

BIOGRAPHICAL INFORMATION: ELLEN E. WOHL

PRESENT POSITION: Professor of Geology and University Distinguished Professor
Dept of Geosciences
Colorado State University
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WEBSITES: <https://sites.warnercnr.colostate.edu/ellenwohl/>
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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)
British Society of Geomorphology (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
Hydrologic Sciences Award, Hydrologic Sciences Division, AGU, 2022
G.K. Warren Prize, National Academy of Sciences, 2024

Theses and dissertations supervised and completed: 57 MS theses, 33 PhD dissertations

BIBLIOGRAPHY:

Refereed Publications

281. **Wohl** E, Marshall AE, Triantafillou S, Mobley M, Means-Brous M, Morrison RR. In press. Distribution of logjams in relation to lateral connectivity in the river corridor. *Geomorphology*.
280. **Wohl** E, S Rathburn, S Dunn, E Iskin, A Katz, A Marshall, M Means-Brous, J Scamardo, S Triantafillou, H Uno. In press. Geomorphic context in process-based river restoration. *River Research and Applications*.
279. Marshall A, RR Morrison, B Jones, S Triantafillou, E **Wohl**. In press. Handheld lidar as a tool for characterizing wood-rich river corridors. *River Research and Applications*.
278. Iskin E, E **Wohl**. 2023. Interpreting floodplain heterogeneity: using field data to understand unsupervised floodplain classifications. *Journal of Hydrology* 628: 130508.
277. Scamardo J, E **Wohl**. 2024. Recognizing the ephemeral stream floodplain: Identification and importance of flood zones in drylands. *Earth Surface Processes and Landforms* 49: 210-235.
276. Iskin E, E **Wohl**. 2023. Beyond the case study: Characterizing natural floodplain heterogeneity in the United States. *Water Resources Research* 59: e2023WR035612.
275. Scamardo J, M Nichols, T Rittenour, E **Wohl**. 2023. Drivers of geomorphic heterogeneity in unconfined non-perennial river corridors. *Journal of Geophysical Research Earth Surface* 128: e2023JF007102.
274. Wymore AS, AS Ward, E **Wohl**, J Harvey. 2023. Viewing river corridors through the lens of critical zone science. *Frontiers in Water* 5: 1147561.
273. Hinshaw S, E **Wohl**. 2023. Carbon sequestration potential of process-based river restoration. *River Research and Applications* 39: 1812-1827.
272. Kemper JT, Rathburn SL, Mueller ER, **Wohl** E, Scamardo J. 2023. Geomorphic response of low-gradient, meandering and braided alluvial river channels to increased sediment supply. *Earth-Science Reviews* 241: 104429.
271. Marshall A, E **Wohl**. 2023. The continuum of wood-induced channel bifurcations.

Frontiers in Water 5: 1155623.

