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Mono Lake

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Photo Credit: Patrick Rodden from Modesto, CA, photo of Mono Lake Tufa State Natural Reserve

“Every year, just like the migrating birds, I return to Mono Lake. Its beauty is only outweighed by its size and its importance to the greater ecosystem of the Great Basin.”

Colorado River wins personhood status from Arizona tribal council

“The Colorado River Indian Tribes have formally accorded personhood status to the Colorado River, creating a powerful new mechanism to protect the eponymous river that makes life possible in their arid homelands. The resolution was approved by the CRIT Tribal Council on Nov. 6 in Parker. The nearly 4,300-member tribe has long been alarmed at the state of its life-giving waterway, CRIT Chairwoman Amelia Flores wrote in a statement shared with The Arizona Republic. “The Colorado River is in jeopardy,” she said. The tribe, which holds the largest quantity of senior water rights in the state, regards the river as a living being, so the resolution codifies that belief and the tribe’s commitment to protecting its needs and ability to provide water for future generations. ... ” [Read more from the Arizona Republic.](#)

10 U.S. Cities Quietly Rewilding Their Rivers – Salmon and Sturgeon Return

By Gargi Chakravorty,

While most Americans focus on flashy infrastructure projects like highways and airports, something remarkable is quietly happening beneath the surface of our cities. Across the United States, urban communities are embracing an unexpected mission: restoring their forgotten waterways to their wild origins. From the bustling streets of Portland to the industrial heartland of Chicago, cities are demolishing outdated dams, removing concrete barriers, and watching in amazement as native fish species return home after decades of exile.

Fish can return to newly accessible habitat within days or weeks once rivers regain their freedom, according to restoration experts. These aren’t just feel-good environmental projects either. The return of salmon and sturgeon represents millions of years of evolutionary wisdom finding its way back to urban landscapes, creating vibrant ecosystems that benefit both wildlife and communities. So let’s dive into the stories of ten cities that are proving urban rewilding isn’t just a dream – it’s happening right now.

California’s Klamath River: When Giants Fall, Salmon Rise (Image Credits: Pixabay) The Klamath River is free-flowing for the first time in over a century after the last of four hydroelectric dams was removed in 2024, opening up over 400 miles of habitat for migratory fish. This massive undertaking represents America’s largest dam removal project ever attempted. Just two months after the final dam was breached, the first salmon found their way to a spawning site in the Klamath basin that had been out of reach for over a century.

The speed of recovery has stunned even the most optimistic scientists. The SONAR recorded more than 9,600 fish crossing this historic threshold, marking the beginning of population reestablishment, and we estimate 7,700 of those fish were Chinook salmon. While not technically a single city project, this restoration effort serves multiple communities along the California-Oregon border and demonstrates the incredible potential of large-scale river liberation.

Portland’s Urban Fish Highway Revolution (Image Credits: Unsplash)

Portland has emerged as a surprising leader in urban salmon restoration, treating its metropolitan waterways like highways that need to stay open for wildlife traffic. Over the next 3 years, the

Clackamas Partnership is removing barriers and restoring habitat at 10 sites around the Portland Metro area. NOAA's Office of Habitat Conservation is reinvigorating efforts to restore threatened salmon and trout species in Oregon's Willamette River watershed.

The city's approach focuses on creating calm refuges for juvenile fish navigating urban chaos. Tributaries of the Willamette River, like the Clackamas River and Johnson Creek, have pretty rapid flows in the winter and spring and juvenile fish need calm, cool side channels to pull over and eat and grow and not get eaten. Portland has become so successful that Portland can swim in the Willamette River downtown today thanks to comprehensive clean water protections.

San Joaquin Valley's Salmon Comeback Story **(Image Credits: Pixabay)**

California's Central Valley might seem like an unlikely place for a salmon renaissance, yet the San Joaquin River restoration program is delivering record-breaking results. Given the record-high number of returns this year, we're hopeful that we surpass the 2019 record for redds this fall, said restoration biologists tracking the unprecedented salmon comeback.

The transformation extends beyond just fish counts. Crews are returning clean, sorted gravel to the riverbed, rebuilding spawning habitat that salmon and steelhead have relied on for thousands of years. This meticulous habitat reconstruction work in California's urban-adjacent watersheds shows how cities can partner with rural areas to create wildlife corridors that span entire regions.

