

CURRICULUM VITAE

DAVID MICHAEL MERRITT

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EDUCATION

Ph.D. 1999. Graduate Degree Program in Ecology, Department of Earth Resources, Colorado State University, Fort Collins, CO.

M.S. 1997. Fishery and Wildlife Biology Department, Colorado State University, Fort Collins, CO.

B.A. 1990. Environmental Science, Department of Geography, University of Colorado, Boulder, CO.

APPOINTMENTS

Jun 2025-pres *Principal*, Functional River Ecology, LLC. Riparian, hydrologic, and geomorphic expertise focused on the conservation, restoration, and management of rivers, floodplains, and wetlands. Riparian plant ecology, surface water-groundwater interactions, dendrochronology, instream flow determination, mapping-spatial modeling-GIS, litigation support.

2023-2025 National Instream Flow Coordinator, USDA Forest Service Field Services and Innovation Center, Water Resources. Coordinate technical, science, legal and policy teams to quantify instream flow requirements for managing riverine natural resources on lands managed by the US Forest Service.

2000-present *Affiliate Faculty*, Department of Biology and Department of Geosciences; *Faculty*, Department of Biology, and the Graduate Degree Program in Ecology, Colorado State University, Fort Collins, CO.

2000-2023 *Riparian Plant Ecologist* and *National Riparian Program Lead*, USDA Forest Service National Watershed, Fish, Wildlife, Air and Rare Plants Staff. Conduct research focused on determining environmental flow requirements to support riparian vegetation. Manage the US Forest Service National Riparian Program, manage several applied research projects and supervise and mentor employees and advise students.

2012-2013 *Program Manager (acting)*, National US Forest Service Stream Systems Technology Center, Watershed, Fish, Wildlife, Air and Rare Plants. Supervised employees, completed all science technical transfer activities, interacted with university and government scientists, administered contracts, grants and agreements, and led scientific projects.

2000-2010 *Research Scientist*, Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, CO.

2000-2004 *Senior Scientist*, Landscape Ecology Group, Umeå University, Umeå, Sweden.

Investigated the processes governing riparian plant species diversity along free-flowing and regulated rivers in northern Sweden. Managed several Swedish National Science Foundation-funded research projects and supervised graduate students and field and laboratory technicians.

