

86 Dams Removed to Restore Rivers in 2017

American Rivers releases annual list including dams in Alaska, California, Connecticut, Iowa, Indiana, Kentucky, Massachusetts, Maine, Michigan, Minnesota, Nevada, New Hampshire, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, Tennessee, Vermont, Washington and Wisconsin.

Nationwide, 1,492 dams have been removed from 1912 through 2017.

Dam removal brings a variety of benefits to local communities, including restoring river health and clean water, revitalizing fish and wildlife, improving public safety and recreation, and enhancing local economies. Working in a variety of functions with partner organizations throughout the country, American Rivers contributed financial and technical support in many of the removals.

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

This list includes all dam removals reported to American Rivers (as of February 13, 2018) that occurred in 2017, regardless of the level of American Rivers' involvement. Inclusion on this list does not indicate endorsement by American Rivers. Dams are categorized alphabetically by state.

Lower Eklutna River Dam, Eklutna River, Alaska

Originally built to provide hydropower, but no longer in use, the Lower Eklutna River Dam was removed in October 2017 in one of Alaska's most ambitious habitat restoration projects ever. The Eklutna Native Corporation and the Native Village of Eklutna partnered with The Conservation Fund to work within a brief construction window in a 300-foot deep steep-walled canyon to open seven miles of the Eklutna River for salmon migration. This project has provided construction work for the local tribe, boosting the economy and helping to restore treasured runs of salmon.

Contact: Brad Meiklejohn, The Conservation Fund, 907-694-9060, <u>bmeiklejohn@conservationfund.org</u>

Cleveland National Forest Dam Removals (HJFD15, HJFD16, HJFD17, HJFD18, HJFD19, SCFD10, SCFD12, SCFD7, SCFD8), Holy Jim Creek and Silverado Creek, California

The U.S. Forest Service removed nine dams along Holy Jim Creek and Silverado Creek in California in 2017. These removals are part of a larger project to remove approximately 80 dams from four streams in Orange County. The dams, mostly built in the 1970s, range from 2.5 to 9.3 feet high by 2.2 to 53 feet long. Collectively, the dam removals are expected to improve stream conditions and fish passage, hopefully leading to the future recovery of endangered steelhead. *Contact: Kirsten Winter, Cleveland National Forest*, 858-674-2956, *kwinter@fs.fed.us*

Milliken Creek Dam, Milliken Creek, California

Built in the 1950s for golf course irrigation, Milliken Creek Dam was removed in order to reduce flooding and improve fish passage. This dam was comprised of a concrete shell filled with dirt, plus a corrugated steel culvert.

Brunswick Mill #1 Dam, Moosup River, Connecticut

For the removal of Brunswick Mill #1 Dam, Connecticut Department of Energy and Environmental Protection (CT DEEP) worked closely with American Rivers and Natural Resources Conservation Service. This timber crib dam was built in the early 1800s by a private individual. It was removed to reduce liability for the owner and improve fish passage and natural river function. *Contact: Amy Singler, American Rivers, 413-584-2183, <u>asingler@americanrivers.org</u>*

Scantic River Dam (Springborn Dam), Scantic River, Connecticut

The 26-foot high Scantic River Dam was built in 1890 to power a mill. Its removal will improve fish passage for migratory fish species, and lengthen a whitewater paddling stretch for public recreation. The Scantic River Watershed Association hosts an annual Scantic Spring Splash canoe and kayak race, and Springborn Dam is a notorious portage along the race route. American Rivers helped fund an early feasibility study assessing the potential removal of the dam in 2009 through our national partnership with the NOAA Community-based Restoration Center.

Contact: Steve Gephard, CT DEEP Fisheries, 860-447-4316, steve.gephard@ct.gov

Fawn River Hatchery Dam, Fawn River, Indiana

This earthen dam and the two spillway structures associated with it were removed in November 2017. The stream channel is being restored through the former mill pond area. This state-owned dam was built sometime prior to 1915 for mill power. Its removal reconnected 26 river miles for fish passage, and removed a barrier for paddlers.

Contact: Doug Keller, Indiana Dept of Natural Resources, 317-232-4093, dkeller@dnr.in.gov

Quaker Mill Dam, Maquoteka River, Iowa

This 22-foot high by 196-foot long dilapidated concrete hydropower dam was built in the 1920s and removed in May 2017. There are plans for the site to become a public access point for the river, and the removal will improve passage for paddlers and fish. Approximately eight stream miles will be reconnected through this dam removal. One of the main goals of this project was to reduce flooding for upstream homes.