Chicago's Floating Wilderness Experiment **(Image Credits: Pixabay)**

Chicago has taken urban river restoration in a completely unexpected direction by literally building nature on top of its polluted waterways. Wild Mile has over 20,000 native plants representing more than 100 species across 2.5 acres of floating habitat. Research teams have catalogued more indigenous fish species and higher quantities of zooplankton near the floating installation than in other parts of the river.

The transformation of the Chicago River from a waterway once so heavily polluted that its stench could make people sick to a thriving ecosystem represents one of America's most dramatic urban environmental victories. At River Park, where the North Branch and North Shore Channel converge, visitors can observe the scars of a 1910 dam and the successful advocacy that led to its removal in 2018, allowing fish to travel freely from Goose Island to the Skokie Lagoons.

Pennsylvania's Ten-Dam Demolition Project **(Image Credits: Unsplash)**

Pennsylvania is pursuing an ambitious strategy of multiple small dam removals rather than focusing on single massive projects. This effort covers a suite of 10 dam removals on Pennsylvania streams important for brook trout habitat. These dam removals will reconnect 190 miles of spawning, rearing, and foraging habitat for federally endangered species.

The state's approach recognizes that sometimes restoration success comes through numerous smaller victories rather than headline-grabbing mega-projects. Wildlands Conservancy continues to bust barriers on Bushkill Creek in Pennsylvania by removing the City of Easton Lower Dam

in 2024, demonstrating how urban communities can systematically reclaim their waterways one barrier at a time.

New Jersey's Four-Dam Success Story

(Image Credits: Flickr)

New Jersey's Paulins Kill River restoration represents a masterclass in strategic, sequential dam removal. In 2024, TNC successfully removed Blairstown's Paulina Dam, the fourth and final barrier from the mainstem Paulins Kill. Combined with the other three dam removals, we have reconnected 45 miles of river habitat in the Paulins Kill.

The results were immediate and dramatic. Just weeks after the Columbia Dam removal, for the first time in more than a century, American shad were discovered upstream from the former dam site. This is an excellent indicator that water quality and habitat have improved in the Paulins Kill. This rapid fish return demonstrates how urban waterways can quickly rebound when given the chance.

California's Yuba River Salmon Superhighway

(Image Credits: Unsplash)

The Yuba River project in California showcases how cities can engineer sophisticated fish passage systems rather than simply removing all barriers. Building a new fishway – a channel resembling a natural river that salmon, steelhead, sturgeon and lamprey can follow to get around the U.S. Army Corps of Engineers' Daguerre Point Dam to reach over 10 miles of healthy spawning habitat.

Launching a comprehensive reintroduction program to support recovery efforts of spring-run Chinook salmon with a goal of returning them to their original habitat in the North Yuba River above New Bullards Bar Reservoir as soon as 2025. The agreement will restore unimpeded access for fish to the full reach of the Yuba River from the confluence with the Feather River up to Englebright Dam for the first time in nearly a century.

Great Lakes Sturgeon Renaissance

(Image Credits: Unsplash)

Cities throughout the Great Lakes region are witnessing the return of one of North America's most ancient fish species through coordinated restoration efforts. Progress is showing in places like the Red River between Minnesota and North Dakota, part of the Hudson Bay basin, where lake sturgeon were completely destroyed and are now reestablished and spawning. We have renewed hope along the St. Clair and Detroit Rivers, where the largest population in the Great Lakes is consistently spawning in restored habitats.

The sturgeon comeback is particularly significant because the decimation of lake sturgeon at the turn of the 20th century is akin to the mass destruction of the American bison. Yet, after 150 million years of life on Earth, overharvest and killing en masse as a nuisance fish nearly wiped out this prehistoric creature. Urban communities along the Great Lakes are now proving that even the most damaged ecosystems can support these living fossils once again.

Texas and Washington's Dam Removal Pioneers

(Image Credits: Rawpixel)

Cities in Texas and Washington State are tackling dam removal from completely different angles but achieving similar conservation victories. Otilla Dam Removal (Texas) – Led by the San

Antonio River Authority, this project will remove a 1920s era dam that has become a human safety hazard as well as a complete barrier to aquatic species. The project will improve public safety, reduce flood risk, and reconnect 30 miles of upstream river habitat for species and recreational uses.

Meanwhile, Washington's approach focuses on massive habitat reconnection projects. Enloe Dam Removal (Washington) – This collaborative project is co-sponsored by Trout Unlimited and the Confederated Tribes of the Colville Reservation. When implemented, the project will reconnect over 1,500 miles of habitat for steelhead trout, Chinook salmon, and Tribal trust species like Pacific lamprey.