PUBLICATIONS

Peer Reviewed Articles

- Bateman, H.L., M.A. Huck, H. Klingel, and **D.M. Merritt**. 2024. Cue the chorus: Canyon tree frog calling phenology on the falling limb of spring floods and warming nights. *The Scientific Naturalist*. DOI: 10.1002/ecy.4287.
- Cubley, E. S., D. J. Cooper, and **D.M. Merritt**. 2022. Are riparian vegetation flow response guilds transferable between rivers? *Freshwater Biology* 68:406-424.
- Rodríguez-González, P.M. and 66 others. 2021. Bringing the margin to the focus: 10 challenges for riparian vegetation science and management. *WIREs Water*.
- Baruch, E.M., H.L. Bateman, D.A. Lytle, **D.M. Merritt**, and J. L. Sabo. 2021. Integrated ecosystems: linking food webs through reciprocal resource reliance. *Ecology* e03450.
- Bateman, H. L., and **D.M. Merritt**. 2020. Complex riparian habitats predict reptile and amphibian diversity. *Global Ecology and Conservation* e00957.
- Cubley, E.S., H. L. Bateman, **D.M. Merritt**, and D.J. Cooper. 2020. Using vegetation guilds to predict bird habitat characteristics in riparian Areas. *Wetlands* 40:1843-1862.
- Cubley, E.S., H.L. Bateman, S.B. Riddle, C. Holmquist-Johnson, and **D.M. Merritt**. 2020. Predicting bird guilds using vegetation composition and structure on a Wild and Scenic River in Arizona. *Wetlands* DOI: 10.1007/s13157-020-01371-9.
- Merritt, D.M.** 2020. Reciprocal relations between riparian vegetation, fluvial landforms, and channel processes. In: J.F. Shroeder (Editor in chief), E. Wohl. (Volume editor). *Treatise on Geomorphology*, Vol. 9, *Fluvial Geomorphology*, San Diego: Academic Press, p. 219-243.
- Reynolds, L.V., **D. M. Merritt**, J.S. Scott, D.A. Lytle, J.D. Tonkin, J.S. Rogosch and J.D. Olden. How will riparian plant guilds respond to future climate change scenarios between river basins and across different scales? U.S. Meeting of the International Association of Landscape Ecologists. April 7-11, 2019. Fort Collins, CO.
- Tonkin, J. D., N. L. Poff, N. R. Bond, A. Horne, **D.M. Merritt**, L.V. Reynolds, J.D. Olden, A. Ruhi, and D.A. Lytle. 2019. Prepare river ecosystems for an uncertain future. *Nature* 570: 301-303. DOI: 10.1038/d41586-019-01877-1
- Rogosch, J.S., J.D. Tonkin, D.A. Lytle, **D.M. Merritt**, L.V. Reynolds, and J.D. Olden. 2019. Increasing drought favors nonnative fishes in a dryland river: evidence from a multispecies demographic model. *Ecosphere* 10(4) e02681. DOI: 10.1002/ecs2.2681
- Engel, V. and **D.M. Merritt**. Determining environmental flows for wilderness streams in Arizona. Presented at the special session on streamflow-ecology relationships in ungaged basins. 32nd Annual Symposium of the Arizona Hydrological Society. September 25-27, 2019. Tucson, AZ.
- Scott, J.A. and **D.M. Merritt**. 2020. Functional riparian plant guilds shift in predictable ways in response to water management in montane streams of the southern Rocky Mountains. *Ecosphere* e03253.

- Bestgen, K.R., N.L. Poff, D.W. Baker, B.P. Bledsoe, **D.M. Merritt**, M. Lorie, G.T. Auble, J.S. Sanderson, B. C. Kondratieff. 2019. Designing flows to enhance ecosystem functioning in heavily regulated rivers. *Ecological Applications* e02005.
- Palmquist, E., B.E. Ralston, **D.M. Merritt**, and P.B. Shafroth. 2019. Landscape-scale processes influence riparian plant composition along a regulated river. *Journal of Arid Environments* 148:54-64.
- Diehl, R.M., **D.M. Merritt**, A.C. Wilcox, and M.L. Scott. 2017. Applying functional traits to ecogeomorphic processes in riparian ecosystems. *Bioscience* 67:729-743.
- Lytle, D.A., **D.M. Merritt**, J.D. Tonken, J.D. Olden, and L.V. Reynolds. 2017. Linking river flow regimes to riparian plant guilds: a community-wide modeling approach. *Ecological Applications* 27:1338-1350.
- McCoy-Sulentic, M.E., T.E. Kolb, **D.M. Merritt**, E. Palmquist, B.E. Ralston, D.A. Sarr, and P. B. Shafroth. 2017. Changes in community-level riparian plant traits over inundation gradients, Colorado River, Grand Canyon. *Wetlands* 37:635-646.
- Merritt, D.M., M.E. Manning, and N. Hough-Snee. 2017. The National Riparian Core Protocol: A riparian vegetation monitoring protocol for wadeable streams of the conterminous United States. Gen. Tech. Rep. RMRS-GTR-367. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 37 p.
- McCoy-Sulentic, M.E., T.E. Kolb, **D.M. Merritt**, E.C. Palmquist, B. E. Ralston, and D. E. Sarr. 2016. Variation in species-level plant functional traits over wetland indicator status categories. *Ecology and Evolution* 7:3732-3744.
- Palmquist, E.C., B.E. Ralston, D. Sarr, **D.M. Merritt**, P.B. Shafroth, and J.A. Scott. 2017. Functional traits and ecological affinities of riparian plants along the Colorado River in Grand Canyon. *Western North American Naturalist* 77:22-30.
- Stromberg, J.C., and **D.M. Merritt**. 2016. Riparian plant guilds of ephemeral, intermittent and perennial rivers. *Freshwater Biology* 61:1259-1275.
- Bateman, H.L., **D.M. Merritt**, E.P. Glenn, P.L. Nagler. 2015. Short-term effects of invasive weed biocontrol: defoliation reduces herpetofauna activity and alters habitats. *Biological Invasions* 17:87-97.
- Chignell, S.M., R.S. Anderson, P.H. Evangelista, M.J. Laituri, and **D.M. Merritt**. 2015. Multi-temporal independent component analysis and Landsat 8 for delineating maximum extent of the 2013 Colorado Front Range flood. *Remote Sensing* 78:9822-9843.
- Hough-Snee, N., B.G. Laub, **D.M. Merritt**, A.L. Long, L.L. Nackley, B.P. Roper, and J.M. Wheaton. 2015. Multi-scale environmental filters and niche partitioning govern the distributions of riparian vegetation guilds. *Ecosphere* 6:1-22.
- Stromberg, J. C. and **D.M. Merritt**. 2015. Riparian plant guilds of ephemeral, intermittent and perennial rivers. *Freshwater Biology* doi:10.1111/fwb.12686.
- Caskey, S.T., T.S. Blaschak, E. Wohl, E. Schnackenberg, **D.M. Merritt**, and K.A. Dwire. 2014. Downstream effects of stream flow diversion on channel characteristics and riparian vegetation in the Colorado Rocky Mountains, USA. *Earth Surface Processes and Landforms* DOI: 10.1002/esp.3651.
- Kehr, J.M., **D.M. Merritt**, and J. C. Stromberg. 2014. Linkages between primary seed dispersal, hydrochory and flood timing in a semi-arid region river. *Journal of Vegetation Science* 25:287-300.
- Wilding, T., J., Sanderson, **D.M. Merritt**, S.B. Rood, N.L. Poff. 2014. Riparian responses to reduced flood flows: comparing and contrasting narrowleaf and broadleaf cottonwoods

