospects*. The John Heinz Center for

- Science, Economics and the Environment, Washington, D.C., pp. 105-118.
14. **Wohl** EE. 2002. Modeled paleoflood hydraulics as a tool for interpreting bedrock channel morphology. In, P.K. House et al., eds., *Ancient floods, modern hazards: principles and applications of paleoflood hydrology*. American Geophysical Union Press, pp. 345-358.
 13. **Wohl** E. 2001. Rivers. In, A. Orme, ed., *Physical geography of North America*. Oxford University Press.
 12. **Wohl** E, D Cenderelli and M Mejia-Navarro. 2001. Channel change from extreme floods in canyon rivers. In, D.J. Anthony et al., eds., *Applying geomorphology to environmental management*. Water Resources Publications, pp. 149-174.
 11. **Wohl** EE. 1999. Incised bedrock channels. In, S.E. Darby and A. Simon, eds., *Incised river channels: processes, forms, engineering and management*. Wiley and Sons, Chichester, pp. 187-218.
 10. **Wohl** E. 1999. Boulders on the move: geomorphic hazards from floods and debris flows along mountain rivers. In, Z.-Y. Wang, T.-W. Soong, and B.C. Yen, eds., *Sediment transport and disasters. Special Issue of International Journal of Sediment Research (China)*, v. 14, p.285- 293.
 9. **Wohl** EE. 1998. Bedrock channel morphology in relation to erosional processes. In, K.J. Tinkler and E.E. Wohl, eds., *Rivers over rock: fluvial processes in bedrock channels*. Am. Geophys. Union Geophysical Monograph 107, pp. 133-151.
 8. Tinkler KJ and EE **Wohl**. 1998. A primer on bedrock channels. In, K.J. Tinkler and E.E. Wohl, eds., *Rivers over rock: fluvial processes in bedrock channels*. Am. Geophys. Union Geophysical Monograph 107, pp. 1-18.
 7. Tinkler KJ and EE **Wohl**. 1998. Field studies of bedrock channels. In, K.J. Tinkler and E.E. Wohl, eds., *Rivers over rock: fluvial processes in bedrock channels*. Am. Geophys. Union Geophysical Monograph 107, pp. 261-277.
 6. Thompson DM and EE **Wohl**. 1998. Flume experimentation and simulation of bedrock channel processes. In, K.J. Tinkler and E.E. Wohl, eds., *Rivers over rock: fluvial processes in bedrock channels*. Am. Geophys. Union Geophysical Monograph 107, pp. 279-296.
 5. **Wohl** E and D Cenderelli. 1998. Flooding in the Himalaya Mountains. In, V.S. Kale, ed., *Flood studies in India*, Geological Society of India, Memoir 41, Bangalore, pp. 77-99.
 4. Cenderelli DA and EE **Wohl**, E.E. 1998. Sedimentology and clast orientation of deposits produced by glacial-lake outburst floods in the Mount Everest region, Nepal. In, J. Kalvoda and C.L. Rosenfeld, eds., *Geomorphological hazards in high mountain areas*, Kluwer Academic Publishers, The Netherlands, pp. 1-26.
 3. **Wohl** EE and Y Enzel. 1995. Data for palaeohydrology. In, K.J. Gregory, L. Starkel, and V.R. Baker, eds., *Global continental palaeohydrology*. John Wiley and Sons, p. 23-59.
 2. Mejia-Navarro M, EE **Wohl** and SD Oaks. 1994. Geological hazards, vulnerability, and risk assessment using GIS: Model for Glenwood Springs-Carbondale, Colorado. In, M. Morisawa, ed., *Geomorphology and Natural Hazards*, Elsevier, p. 331-354.
 1. Salas JD, EE **Wohl** and RD Jarrett. 1994. Determination of flood characteristics using systematic, historical and paleoflood data. In, G. Rossi, N. Harmancioglu, and V. Yevjevich, eds., *Coping with floods*. Kluwer Academic Publishers, Dordrecht, p. 111-134.