Maine's River Herring Super Highway

(Image Credits: Unsplash)

Maine is creating what could become North America's most productive river herring restoration project through strategic fishway construction rather than complete dam removal. Lower Skutik/St. Croix River Fishways (Maine) – This collaborative project with the State of Maine, Passamaquoddy Tribe, and other partners has the potential to support tens of millions of adult river herring returns annually, making their population the biggest in the United States and Canada. The fishways project will also contribute to the **sustainability and economic viability of the local pulp, paper and fishing industries.**

This project demonstrates how urban river restoration can support both ecological recovery and economic development. The scale is breathtaking – tens of millions of fish returning annually to waterways that flow through or near Maine's urban centers, creating a massive wildlife spectacle in the heart of developed landscapes.

Conclusion

It is truly remarkable how fast a river recovers once it is returned to its free-flowing state. Across America, these ten cities and regions are proving that urban waterways don't have to remain ecological dead zones. From the Pacific Northwest's salmon highways to the Great Lakes 'sturgeon sanctuaries, communities are discovering that removing human barriers allows nature to reassert itself with stunning speed and vitality.

The return of salmon and sturgeon to urban rivers represents more than just environmental success stories. These fish are living symbols of resilience, adaptation, and the possibility that even our most industrialized landscapes can support wild abundance once again. What do you think about it? Tell us in the comments. (bf by sdc)

For great pics of the fish, <https://www.newsbreak.com/discover-wild-science-318442312/4327454206144-10-u-s-cities-quietly-rewilding-their-rivers-salmon-and-sturgeon-return>

10 Native American Inventions Commonly Used Today

From kayaks to contraceptives to pain relievers, Native Americans from a range of tribal nations developed key innovations long before Columbus reached the Americas.

Patrick J. Kiger

From the tip of South America to the Arctic, Native Americans developed scores of innovations—from kayaks, protective goggles and baby bottles to birth control, genetically modified food crops and analgesic medications—that enabled them to survive and flourish wherever they lived.

In fact, early European explorers who reached the Western Hemisphere were apparently so impressed by the achievements of the people they encountered that they [felt compelled](#) to dream up stories about Native Americans being descendants of ancient Phoenician traders or a lost tribe of Israel, in an effort to explain the source of their technological prowess.

“People don’t realize the ingenuity or the knowledge that native people had, and continue to have about the world around them,” explains Gaetana De Gennaro, a supervisory specialist at the National Museum of the American Indian in New York, who manages a [permanent interactive exhibit](#) on Native American inventions.

Because various Native American tribal nations were connected through trade routes, new inventions created by one group could quickly spread from North to South and East to West, according to De Gennaro, a member of the [Tohono O’odham](#) tribe in southern Arizona.

Corn

It may be a crop, but corn was carefully cultivated by ancient farmers as long as 10,000 years ago. Native Americans then taught European colonists how to grow the crop.

“Everybody knows about corn, but they don’t know that it’s a food that wouldn’t exist without human intervention,” says De Gennaro.

Farmers in northern Guatemala and southern Mexico [selectively bred teosinthe](#), a wild grass, for many generations to enlarge the ear and develop kernels that were soft enough for humans to eat. Once they’d created the corn plant, their invention spread throughout the Western Hemisphere.

Rubber

Some Native American inventions were appropriated by the Europeans, who had the trading networks and manufacturing infrastructure to commercialize them, and who sometimes added improvements. For example, rubber was a material developed by Native Americans, and then Columbus took a rubber ball back to Europe, De Gennaro says.

After [Charles Goodyear](#) developed the [vulcanization](#) process in the 1830s to allow rubber to withstand heat and cold, colonizers developed vast rubber tree plantations in Asia to produce the raw material for factories. “Now, rubber is used all over the world,” De Gennaro says.

Kayaks

The Inuit in the Arctic developed the concept of a small, narrow boat, with a sealed cockpit to protect the paddler from sinking in the event that the craft capsized, according to Canadian technology historians [David Johnston and Tom Jenkins](#). The classic vessels were fashioned entirely from natural materials, with wood or whalebone frames covered by stitched sealskin or other animal hides. Today, the kayaks in use across the world are sometimes built from modern

materials such as [plastic and carbon fiber](#), but as De Gennaro notes, “the design is still essentially the same.”

Snow Goggles

The Inuit also invented [goggles](#) fashioned from wood, bone, antler or leather to protect their eyes from over-exposure to sunlight reflected from expanses of snow. “They’d put a slit in there, to simulate the way that you can squint,” De Gennaro says. “It cut down on the ultraviolet rays that got into the eyes.” The snow goggles were the predecessors to today’s sunglasses.