- Hydrological Sciences Journal* 59: 1-13 (special issue on "Hydrological Science for Environmental Flows").
- Polvi, L.E., E.E. Wohl, and **D.M. Merritt**. 2014. Modeling the functional influence of vegetation type on streambank cohesion. *Earth Processes and Landforms* 39:1245-1258.
- Bateman, H.L., **D.M. Merritt**, and J.B. Johnson. 2012. Riparian forest restoration: conflicting goals, trade-offs, and measures of success. *Sustainability* 4: 2334-2347.
- Merritt, D.M.** and H.L. Bateman. 2012. Linking stream flow and groundwater to avian habitat in a desert riparian system. *Ecological Applications* 22: 1973-1988.
- Merritt, D.M.** and P.B. Shafroth. 2012. Edaphic and stand structural trends in chronosequences of native and non-native dominated riparian forests along the Colorado River, USA. *Biological Invasions* 14: 2665-2685.
- Polvi, L.E., E.E. Wohl, and **D.M. Merritt**. 2011. Geomorphic and process domain controls on riparian zones in the Colorado Front Range. *Geomorphology* 125:504-516.
- Simberloff, D. *et al.* and signatories. 2011. Non-natives: 141 scientists object. *Nature* 475: 36-36.
- Merritt, D.M.**, C. Nilsson, and R. Jansson. 2010. Consequences of propagule dispersal and river fragmentation to riparian plant community diversity and interannual turnover. *Ecological Monographs* 80: 609-626.
- Nilsson, C. R. Brown, R. Jansson, and **D.M. Merritt**. 2010. The role of hydrochory in structuring riparian and wetland vegetation. *Biological Reviews* 85:837-858.
- Merritt, D.M.** and N.L. Poff. 2010. Shifting dominance of riparian *Populus* and *Tamarix* along gradients of flow alteration in western North American rivers. *Ecological Applications* 20: 135-152.
- Merritt, D.M.**, M.L. Scott, N.L. Poff, G.T. Auble, and D.A. Lytle. 2010. Theory, methods and tools for determining environmental flows for riparian vegetation: riparian vegetation-flow response guilds. *Freshwater Biology* 55: 206-225 (Invited; special issue "Environmental Flows: Science and Management").
- Poff, N.L., B.D. Richter, A.H. Arthington, S.E. Bunn, R.J. Naiman, E. Kendy, M. Acreman, C. Apse, B.P. Bledsoe, M.C. Freeman, J. Henriksen, R.B. Jacobson, J.G. Kennen, **D.M. Merritt**, J.H. O'Keeffe, J.D. Olden, K. Rogers, R.E. Tharme, and A. Warner. 2010. The ecological limits of hydrologic alteration (ELOHA): a new framework for developing regional environmental flow standards. *Freshwater Biology* 55: 147-170 (Special issue "Environmental Flows: Science and Management").
- Rathburn, S.L., **D.M. Merritt**, E.E. Wohl, J.A. Sanderson and H.A.L. Knight. 2009. Characterizing environmental flows for maintenance of river ecosystems: North Fork Cache La Poudre River, Colorado. In: *Management and Restoration of Fluvial Systems with Broad Historical Changes and Human Impacts* (L.A. James, S.L. Rathburn & G.R. Whitticar, eds.), pp. 143–157. *Geological Society of America Special Paper* 451.
- David, G.C.L., B.P. Bledsoe, **D.M. Merritt**, and E. Wohl. 2009. The impacts of ski slope development on stream channel morphology in the White River National Forest, Colorado, USA. *Geomorphology* 103: 375-388.
- Wohl, E.E. and **D.M. Merritt**. 2008. Reach-scale channel geometry of mountain streams. *Geomorphology* 93: 168-185.
- Poff, N.L., J.D. Olden, **D.M. Merritt**, D.M. Pepin. 2007. Homogenization of regional river dynamics by dams and global biodiversity implications. *Proceedings of the National Academy of Sciences of the United States of America* 104: 5732-5737.

