



U.S. Forest Service and Dam Removal: Challenges and Opportunities

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Credit: Jason Jaacks
Resource Legacy Fund

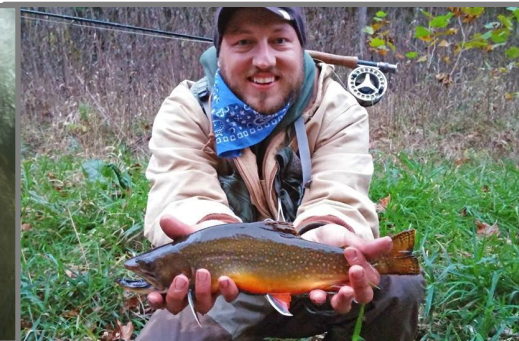
The Forest Service Mission Means Managing for Multiple Objectives

- **Provide multiple use**, including timber, water, rangelands, mining and recreation
- **\$13 Billion recreational economy**, including \$1 Billion in recreational fishing
- **Conserve important aquatic species**, their habitat, and their migration corridors
- **Public access** – provide a reliable, climate resilient transportation network



Why is Aquatic Habitat Connectivity So Important Ecologically?

- We now know that fish and other aquatic organisms move much more than previously believed. They need to access a variety of habitats to:
 - Spawn
 - Allow young to feed and grow
 - Survive floods, droughts, and winter conditions
 - Find cold water
 - Repopulate habitats after wildfires
- Bigger, connected stream and river systems support greater biodiversity and allow fish to grow larger (which is important to survival)



Strong Program for Road-Stream Crossings and Aquatic Organism Passage

- Legacy Roads & Trails Program - \$250 million over 5 years
- Agency and our many partners remove or upgrade 115-250 road-stream crossings annually
- Robust Training Program, strong direction, adequate internal expertise and collaboration with partners
- Regional priorities include Tribal Benefit, climate resilience, ESA species, public access, and partnership support



Credit: Freshwaters Illustrated



National Forest System Statistics Fiscal Year 2023

1,530
Jurisdictional
Dams on
National
Forests &
Grasslands

Land Ownership (acres)

National forests	188,524,540
National grasslands	3,835,509
Other lands ¹	769,757
TOTAL	193,129,806

Bridges

Road bridges	6,678
Trail bridges	7,363

System Roads (miles)

Passenger vehicles	64,807
High-Clearance vehicles	199,472
Stored for future use	103,668
TOTAL	367,947

Communication Systems 1,123

¹ Includes research and experimental areas, administrative sites, purchase units, etc.

Photo: A new trail bridge constructed on the Hoosier National Forest that improves visitor safety, reduces erosion, and improves species habitat. USDA Forest Service photo.

Trails (miles)

Motorized trails	64,826
Nonmotorized trails	98,881
TOTAL	163,706
Nonwilderness	131,567
Wilderness	32,139

Buildings (number and square footage)

Recreation 6,330	4,042,592
Administrative 14,345	20,833,721
Other 1,142	578,059
Research 205	1,613,463
Toilet structures 17,139	2,129,993
TOTALS 39,161	29,197,828

Sustainable Buildings²

Eligible	51
Sustainable	22

² In FY23, the criteria for eligible and sustainable buildings changed from 10,000 ft² and over, to 25,000 ft² and over.

Recreation Sites

Boating	1,315
Cabin	793
Camping (Individual)	4,323
Camping (group)	413
Visitor centers and small interpretive sites	797
Picnic	1,313
Trailhead	7,251
Other	14,376
TOTAL	30,581

Drinking and Wastewater Systems

Drinking water	4,652
Wastewater	4,743

Dams³

Forest Service-Owned, in the NID	470
Forest Service-Owned, not in the NID	1,060
TOTAL	1,530

³ National Inventory of Dams (NID).