Contact: Nate Hoogeveen, Iowa DNR Land and Water Bureau, 515-725-2991, <u>nate.hoogeveen@dnr.iowa.gov</u>

Lock and Dam No. 6, Green River, Kentucky

In recent years, the U.S. Army Corps of Engineers' Louisville District undertook an economic assessment of navigation dams on the Green and Barren rivers in Kentucky, and received Congressional approval to de-authorize (i.e., retire) five little-used locks and dams. Lock and Dam No. 6 was quickly removed from the Green River by the U.S. Fish and Wildlife Service (USFWS)—utilizing a construction crew that has successfully removed several dams throughout the southeast—in April 2017, due to its deteriorated condition and safety hazard. Other project partners included: Kentucky Department of Fish and Wildlife Resources, Mammoth Cave National Park, The Nature Conservancy and Kentucky Waterways Alliance. In addition to the project improving habitat for fish, mussels and invertebrates, the dam's impoundment was filling a portion of Mammoth Cave National Park with water and sediment, and that part of the caves will now be accessible for important archaeological study. The project is precedent-setting for removing uneconomical, expensive federal navigation infrastructure and for the federal partnership between the Army Corps and USFWS.

Contact: Mike Hensley, The Nature Conservancy, 270-576-4790, mhensley@tnc.org

Masse Dam, China Lake Outlet Stream, Maine

Removal of the Masse Dam is part of a multi-phased effort of dam removals and fishway installations to restore alewife to China Lake. This private 17-foot high concrete dam was built originally for a sawmill. This project is located upstream of the site of the Edwards Dam removal on a tributary to the Kennebec River.

Contact: Alewife Restoration Initiative

Wight's Pond Dam, Bagaduce River, Maine

This 3-foot high by 40-foot long concrete dam was owned by the Town of Penobscot in Maine. This removal will provide access to a 192 acre spawning pond for migration of alewives (*Alosa pseudoharengus*). The dam had a denil fishway but never had flow during outmigration due to the poor design of the dam. The town expects to increase the alewife fishery to the point that the state will allow a licensed harvest. Alewives are a popular, and traditional, fresh lobster bait, and the town stands to benefit financially from this restoration. The Nature Conservancy and NOAA were the major funders of this project through the NOAA Penobscot Habitat Focus Area grant.

Contact: Ciona Ulbrich, Maine Coast Heritage Trust, 207-729-7366, culbrich@mcht.org

Balmoral Dam and Marland Place Dam, Shawsheen River, Massachusetts

The removal of the Balmoral Dam, originally built as an ornamental structure, and Marland Place Dam, built to power a former mill, reconnected approximately five miles and 16 acres of habitat along the Shawsheen River in Andover, Massachusetts. The Shawsheen River is a tributary to the Merrimack River, an important ecological resource and believed to support some of New England's largest shad runs. In addition to improving passage for migratory fish, the removal of these aging structures will improve safety for paddlers and reduce risk to adjacent property owners along the river. The project's central location within the town of Andover has also provided educational opportunities. American Rivers helped fund an early feasibility study assessing the potential dam removals through our national partnership with the NOAA Community-based Restoration Center.

Contact: Nick Wildman, Massachusetts Division of Ecological Restoration, 617-626-1528, nick.wildman@state.ma.us

Carver Cotton Gin Pond Dam, Satucket River, Massachusetts

This 15-foot high by 60-foot long mill dam was built in the 1890s and removed in October 2017. Approximately 13 miles of river were opened for fish passage; the project restored river processes and connectivity and increased access to river herring spawning grounds. Other benefits included the elimination of a public safety hazard and protection of upstream infrastructure. *Contact: Kristopher Houle, Massachusetts Division of Ecological Restoration, 617-626-1543, kris.houle@state.ma.us*

Charles River Mill Dam (Pearl Street Mill Dam), Charles River, Massachusetts

The Town of Bellingham led this project to remove an obsolete and aging dam. The project involved dredging to address mercury contamination in sediment. This 13.5-foot high by 250-foot long concrete mill dam was built prior to 1900, and had become a public safety hazard and liability. *Contact: Alex Hackman, Massachusetts Division of Ecological Restoration, 617-626-1548, alex.hackman@state.ma.us*

Coonamessett Lower Bog Dam, Coonamessett River, Massachusetts

The removal of Coonamessett Lower Bog Dam is part of the first phase of a larger restoration project aiming to restore connectivity to 2.2 miles of river through two dam removals and culvert replacements.