270. Marshall A, X Zhang, AH Sawyer, E **Wohl**, K Singha. 2023. Logjam characteristics as drivers of transient storage in headwater streams. *Water Resources Research* 59: e2022WR033139.
269. Scott DN, S Shahverdian, R Flitcroft, E **Wohl**. 2022. Geomorphic heterogeneity as a framework for assessing river corridor processes and characteristics. *River Research and Applications* 38: 1893-1901.
268. **Wohl** E, H Uno, SB Dunn, JT Kemper, A Marshall, M Means-Brous, JE Scamardo, SP Triantafillou. In press. Why wood should move in rivers. *River Research and Applications*.
267. Iskin EP, E **Wohl**. 2023. Quantifying floodplain heterogeneity with field observation, remote sensing, and landscape ecology: methods and metrics. *River Research and Applications* 39: 911-929.
266. Sendrowski A, E **Wohl**, R Hilton, N Kramer, P Ascough. 2023. Wood-based carbon storage in the Mackenzie River Delta: The world's largest mapped riverine wood deposit. *Geophysical Research Letters* 50: e2022GL100913.
265. **Wohl** E, JE Scamardo. 2022. Aufeis as a major forcing mechanism for channel avulsion and implications of warming climate. *Geophysical Research Letters* 49: e2022GL100246.
264. Scamardo J, PA Nelson, M Nichols, E **Wohl**. 2022. Modeling the relative morphodynamic influence of vegetation and large wood in a dryland ephemeral stream, Arizona, USA. *Geomorphology* 417: 108444.
263. **Wohl** E, Knox RL. 2022. A first-order approximation of floodplain soil organic carbon stocks in a river network: the South Platte River, Colorado, USA as a case study. *Science of the Total Environment* 852: 158507.
262. Norman LM, R Lal, E **Wohl**, E Fairfax, AC Gellis, MM Pollock. 2022. Natural infrastructure in dryland streams (NIDS) can establish regenerative wetland sinks that reverse desertification and strengthen climate resilience. *Science of the Total Environment* 849: 157738.
261. Scott D, S Shahverdian, R Flitcroft, E **Wohl**. 2022. Geomorphic heterogeneity as a framework for assessing river corridor processes and characteristics. *River Research and Applications* 38: 1893-1901.
260. White DC, RR Morrison, E **Wohl**. 2022. Fire and ice: winter flooding in a Southern Rocky Mountain stream after a wildfire. *Geomorphology* 413: 108370.
259. Knox RL, EE **Wohl**, RR Morrison. 2022. Levees don't protect, they disconnect: a critical review of how artificial levees impact floodplain functions. *Science of the Total Environment* 837: 155773.
258. Knox RL, RR Morrison, EE **Wohl**. 2022. A river ran through it: floodplains as America's newest relict landform. *Science Advances* 8: eab01082.
257. **Wohl** E, E Iskin. 2022. The transience of channel-spanning logjams in mountain streams. *Water Resources Research* 58: e2021WR031556.
256. Knox RL, RR Morrison, EE **Wohl**. 2022. Identification of artificial levees in the contiguous United States. *Water Resources Research*: e2021WR031308.
255. Hinshaw S, E **Wohl**, JD Burnett, S Wondzell. 2022. Development of a geomorphic monitoring strategy for stage 0 restoration in the South Fork McKenzie River, Oregon, USA. *Earth Surface Processes and Landforms* 47: 1937-1951.

<https://onlinelibrary.wiley.com/doi/full/10.1002/esp.5356>

254. **Wohl** E, J Scamardo. 2022. Patterns of organic matter accumulation in dryland river corridors of the southwestern United States. *Science of the Total Environment* 833: 155136.
253. **Wohl** E. 2022. Logjam fluctuations during the decade after a major blowdown along a mountain stream in the US Southern Rockies. *Earth Surface Processes and Landforms* 47: 669-705.
252. **Wohl** E, AE Marshall, J Scamardo, D White, RR Morrison. 2022. Biogeomorphic influences on river corridor resilience to wildfire disturbances in a mountain stream of the Southern Rockies, USA. *Science of the Total Environment* 820: 153321.
251. Scamardo J, S Marshall, E **Wohl**. 2022. Estimating widespread beaver dam loss: habitat decline and surface storage loss at a regional scale. *Ecosphere* 13: e3962.
250. **Wohl** E, E Iskin. 2021. Damming the wood falls. *Science Advances* 7:eabj0988.
249. Hinshaw S, E **Wohl**. 2021. Quantitatively estimating carbon sequestration potential in soil and large wood in the context of river restoration. *Frontiers in Earth Science* 9: 708895.
248. Livers B, E **Wohl**. 2021. All logjams are not created equal. *Journal of Geophysical Research: Earth Surface* 126: e2021JF006076.
247. **Wohl** E, J Castro, B Cluer, D Merritts, P Powers, B Staab, C Thorne. 2021. Rediscovering, reevaluating, and restoring lost river-wetland corridors. *Frontiers in Earth Science: Hydrosphere*: 9, 653623. doi: 10.3389/feart.2021.653623
246. Sendrowski A, E **Wohl**. 2021. Remote sensing of large wood in high resolution satellite imagery: design of an automated classification workflow for multiple wood deposit types. *Earth Surface Processes and Landforms* 46: 2333-2348.
245. **Wohl** E. 2021. Conceptualizing rivers as ecosystems. *Earth Surface Processes and Landforms* 46: 1652-1654.
244. Marshall A, E Iskin, E **Wohl**. 2021. Seasonal and diurnal fluctuations of coarse particulate organic matter transport in a snowmelt-dominated stream. *River Research and Applications* 37: 815-825.
243. Iskin E, E **Wohl**. 2021. Wildfire and the patterns of floodplain large wood on the Merced River, Yosemite National Park, California, USA. *Geomorphology* 389: 107805.
242. Schalko I, E **Wohl**, HM Nepf. 2021. Flow and wake characteristics associated with large wood to inform river restoration. *Scientific Reports* 11: 8644.
241. Sutfin NA, E **Wohl**, T Fegel, N Day, L Lynch. 2021. Logjams and channel morphology influence sediment storage, transformation of organic matter, and carbon storage within mountain stream corridors. *Water Resources Research* 57: e2020WR028046.
240. **Wohl** E. 2021. An integrative conceptualization of floodplain storage. *Reviews of Geophysics* 59: e2020RG000724.
239. Ader E, E **Wohl**, S McFadden, K Singha. 2021. Logjams as a driver of transient storage in a mountain stream. *Earth Surface Processes and Landforms* 46: 707-711.
238. **Wohl** E. 2021. Legacy effects of loss of beavers in the continental United States. *Environmental Research Letters* 16: 025010.
237. Swanson FJ, SV Gregory, A Iroume, V Ruiz-Villanueva, E **Wohl**. 2021. Reflections on the history of research on large wood in rivers. *Earth Surface Processes and Landforms* 46: 55-66.
236. Grabowski J, E **Wohl**. 2020. Logjam attenuation of annual sediment waves in eolian-