- Malm-Renöfält, B., **D.M. Merritt**, and C. Nilsson. 2007. Connecting variation in vegetation and streamflow: importance of large floods for riparian plant diversity and composition in boreal rivers. *Journal of Applied Ecology* 44: 147-157.
- Merritt, D.M.** and E.E. Wohl. 2006. Plant dispersal along rivers fragmented by dams. *River Research and Applications* 22: 1-26.
- Wohl, E.E., P.L. Angermeier, B. Bledsoe, G.M. Kondolf, L. MacDonnell, **D.M. Merritt**, M.A. Palmer, N.L. Poff, and D. Tarboton. 2005. River restoration. *Water Resources Research* 41: 1-12.
- Wohl, E.E. and **D.M. Merritt**. 2005. Reach-scale channel geometry of mountain streams. *Water Resources Research* 41: 1-10.
- Jansson, R., U. Zinko, **D.M. Merritt**, and C. Nilsson. 2005. Hydrochory increases riparian plant species richness: a comparison between a free-flowing and a regulated river. *Journal of Ecology* 93: 1094-1103.
- Lytle, D.A. and **D.M. Merritt**. 2004. Hydrologic regimes and riparian forests: a structured population model for cottonwood. *Ecology* 85: 2493-2503.
- Merritt, D.M.** and E.E. Wohl. 2003. Downstream hydraulic geometry and channel adjustment during a flood along an ephemeral, arid region channel. *Geomorphology* 52: 165-180.
- Nilsson, C., E. Andersson, **D.M. Merritt**, and M. Johansson. 2002. Differences in riparian flora between riverbanks and lakeshores explained by dispersal traits. *Ecology* 83: 2878-2887.
- Merritt, D.M.** and E.E. Wohl. 2002. Processes governing hydrochory along rivers: hydraulics, hydrology, and dispersal phenology. *Ecological Applications* 12: 1071-1087.
- Wohl, E.E. and **D.M. Merritt**. 2001. Bedrock channel morphology. *Geological Society of America Bulletin* 113: 1205-1212. (Winner of the G.K. Gilbert Award for Excellence in Geomorphological Research).
- Merritt, D.M.** and D.J. Cooper. 2000. Riparian vegetation and channel change in response to river regulation: a comparative study of two regulated streams in the Green River Basin, U.S.A. *Regulated Rivers Research and Management* 16: 543-564.
- Cooper, D.J., **D.M. Merritt**, D.C. Andersen, and R.A. Chimner. 1998. Factors controlling the establishment of Fremont cottonwood seedlings on the upper Green River, U.S.A. *Regulated Rivers Research and Management* 15: 419-440.

