

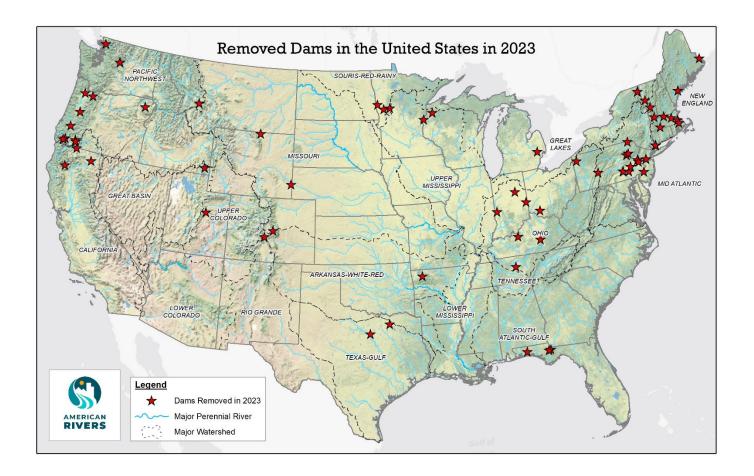
# Summary: 2023 U.S. Dam Removals



Copco 2 Dam, Klamath River, California Credit: Swiftwater Films

# **2023 Dam Removal Summary Statistics**

- Number of dams removed in 2023: 80 removals
- Number of upstream river miles reconnected in 2023: More than 895 miles
- Top states for dam removals in 2023:
  - o Pennsylvania (15 removals)
  - o Oregon (9 removals)
  - o Massachusetts (6 removals)
- 25 states removed dams in 2023: Arkansas, California, Colorado, Connecticut, Florida, Idaho, Indiana, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Montana, New Jersey, New York, Ohio, Oregon, Pennsylvania, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming



## **Historical Dam Removal Summary Statistics**

- Total number of dam removals from 1912-2023: 2.119 removals
- Years with the highest numbers of dam removals:
  - o 2018 (109 removals)
  - o 2019 (106 removals)
  - o 2017 (101 removals)

The following are highlights of 2023 dam removals (see Table 1 for the full list).

- 1. Copco No. 2 Dam, Klamath River, California
- 2. Milltown Power Station Dam, St. Croix River, Maine
- 3. Oakland Dam, Susquehanna River, Pennsylvania

<u>Note</u>: This list includes all dam removals reported to American Rivers (as of February 2, 2024) that occurred in 2023, regardless of the level of American Rivers' involvement. Inclusion on this list does not indicate endorsement by American Rivers.

Contact information is provided for dam removals, if available. For further information about the list, please contact Jessie Thomas-Blate, American Rivers, Director of River Restoration at 202.347.7550 or jthomas@americanrivers.org.

### Copco No. 2 Dam Removal, Klamath River, California



Photo Credit: Swiftwater Films

#### **QUICK FACTS**

Dam Height: 63 feetDam Length: 278 feet

Year Built: 1925

• Dam Use: Hydropower

Upstream Miles
 Reconnected: 40 miles

For nearly 100 years, dams on the Klamath River have blocked salmon and steelhead trout from reaching more than 400 miles of habitat, encroached on Indigenous culture, and harmed water quality for people and wildlife. But now, four dams – J.C. Boyle, Copco No. 1, Copco No. 2, and Iron Gate – built between 1908 and 1962, are coming down. The construction of this series of dam removals began in 2023 with Copco 2 Dam. The project will have lasting benefits for the river, salmon, and communities throughout the Klamath Basin.

The Klamath River dam removals will be among the largest dam removals in the nation's history. On November 17, 2022, the Federal Energy Regulatory Commission (FERC) approved the hydropower license surrender to remove these four dams from the Klamath River. This exciting progress is thanks to years of leadership by the Tribes that live along the river– including the Hoopa, Karuk, Yurok, Shasta, Klamath, and Modoc people– as well as efforts by the states of California and Oregon, the dams' owner, federal agencies, and several nonprofits, including American Rivers. This is the first stage of a multi-step dam removal process that will improve water temperatures, increase the levels of dissolved oxygen in the water, and reduce algal toxins, thus reconnecting coldwater habitat and allowing salmon to reproduce in safe and healthy conditions. The overall water quality improvements resulting from dam removal will bolster healthy communities and expand access to recreation.

Visit the <u>Klamath River Renewal Corporation's website</u> to find out more about the project, and to stay updated as work progresses.

#### **CONTACT**

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### Milltown Power Station Dam, St. Croix (Lower Skutik) River, Maine



Photo Credit: International Joint Commission

#### **QUICK FACTS**

Dam Height: 23 feetDam Length: 590 feet

• Year Built: 1881

 Dam Use: Hydropower/Cotton Mill

Miles reconnected: 10 miles

The Milltown Power Station Dam on the St. Croix River, situated along the U.S./Canada border, was among the oldest hydroelectric generating stations in Canada. It had a power capacity of four megawatts with its seven turbines. This was the first removal of a dam in international waters.