- fluvial environments, North Park, Colorado, USA. *Geomorphology* 375: 107494.
235. **Wohl E, JE Scamardo.** 2021. The resilience of logjams to floods. *Hydrological Processes* 35: e13970.
234. Kornse Z, E **Wohl.** 2020. Assessing the restoration potential for beaver (*Castor canadensis*) in the semiarid foothills of the Southern Rockies, USA. *River Research and Applications* 36: 1932-1943.
233. Ortega-Becerril JA, B Livers, E **Wohl.** 2020. Regional- to local-scale controls on waterfalls in Rocky Mountain National Park, Colorado. *Journal of Mountain Science* 17: 1874-1890.
232. Hinshaw S, E **Wohl**, D Davis. 2020. The effects of longitudinal variations in valley geometry and wood load on flood response. *Earth Surface Processes and Landforms* 45: 2927-2939.
231. **Wohl E.** 2020. Rivers in the Anthropocene: the US perspective. *Geomorphology* 366: 106600.
230. Doughty MN, E **Wohl**, AH Sawyer, K Singha. 2020. Mapping increases in hyporheic exchange from channel-spanning logjams. *Journal of Hydrology* 587: 124931.
229. 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.
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, E **Wohl**, SE Yochum. 2019. Wood jam dynamics database and assessment model (WoDDAM): 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 Poepll, 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, 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, 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, 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**, 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, 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, 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, WD Erskine. 2017. Instream large wood loads across bioclimatic regions. *Forest Ecology and Management* 404: 370-380.
198. Wegener P, T Covino, 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, 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 Ampsonah, 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, 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, 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, DM Walters. 2017. Carbon dynamics of river corridors and the effects of human alterations. *Ecological Monographs* 87: 379-409.
190. **Wohl** E, D Scott. 2017. Transience of channel head locations following disturbance. *Earth Surface Processes and Landforms* 42: 1132-1139.
189. Scott DN, 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, 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, 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, S Leisz. 2017. The pulse of driftwood over multiple timescales in a great northern river. *Water Resources Research* 53: 1928-1947.
185. Kramer N, 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, 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, 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, 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**, 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, 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, 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, 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, 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, AC Wilcox. 2015. The science and practice of river restoration. *Water Resources Research* 51, 5974-5997.
172. Sutfin N, E **Wohl**, 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, 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, AC Wilcox. 2015. The natural sediment regime: broadening the foundation for ecosystem management. *BioScience* 65, 358-371.

