



FACT SHEET

NO LONGER WORKING AGAINST THE STREAM

HOW THE BUREAU OF LAND MANAGEMENT CAN RESTORE HEALTHY RIVERSCAPES IN THE WEST

Healthy riverscapes are critical natural infrastructure; they filter pollution from our water, support fish and other wildlife, form natural firebreaks, and buffer communities from the impacts of flooding and drought. These benefits are especially beneficial in the semiarid and arid West where communities and wildlife are already confronting water insecurity, wildfires, and persistent drought. Unfortunately, most riverscapes in the West are a tiny remnant of their former footprints and no longer provide meaningful habitat or regulate the filtering and flow of water as we need them to do.

This fact sheet outlines policies and programs the Bureau of Land Management (Bureau or BLM) can and should use to restore riverscapes, reestablish the nature-based services that have been lost over time, and increase resilience to drought and climate change. With strategic investment, the BLM can help improve the health of our riverscapes.

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A restored riverscape on Maggie Creek near Elko, Nevada. The BLM, ranchers, and hunters and anglers worked together to shift grazing on Maggie Creek to benefit ecosystem services and the interests of all parties. Eventually beavers returned to support natural processes and create wetlands that remain wet year-round.

For more information,
please contact:

Amy McNamara,
Freshwater Ecosystems
Strategist, NRDC,
amcnamara@nrdc.org

Alicia Marrs,
Director of Western
Water, NWF,
marrsa@nwf.org

Fay Hartman,
Southwest Region
Conservation Director, AR,
fhartman@americanrivers.org

www.nrdc.org
www.americanrivers.org
www.nwf.org

DEFINITIONS

Riverscapes are streams, rivers, or wet meadows and their associated floodplains, wetlands, and riparian vegetation.

A **healthy riverscape** is defined by three principles. A healthy riverscape needs space; is physically complex and often cluttered with vegetation and wood; and slows the flow of water, allowing it to sink and spread.

THE BLM'S ROLE IN RIVERSCAPE HEALTH

The Bureau is the largest land manager in the United States. It manages more than 250,000 miles of perennial and intermittent streams and rivers, and can play a crucial role in restoring riverscapes on the land it manages.¹ This land serves as the source of drinking water for 1 in 10 people in the western United States.² The BLM also oversees some of the most degraded riverscapes in the country.³ Fortunately, it can change that: Compared with riverscapes elsewhere, its freshwater systems are not as burdened by development, roads, or the complexities of private land ownership, making them well positioned for restoration.

In fact, BLM-managed lands provide us with some of the best opportunities to increase riverscape health at scale across the West (Figure 1).⁴ By making riverscape restoration a priority, the Bureau can help improve habitat and biodiversity, store carbon, and increase resilience to natural hazards to help us adapt to climate change.⁵