The full project will improve access for migratory fish to 158 acres of spawning habitat. In addition, 56 acres of former cranberry bogs will be restored to natural wetlands. *Contact: Betsy Gladfelter, Falmouth Conservation Commission*

Hamant Brook Lower, Middle, and Upper Pond Dams, Hamant Brook, Massachusetts

Three dams on Hamant Brook in Massachusetts were removed in Fall 2017 in order to restore connectivity to coldwater habitat for native trout and endangered turtles. Hamant Brook runs through the Leadmine Conservation Area—880 acres of protected municipal conservation land. The project includes work to improve public access to the protected lands, while removing a public safety hazard and improving habitat for fish and wildlife. The Hamant Brook Restoration Project is supported by the landowners (Town of Sturbridge and Old Sturbridge Village), in partnership with the Massachusetts Division of Fisheries and Wildlife, American Rivers, and the Massachusetts Division of Ecological Restoration.

Contact: Amy Singler, American Rivers, 413-584-2183, asingler@americanrivers.org

Mordecai Lincoln Road Pond Dam (Hunters Pond Dam), Bound Brook, Massachusetts

The Town of Scituate led the effort to remove this 11-foot high by 220-foot long obsolete former mill dam. They eliminated a public safety hazard and future town financial liability. The project also improved fish passage and access to river herring spawning grounds, and restored river processes and connectivity. *Contact: Kristopher Houle, Massachusetts Division of Ecological Restoration, 617-626-1543, kris.houle@state.ma.us*

Boardman Dam, Boardman River, Michigan

The Boardman River Dam removal is part of a larger restoration effort to address four barriers along the Boardman River in Michigan. This removal not only removed an impediment to fish passage, but also improved a river crossing for local residents. Previously, the Brown Bridge Dam was removed in 2013, and plans are in place to remove Sabin Dam and modify Union Street Dam in the near future. The largest river restoration project in Michigan's history, collectively the project will restore more than two river miles of native coldwater fisheries habitat, more than 250 acres of wetlands and nearly 60 acres of upland habitat.

Contact: Nate Winkler, Conservation Resource Alliance, 231-946-6817, nate@rivercare.org

Buhl Dam, South Branch Pine River, Michigan

In May 2017, this 20-foot high by 30-foot long dam was removed from the South Branch Pine River in Michigan. The Buhl family originally built this dam to create a recreational pond for their family lodge. Approximately 20 miles of river was reconnected for fish passage, to address erosion issues, and to reduce thermal impacts. This project was made possible through joint efforts by Huron Pines, U.S. Forest Service, Pine River-Van Etten Lake Watershed Coalition (PRVEL), Michigan Department of Natural Resources, National Fish and Wildlife-Sustain Our Great Lakes and the U.S. Fish and Wildlife Service. *Contact: John Bailey, Huron Pines, 989-448-2293 ext. 19, john@huronpines.org*

Dog Lake Dam, McMasters Creek, Michigan

This 6.5-foot high by 620-foot long earthen gravity dam was built in 1957 for recreational purposes. Michigan Department of Natural Resources (DNR) removed the structure in September 2017 because it had become dilapidated. The project is anticipated to restore natural stream function and provide fish passage.

Contact: Keith Fisher, Michigan DNR Wildlife Division, 989-275-5151, FISHERK2@michigan.gov

Molasses River Flooding #1 Dam, Molasses River, Michigan

In September 2017, this 5-foot high by 815-foot long earthen dam was removed because it had fallen into disrepair. It was built in 1949 for recreational purposes. The project is anticipated to restore natural stream function and provide fish passage.

Contact: Keith Fisher, Michigan DNR Wildlife Division, 989-275-5151, FISHERK2@michigan.gov

Rainy River Dam, West Branch Upper Rainy River, Michigan

Michigan Department of Natural Resources (DNR) removed this dam in September 2017 because it was dilapidated. The structure was built in 1960 for recreational purposes. The project is anticipated to restore natural stream function and provide fish passage.