165. Livers B, 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, 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**, 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**, 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, 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**, DM Merritt. 2014. Modeling the functional influence of vegetation type on streambank cohesion. *Earth Surface Processes and Landforms* 39, 1245-1258.
157. Kramer N, 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, 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, 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, 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, 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**, 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, EE **Wohl**. 2014. Understanding human-landscape interactions in the “Anthropocene.” *Environmental Management* 53, 4-13.
150. **Wohl** E, N Beckman. 2014. Leaky rivers: implications of the loss of longitudinal fluvial connectivity in headwater streams. *Geomorphology* 205, 27-25.
149. Ortega JA, M Gómez-Heras, R Perez-López, 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, A Chin. 2014. Common core themes in geomorphic, ecological, and social systems. *Environmental Management* 53, 14-27.
147. Cadol D, 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, 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, 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, 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, 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, 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, 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, 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, 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, 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, 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, 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, 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, E **Wohl**. 2012. Velocity prediction in high-gradient channels. *Journal of Hydrology* 424-425, 84-98.
124. Polvi LE, 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**, 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, 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**, D Harry. 2012. Using ground penetrating radar to 'unearth' buried beaver dams. *Geology* 40, 43-46.
120. **Wohl** E, 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, 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, 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, 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, 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**, N Beckman, 2011. Locations of channel heads in the semiarid Colorado Front Range, USA. *Geomorphology* 129: 309-319.

112. Polvi LE, EE **Wohl**, 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, 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, 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, EE **Wohl**. 2010. Reclaiming freshwater sustainability in the Cadillac Desert. *Proceedings of the National Academy of Sciences* 107: 21263-21270.
107. Goode JR, 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, JL Sabo, 2010. Sedimentation and sustainability of western American reservoirs. *Water Resources Research* 46: W12535.
105. David GCL, E **Wohl**, SE Yochum, 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, 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, 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, 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, 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, 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**, 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, 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, J Goode. 2009. Episodic wood loading in a mountainous neotropical watershed. *Geomorphology* 111: 149-159.
95. Cadol D, E **Wohl**, JR Goode, 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, 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, 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, E **Wohl**. 2009. Linking theory and practice for restoration of step-pool streams. *Environmental Management* 43:645-661.
 91. Thompson DM, 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, 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, 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, JR Goode. 2008. Wood dynamics in headwater streams of the Colorado Rocky Mountains. *Water Resources Research* 44, W09429.
 87. **Wohl** E, GCL David. 2008. Consistency of scaling relations among bedrock and alluvial channels. *Journal of Geophysical Research - Earth Surfaces* 113: F04013.
 86. Nowakowski AL, 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, 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, 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, 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, DJ Merritts. 2007. What is a natural river? *Geography Compass* 1: 871-900.
 79. Comiti F, L Mao, A Wilcox, EE **Wohl**, 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, D Winters. 2007. Assessment of stream ecosystem function and sensitivity in the Bighorn National Forest, Wyoming. *Environmental Management* 40: 284-302.
 77. Dubinski IM, 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, E **Wohl**. 2007. Relationships between land-use and forced-pool characteristics in the Colorado Front Range. *Geomorphology* 83: 249-265.
75. Rengers FK, E **Wohl**. 2007. Grain-size trends of gravel bars on the Rio Chagres, Panama. *Geomorphology* 83: 282-293.
74. Legleiter CJ, TL Phelps, 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, E **Wohl**. 2007. Field measurements of three-dimensional hydraulics in a step-pool channel. *Geomorphology* 83: 215-231.
72. Springer GS, S Tooth, 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, 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, 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, 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, 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, EE **Wohl**. 2006. Plant dispersal along rivers fragmented by dams. *River Research and Applications* 21: 1-26.
65. Sable KA, 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, 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, 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, E **Wohl**. 2005. Toward a theory for step pools in stream channels. *Progress in Physical Geography* 29: 275-296.
61. Jaquette C, E **Wohl**, 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, D Tarboton. 2005. River restoration. *Water Resources Research* 41: 10.1029/2005WR003985, 12 p.
58. **Wohl E, DM Merritt.** 2005. Prediction of mountain stream morphology. *Water Resources Research* 41: 10.1029/2004WR003779, 10 p.
57. **Wohl E, 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, NE Brown.** 2004. Reach-scale channel geometry of a mountain river. *Earth Surface Processes and Landforms* 29: 969-981.
54. Zelt RB, 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, E **Wohl.** 2003. Predicting fine sediment dynamics along a pool-riffle mountain channel. *Geomorphology* 55: 111-124.
52. Springer GS, EE **Wohl, JA Foster, 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, 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, S Rathburn.** 2003. Mitigation of sedimentation hazards downstream from reservoirs. *International Journal of Sediment Research* 18: 97-106.
49. Merritt DM, 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, 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, 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, CJ Legleiter.** 2003. Controls on pool characteristics along a resistant-boundary channel. *Journal of Geology* 111: 103-114.
45. Cenderelli DA, 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, EE **Wohl.** 2003. Large woody debris and flow resistance in step-pool channels, Cascade Range, Washington. *Geomorphology* 51: 141-157.
43. **Wohl E, H Achyuthan.** 2002. Substrate influences on incised channel morphology. *Journal of Geology* 110: 115-120.
42. Ehlen J, E **Wohl.** 2002. Joints and landform evolution in bedrock canyons. *Transactions, Japanese Geomorphological Union* 23: 237-255.
41. Merritt DM, EE **Wohl.** 2002. Processes governing hydrochory along rivers: hydraulics, hydrology, and dispersal phenology. *Ecological Applications* 12: 1071-1087.
40. Springer GS, 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, DM Merritt.** 2001. Bedrock channel morphology. *Geological Society of America Bulletin* 113: 1205-1212.

