

PSU Environmental Professional Program Citation List

Selected publications of **EPP course facilitators**, 2014-2024.

2024

Edwards, P. M., Bedell, D., Hubler, S. L., Larson, C. A., Macneale, K. H., Mickelson, E., ... & Wilhelm, J. (2024). An index of biotic integrity for macroinvertebrate stream bioassessment conducted by community scientists. *Freshwater Science*, 43(2), 183-197.

Edwards, P. M., Popp, N. C., Pan, Y., Weihhoefer, C. L., Peterman, A. B., Mork, L. A., **Thorne, C. R.** ... & Popp, B. N. (2024). Reconnecting a stream channel to its floodplain: implications for benthic diatoms and macroinvertebrate trophic structure. *Restoration Ecology*, 32(4), e14123.

Noone, W. N., **Edwards, P. M.**, Pan, Y., & **Thorne, C.** (2024). Floodplain Restoration and Its Effects on Summer Water Temperature and Macroinvertebrates in Whychus Creek, Oregon (USA). *River Research and Applications*.

2023

Downs, P. W., Soar, P. J., Biedenharn, D. S., Cox, A., Dahl, T. A., Haring, C. P., ... & **Thorne, C. R.** (2023, May). From forecast to foresight: a decision-support framework for visioning channel evolution in river management. In *Proceedings from the Sedimentation and Hydrologic Modeling (SEDHYD) 2023 conference*, May (pp. 8-12).

Mason, R. J., Johnson, M. F., Wohl, E., Russell, C. E., Olden, J. D., Polvi, L. E., ... & **Thorne, C. R.** (2025). Rebalancing River Lateral Connectivity: An Interdisciplinary Focus for Research and Management. *Wiley Interdisciplinary Reviews: Water*, 12(1), e1766.

2022

Johnson, M. F., **Edwards, P.M.**, Todd, R., **Castro, J. M.**, & **Thorne, C. R.** (2022). Performance of an environmentally-aligned, low maintenance flood alleviation scheme on the Burn of Mosset, Forres, Scotland. *River Research and Applications*, 38(9), 1544-1554.

Hood, W. G., Blauvelt, K., Bottom, D. L., **Castro, J. M.**, Johnson, G. E., Jones, K. K., ... & Wilson, A. (2022). Using landscape ecology principles to prioritize habitat restoration projects across the Columbia River Estuary. *Restoration Ecology*, 30(3), e13519.

Powers, P., Staab, B., Cluer, B., & **Thorne, C.** (2022). Rediscovering, reevaluating, and restoring Entiatqua: Identifying pre-Anthropocene valleys in North Cascadia, USA. *River Research and Applications*, 38(9), 1527-1543.

Pugh, B. E., Colley, M., Dugdale, S. J., **Edwards, P.M.**, Flitcroft, R., Holz, A., **Thorne, C.**, ... & Field, R. (2022). A possible role for river restoration enhancing biodiversity through interaction with wildfire. *Global Ecology and Biogeography*, 31(10), 1990-2004.

2021

Green, D., O'Donnell, E., Johnson, M., Slater, L., **Thorne, C.**, Zheng, S., ... & Boothroyd, R. J. (2021). Green infrastructure: The future of urban flood risk management?. *Wiley Interdisciplinary Reviews: Water*, 8(6), e1560.

Wohl, E., **Castro, J.**, Cluer, B., Merritts, D., Powers, P., Staab, B., & **Thorne, C.** (2021). Rediscovering, reevaluating, and restoring lost river-wetland corridors. *Frontiers in Earth Science*, 9, 653623.

2020

Edwards P.M., Shaloum G (2020) Citizen Science and Ecological Restoration. Society for Ecological Restoration News. Vol 34 (2).

Edwards, P. M., Pan, Y., Mork, L., & **Thorne, C.** (2020). Using diatoms to assess river restoration: A pilot study in Whychus Creek, Oregon, USA. *River Research and Applications*, 36(10), 20892095.

Johnson, M. F., **Thorne, C. R.**, **Castro, J. M.**, Kondolf, G. M., Mazzacano, C. S., Rood, S. B., & Westbrook, C. (2020). Biomic river restoration: A new focus for river management. *River Research and Applications*, 36(1), 3-12.

O'Donnell, E., **Thorne, C.**, Ahilan, S., Arthur, S., Birkinshaw, S., Butler, D., ... & Wright, N. (2020). The blue-green path to urban flood resilience. *Blue-Green Systems*, 2(1), 28-45.

O'Donnell, E. C., **Thorne, C. R.**, Yeakley, J. A., & Chan, F. K. S. (2020). Sustainable flood risk and stormwater management in blue-green cities; an interdisciplinary case study in Portland, Oregon. *JAWRA Journal of the American Water Resources Association*, 56(5), 757-775.

Waite, I. R., Pan, Y., & **Edwards, P. M.** (2020). Assessment of multi-stressors on compositional turnover of diatom, invertebrate and fish assemblages along an urban gradient in Pacific Northwest streams (USA). *Ecological Indicators*, 112, 106047.

