

ATTACHMENT 2 Literature Cited

- Adams, Alexandra, Robert Byron, Bruce Maxwell, Susan Higgins, Margaret Eggers, Lori Byron, and Cathy Whitlock. 2020. *Climate Change and Human Health in Montana: A Special Report of the Montana Climate Assessment*. Montana Institute on Ecosystems.
- Al-Chokhachy, Robert, Jay Alder, Steven Hostetler, Robert Gresswell, and Bradley Shepard. 2013. "Thermal controls of Yellowstone cutthroat trout and invasive fishes under climate change." *Global Change Biology* 19 (10): 3069-3081.
- Bell, Donovan A., Ryan P. Kovach, Clint C. Muhlfeld, Robert Al-Chokhachy, Timothy J. Cline, Diane C. Whited, David A. Schmetterling, Paul M. Lukacs, and Andrew R. Whiteley. 2021. "Climate Change and Expanding Invasive Species Drive Widespread Declines of Native Trout in the Northern Rocky Mountains, USA." *Science Advances* 7 (52): eabj5471. <https://doi.org/10.1126/sciadv.abj5471>.
- Billings Gazette. 2021. "FWP investigating fish die-off on lower Madison River." *Billings Gazette*. May 21, 2021. https://billingsgazette.com/outdoors/fwp-investigating-fish-die-off-on-lower-madison-river/article_d3de27db-aec5-55d5-bc13-c68c168fb1d4.html.
- Birrell, Jackson H., Alisha A. Shah, Scott Hotaling, J. Joseph Giersch, Craig E. Williamson, Dean Jacobsen, and H. Arthur Woods. 2020. "Insects in High-Elevation Streams: Life in Extreme Environments Imperiled by Climate Change." *Global Change Biology* 26 (12): 6667–84. <https://doi.org/10.1111/gcb.15356>.
- Dahlke, Flemming T., Sylke Wohlrab, Martin Butzin, and Hans-Otto Pörtner. 2020. "Thermal Bottlenecks in the Life Cycle Define Climate Vulnerability of Fish." *Science* 369 (6499): 65–70. <https://doi.org/10.1126/science.aaz3658>.
- Eby, Lisa A., Olga Helmy, Lisa M. Holsinger, and Michael K. Young. 2014. "Evidence of climate-induced range contractions in bull trout *Salvelinus confluentus* in a Rocky Mountain watershed, USA." *PLoS One* 9 (6): e98812.
- Eggert, Amanda. 2021. "Heat, drought point to trouble ahead for Montana's trout." *Daily Inter Lake*. August 21, 2021. <https://dailyinterlake.com/news/2021/aug/21/heat-drought-point-trouble-ahead-montanas-trout/>.
- Ellis, Bonnie K., Jack A. Stanford, Daniel Goodman, Craig P. Stafford, Daniel L. Gustafson, David A. Beauchamp, Dale W. Chess, James A. Craft, Mark A. Deleray, and Barry S. Hansen. 2011. "Long-Term Effects of a Trophic Cascade in a Large Lake Ecosystem." *Proceedings of the National Academy of Sciences* 108 (3): 1070–75. <https://doi.org/10.1073/pnas.1013006108>.
- Elser, James. 2022. "Amplified Stoichiometric Imbalance in a Large Oligotrophic Lake." *Proceedings of the National Academy of Sciences* in review.
- Giersch, J. Joseph, Scott Hotaling, Ryan P. Kovach, Leslie A. Jones, and Clint C. Muhlfeld. 2017. "Climate-Induced Glacier and Snow Loss Imperils Alpine Stream Insects." *Global Change Biology* 23 (7): 2577–89. <https://doi.org/10.1111/gcb.13565>.
- Gooseff, Michale N., Kenneth Strzepek, and Steven C. Chapra. 2005. "Modeling the Potential Effects of Climate Change on Water Temperature Downstream of a Shallow Reservoir, Lower Madison River, MT." *Climatic Change* 68 (3): 331–53. <https://doi.org/10.1007/s10584-005-9076-0>.
- Isaak, D. J., S. Wollrab, D. Horan, and G. Chandler. 2012a. "Climate Change Effects on Stream and River Temperatures across the Northwest U.S. from 1980–2009 and Implications for