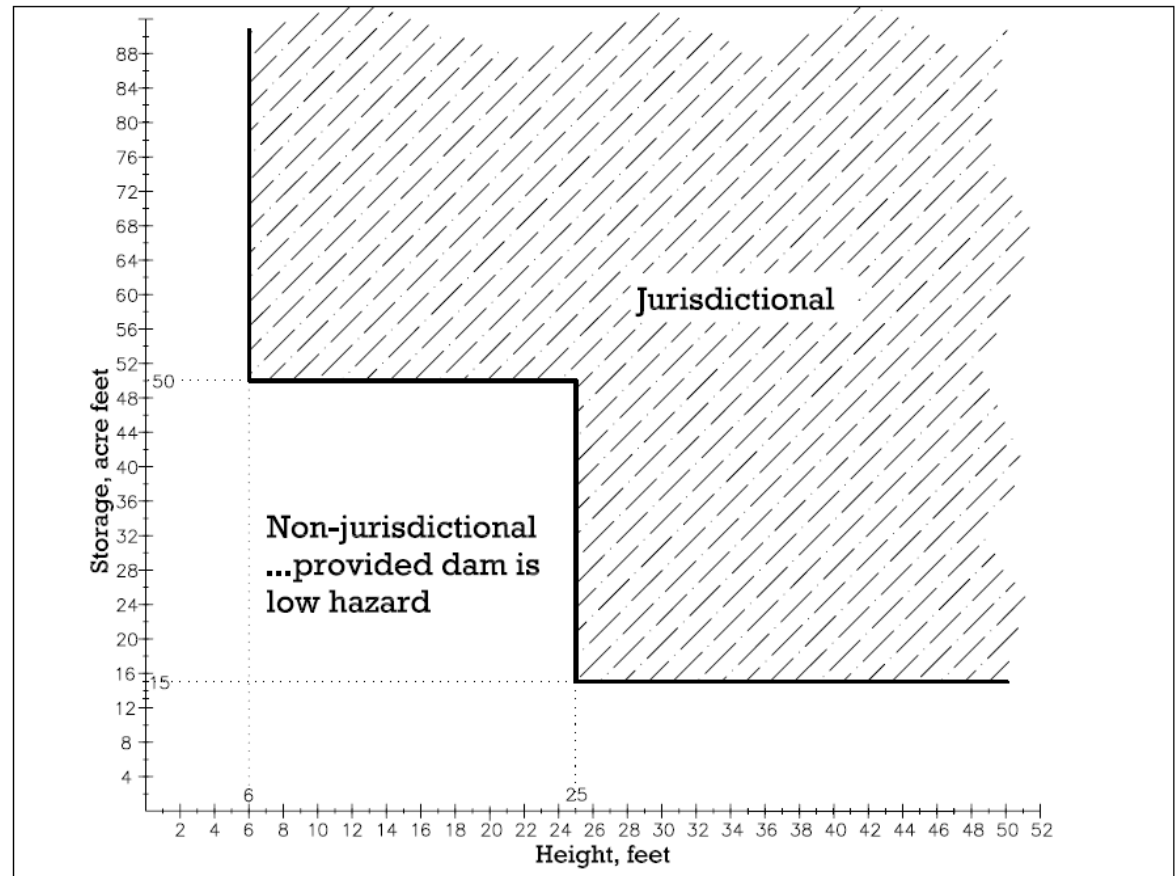


Thousands of Non-Jurisdictional Dams and Dam-Like Structures



Management of “Dams” is nuanced

- Jurisdictional Dams are the focus now
- High Hazard or Moderate Hazard Dams
- Ecological gain of low-head dam removal vs. program of work



Agency Goal: 1500 Barriers in 5 Years

Year	Type of Project [^]	Number of Projects	Miles of Upstream Habitat Reconnected	FS Funds Spent	Partner Funds Contributed	Total Project Funds
FY2021	AOP projects	116	221	\$15.4 M	\$9.2 M	24.7 M
	Non-Road AOPs	12	41	\$252,110	\$1.3 M	\$1.6 M
FY2022	AOP projects	129	190	\$21.9 M	17.4 M	\$39.3 M
	Non-Road AOPs	15	48	\$501,350	\$2.7 M	\$3.2 M
FY2023	AOP projects	144	213	\$9.4 M	14.9 M	\$24.4 M
	Non-Road AOPs	57	328	\$189,707	\$342,000	\$531,707
Total		473	1041	\$47.7 M	\$46.1 M	\$93.7 M

[^] AOP projects occur at road-stream crossings; [^] Non-Road AOPs are barriers such as dams, dam-like structures, irrigation diversion weirs, and other non-road projects.

Challenges

- Wildfire crisis demands
- Competing deferred maintenance, safety other management demands
- Technical assessment and design capacity
- Experience at the regional or forest level
- NEPA and permitting
- SHPO and permitting



Opportunities



- Leveraging BIL, IRA and a broad suite of funding
- Partner collaboration, interest and expertise
- Ongoing assessment, inventory and prioritization
- Training

Oconaluftee River Restoration



Questions?



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