POSITIONING THE BLM FOR SUCCESS

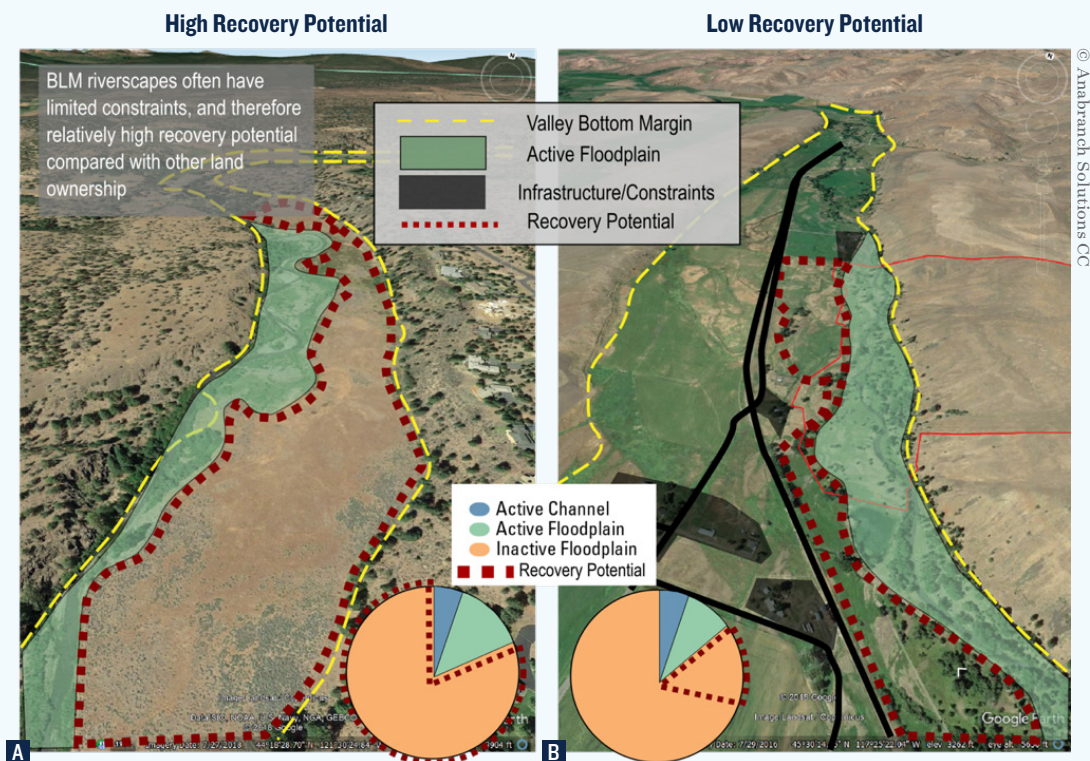
Although Bureau-managed lands provide us with the best opportunity to restore freshwater ecosystems at scale across the West, BLM has suffered from underinvestment in comparison with other land management agencies, given the number of acres it manages.⁷ It's time to position the agency to be a leader in revitalizing riverscapes across the West. Decision makers can support the Bureau in the following ways:

- Congress should increase funding for BLM's Aquatic Resources Program to hire and maintain hydrologists, fisheries biologists, and restoration staff, in order to restore priority watersheds and build climate resilience at scale in a cost-effective and efficient way.
- The Bureau should establish a Healthy Riverscapes Initiative within its Aquatic Resources Program, and Congress should provide long-term, consistent funding to restore priority watersheds.⁸ This initiative would

FIGURE 1

BLM lands (A) are largely unconstrained by development, roads, and other impediments. As such, there is a greater opportunity to restore riverscapes to their full potential compared with those valley bottoms in private ownership (B) or urban areas.

Source: Adapted from Wheaton, et al., (2019).⁶



establish a framework to strategically focus resources and capacity where conditions are right for riverscape restoration, where ecological and hydrological benefits are high, and where community engagement and partner interest are present.

- The U.S. Department of Interior, in partnership with the Bureau, should center riverscape restoration as a pivotal tool for advancing federal initiatives and priority programs that
 - improve water quality,
 - increase resilience of water resources in the arid West,
 - reduce wildfire risk and aid post-fire recovery,
 - improve habitat for fish and other wildlife, and
 - enhance grazing quality for wildlife and livestock.
- The BLM should prioritize freshwater ecosystem restoration on the land it manages as it begins to implement its Public Lands Rule.⁹ This should include using restoration and mitigation leases to invest in riverscape health, integrating riverscape health into watershed condition assessments, and prioritizing riverscape health in future resource management planning. The Bureau should also integrate practices to improve riverscape health into grazing regulations by using strategic wildlife-friendly fencing and rotational grazing management.