Contact: Keith Fisher, Michigan DNR Wildlife Division, 989-275-5151, FISHERK2@michigan.gov

Union Spring Dam, Union River, Michigan

The Union Spring Dam was replaced with a bridge crossing in August 2017, in order to accommodate the needs of the community. Built in 1965, this 13-foot high by 180-foot long earthen dam was no longer needed. Connectivity was restored to approximately one mile of river, and the project improved hiking opportunities and access to natural areas.

Contact: Eric Cadeau, Michigan DNR Parks & Recreation Division, 906-353-6651 x 112, <u>CadeauE@michigan.gov</u>

Chester Creek Dams 1 & 2, Chester Creek, Minnesota

In October 2017, the City of Duluth removed these two dams that were built in 1939 for recreational purposes. The river channel was restored, the banks were stabilized, ponding was eliminated which will improve water temperatures for trout, and built up sediment was removed. The project was also expected to improve angling, minimize future flooding, improve park aesthetics, promote natural river function, and strengthen relationships between local agencies.

Contact: Kate Kubiak, South St. Louis Soil and Water Conservation District, 218-723-4946, Kate.kubiak@southstlouisswcd.org

Drywood Creek Dam, Drywood Creek, Minnesota

Built in 1972 as a barrier for carp, Drywood Creek Dam was a failing concrete dam (6-foot high by 30-foot long) and earthen dike. For this project, a rock riffle was constructed and the historic channel was reconnected. Other goals of the project were to reestablish a functional/stable stream morphology and improve stream stability and water quality.

Contact: Ryan Bjerke, Minnesota Dept of Natural Resources, 320-839-3823, Ryan.Bjerke@state.mn.us

Sauk River Dam, Sauk River, Minnesota

In June 2017, the Sauk River Dam was removed from under a pedestrian bridge near Whitney Park in St. Cloud, Minnesota, but bridge was left in place for public use. The dam was originally built in the 1930s to create a swimming hole. This project added over 0.6 acres of native planting, restored and stabilized over 150 feet of shoreline, and will reduce pollutant loading to the Sauk River.

Contact: Greg Berg, Stearns County Soil and Water Conservation District, 320-251-7800 x3, <u>Greg.Berg@mn.nacdnet.net</u>

Shell Lake Dam, Shell River, Minnesota

In June 2017, this dam was replaced with a rock rapids to improve fish passage. This dam was originally built during the Great Depression in 1937, by the Works Progress Administration. Contact: Jeff Tillma, MN Dept Natural Resources, 218-328-8834, jeff.tillma@state.mn.us

Chester Dam (Crestview Reservoir), Adobe Creek, Nevada

This 5-foot high by 160-foot long earthen irrigation dam was constructed in 1964. It was removed because it was no longer serving a useful purpose and created a safety hazard.

Ice Plant #1, 2, and 3 Dams, Gleason Creek, Nevada

This series of three high risk erosion control dams in Humboldt-Toiyabe National Forest were removed because the dams did not function in the flood control purpose for which they were built. These earthen dams were built in 1972, and removed to lower safety risk. Contact: Sierra Brewer, U.S. Forest Service, 775-352-1264, sierrabrewer@fs.fed.us

Judd Brook Dam, Judd Brook, New Hampshire

This 5.1-foot tall by 42-foot long dam was removed in October 2017. It was originally created by a private entity that used it for water diversion.

Flower Hill Dam, Unnamed tributary to the Shabakunk River, New Jersey

The College of New Jersey removed this 10-foot high by 365-foot long earthen dam in July 2017. Contact: Richard Tamagno, NJ Dept Environmental Protection, 609-984-0859, *Richard.Tamagno@dep.nj.gov*

Kazmar Pond Dam, Unnamed tributary to Wawayanda Creek, New Jersey

In October 2017, this 6-foot high by 40-foot long concrete gravity dam was removed. The project eliminated the safety hazard of a partially breached dam. Contact: Zachary Kohl, NJ Dept Environmental Protection, 609-984-0859, Zachary.Kohl@dep.nj.gov

Weston Mills Dam, Millstone River, New Jersev

Originally built in 1844 and rebuilt in 1935, the 5-foot tall by 112.5-foot long earthen Weston Mills Dam provided power for mills. The project reconnected 4.5 river miles for American shad and river herring spawning, improved water quality, enhanced public safety, improved fishing, and provided new boating opportunities. Part of the project involved stabilizing the attached grist mill foundation walls and recovering and documenting archaeological artifacts.