Books, Edited Volumes, and Other Special Publications

21. **Wohl** E, DN Scott, SE Yochum. 2019. Managing for Large Wood and Beaver Dams in Stream Corridors. USDA Forest Service General Technical Report RMRS-GTR-404, 136 pp.
20. **Wohl** E. 2019. Saving the dammed: why we need beaver-modified ecosystems. Oxford University Press.
19. **Wohl** E. 2018. The upstream extent of a river network: a review of scientific knowledge of channel heads. Cold Regions Research and Engineering Laboratory, US Army Corps of Engineers, Washington, D.C., ERDC/CRREL CR-18-1, 47 pp.
18. **Wohl** E. 2017. Sustaining river ecosystems and water resources. Springer.
17. **Wohl** E, MK Mersel, AO Allen, KM Fritz, SL Kichefski, RW Lichvar, TL Nadeau, BJ Topping, PH Trier, FB Vanderbilt. 2016. Synthesizing the scientific foundation for ordinary high water mark delineation in fluvial systems. Cold Regions Research and Engineering Laboratory, US Army Corps of Engineers, Washington, D.C., ERDC/CRREL SR-16-5, 198 pp.
16. **Wohl** E. 2016. Rhythms of change in Rocky Mountain National Park. University Press of Kansas.
15. **Wohl** E. 2015. Transient landscapes: insights on a changing planet. University Press of Colorado.
14. Yochum SE, F Comiti, E **Wohl**, GCL David and L Mao. 2014. Photographic guidance for selecting flow resistance coefficients in high-gradient channels. USDA Forest Service General Technical Report RMRS-GTR-323, 91 pp.
http://www.fs.fed.us/rm/pubs/rmrs_gtr323.pdf
13. **Wohl** E. 2014. Rivers in the landscape: science and management. Wiley-Blackwell, Chichester, UK.
12. **Wohl** E. (Ed.). 2013. Treatise on fluvial geomorphology. Elsevier, Amsterdam.
11. **Wohl** E. 2013. Wide rivers crossed: the South Platte and the Illinois of the American Prairie. University Press of Colorado.
10. **Wohl** E. 2011. A world of rivers: environmental change on ten of the world's great rivers. University of Chicago Press.
9. **Wohl** E. 2010. Mountain rivers revisited. American Geophysical Union, Water Resources Monograph 19, 573 pp.
8. **Wohl** E. 2009. Of rock and rivers: seeking a sense of place in the American West. University of California Press.
7. **Wohl** E. 2009. Island of grass. University Press of Colorado.
6. **Wohl** E. 2004. Disconnected rivers: Draining the vitality of U.S. Waterways. Yale University Press.
5. **Wohl** EE. 2001. Virtual Rivers: lessons from the mountain rivers of the Colorado Front Range. Yale University Press, New Haven, 210 pp.
4. **Wohl** E. 2000. Mountain rivers. American Geophysical Union, Water Resources Monograph 14, 320 pp.
3. **Wohl** E. 2000. (Ed.) Inland flood hazards: Human, riparian, and aquatic communities. Cambridge University Press, 498 pp.
2. Tinkler KJ and EE **Wohl**. 1998. (Eds.) Rivers over rock: fluvial processes in bedrock

channels. Am. Geophys. Union Geophysical Monograph 107, 323 pp.
1. Wohl E. 1994. Rain forest into desert. University Press of Colorado.