A wooden case and pairs of Inuit people.

SSPL/Getty Images &



snow goggles made by the

DeAgostini/Getty Images

Cable Suspension Bridges

The Inca of South America figured out how to weave mountain grasses and other vegetation into cables, sometimes as thick as a person’s body, and then used them to build super-strong suspension bridges that spanned across gorges. Some of the structures [spanned longer](#) distances than anything European engineers of the time could construct with stone, though [modern steel suspension bridges](#) eventually achieved far greater scale. The last of the ancient Inca-style grass cable suspension bridges still [spans a gorge](#) in Peru’s Canas Province.



The Inca bridge at Q'eswachaka, Peru

Geraint Rowland Photography/Getty Images

Raised-Bed Agriculture

Native people in South and Central America invented the technique of enriching soil and piling it to build raised garden plots called [chinampas](#) on swampy land and in lakes, according to Emory Dean Keoke and Kay Marie Porterfield in their *Encyclopedia of American Indian Contributions to the World*. The technique was a forerunner of raised-bed farming used for modern vegetable production.

Baby Bottles

The Iroquois took dried and greased bear gut and added a nipple fashioned from a bird's quill to create bottles that could be used to feed infants, according to Iroquois historian [Arthur C. Parker](#).

Anesthetics and Topical Pain Relievers

Native American healers pioneered pain relief. Across the Americas, Indigenous people, including the Algonquian, Aztecs, Navajo and Cherokee used jimson weed (scientific name *Datura stramonium*) as a topical analgesic, grinding the root to make a plaster that they applied to external injuries such as cuts and bruises, according to Keoke and Porterfield's book.

Healers also had patients ingest the plant as an anesthetic as they set broken bones. Another native remedy for pain and inflammation was tea brewed from the bark of the American black willow (*Salix nigra*), which contains the chemical salicin. Once it gets into the body, salicin produces salicylic acid, the active ingredient in modern aspirin tablets. Native Americans also used [capsaicin](#), a chemical found in hot peppers, for topical pain relief, according to De Gennaro.

Syringes

Indigenous tribes in South America, including the Iroquois and Seneca, fashioned syringes made

of animal bladders and hollow bird bones to inject medications, according to [Technology in America: A Brief History](#). The technology didn't show up in European medicine until the 1850s, when Scottish physician Alexander Wood began using needles to inject morphine to relieve pain.

Hammocks

When Christopher Columbus landed in the Caribbean, he found Indigenous people resting in hammocks, a bed made from cotton netting and suspended between two trees or poles, according to his [letters](#). Hammocks were so comfortable and convenient that European sailors began sleeping in them on merchant and naval ships, according to [Indians of North America](#).

Oral Contraceptives

The Shoshone and Navajo tribes used [stone seed](#), also known as Columbia Puccoon (*Lithospermum ruderale*) as an oral contraceptive, long before the pharmaceutical industry developed birth control pills.

Mouthwash

Various tribes in Northeastern North America used the wildflower [goldthread \(*Coptis trifolia*\)](#) as a [mouthwash and a treatment](#) for oral pain.

For some more great pics: <https://www.history.com/articles/native-american-inventions>

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### **7 Foods Developed by Native American**

These dietary staples were cultivated over thousands of years by Indigenous peoples of America.

<https://www.history.com > articles > native-american-foods-crops>

Greetings!

It's been a long festival run (all pun intended) since our premiere at SXSW, and we're in awe of the support, encouragement, and enthusiasm around **Remaining Native**. From 14 community runs to 70+ festival screenings, and over 200 partnerships, we understand the power of community wrap-around support and the importance of bringing people together in and outside the theater to raise critical awareness around the legacy of Indian boarding schools while celebrating strength, resilience and joy.

Now we're thrilled to announce our biggest endeavor yet— an Oscar qualifying theatrical release. From November 21st to November 27th, Remaining Native will screen 3 times a day, for 7 consecutive days at DCTV's Firehouse Cinema.

Remaining Native and Ku's story reminds us of the multi-dimensional truth that holds both pain and hope, past and present, and as we gather to remember the atrocities inflicted by this country, we also uplift the strength of our people who endure it.

We invite you to share this space with us whether in person, virtually or in thought, during this exciting and important moment

Tickets are now available and for groups or 10+ are discounted at half off, we hope you can join us!