- Salmonid Fishes.” *Climatic Change* 113 (2): 499–524. <https://doi.org/10.1007/s10584-011-0326-z>.
- Isaak, Daniel J., Clint C. Muhlfeld, Andrew S. Todd, Robert Al-Chokhachy, James Roberts, Jeffrey L. Kershner, Kurt D. Fausch, and Steven W. Hostetler. 2012b. “The past as prelude to the future for understanding 21st-century climate effects on Rocky Mountain trout.” *Fisheries* 37 (12): 542-556.
- Isaak, Daniel J., Seth J. Wenger, Erin E. Peterson, Jay M. Ver Hoef, David E. Nagel, Charles H. Luce, Steven W. Hostetler et al. 2017. “The NorWeST summer stream temperature model and scenarios for the western US: A crowd-sourced database and new geospatial tools foster a user community and predict broad climate warming of rivers and streams.” *Water Resources Research* 53 (11): 9181-9205.
- Jones, L. A., C. C. Muhlfeld, L. A. Marshall, B. L. McGlynn, and J. L. Kershner. 2014. “Estimating Thermal Regimes of Bull Trout and Assessing the Potential Effects of Climate Warming on Critical Habitats.” *River Research and Applications* 30 (2): 204–16. <https://doi.org/10.1002/rra.2638>.
- Jones, Leslie A., Clint C. Muhlfeld, and Lucy A. Marshall. 2017. “Projected Warming Portends Seasonal Shifts of Stream Temperatures in the Crown of the Continent Ecosystem, USA and Canada.” *Climatic Change* 144 (4): 641–55. <https://doi.org/10.1007/s10584-017-2060-7>.
- Kuglin, Tom. 2021. “Montana grapples with early low river flows.” *Independent Record*. June 25, 2021. https://helenair.com/outdoors/montana-grapples-with-early-low-river-flows/article_5786cb98-39a6-59dd-8c69-a88683d4ac4a.html.
- Leppi, Jason C., Thomas H. DeLuca, Solomon W. Harrar, and Steven W. Running. 2012. “Impacts of climate change on August stream discharge in the Central-Rocky Mountains.” *Climatic Change* 112 (3): 997-1014.
- Le Quéré, Corinne, and Nicolas Mayot. 2022. “Climate Change and Biospheric Output.” *Science* 375 (6585): 1091–92. <https://doi.org/10.1126/science.abo1262>.
- Lundquist, Laura. 2015. “Heat wave spells early trouble for Montana trout.” *Montana On The Ground*. June 24, 2015. <http://www.montanaotg.com/blog-native/2015/6/24/heat-wave-spells-early-trouble-for-montana-trout>.
- Lynch, Abigail J., Bonnie J. E. Myers, Cindy Chu, Lisa A. Eby, Jeffrey A. Falke, Ryan P. Kovach, Trevor J. Krabbenhoft, et al. 2016. “Climate Change Effects on North American Inland Fish Populations and Assemblages.” *Fisheries* 41 (7): 346–61. <https://doi.org/10.1080/03632415.2016.1186016>.
- Muhlfeld, Clint C., Ryan P. Kovach, Leslie A. Jones, Robert Al-Chokhachy, Matthew C. Boyer, Robb F. Leary, Winsor H. Lowe, Gordon Luikart, and Fred W. Allendorf. 2014. “Invasive Hybridization in a Threatened Species Is Accelerated by Climate Change.” *Nature Climate Change* 4 (7): 620–24.
- Murray, David. 2021. “Historically low stream flows, high temperatures prompt fishing restrictions across Montana.” *Great Falls Tribune*. June 29, 2021. <https://www.greatfallstribune.com/story/news/2021/06/29/montana-heat-wave-prompts-early-fishing-closures/7794736002/>.
- Nissen, Jack. 2020. “Dissecting the Algae Blooms of Montana’s “Unique Gem” the Smith River.” *Environmental Monitor*. April 29, 2020. <https://www.fondriest.com/news/dissecting-the-algae-blooms-of-montanas-unique-gem-the-smith-river.htm>.

- NOAA. "The Hydrological Cycle." Last accessed May 14, 2022.
<https://www.weather.gov/jetstream/hydro>.
- Norton, Parker A., Mark T. Anderson, and John F. Stamm. 2014. "Trends in annual, seasonal, and monthly streamflow characteristics at 227 streamgages in the Missouri River Watershed, water years 1960–2011." *Scientific Investigations Report* 5053: 128.
- Penn, Justin L., and Curtis Deutsch. 2022. "Avoiding Ocean Mass Extinction from Climate Warming." *Science* 376 (6592): 524–26. <https://doi.org/10.1126/science.abe9039>.
- Post, Justin. 2019. "Algae blooms on Yellowstone River being investigated." *The Livingston Enterprise*. August 22, 2019. <https://www.livingstonenterprise.com/content/algae-blooms-yellowstone-river-being-investigated>.
- Robbins, Jim. 2021. "Montana's Famed Trout Under Threat as Drought Intensifies." *New York Times*. July 23, 2021. <https://www.nytimes.com/2021/07/23/science/drought-montana-fly-fishing.html>.
- Stanford, J. A., M. L. Anderson, Brian L. Reid, Samantha D. Chilcote and Thomas S. Bansak. 2016. Thermal diversity and the phenology of floodplain aquatic biota. Pages 259-278. IN: Gilvear, D., M. Greenwood, M. Thoms and P. Wood (eds.), *River Science: Research and Applications for the 21st Century*. John Wiley & Sons, UK. 392 p.
- US Environmental Protection Agency. 2015. "Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence Technical Report, EPA/600/R-14/475F." EPA
- USGS. 2019. "The Atmosphere and the Water Cycle." June 8, 2019.
<https://www.usgs.gov/special-topics/water-science-school/science/atmosphere-and-water-cycle>.
- Whited, Diane C., Mark S. Lorang, Mary J. Harner, F. Richard Hauer, John S. Kimball, and Jack A. Stanford. 2007. "Climate, Hydrologic Disturbance, and Succession: Drivers of Floodplain Pattern." *Ecology* 88 (4): 940–53. <https://doi.org/10.1890/05-1149>.
- Whitlock, Cathy, Wyatt F. Cross, Bruce D. Maxwell, Nick Silverman, and Alisa A. Wade. 2017. "2017 Montana Climate Assessment: Stakeholder Driven, Science Informed." Technical Report. Montana Institute on Ecosystems. <https://doi.org/10.15788/M2WW8W>.
- Williamson, Craig E., Jasmine E. Saros, and David W. Schindler. 2009. "Sentinels of Change." *Science* 323 (5916): 887–88. <https://doi.org/10.1126/science.1169443>.
- Wu, Huan, John S. Kimball, Marketa M. Elsner, Nate Mantua, Robert F. Adler, and Jack Stanford. 2012. "Projected Climate Change Impacts on the Hydrology and Temperature of Pacific Northwest Rivers." *Water Resources Research* 48 (11).
<https://doi.org/10.1029/2012WR012082>.