In 2019, New Brunswick Power, the dam's owner and operator, initiated planning and design for the decommissioning of the dam and restoration of fish passage past the site. The design involved the removal of dam

infrastructure and associated structures, installation of a 500-foot-long channel-spanning nature-like passage to ensure fish are able to navigate the 10-foot vertical drop at the site, and selective bedrock excavation in the upstream area. The project aimed to restore access to 10 miles and 60,000 acres of habitat for alewife and five other migratory fish species.

This dam was originally built on top of natural waterfalls to power the historic St. Croix Cotton Mill. In 1957, New Brunswick Power purchased the dam and began producing hydropower. Eventually, the facility reached the end of its service life, needing maintenance that was uneconomical to address. In addition, the facility was blocking passage for Atlantic salmon, river

herring, and other species important to the Peskotomuhkati Nation in this traditional territory.

This project is part of a broader initiative to improve fish passage at other dams and barriers throughout the watershed. Early results of restoration work led by the Peskotomuhkati Nation have shown a doubling of alewife, one of the river's major environmental health indicators.

#### **CONTACT**

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## Oakland Dam, Susquehanna River, Pennsylvania



Photo Credit: Lisa Hollingsworth-Segedy

#### **QUICK FACTS**

- Dam Height: 16 feet
- Dam Length: 755 feet
- Year Built: 1929
- Dam use: Hydropower
- Miles Reconnected:
   250 miles

Once a dangerous and obsolete former hydropower dam, the Oakland Dam along the North Branch Susquehanna River Water Trail is no longer a safety hazard for recreational users. This project not only made the river safer, it also reconnected 250 miles of aquatic habitat for sportfish, iconic freshwater mussels, and other fish and wildlife. The project is the largest dam removal to date in Pennsylvania, which leads the nation in dam removals (390 removals as of 2023).

The Susquehanna Borough Council is planning to create a new riverfront park for camping, now that the site is safer for the community. This will improve public access and help bolster economic growth for the area.

Oakland Dam once provided electricity to Barnes Kasson Hospital and to Susquehanna Depot, a major railroad hub for the northeastern U.S., located on the banks of the Susquehanna River in what is now Ira Reynolds Riverfront Park. Hydropower generation was abandoned in the early 2000's due to an accidental breach in the center of the dam.

American Rivers worked in partnership with the Boroughs of Susquehanna and Oakland, Endless Mountains Heritage Region, Upper Susquehanna Coalition via Tioga County Soil & Water Conservation District, PA Department of Environmental Protection, PA Fish & Boat Commission, and the U.S. Army Corps of Engineers on this project.

#### **CONTACT**

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# Table 1. Reported Dam Removals from 2023

Dam Name	City/County	River	State
Huntsville Dam			
(War Eagle Creek Dam)	Huntsville/Madison	War Eagle Creek	AR
Copco 2 Dam	Siskiyou County	Klamath River	CA
Double U Fish Ranch Dam	Modoc County	Howards Gulch	CA
East Weaver Creek Dam	Weaverville	East Weaver Creek	CA
Lake George Diversion Dam			
(Lower Eleven Mile Dam)	Park County	South Platte River	CO
Mt Shavano Dam			
(Salida Lowhead Dam)	Salida/Chaffee	Arkansas River	CO
Dana Dam (Merwin Meadows			
Dam; Strong Pond Dam)	Wilton	Norwalk River	CT
Smith Dam	Wilton/Fairfield	Comstock Brook	CT
Sternheim-Gardner Dam			
(Comstock Brook Dam)	Wilton	Comstock Brook	CT
Crooked Creek Dam		0   10	
(Clearwater Dam)	Gadsden County	Crooked Creek	FL
Pearl Creek Pond Dam	Okaloosa	Pearl Creek	FL
(Duke Field Dam)			
Sweetwater Creek Dam Stauffer Creek Oxborrow	Liberty	Sweetwater Creek	FL
No. 1 Dam	Montpelier	Stauffer Creek	ID
Stauffer Creek Oxborrow	Montpeller	Stauffer Creek	
No. 2 Dam	Montpelier	Stauffer Creek	ID
Charles Mill Dam	Marion	Mississinewa River	IN
Hickey Martin Dam	Lawrence County	Henderson Creek	IN
Markle Mill Dam	Vigo County	Otter Creek	IN
Markie Milli Barri	vigo courity	East Fork	1111
Weir Dam	Richmond	Whitewater River	IN
City of Vine Grove Weir Dam	Vine Grove/Hardin	Brushy Fork	KY
Roundstone Creek Dam	Mount Vernon	Roundstone Creek	KY
Ames Pond Dam	Braintree	Monatiquot River	MA
Armstrong Dam			, .
(Hollingsworth Dam)	Braintree	Monatiquot River	MA
Jenkins Pond Dam		·	
(High Street Dam)	Bridgewater	Town River	MA
Lower Bemis Dam	Chicopee	Abbey Brook	MA
River Street Dam	Acton	Fort Pond Brook	MA
Whites Mill Pond Dam	Winchendon	Millers River	MA
Burr Pond Dam	Freeport	Frost Gully Brook	ME
		Frost Gully Brook	
Fire Pond Dam	Freeport	tributary	ME
Maine Water Company Dam	Freeport	Frost Gully Brook	ME
Milltown Power Station Dam	Calais	St. Croix River	ME