PROFESSIONAL SERVICE

Manuscript Reviews

American Journal of Science; Arabian Journal of Science and Engineering; Arctic, Antarctic, and Alpine Research; Canadian Journal of Forest Research; Catena; Earth and Planetary Science Letters; Earth-Science Reviews; Earth Surface Processes and Landforms; Ecological Applications; Environmental Management; Forest Ecology and Management; Frontiers in Ecology and the Environment; Geodinamica Acta; Geological Society of America Bulletin; Geological Society of America Special Paper series; Geology; Geomorphology; Geophysical Research Letters; Global and Planetary Change; GSA Today; Hydrological Processes; International Journal of Computers and Applications; International Journal of Sediment Research; Journal of the American Water Resources Association; Journal of Geology; Journal of Geophysical Research; Journal of Hydraulic Engineering; Journal of Hydrology; Journal of Range Management; Journal of Sedimentary Petrology; Journal of Sedimentary Research; Limnology and Oceanography; Mountain Research and Development; National Park Service Proceedings Series; Natural Areas Journal; Polish Journal of Environmental Studies; Quaternary Research; Regulated Rivers; U.S. Geological Survey Professional Papers; U.S. Geological Survey Water-Resources Investigations; Water, Air and Soil Pollution; Water Management; Water Resources Research; Wetlands

Service to Societies and Journals

Editorial board of *Geomorphology*, 1996-present
Associate Editor, *Geological Society of America Bulletin*, 1997-2006
Associate Editor, *Water Resources Research*, 2001-2011
Editorial board of *Environmental Management*, 2007-2013
Editorial board of *Geography Compass*, 2007-present
Editorial board of *Earth Surface Processes and Landforms*, 2008-2009; Associate Editor, 2010-present
Associate Editor, *Journal of Hydrology*, 2010-2013
Editor, *Water Resources Research*, 2018-present
Editor-in-Chief, Oxford Bibliography of Environmental Science, 2013-present, <http://www.oxfordbibliographies.com/obo/page/environmental-science>
Board member, Geological Society of America Foundation, 2017-present
Officer, Quaternary Geology & Geomorphology Division, Geological Society of America, 2001-2005 (Chair, 2003-2004)
Member, Ordinary High Water Mark National Technical Committee, 2014-present
Member, Erosion & Sedimentation Committee, Am. Geophys. Union, 2001-2008
Member, Earth and Planetary Surface Process Focus Group, Am. Geophys. Union, 2009-present
Geol. Soc. Am. Committee on Committees, 1996
Geol. Soc. Am. Joint Technical Program Committee, 2004

GSA Quaternary Geology & Geomorphology Division Nominating Committee, 1996
 GSA Quaternary Geol. & Geomorph. Division Panel Member, 1996-1998
 GSA Quaternary Geol. & Geomorph. Division Abstracts Reviewer, 1993
 GSA Quaternary Geol. & Geomorph. Division Mackin/Howard Committee, 1990-91, 1996-98,
 2001-02
 GSA Session Chair, annual meetings in 1993, 1996, 1997, 2002, 2007
 Am. Geophys. Union Session Chair, Hydrology Days, 1992-1994, 1997-1998
 AGU Student Presentation Judge, 1998, 2001, 2003, 2007
 Member, Colorado Natural Hazards Mitigation Council, 1991-present
 Trustee, Rocky Mountain Hydraulic Research Center, 1992-present
 Panel member, NSF Hydrologic Sciences Program, 1999-2003
 Am. Soc. Civil Engineers Paleoflood Hydrology Committee, 1999
 Panel member, NSF Geomorphology and Land-Use Dynamics Program, 2005-2007
 Panel member, NSF Geography and Spatial Sciences Doctoral Dissertation Improvement Grant
 Program, 2016-2017
 Member, National Technical Committee on the Ordinary High Water Mark (Army Corps of
 Engineers and US EPA), 2014-present

Invited Lectures, Review Panels, Advisory Boards

Invited lectures

US universities

Baylor University
 Boise State University
 Central Washington University
 College of Idaho
 Colorado College
 Idaho State University
 Iowa State University
 Miami University
 Ohio State University
 Ohio Wesleyan University
 Oregon State University
 Skidmore College
 St. Louis University
 Texas A&M University
 University of Arizona
 University of California, Berkeley
 University of California, Davis
 University of California, Santa Barbara
 University of Colorado, Boulder
 University of Colorado, CO. Springs
 University of Denver
 University of Illinois
 University of Iowa

Other universities

Aberystwyth University (Wales)
 Chuo University (Japan)
 Durham University (England)
 ETH Zurich (Switzerland)
 GFZ Potsdam (Germany)