Niawen,  
Paige and the Remaining Native Team

[GET TICKETS](#)

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In 2022, **groundbreaking DNA evidence confirmed what the Blackfeet Nation has always known** — their ancestors have lived in Montana for over 18,000 years, long before written history. This discovery reinforces the deep connection between the Blackfeet people and the land they've called home for millennia.

The revelation is a powerful testament to the strength of oral traditions and the unshakable bond Indigenous peoples share with the natural world. It highlights the importance of recognizing and honoring Indigenous histories.

IN 2022, DNA EVIDENCE CONFIRMED WHAT THE
BLACKFEET NATION HAD ALWAYS SAID: THEIR
ANCESTORS HAVE LIVED IN MONTANA FOR
18,000 YEARS, LONG BEFORE WRITTEN HISTORY.



[Archaeologists Found an Ancient Maya Map of the Universe Carved Into Bedrock](#)

[Popular Mechanics](#)

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**From National Geographic:**

[Native People of the Arctic and Subarctic](#)

[Native People of the American Southeast](#)

[Native People of the American Northeast](#)

[Native People of the American Great Plains](#)



[People of the American Southwest](#)

[Native People of the American Northwest Coast](#)

[Native People of California](#)

[Encyclopedia Of American Indian History And Culture](#)

[Native People of the American Great Basin](#)



*I had some email problems yesterday, so did not get this until late evening. If interested, you can probably call and get a transcript. Their seminars are usually very good. sdc*

**WEBINAR: Indian Water Settlements in Arizona: An Analysis of their History and Potential Future from 11am to 12:15pm.** Indian water settlements are complex, and each settlement is unique to the priorities of the Tribe, the state, the United States, and other stakeholders at time of settlement agreement negotiation and Congressional ratification. This WRRRC Water Webinar will discuss the research that reviewed Arizona's 11 Congressionally ratified Indian water settlements using a historical and discourse analysis to contextualize such settlements within the history of Tribal water rights and the changing priorities of the parties involved. [Click here to register.](#)

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**No deal on the Colorado River ...**

**despite Trump administration**

**deadline**



“After two fraught years of negotiations amid dire projections for the Colorado River’s reservoirs, California and six other states that rely on the river’s water have yet again failed to reach a deal — despite a federal deadline. “While more work needs to be done, collective progress has been made that warrants continued efforts to define and approve details for a finalized agreement,” the states said. The written statement released Tuesday included no details about how they plan to manage the river after the current rulebook expires at the end of next year. Officials at the U.S. Bureau of Reclamation, the federal stewards for the river under the Department of the Interior, have threatened to impose their own plan in the absence of a deal. “Two years. And the lack of progress, in light of how perilous the conditions are on the Colorado — it’s unacceptable,” said Mark Gold, former director of Water Scarcity Solutions at



the Natural Resources Defense Council and a board member of the Southern California water import giant, the Metropolitan Water District. ... ” [Read more from Cal Matters](#).

### **Water providers SRP and CAP to connect systems, shore up Valley water security**

“The Valley’s two largest water providers will connect their systems, allowing water from the Salt River Project into the Central Arizona Project canal system. The project would give SRP and CAP the flexibility to move water through the Valley. Combined, the two providers serve the vast majority of Arizonans. SRP water comes from the Salt and Verde Rivers. CAP water comes from the Colorado River and is in danger of taking cuts. SRP and CAP have different service areas. The proposed SRP-CAP Interconnection Facility (SCIF) would allow water users, like some central Arizona cities and towns with rights to SRP water to access it. “It’s water that belongs to these municipalities that have invested in infrastructure within SRP service territory that they may not have access to currently,” SRP Senior Engineer Jacob Rodriguez said. ... ” [Read more from KJZZ](#).

### **New dam rule could put Grand Canyon at risk**

“Can tribes put an early stop to hydropower projects on their own lands? Under a new rule recommended by the secretary of energy the answer would be: No. In an alarming move, on October 23, 2025, Secretary of Energy Chris Wright proposed that the Federal Energy Regulatory Commission (FERC) create a new regulation. The new rule would prevent FERC from denying preliminary permits for hydropower projects based on the objection of the tribe on whose land the project would be built. On October 27, 2025, FERC quietly opened a public comment period on the idea. There’s a short window to submit a comment; the deadline is November 12, 2025. This proposed rule flies in the face of tribal sovereignty and the modern best practice for developers to work with a host tribe on projects proposed on the tribe’s land. The Inter Tribal Association of Arizona, which represents 21 tribal nations, called the proposed rule “an affront to the basic tenets of Tribal sovereignty.” ... ” [Read more from the Grand Canyon Trust](#).