- Federal, state, tribal, and municipal decision makers as well as nonprofit and landowner stakeholders should encourage and invest in watershed-scale partnerships that include the BLM, to accelerate the restoration of degraded freshwater systems at a broader scale. This should include coordinating other federal agencies such as the U.S. Forest Service, U.S. Fish and Wildlife Service, and the Natural Resource Conservation Service within the U.S. Department of Agriculture, which can allocate funding to adjacent private lands as well as public lands when it benefits agricultural producers. Other partnership opportunities include the Bureau of Indian Affairs' Reserved Treaty Rights Lands Program, which supports tribes interested in partnering with public land managers to restore reserved lands of ecological and cultural importance.¹⁰

Now more than ever, there is a critical need to invest in the natural infrastructure on our public lands. We can conserve, restore, and sustain healthy riverscapes for wildlife and the communities that depend on freshwater ecosystems for drinking water, recreation, and livelihoods. Doing so on the millions of acres managed by the Bureau of Land Management must be part of the solution.



Sandhill cranes can use wetland and marsh habitat found on the edges of healthy riverscapes throughout their lifecycle.



A moose eats next to a beaver lodge on Trail Creek in Colorado.

INTERESTED IN LEARNING MORE ABOUT RIVERSCAPE RESTORATION?

TAKE A LOOK AT OUR FULL SUITE OF *NO LONGER WORKING AGAINST THE STREAM* FACT SHEETS:

[An Overview of Riverscape Restoration—How We Got Here and Where We Need to Go](#)

[The Benefits of Healthy Riverscapes for Climate Resilience and Ecosystems in the West](#)

[Five Policy Pathways to Restoring Healthy Riverscapes in the West](#)

ENDNOTES

- 1 Cybercastor, “Landscape Synthesis for BLM Priority Landscapes,” a Riverscapes Project data set of type: Landscape Synthesis, BLM Riverscapes, <https://data.riverscapes.net/p/93258a8b-4333-45dc-a013-5e525b1c60fc/> This is based on a combination of perennial and intermittent streams from the National Hydrographic Data set Plus Version 2.1.
- 2 Bureau of Land Management, Conserving and Restoring Riparian, Fisheries, and Water Resources in a Changing Climate: A 5-Year Strategy for the BLM’s Aquatic Resources Program, January 2022, 9, https://www.blm.gov/sites/default/files/docs/2022-02/IB2022-022_att1_1.pdf.
- 3 J. Courtwright et al., “Stream and River Condition Across the BLM’s National System of Public Lands,” presented to the Society for Freshwater Science, Sacramento, California, May 21–26, 2016, https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NHEERL&dirEntryId=316651; and Karl Hess and Jerry L. Holechek, Policy Roots of Land Degradation in the Arid Region of the United States: An Overview,” *Environmental Monitoring and Assessment* 37 (January 1995): 123–41, <https://doi.org/10.1007/BF00546885>.
- 4 Cybercastor, “Landscape Synthesis.”
- 5 Peter Skidmore and Joseph Wheaton, “Riverscapes as Natural Infrastructure: Meeting Challenges of Climate Adaptation and Ecosystem Restoration,” *Anthropocene* 38 (June 2022), <https://doi.org/10.1016/j.ancene.2022.100334>.
- 6 Joseph M. Wheaton et al., *Low-Tech Process-Based Restoration of Riverscapes: Pocket Field Guide*, (Logan, UT: Utah State University Restoration Consortium, 2019), <http://lowtechpbr.restoration.usu.edu/resources/pocket.html>.
- 7 Chandra Rosenthal, “Report: Building a Better BLM,” Public Employees for Environmental Responsibility, June 15, 2022, <https://peer.org/report-building-a-better-blm/>.
- 8 Amy McNamara, “Restoring Riverscapes and Beavers in the West,” NRDC Expert Blog, April 11, 2022, <https://www.nrdc.org/bio/amy-mcnamara/restoring-riverscapes-and-beavers-west>.
- 9 U.S. Department of Interior, Bureau of Land Management. “Public Lands Rule,” accessed May 7, 2024, <https://www.blm.gov/public-lands-rule>.
- 10 Department of Interior, Bureau of Indian Affairs, “Fuels Management,” accessed May 13, 2024, <https://www.bia.gov/service/fuels-management>.