 Griffith University (Australia)
 Hebrew University (Israel)
 Hokkaido University (Japan)
 Loughborough University (England)
 Mid-Sweden University
 Newcastle University (England)
 Queen Mary University of London (England)
 Umeå University (Sweden)
 Universidad Complutense Madrid (Spain)
 University of Cambridge (England)
 University of Edinburgh (Scotland)
 University of Glasgow (Scotland)
 University of Hull (England)
 University of Lausanne (Switzerland)
 University of Nottingham (England)

University of New Mexico
University of North Carolina, Charlotte
University of Oklahoma
University of South Carolina
University of Vermont
University of Washington
University of Wyoming

University of Padova (Italy)
University of Salzburg (Austria)
University of Southampton (England)
University of Tokyo (Japan)
University of Tsukuba (Japan)
University of Western Ontario (Canada)
Pontificia Universidad Católica de Chile
Universidad de los Andes (Colombia)
University of Melbourne (Australia)
University of Wollongong (Australia)

Other

Am. Geophys. Union Gilbert Club
Army Research Office Workshop on Desert Processes
Australian Stream Management Conference, 2016
Chinese-American Frontiers of Science Meeting, 1999, 2000
Colorado Archeological Society
COACH International invited participant (Argentina 2013, Jamaica 2014, Namibia 2015, Rwanda 2016)
Colorado Natural Hazards Mitigation Council
Colorado Scientific Society
CUAHSI Biennial Symposium (2018)
Estes Valley Land Trust
Geological Survey of Norway
Institute of Geography (Russia)
National Institute of Water and Atmospheric Sciences (New Zealand)
NSF Workshop on Sediment-Induced Disasters
The Nature Conservancy
U.S. Forest Service
U.S. Geological Survey
Wood Buffalo National Park, Canada

Invited keynote speaker at Binghamton Geomorphology Symposium (1994, 2006, 2012, 2019); North American Benthological Society (2000); American Water Resources Association conference (2004); Colorado Riparian Association conference (2004); Second International Symposium on Riverine Landscapes, Sweden (2004); Gravel-Bed Rivers VI Workshop, Austria (2005); 7th IAHR Symposium on River, Coastal and Estuarine Morphodynamics, China (2011); 4th Interagency Conference on Research in the Watersheds (2011); Mid-Atlantic Stream Restoration Conference (2011); MTNCLIM (Consortium for Integrated Climate Research in Western Mountains, 2012); River Restoration Northwest Conference (2012); American Society of Environmental Historians (2013); Southwest Stream Restoration Conference (2014); Wood in World Rivers III (2015); 8th Australian Stream Management Conference (2016); Catskills Environmental Research and Monitoring Conference (2016); RiverFlow (2016); Rocky Mountain Stream Restoration Conference (2016); Sustaining Colorado Watersheds Conference (2016); European Geosciences Union (2017); Society for Freshwater Science (2018); Natural

Channels Conference (2018); River Restoration Northwest (2019); Upper Columbia River Science Conference (2020)

Review panels for Upper Colorado River Endangered Fish Recovery Program (1995); San Juan River Recovery Program (1997-2005); Chair, Physical Sciences Review Panel for Grand Canyon Monitoring and Research Center (1998-2000); CALFED Battle Creek Restoration Plan (2003-2004); Building with Nature (The Netherlands, 2013); US Environmental Protection Agency Science Advisory Board Panel for the review of the EPA Water Body Connectivity Report (2013); The New Delta (The Netherlands, 2014)

External PhD examiner for Macquarie University, Australia (2001, 2015); Umea University, Sweden (2004); University of Trento, Italy (2007); Southern Cross University, Australia (2010); University of Auckland, New Zealand (2014); University of Melbourne, Australia (2014); University of the West Indies, Jamaica (2014); University of Newcastle, Australia (2016); University of Wollongong, Australia (2016); ETH Zurich (2018); University of British Columbia, Canada (2019); University of New England, Australia (2019); Wagenigen University, The Netherlands (2019); University of Vienna, Austria (2020)