Book Chapters and Reports

- Finn, D.S. and **D.M. Merritt**. 2024. Streams as unique habitats. In: *Foundations of Stream and River Ecology*. Eds: W.F. Cross, J.P. Benstead, A.M. Marcarelli, and R.A. Sponseller. University of Chicago Press.
- Merritt, D.M.** 2022. Riparian Zones. Chapter in *Encyclopedia of Inland Waters*, second edition. Elsevier Ltd. T. Mehner & K. Tockner, eds.
- Merritt, D.M.** 2020. Reciprocal relations between riparian vegetation, fluvial landforms, and channel processes. In: J.F. Shroeder (Editor in chief), E. Wohl. (Volume editor). *Treatise on Geomorphology*, Vol. 6, *Fluvial Geomorphology*, second edition, San Diego: Academic Press, p. 219-243.
- Auble, G., D. Baker, K. Bestgen, B. Bledsoe, B. Kondratieff, M. Lorie, **D. Merritt**, L. Poff, J. Sanderson, J. Stokes (alph. order). 2014. An ecological response model for the Cache La Poudre River through Fort Collins, Fort Collins Natural Areas Program.
- Aguiar F.C., M.J. Martins, M.D. Bejarano, C. Nilsson, M.M. Portela, P. Segurado, **D.M.**