Contact: John W. Jengo. Stantec. Inc., 610-407-7914, John.Jengo@stantec.com

Milburnie Dam, Neuse River, North Carolina

This project restored 32,590 linear feet of the Neuse River in Wake County, North Carolina, and created the Milburnie Dam Mitigation Bank. The Milburnie Dam (15-foot high by 600-foot long) was originally built in 1813 and rebuilt around 1900, and has seen a variety of uses over the years, including a saw mill, gristmill, papermill, and hydropower. Goals of the project included: aquatic community re-establishment, habitat restoration for rare, threatened or endangered species, opening 6.17 miles for fish passage, water quality improvement, supporting independent scientific research relating to the ecology of dams and dam removal, and removing the hydraulic current of the river that can cause drownings.

Contact: George Howard, Restoration Systems, 919-306-4258, george@restorationsystems.com

Rush Mountain Dam, Greer Creek, North Carolina

Soon after Conserving Carolina took ownership of the property, it was discovered that the pond outlet was not functioning and water was overtopping and eroding Rush Mountain Dam. On further investigation, they discovered that the dam appeared to have been constructed or repaired with debris such as shingles and tires. Additionally, they were having serious issues with trespassers near the dam. They decided to remove the attractive nuisance and liability of a complete failure of the earthen dam. *Contact: David Lee, Conserving Carolina, 828-697-5777 ext. 213, david@conservingcarolina.org*

Bradford Sewage Lagoon I and II, offstream near Ballinger Run, Ohio

In September 2017, the Village of Bradford removed these two dams built in 1963 for waste retention. The dams were no longer serving a useful purpose.

Jockey Hollow (Conservation Pond) No. 1, 2, and 3 Dams, Tributary to Boggs Fork, Ohio

These three dams were no longer serving a useful purpose and were removed in December 2017. They were originally built for mining purposes and then served some recreational function. Collectively, the dam removals opened approximately one mile of river habitat.

Killdeer Upground Reservoir, offstream near Tymochtee Creek, Ohio

Built in 1971 to create a recreational lake, this earthen dam was removed to eliminate embankment stability issues and create a wildlife area.

Whispering Pines Lake Dam, Tributary to Deer Creek, Ohio

This 13-foot high by 615-foot long recreational earthen dam was removed in November 2017 due to liability and maintenance concerns.

Willow Grove Park Dam, Little Beaver Creek, Ohio

This 6-foot high low-head dam was removed in January 2017 near Lisbon, Ohio. The removal was part of a compensatory settlement with the current owners of a former Salem-area chemical company responsible for contaminating the Middle Fork of the Little Beaver Creek.

Beeson-Robinson Diversion Dam, Wagner Creek, Oregon

The Rogue River Watershed Council removed the Beeson-Robinson Diversion Dam and replaced it with a re-profiled stream channel with a five percent gradient over 115 feet. This engineered stream channel design is expected to improve fish passage while mimicking the pool that is created behind the dam each irrigation season. The project will re-connect three miles of stream for juvenile and adult steelhead and possibly Coho salmon.

Contact: Alexis Brickner, Rogue River Watershed Council, 541-423-6158, abrickner@rogueriverwc.org

Dillon Diversion Dam, Umatilla River, Oregon

Built in 1915 by the Dillon Irrigation Company, this 16-foot high by 200-foot long was removed in July 2017. Its removal re-established 2.6 miles of habitat for federally listed Mid-Columbia steelhead, Chinook and coho salmon, and Pacific lamprey. The project also addressed maintenance and irrigation challenges associated with the structure. Large bedload sediment movement within this reach of the Umatilla had been documented to clog the fish ladder and block the ability of water to access the irrigation ditch. Removal reconnected habitat for salmon and steelhead at all life stages and allowed for a more reliable irrigation system to be put in place.

Contact: Michael Ward, Umatilla Basin Watershed Council, 541-276-2190

Camp Michaux Lower Dam, Toms Run, Pennsylvania

This 4.5-foot high by 32-foot long dam was built in 1928. It had become obsolete, and its removal would provide passage and refuge for Eastern brook trout. *Contact: Craig Fetterhoff, PA Dept Conservation and Natural Resources*, 717-783-3319, <u>cfetterhoff@pa.gov</u>

Dugan Run Dam, Dugan Run, Pennsylvania

In January 2017, this 8-foot high by 80-foot long dam was removed from Dugan Run in the Lower Susquehanna River watershed.