Advisory board for The Nature Conservancy's Colorado Scientific Advisory Network (1997-present), Grand Canyon Monitoring and Research Center Science Advisors Board (2006-present)

International visitors hosted at Colorado State University

Takashi Oguchi, University of Tokyo, Japan (2001)
Yuichi Hayakawa, University of Tokyo, Japan (2005)
Francesco Comiti, University of Padova, Italy (2007)
Mario Jiménez, Universidad Nacional de Colombia, Colombia (2010)
Jonathan Ryan, University of Nottingham, England (2011)
Jose Ortega, Universidad Autónoma de Madrid, Spain (2012, 2015)
Michaela Wörndl, University of Innsbruck, Austria (2014)
Margherita Righini, University of Padova, Italy (2015)
William Amponsah, University of Padova, Italy (2015)
Fernando Ugalde, Pontificia Universidad Católica de Chile, Chile (2015)
Lina Polvi Sjöberg, Umeå University, Sweden (2015)
Alfonso Pisabarro, University of Valladolid, Spain (2016)
Tania Santos, Universidad de los Andes, Colombia (2017-18)
Yuko Asano, University of Tokyo, Japan (2018-19)

Primary advisor for the following graduate students (completion date)

MS (56)	PhD (29)
Kathy Adenlof (1992)	Mario Mejia-Navarro (1995)
Susan Fuertsch (1992)	Nancy Hoefs (1996)
Mario Mejia-Navarro (1992)	Brian Cluer (1997)
Michael Grimm (1993)	Mette Jordan (1997)
Marsha Hilmes (1993)	Douglas Thompson (1997)

Clifford Blizzard (1994)
Lauren Hammack (1994)
Michael Martin (1994)
Rebecca Smith (1994)
Douglas Thompson (1994)
Michael Liquori (1995)
Susan Madsen (1995)
Jill Minter (1996)
Jonathan Pruess (1996)
Carolyn Trayler (1997)
Janet Curran (1999)
Jasper Hardison (2000)
Stephanie Phippen (2000)
William MacFarlane (2001)
Gregory Stewart (2001)
Ronald Zelt (2002)
Chris Jaquette (2003)
Tracy Phelps (2003)
Kurt Sable (2004)
Ian Dubinski (2005)
Jaime Goode (2005)
Francis Rengers (2005)
Dan Cadol (2007)
Gabrielle David (2007)
Amy Nowakowski (2007)
Paul Dante (2009)
Lina Polvi (2009)
Zan Rubin (2010)
Jameson Henkle (2010)
Elizabeth Gilliam (2011)
Natalie Kramer (2011)
Tyanna Schlom (2012)
Nicholas Sutfin (2012)
Jonathan Garber (2013)
Simeon Caskey (2013)
Bridget Livers (2013)
Heidi Klingel (2013)
Karen Jackson (2014)
DeAnna Laurel (2014)
Dena Hicks (2015)
Dan Scott (2015)
Elizabeth Oswald (2015)
Krista Garrett (2016)
Andrew Pfeiffer (2017)
Julianne Scamardo (2019)

Edmund Wick (1998)
Dan Cenderelli (1998)
David Merritt (1999)
Sara Rathburn (2001)
Gregory Springer (2002)
Allen Gellis (2003)
Andrew Wilcox (2005)
Nancy Brown (2006)
Ian Dubinski (2009)
Jaime Goode (2009)
Kristin Jaeger (2009)
Dan Cadol (2010)
Gabrielle David (2011)
Lina Polvi (2011)
Natalie Beckman (2012)
Susan Howe (2013)
Dai Thomas (2014)
Umit Duru (2015)
Nick Sutfin (2015)
Natalie Kramer Anderson (2016)
Bridget Livers (2016)
Katherine Lininger (2018)
Dan Scott (2018)
DeAnna Laurel (2019)

Ethan Ader (2019)
Sarah Hinshaw (2019)
Zachary Kornse (2020)
Julia Grabowski (2020)
Emily Iskin (2020)