- Merritt.** 2014. Are dams regulating diversity of riparian forests? Functional trade-offs and synergies in Mediterranean Europe. In: Mucina L, Price JN, Kalwij JM (eds.), *Biodiversity and vegetation: patterns, processes, conservation*. Kwongan Foundation, Perth, Australia: 63 p.
- Aguiar F.C., A. Fabião, M.D. Bejarano, C. Nilsson, **D.M. Merritt**, M.J. Martins. 2014. FLOWBASE: a traitbase for Mediterranean riparian Flora. In: Mucina, L., J.N. Price, J.M. Kalwij (eds.), *Biodiversity and vegetation: patterns, processes, conservation*. Kwongan Foundation, Perth, Australia: 213 p.
- Auerbach, D.A., **D.M. Merritt**, and P.B. Shafroth. 2013. *Tamarix*, hydrology, and fluvial geomorphology. 2013. Chapter 7 in A. Sher and M.F. Quigley (Editors), *Tamarix: A Case Study of Ecological Change in the American West*. Oxford University Press, New York. 488 p.
- Merritt, D.M.** 2013. Reciprocal relations between riparian vegetation, fluvial landforms, and channel processes. In: J.F. Shroeder (Editor in chief), E. Wohl. (Volume editor). *Treatise on Geomorphology*, Vol. 9, *Fluvial Geomorphology*, San Diego: Academic Press, p. 219-243.
- Shafroth , P.B., **D.M. Merritt** , M.K. Briggs , V.B. Beauchamp , K.D. Lair, M.L. Scott and A. 2013. Riparian Restoration in the Context of *Tamarix* Control. 2013. Chapter 23 in A. Sher and M.F. Quigley (Editors), *Tamarix: A Case Study of Ecological Change in the American West*. Oxford University Press, New York. 488 p.
- Auerbach, D.A., N.L. Poff, R.R. McShane, **D.M. Merritt**, M.I. Pyne, and T. Wilding. 2012. Streams past and future: Fluvial responses to rapid environmental change in the context of historical variation. Chapter 16 in J.A. Wiens, G.D. Hayward, H.D. Safford, and C. Giffen, editors. *Historical Environmental Variation in Conservation and Natural Resource Management*. Wiley-Blackwell, Hoboken. <http://www.wiley.com/WileyCDA/WileyTitle/productCd-1444337939,descCd-description.html>
- Cooper, D.J., R.J. Chimner, and **D.M. Merritt**. 2012. Western Mountain Wetlands. Chapter 22 pages 313-328 in D.P. Batzer and A.H. Baldwin editors. *Wetland Habitats of North America: Ecology and Conservation Concerns*. University of California Press. <http://www.ucpress.edu/book.php?isbn=9780520271647>
- Cooper, D.J. and **D.M. Merritt**. 2012. Assessing the water needs of wetland and riparian vegetation in the western United States. USDA Forest Service Rocky Mountain Research Station General Technical Report 282. http://www.fs.fed.us/rm/pubs/rmrs_gtr282.html
- Covich, A.P., K.C. Ewell, R.O. Hall, P.S. Giller, W. Goedkoop, and **D.M. Merritt**. 2004. Ecosystem Services Provided by Freshwater Benthos in D.H. Wall ed. *Sustaining Biodiversity and Ecosystem Services in Soils and Sediments*. Scientific Committee on Problems of the Environment publication no. 64.
- Giller, P.S., A.P. Covich, K.C. Ewell, R.O. Hall, and **D.M. Merritt**. 2004. Vulnerability and Management of Ecological Services in Freshwater Ecosystems in D.H. Wall ed. *Sustaining Biodiversity and Ecosystem Services in Soils and Sediments*. Scientific Committee on Problems of the Environment publication no. 64.
- Wohl, E.E., P.L. Angermeier, B. Bledsoe, G.M. Kondolf, L. MacDonnell, **D.M. Merritt**, M.A. Palmer, N.L. Poff, and D. Tarboton. 2004. River restoration. Published online, Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. Website: <http://www.cuahsi.org/PageFiles/VisionPapers/Wohl-20040923-paper.pdf>

Professional Reports and Recent Talks

- Merritt, D.M. 2025.** Quantification and monitoring of environmental flows and riverine condition using a functional approach. 2025 Korean Institute of Hydrologic Survey International Forum: Rethinking hydrological surveys for a changing environment, Parnas-Seoul, Republic of Korea.
- Merritt, D.M. 2025.** Considerations for managing rivers for functional values: monitoring, management and process restoration. Korean Institute of Hydrologic Survey, Korean Ministry of Environment, and the Korean Water Resources Association, Goyang-si, Gyeonggi-do, Republic of Korea.
- Merritt, D.M. 2023.** Determining Instream Flows for Federal Reserve Water Right filings. Water Resource Management for Line officers, Fort Collins, CO.
- Merritt, D.M. 2022.** USFS Line Officer Academy, Water Session, Instream flow program training, Fort Collins, CO.
- Merritt, D.M. 2021.** Invited keynote speaker for the Colorado Riparian Association Colorado Watersheds Conference, Avon, CO.
- Merritt, D.M. 2020.** Invited keynote lecture at an international conference in Thessaloniki, Greece on instream flows, climate change and river management (river ecologists from 30 countries participated).
- Engel, V. and **D.M. Merritt**. 2019. Determining environmental flows for wilderness streams in Arizona. Presented at the special session on streamflow-ecology relationships in ungaged basins. 32nd Annual Symposium of the Arizona Hydrological Society. September 25-27, Tucson, AZ.
- Merritt, D.M.** 2018. Overview of the Verde River Wild and Scenic flow quantification study, presented at the National Park Service Interagency Wild and Scenic River meeting, Fort Collins, CO.
- Merritt, D.M.,** V. Bevan, and J. Scott. 2012. Recommendations for management of woody riparian vegetation on the Feather River, Plumas National Forest, California. Report to Pacific Gas and Electric and the Feather River Ecological Resources Committee, Quincy, CA.
- Theobald, D.M., **D.M. Merritt**, J.B. Norman. 2010. Assessment of threats to riparian ecosystems in the western US, Western Environmental Threats Assessment Center, Prineville, OR. Website: <http://www.fs.fed.us/wwetac/projects/theobald.html>
- Poff, N.L., G.T. Auble, B.P. Bledsoe, D. Dean, J. Friedman, D. Lytle, **D.M. Merritt**, D. Pukey, D. A. Raff, P.B. Shafroth. 2009. Predicting relative risk of invasion by the Eurasian saltcedar and New Zealand mud snail in river networks under different scenarios of climate change and dam operations in the western United States. Proceedings of the plight of ecosystems in a changing climate: impacts on services, interactions, and responses workshop, US Environmental Protection Agency, Seattle, WA.
- Merritt, D.M.,** H.L. Bateman, and C.D. Peltz. 2009. Intream flows for riparian habitat: Cherry Creek, AZ, USA. Expert report prepared for Tonto National Forest, USDA Forest Service, Phoenix, AZ.
- Merritt, D.M.,** M.L. Scott, N.L. Poff, G.T. Auble, and D.A. Lytle. 2009. Riparian vegetation-flow response guilds: determining environmental flows for riparian vegetation. *Stream Notes*, Rocky Mountain Research Station, October, 2009 edition.