Dunbar Dams 2 and 3, Dunbar Creek, Pennsylvania

Both of these 12-foot high by 500-foot long dams were removed in January 2017 from this tributary of the Youghiogheny River. The dams originally provided water supply for coke ovens. The project reconnected coldwater habitat, restored stable stream banks and river function, and improved river recreational opportunities.

Contact: Lisa Hollingsworth-Segedy, American Rivers, 412-727-6130, <u>lh-segedy@americanrivers.org</u>

East Branch Saucon Dam, Tributary to the Lehigh River, Pennsylvania

Owned by the City of Bethlehem, this 4-foot high by 20-foot long concrete dam was removed in September 2017. The project is expected to improve fish and other aquatic wildlife passage, restore coldwater conditions, stabilize stream banks and river function, eliminate a public safety hazard, and reduce flooding.

Contact: Kristie Fach, Wildlands Conservancy, 610-965-4397 x124, kfach@wildlandspa.org

Eckenrode Mills Dam, Chest Creek, Pennsylvania

This stone masonry dam (5-foot high by 100-foot long) was built around 1830. The dam was obsolete, and its removal reconnected habitat for wild brook trout, hellbenders, and possibly American eel. *Contact: Lisa Hollingsworth-Segedy, American Rivers, 412-727-6130, <u>lh-segedy@americanrivers.org</u>*

Gorson Dam, Tributary to the Delaware River, Pennsylvania

In May 2017, this 11-foot high by 567-foot long earthen dam was removed. The dam was originally built in 1918 by the Girl Scouts of America.

Maple Dam, Tunkhannock Creek, Pennsylvania

This stone masonry dam was 3-foot tall by 60-foot wide. It was removed to reconnect 15 miles of river, improve fish and other aquatic wildlife passage, restore coldwater conditions, eliminate a public safety hazard, and reduce flooding.

Contact: Kristie Fach, Wildlands Conservancy, 610-965-4397 x124, kfach@wildlandspa.org

Millbrook Farms Dam, Tributary to the Lehigh River, Pennsylvania

This stone masonry dam (4-foot high by 115-foot long) was built to power a grist mill in 1831. Having become obsolete, it was removed to reconnect 5 miles of river, improve fish and other aquatic wildlife passage, restore coldwater conditions, eliminate a public safety hazard, and reduce flooding. *Contact: Kristie Fach, Wildlands Conservancy, 610-965-4397 x124, <u>kfach@wildlandspa.org</u>*

Mountain Springs Dam 2, Bowmans Creek, Pennsylvania

In 1911, this 18-foot high by 722-foot long concrete dam was built for recreational purposes. However, it had fallen into disuse and was deemed to be structurally deficient. This removal opened 2 miles of river for fish passage, established a more natural flow regime, and eliminated a public safety hazard. *Contact: Lisa Hollingsworth-Segedy, American Rivers, 412-727-6130, <u>lh-segedy@americanrivers.org</u>*

PGC Dams 1, 2, and 3, Lehigh River, Pennsylvania

In September 2017, these three earthen dams owned by the Pennsylvania Game Commission were removed. The water quality downstream is expected to benefit from natural buffering of wetlands, and habitat for wetland species was restored.

Contact: Kristie Fach, Wildlands Conservancy, 610-965-4397 x124, kfach@wildlandspa.org

Solomons Creek Dam, Solomons Creek, Pennsylvania

This 6-foot high by 80-foot long stone masonry dam in Ashley Borough, Pennsylvania, was removed in July 2017. It had become dilapidated, served no useful purpose, and blocked access to habitat for Eastern brook trout. The project is expected to restore the natural form and function of the stream channel, enhance instream and riparian habitats, provide additional cross sectional area for the stream to convey high flows, and limit erosion.

Contact: Ben Lorson, PA Fish and Boat Commission, 814-359-5106, blorson@gmail.com

Tyler Hill Dam, Sunny Brook, Pennsylvania

Built in 1820, this 13-foot high by 160-foot long stone masonry dam was originally constructed by a private entity for recreational purposes.

Wildcat Run Dam, Wildcat Run, Pennsylvania

In January 2017, this 14-foot high by 120-foot long dam was removed.