38. Cenderelli DA, 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, 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, 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, DM Thompson. 2000. Velocity characteristics along a small step-pool channel. *Earth Surface Processes and Landforms* 25: 353-367.
34. **Wohl** EE, 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**, 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, EE **Wohl**. 1998. Interactions between pool geometry and hydraulics. *Water Resources Research* 34: 3673-3681.
30. Blizard CR, 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**, LC Todd. 1998. Stable isotope composition of soil organic matter and phytoliths as paleoenvironmental indicators. *Geoderma* 82: 59-81.
28. Pruess J, EE **Wohl**, 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, H Ikeda. 1998. Patterns of bedrock channel erosion on the Boso Peninsula, Japan. *Journal of Geology* 106: 331-345.
25. **Wohl** EE, 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, 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, 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, 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, DM Thompson. 1996. A comparison of surface sampling methods for coarse fluvial sediments. *Water Resources Research* 32: 3219-3226.
19. Thompson DM, EE **Wohl**, 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**, 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, 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, AG Georgiadi. 1994. Holocene paleomeanders along the Sejm River, Russia. *Zeitschrift fur Geomorphologie* 38: 299-309.
 14. Mejia-Navarro M, 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, 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, VR Baker. 1994. Controls on bedrock channel incision along Nahal Paran, Israel. *Earth Surface Processes and Landforms* 19: 1-13.
 11. **Wohl** EE, T Grodek. 1994. Channel bed-steps along Nahal Yael, Negev desert, Israel. *Geomorphology* 9: 117-126.
 10. **Wohl** EE, RH Webb, VR Baker, 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, 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, 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, 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, PA Pearthree. 1991. Debris flows as geomorphic agents in the Huachuca Mountains of southeastern Arizona. *Geomorphology* 4: 273-292.