- Johnson, J.B. and **D.M. Merritt**. 2009. The effects of wildfire on native tree species in the middle Rio Grande bosques of New Mexico. Submitted to the USDA Rocky Mountain Research Center, Albuquerque, NM.
- Johnson, J.B., **D.M. Merritt**, and C. Peltz. 2009. An evaluation of the vegetative effects of woody exotic species clearing in middle Rio Grande bosques. Submitted to the USDA Rocky Mountain Research Center, Albuquerque, NM.
- Lytle, D.A. and **Merritt, D.M.** 2005. An approach for modeling the influence of river flow regime on riparian cottonwood populations. *Stream Notes*, Rocky Mountain Research Station, April 2005 edition.
- Wilcox, A. and **D.M. Merritt**. 2005. Effects of modified flow regimes on the Dolores River. Colorado Riparian Association 2005 Conference Proceedings, Durango, CO.
- Merritt, D.M.** 2005. Dolores River Dialogue Riparian Vegetation Analysis *in* Core Science Report for the Dolores River Dialogue: An interagency effort to develop flow recommendations for the Dolores River. Sponsored by the U.S. Bureau of Reclamation and funded by the Nature Conservancy.
- Schmidt, L.J. and **D.M. Merritt**. 2003. Expert witness report of Mr. Larry J. Schmidt and Dr. David M. Merritt concerning Hage vs. US. Submitted to the 2nd Judicial District Court, Washoe County, NV.
- Merritt, D.M.** and C. Nilsson. 2001. Abiotic factors contributing to source-sink dynamics of biodiversity in boreal riparian plant communities. Report submitted to the Bergvall Foundation, Stockholm, Sweden.
- Merritt, D.M.** and C. Nilsson. 2001. Controls on plant species diversity in riparian corridors. Progress report presented to Vetenskapsrådet, The Swedish Natural Science Research Council, Stockholm, Sweden.
- Merritt, D.M.** 2001. Processes of *Tamarix* dominance in Western ecosystems. Progress Report submitted to The Nature Conservancy David H. Smith Postdoctorate Fellowship Program, Arlington, VA.
- Merritt, D.M.** 2000. Maintenance of riparian woodlands along mountain channels: roles of historic disturbance and hydrologic variability. Final Report presented to the Rodney Johnson and Katherine Ordway Grant Program, The Nature Conservancy, Arlington, VA.