Nashville Zoo Dam Weir 1 and 2, Cathy Jo Branch tributary to Mill Creek, Tennessee

This pair of small (4-foot high by 8-foot long) concrete and rebar dams were removed in February 2017. The project restored 0.5 miles of upstream habitat for Nashville crayfish, reestablished natural sediment transport downstream, restored flow and open habitat, and increased habitat for Nashville Zoo's local conservation exhibits.

Contact: Mekayle Houghton, Cumberland River Compact, 615-210-9600, <u>mekayle.houghton@cumberlandrivercompact.org</u>

Roaring River Fish Dam, Roaring River, Tennessee

In August 2017, this 10-foot high by 220-foot long was removed. The dam was originally built in 1976 as a fish barrier meant to keep "rough" fish from downstream Cordell Hull reservoir out of the river. The project opened up passage for several migrating fish species, and it may reconnect hellbender populations. Partners restored riffle run habitat upstream of dam, removed a safety hazard, improved river passage for paddling, and increased fishing opportunities.

Contact: Mark Thurman, Tennessee Wildlife Resources Agency, 931-797-9500, mark.thurman@tn.gov

Bagatelle Dam, West River Tributary, Vermont

This private concrete dam (10-foot high by 15-foot long) was built in 1939 to create a pond. Its removal reconnected five miles of habitat for fish passage.

Contact: Ron Rhodes, Connecticut River Conservancy, 802-457-6114, rhodes@ctriver.org

Dummerston Dam, West River, Vermont

Removal of this 1920s era dam in Dummerston, Vermont, will open up four miles of brook trout habitat that connects to the West River and then directly to the Connecticut River. The project also aims to limit localized flooding and improve recreational fishing.

Contact: Ron Rhodes, Connecticut River Conservancy, 802-457-6114, rhodes@ctriver.org

East Burke Dam, Passumpsic River, Vermont

This 13-foot high by 150-foot long concrete mill dam was built around 1931. The project reconnected 99 miles of river to improve passage for Eastern brook trout. It also aimed to limit localized flooding and improve recreational fishing.

Contact: Ron Rhodes, Connecticut River Conservancy, 802-457-6114, rrhodes@ctriver.org

East Highgate Dam, Missisquoi River, Vermont

Built around 1807 for mill power and other manufacturing interests, this dilapidated dam had become a safety hazard on the Northern Forest Canoe Trail. *Contact: Noah Pollack, Northern Forest Canoe Trail, 802-496-2285, <u>noah@northernforestcanoetrail.org</u>*

Geer Dam, Ompompanoosuc River, Vermont

This project removed an unused hydropower dam from the mainstem of the Ompomanoosuc River, created a natural downstream gradient, corrected geomorphic compatibility, improved water quality, opened 17 miles of brook trout habitat, and created future flood resiliency. The 6-foot high by 20-foot long hydropower dam was built in 1983.

Contact: Ron Rhodes, Connecticut River Conservancy, 802-457-6114, rrhodes@ctriver.org

Harrington Road Dam, Mill Brook, Vermont

In February 2017, this private stone masonry dam was removed to improve aquatic organism passage. *Contact: Marie Caduto, Vermont Dept Environmental Conservation, 802-289-0633,* <u>marie.caduto@vermont.gov</u>

Mill Pond Dam, Sullivan Creek, Washington

The Inland Portland Cement Company constructed a log crib dam (1909) and a gated concrete dam (1921), both of which were removed as part of this project. While it was part of the Sullivan Creek Hydroelectric Project in Colville National Forest, Mill Pond Dam did not perform hydroelectric functions or provide flood protection. As part of the Federal Energy Regulatory Commission (FERC) processes to relicense the Boundary Project (owned by Seattle City Light), and to Surrender the license for the Sullivan Creek Project (owned by Pend Oreille County PUD), it was agreed that Mill Pond Dam should be removed to restore Sullivan Creek to a more natural riverine condition. *Contact: Thomas O'Keefe, American Whitewater, 425-417-9012, okeefe@americanwhitewater.org*

Old Okauchee Dam, Oconomowoc Lake, Wisconsin

The Old Okauchee Dam was removed in Waukesha, Wisconsin, in 2017. Contact: Michelle Hase, WI Department of Natural Resources, 262-574-2127, michelle.hase@wisconsin.gov