2019

Castro, J. M., & **Thorne, C. R.** (2019). The stream evolution triangle: Integrating geology, hydrology, and biology. *River Research and Applications*.

Major, J. J., Zheng, S., Mosbrucker, A. R., Spicer, K. R., Christianson, T., & **Thorne, C. R.** (2019). Multidecadal geomorphic evolution of a profoundly disturbed gravel bed river system—A complex, nonlinear response and its impact on sediment delivery. *Journal of Geophysical Research: Earth Surface*, 124(5), 1281-1309.

Powers, P. D., Helstab, M., & **Niezgoda, S. L.** (2019). A process-based approach to restoring depositional river valleys to Stage 0, an anastomosing channel network. *River Research and Applications*, 35(1), 3-13.

2018

Edwards, P. M., Shaloum, G., & Bedell, D. (2018). A unique role for citizen science in ecological restoration: a case study in streams. *Restoration Ecology*, 26(1), 29-35.

O'Donnell, E. C., Woodhouse, R., & **Thorne, C. R.** (2018, August). Evaluating the multiple benefits of a sustainable drainage scheme in Newcastle, UK. In *Proceedings of the Institution of Civil Engineers-Water Management* (Vol. 171, No. 4, pp. 191-202). Thomas Telford Ltd.

Sclafani, P., Nygaard, C., & **Thorne, C.** (2018). Applying geomorphological principles and engineering science to develop a phased Sediment Management Plan for Mount St Helens, Washington. *Earth Surface Processes and Landforms*, 43(5), 1088-1104.

Silver, B. P., Hudson, J. M., Smith, C. T., Lujan, K., Brown, M., & Whitesel, T. A. (2018). An urban stream can support a healthy population of coastal cutthroat trout. *Urban ecosystems*, 21, 291304.

2017

O'Donnell, E. C., Lamond, J. E., & **Thorne, C. R.** (2017). Recognising barriers to implementation of Blue-Green infrastructure: a Newcastle case study. *Urban Water Journal*. 1-11.

Silver, B. P., Hudson, J. M., Lohr, S. C., & Whitesel, T. A. (2017). Short-term response of a coastal wetland fish assemblage to tidal regime restoration in Oregon. *Journal of Fish and Wildlife Management*, 8(1), 193-208.

Soar, P. J., Wallerstein, N. P., & **Thorne, C. R.** (2017). Quantifying river channel stability at the basin scale. *Water*, 9(2), 133.

2016

Castro, J., & Beavers, A. (2016). Providing Aquatic Organism Passage in Vertically Unstable Streams. *Water*, 8(4), 133.

Hubler, S., Huff, D. D., **Edwards, P.**, & Pan, Y. (2016). The Biological Sediment Tolerance Index: Assessing fine sediments conditions in Oregon streams using macroinvertebrates. *Ecological Indicators*, 67, 132-145.

Maskrey, S. A., Mount, N. J., **Thorne, C. R.**, & Dryden, I. (2016). Participatory modelling for stakeholder involvement in the development of flood risk management intervention options. *Environmental Modelling & Software*, 82, 275-294.

Edwards, P. M. (2016). The Value of Long-Term Stream Invertebrate Data Collected by Citizen Scientists. *PloS one*, 11(4), e0153713.

2015

Castro, J. M., MacDonald, A., Lynch, E., & **Thorne, C. R.** (2015). Risk-based Approach to Designing and Reviewing Pipeline Stream Crossings to Minimize Impacts to Aquatic Habitats and Species. *River Research and Applications*, 31(6), 767-783.

Simon, A., **Castro, J.**, & Rinaldi, M. (2015). Channel form and adjustment: characterization, measurement, interpretation and analysis. *Tools in Fluvial Geomorphology*, 233-259.

Thorne, C. R., Lawson, E. C., Ozawa, C., Hamlin, S. L., & Smith, L. A. (2015). Overcoming uncertainty and barriers to adoption of Blue-Green Infrastructure for urban flood risk management. *Journal of Flood Risk Management*.

Thorne, C., Castro, J., Cluer, B., Skidmore, P., & Shea, C. (2015). Project risk screening matrix for river management and restoration. *River Research and Applications*, 31(5), 611-626.

2014

Cluer, B., & **Thorne, C.** (2014). A stream evolution model integrating habitat and ecosystem benefits. *River Research and Applications*, 30(2), 135-154.

Legg, N. T., & Olson, P. L. (2014). Channel migration processes and patterns in Western Washington: A synthesis for floodplain management and restoration. Shorelands and Environmental Assistance Program, Washington State Department of Ecology.

Niezgoda, S. L., Wilcock, P. R., Baker, D. W., Price, **J. M.**, **Castro, J. M.**, Curran, J. C., ... & Shields Jr, F. D. (2014). Defining a stream restoration body of knowledge as a basis for national certification. *Journal of Hydraulic Engineering*, 140(2), 123-136.