Book Chapters

37. Morrison RR, CN Jones, K Lininger, MC Thoms, E **Wohl**. 2023. Resilient floodplains in the Anthropocene. In, *Resilience and Riverine Landscapes*, M Thoms & I Fuller, eds. Elsevier, p. 42-68
36. **Wohl** E, A Marshall, J Scamardo, S Rathburn. 2023. Biogeomorphic processes, spatial heterogeneity, and river corridor resilience to stand-killing wildfire. In, *Biogeomorphic Responses to Wildfire in Fluvial Systems*, JL Florsheim, AP O'Dowd, & A Chin, eds. Geological Society of America Special Paper 562, Boulder, CO.
35. **Wohl** E. 2023. The past and present in environmental science. In, *Engaging with the Past and Present*. P Dover, ed. Routledge, p. 180-193.
34. **Wohl** E, N Kramer, KB Lininger. 2022. The Yukon and the Mackenzie: large Arctic rivers of North America. In, *Large Rivers: Geomorphology and Management*, 2nd ed. A Gupta, ed. Wiley, p. 368-387.
33. **Wohl** E, KB Lininger. 2022. Hydrology and discharge. In, *Large Rivers: Geomorphology and Management*, 2nd ed. A Gupta, ed. Wiley, p. 42-75.
32. **Wohl** E, RO Hall, DM Walters. 2020. Lotic freshwater: rivers. In, *Encyclopedia of the World's Biomes*, vol. 4, MI Goldstein & DA Dellasala, eds. Elsevier, pp. 152-169.
31. **Wohl** E, PR Bierman, 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, RS Harmon, SE Baker, & EV 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, IP Martini, W Chesworth, eds., *Landscapes and Societies*. Springer, p. 391-406.
26. **Wohl** E, A Chin, JP Haltiner, GM Kondolf. 2011. Managing stream morphology with check dams. In, C Conesa García & MA 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, & G Valentine, eds., *Key Methods in Geography*, 2nd edition. SAGE Publications, London, p. 253-273.
24. Rathburn SL, DM Merritt, EE **Wohl**, JS Sanderson, HAL Knight. 2009. Characterizing environmental flows for maintenance of river ecosystems: North Fork Cache la Poudre River, Colorado. In, LA James, SL Rathburn, & GR 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, K Larkin. 2009. Vanishing riverscapes: a review of historical channel change on the western Great Plains. In, LA James, SL Rathburn, & GR 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, GM Kondolf. 2008. The US experience. In, G Brierley & 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**, 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, EE **Wohl**. 2004. Rivers and riverine landscapes. In, A Gillespie, SC Porter, & BF Atwater, eds., The Quaternary period in the United States. Elsevier, Amsterdam, pp. 221-246.
 16. **Wohl E**, T Oguchi. 2004. GIS and mountain hazards. In, MP Bishop, ed., Geographic Information Science and Mountain Geomorphology. Praxis Scientific Publishing, Chichester, UK, pp. 309-341.
 15. Rathburn SL, EE **Wohl**. 2003. Sedimentation hazards downstream from reservoirs. In, WL 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, PK 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, M Mejia-Navarro. 2001. Channel change from extreme floods in canyon rivers. In, DJ Anthony et al., eds., Applying geomorphology to environmental management. Water Resources Publications, pp. 149-174.
 11. **Wohl EE**. 1999. Incised bedrock channels. In, SE Darby & 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, ZY Wang, TW Soong, & BC 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, KJ

- Tinkler & EE Wohl, eds., Rivers over rock: fluvial processes in bedrock channels. Am. Geophys. Union Geophysical Monograph 107, pp. 133-151.
8. Tinkler KJ, EE Wohl. 1998. A primer on bedrock channels. In, KJ Tinkler & EE Wohl, eds., Rivers over rock: fluvial processes in bedrock channels. Am. Geophys. Union Geophysical Monograph 107, pp. 1-18.
 7. Tinkler KJ, EE Wohl. 1998. Field studies of bedrock channels. In, KJ Tinkler & EE Wohl, eds., Rivers over rock: fluvial processes in bedrock channels. Am. Geophys. Union Geophysical Monograph 107, pp. 261-277.
 6. Thompson DM, EE Wohl. 1998. Flume experimentation and simulation of bedrock channel processes. In, KJ Tinkler & EE Wohl, eds., Rivers over rock: fluvial processes in bedrock channels. Am. Geophys. Union Geophysical Monograph 107, pp. 279-296.
 5. Wohl E, D Cenderelli. 1998. Flooding in the Himalaya Mountains. In, VS Kale, ed., Flood studies in India, Geological Society of India, Memoir 41, Bangalore, pp. 77-99.
 4. Cenderelli DA, EE Wohl. 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, Y Enzel. 1995. Data for palaeohydrology. In, KJ Gregory, L Starkel, VR Baker, eds., Global continental palaeohydrology. John Wiley and Sons, p. 23-59.
 2. Mejia-Navarro M, EE Wohl, 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, RD Jarrett. 1994. Determination of flood characteristics using systematic, historical and paleoflood data. In, G Rossi, N Harmancioglu, V Yevjevich, eds., Coping with floods. Kluwer Academic Publishers, Dordrecht, p. 111-134.