Dam Name	City/County	River	State
		Spring	
	Orion Twp/Oakland	Creek/Tributary to	
Bald Mountain Pond Dam	County	Trout Creek	MI
		Buffalo River South	
Ganz Dam	Clay County	Branch	MN
Little Pine Dam	Otter Tail County	Otter Tail River	MN
	City of Pelican		
Pelican Rapids Dam	Rapids/Otter Tail County	Pelican River	MN
Pelican Rapids Dam	County	Upper Clark Fork	IVIIN
Broken Circle Pump	Deer Lodge County	River	MT
Broker energy armp		Tributary to East	
Camp Cromwell North		Branch of Middle	
No. 2 Dam	Bridgewater/Somerset	Brook	NJ
		Tributary to East	
Camp Cromwell South	,	Branch of Middle	
No. 1 Dam	Bridgewater/Somerset	Brook	NJ
Centura-Normandy Dam	Cherry Hill/Camden	Tindale Run	NJ
Indian Rapids Dam	Plattsburgh	Saranac River	NY
Fredenburgh Falls Dam	Plattsburgh	Saranac River	NY
5		Tributary to Salt Lick	
Dieckbrader Lake Dam	Brown County	Creek	OH
Baker Creek Dam	Washington County	Baker Creek	OR
Krumwiede Diversion 1 & 2	Jackson County	Calt Craal	OD
Pushup Dams	Jackson County	Salt Creek	OR
Lost Creek Dam	Jackson	Lost Creek	OR
Lovelace Dam	Jackson County	Slate Creek	OR
North Fork Eagle Creek Dam	Clackamas County	North Fork Eagle Creek	OR
Parrott Creek Dam	Douglas County	Parrott Creek	OR OR
Poley Allen Diversion Dam	Wallowa County	Lostine River	OR OR
Takelma Creek Dam			
Whiskey Creek Hydro Dam	Josephine	Takelma Creek	OR
Bushkill Dam No. 3	Lan County	Whiskey Creek	OR
(Silk Masters Dam)	Northampton	Bushkill River	PA
Crest Dam	Dauphin	Spring Creek	PA
Cussewago Dam	Meadville/Crawford	Cussewago Creek	PA
Hanover Dam	Luzerne	Tributary to Espy Run	PA
Homestead Dam	Dauphin	Spring Creek	PA PA
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Lafayette College Dam	Northampton	Bushkill Creek	PA
Laurel Run Dam No. 2	Plains Township	Laurel Run	PA
Lower Crest Dam	Dauphin	Spring Creek	PA
Oakland Dam	Susquehanna	Susquehanna River	PA
Red Oak Dam	Dauphin	Spring Creek	PA
Stutz Dam	Ducks	Unnamed tributary to Delaware River	PA
Stutz Dam	Bucks Datton/Combrid		
Unnamed Dam	Patton/Cambria	Chest Creek	PA

Dam Name	City/County	River	State
Upper Brooke Drive Dam	Dauphin	Spring Creek	PA
Vance Dam	Lancaster	Gross Run	PA
Willow Creek Dam	Berks	Willow Creek	PA
Sam Davis Dam	Smyrna/Rutherford	Stewart Creek	TN
Pilot Grove Creek Soil			
Conservation Service Site 77		Unnamed tributary	
Dam	Collin	to Hickory Creek	TX
		Unnamed tributary	
Vaquero Crossing Dam	Parker	to Hart Branch	TX
Gigliotti Diversion Dam	Carbon County	Price River	UT
Beaver Brook Dam	Wilmington	Beaver Brook	VT
Connolly Pond Dam	Shrewsbury	Tributary to Mill River	VT
Dow Pond Dam	Middlebury/Addison	Muddy Branch	VT
Beaver Creek Dam No. 1	Chelan County	Beaver Creek	WA
Beaver Creek Dam No. 2	Chelan County	Beaver Creek	WA
Nelson Dam	Yakima County	Naches River	WA
Spore Dam	Alger	Barrel Springs	WA
		Tributary of Wood	
Stenberg Mill Dam	Burnett County	River	WI
		Unnamed tributary	
Wolf Springs Dam No. 4	Washburn County	to Frog Creek	WI
Acme Diversion Dam	Sheridan County	Tongue River	WY
Lawrence Diversion Dams	Goshen County	Horse Creek	WY



City of Vine Grove Weir Dam, Brushy Fork, KY; Photo Credit: Ward Wilson

#### **Learn More**

Full Database of Dam Removals 1912-2023: <a href="https://www.americanrivers.org/DamRemovalDatabase">www.americanrivers.org/DamRemovalDatabase</a>

Map of U.S. Dams Removed Since 1912: www.americanrivers.org/DamRemovalMap



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