LITIGATION AND EXPERT WITNESS EXPERIENCE

- Keystone Acid Fen and Spring Creek instream flow water rights permitting with the State of Colorado Instream Flow Program. 2002.
- Tacoma Hydroelectric Project (FERC No. 12589). 2010. Federal Energy Regulatory Commission Trial Type Hearing. Report review, participation in Delphi process, Deposition, interrogatory, expert testimony on the stand. Denver, Colorado.
- Hage v. United States, No. 11-5001 (Fed. Cir. 2012). Riparian and wetland plant and hydrology expert witness. Depositions, discovery, expert report writing, exhibit preparation and 16 hours testifying on the stand. Reno, Nevada.
- Cherry Creek State of Arizona Department of Water Resources Instream Flow Water Right. 2005. Riparian plant ecology and instream flow expert witness. Expert report preparation, science coordination, water right preparation and filing. Water right issued after challenge by Phelps Dodge and decision by the Arizona Court of Appeals (CV 04-0491 - Phelps Dodge v. ADWR). Phoenix, Arizona.

INTERVIEWS AND MEDIA COVERAGE

- Audubon Magazine* interview. Summer 2025. Will Arizona save its groundwater before it's gone for good?
- River Music* live performance with expert panel discussion. 2019. Lincoln Center Ballroom, Fort Collins, CO.
- Runyon, L. KUNC Public Radio for Northern Colorado. 2018. Can a river play the violin? It can with this researcher's help.
- Stokstad, E. 2014. U.S. and Mexico unleash a flood into Colorado Delta. *Science* 343:1301 (Interviewed; quoted).
- City of Fort Collins, Cable Channel 14. 2014. The Poudre River Runs Through it Symposium, the Water Center, Colorado State University (Televised).
- U.S.D.A. Forest Service, Tribal Relations News. 2013. Native American Hydrologist Graduate to Become Forest Service Employee (Interviewed, quoted).
- Rocky Mountain Research Station Research Report. 2008. Understanding, Conserving, and Restoring Southwestern Ecosystems, Middle Rio Grande Basin (Interviewed, quoted).
- Idaho Public Television, KISU-TV. 2006. Great Basin riparian ecosystems: form, function, restoration. Southeast Idaho Environmental Network, University of Idaho, Pocatello, ID (Televised).

AWARDS, HONORS, ADVISORY COMMITTEES

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| 2023 | Outstanding Support to the Wild and Scenic Rivers Program, National Wild and Scenic Rivers System. |
| 2021 | USDA Forest Service Performance Award for instream flow coordination and leadership in instream flow coordination in Forest Service Regions 3, 4, and 6 |
| 2016 | Conservationist of the Year, Arizona-New Mexico Chapter of the American Fisheries Society. |
| 2011 | US Department of Agriculture Honor Award for excellence for serving as expert in a federal legal trial: Federal Energy Regulatory Commission Tacoma hydropower-instream flow hearing. |
| 2008 | River Science Network Steering Committee, The Nature Conservancy. |
| 2006 | USDA Forest Service Senior Leader Program leadership graduation. |
| 2003 | G.K. Gilbert Award for Excellence in Geomorphic Research, Geological Society of America. |
| 2002 | US Forest Service Achievement Award for serving as an expert witness in a federal legal trial: Hage versus the United States of America. |
| 1999 | David H. Smith Conservation Research Fellowship. |

REVIEW SERVICE FOR SCHOLARLY JOURNALS

Aquatic Botany; Basic and Applied Ecology; Biological Conservation; Conservation Biology; Conservation Ecology; Earth Surface Processes and Landforms; Ecology; Ecological Applications; Environmental Evidence; Environmental Management; Forest Ecology and Management; Freshwater Biology; Frontiers in Ecology and the Environment; Functional

*Ecology; J. of Applied Ecology; J. of Arid Environments; J. of Ecology; J. of Vegetation Science;
Perspectives in Plant Ecology Evolution and Systematics; Wetlands*