Books, Edited Volumes, and Other Special Publications

24. Wohl E. 2022. Treatise on fluvial geomorphology, 2nd ed. Elsevier, Amsterdam.
23. Wohl E. 2022. Dead Wood: The Afterlife of Trees. Oregon State University Press.
22. Wohl E. 2021. Something hidden in the ranges: The secret life of mountain ecosystems. Oregon State University Press.
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, 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, 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.

Primary advisor for the following graduate students (completion date)

MS (57)

- 1.Kathy Adenlof (1992)
- 2.Susan Fuertsch (1992)
- 3.Mario Mejia-Navarro (1992)
- 4.Michael Grimm (1993)
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PhD (33)

- 1.Mario Mejia-Navarro (1995)
- 2.Nancy Hoefs (1996)
- 3.Brian Cluer (1997)
- 4.Mette Jordan (1997)
- 5.Douglas Thompson (1997)
- 6.Edmund Wick (1998)
- 7.Dan Cenderelli (1998)
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- 9.Rebecca Smith (1994)
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21.Ronald Zelt (2002)
22.Chris Jaquette (2003)
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24.Kurt Sable (2004)
25.Ian Dubinski (2005)
26.Jaime Goode (2005)
27.Francis Rengers (2005)
28.Dan Cadol (2007)
29.Gabrielle David (2007)
30.Amy Nowakowski (2007)
31.Paul Dante (2009)
32.Lina Polvi (2009)
33.Zan Rubin (2010)
34.Jameson Henkle (2010)
35.Elizabeth Gilliam (2011)
36.Natalie Kramer (2011)
37.Tyanna Schлом (2012)
38.Nicholas Sutfin (2012)
39.Jonathan Garber (2013)
40.Simeon Caskey (2013)
41.Bridget Livers (2013)
42.Heidi Klingel (2013)
43.Karen Jackson (2014)
44.DeAnna Laurel (2014)
45.Dena Hicks (2015)
46.Dan Scott (2015)
47.Elizabeth Oswald (2015)
48.Krista Garrett (2016)
49.Andrew Pfeiffer (2017)
50.Julianne Scamardo (2019)
51.Ethan Ader (2019)
52.Sarah Hinshaw (2019)
53.Zachary Kornse (2020)
- 9.Sara Rathburn (2001)
10.Gregory Springer (2002)
11.Allen Gellis (2003)
12.Andrew Wilcox (2005)
13.Nancy Brown (2006)
14.Ian Dubinski (2009)
15.Jaime Goode (2009)
16.Kristin Jaeger (2009)
17.Dan Cadol (2010)
18.Gabrielle David (2011)
19.Lina Polvi (2011)
20.Natalie Beckman (2012)
21.Susan Howe (2013)
22.Dai Thomas (2014)
23.Umit Duru (2015)
24.Nick Sutfin (2015)
25.Natalie Kramer Anderson (2016)
26.Bridget Livers (2016)
27.Katherine Lininger (2018)
28.Dan Scott (2018)
29.DeAnna Laurel (2019)
30. Richard Knox (2022)
31. Sarah Hinshaw (2022)
32. Emily Iskin (2023)
33. Julianne Scamardo (2023)

- 54.Julia Grabowski (2020)
- 55.Emily Iskin (2020)
- 56. Anna Marshall (2021)
- 57. Mickey Means-Brous (2023)