Center for American Progress

Wyoming's Disappearing Rivers

by the CAP Public Lands Team December 2017

Note: On April 9, 2018, the authors added policy recommendations to this fact sheet.

Rivers are the lifeblood of Wyoming. They irrigate crops, provide clean drinking water, serve as habitat for fish and wildlife, and fuel a \$5.6 billion¹ outdoor recreation economy in the state.

But rivers are under immense pressure. As documented in the Disappearing Rivers analysis—the first comprehensive snapshot of the state of Western rivers—climate change, dams, development, and an ever-changing landscape are placing increasingly more stress on the waterways that are so inextricably tied to the health of Western communities and economies.

Across the West, nearly half of all rivers—49 percent—are modified from their natural state. That's more than 140,000 unnatural river miles, or enough to circle the earth nearly six times.

In Wyoming, 49 percent of all rivers are altered.

That's equal to 12,656 unnatural river miles enough to cross the state more than 45 times.

Of the 11 Western states in the Disappearing Rivers analysis, Wyoming had the fourth least altered rivers in the West. When broken down by size, 85 percent of all major rivers, 49 percent of all smaller streams and rivers, and 33 percent of all headwaters are altered.

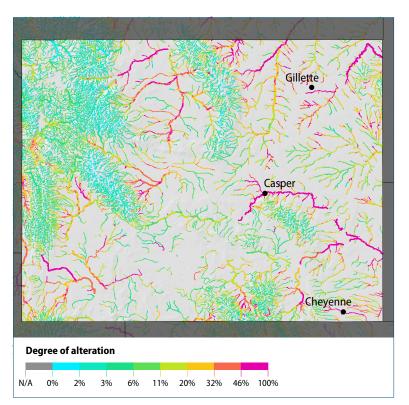


FIGURE 1 Unnatural rivers in Wyoming

Share of headwaters	Share of smaller rivers	Share of major rivers	Share of all rivers
that have been	and streams that	that have been	that have been
modified	have been modified	modified	modified
33.3%	49.3%	85.3%	48.9%

Modification by flow restriction and floodplain alteration

Source: Dylan Harrison-Atlas and others, "Description of the approach, data, and analytical methods used to evaluate river systems in the western U.S." (Truckee, CA: Conservation Science Partners, 2017), available at https://disappearingwest.org/rivers/methodology.pdf.

In Wyoming, three of the most-altered, major rivers are the North Platte River, the Hams Fork, and the Little Wind River, at 54 percent, 45 percent, and 43 percent, respectively.

River degradation is being driven both by development within waterways and in the surrounding floodplains. In Wyoming, 30 percent of rivers no longer flow freely due to obstructions and development within rivers—most notably the 1,615 major dams in the state. Thirty-eight percent of rivers flow through lands that are significantly developed and altered by human activity.

Rivers also play an important role in Western economies. The Disappearing Rivers analysis found that watersheds in the West with the highest concentration of rivers drive 717 percent more outdoor recreation spending than those with the fewest rivers. In Wyoming, there is 6,617 percent more outdoor recreation spending in watersheds with the highest concentration of rivers, fueling an impressive portion of the state's \$5.6 billion² outdoor recreation economy.

Despite the degraded state of rivers in Wyoming and across the West, policies that promote conservation and protect public lands can have an enormous effect on water. The Disappearing Rivers analysis found that rivers that flow through protected lands are on average 50 percent more natural than rivers that flow through unprotected areas.

Recommendations

There are several actions that policymakers could take to conserve remaining natural rivers; restore damaged rivers; and protect the economic and ecological health of the state.

- 1. Protect what's left of the large, natural rivers in Wyoming. Through the Wild and Scenic Rivers Act and other tools that protect both land and water, the state should set an ambitious goal to prioritize protections for its 312 miles of major rivers that are natural and currently unprotected. The Wyoming Legislature should establish a state river protection system to help accomplish this goal.
- 2. **Conserve and restore Wyoming's headwaters.** The state should partner with federal land agencies, counties, and drinking water utilities to expand watershed restoration efforts and direct consistent funding to projects that protect headwaters and the surrounding landscapes.
- 3. Rethink Wyoming's river infrastructure. The state must re-evaluate dams and floodcontrol infrastructure by modernizing necessary functions and restoring natural processes where built infrastructure is no longer a net benefit.
- 4. **Collaborate with private landowners in Wyoming.** The state must prepare proactively for water scarcity, including through innovative solutions such as short-term leases to protect streamflows. It should also continue to partner with federal agencies to support private lands conservation that protects and restores rivers and streams for their benefits to healthy rangelands and species such as greater sage-grouse.

To explore the data, sources, interactive map, and the full project, visit DisappearingWest.org/rivers.

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Endnotes

2 Ibid.

¹ Outdoor Industry Association, "Wyoming," available at https://outdoorindustry.org/state/wyoming/ (last accessed November 2017).