

Harnessing America's Forests & Natural Infrastructure



Innovative Funding and Finance to Restore Nature for Water, Jobs, and Wildfire Resilience

WRI's U.S. Forests & Water program, part of the global Cities4Forests initiative, works to reduce the risk of catastrophic wildfire, restore degraded forests, and protect watersheds across the U.S. We design, implement, finance, and scale projects with local partners to build disaster resilience, strengthen water security, protect and enhance infrastructure, create jobs and recreation opportunities, and boost rural prosperity.

Our Vision

By 2030, our goal is to:

- Restore and protect 500,000 acres of forest and natural infrastructure
- Unlock \$250 million in forest resilience funding and finance
- Scale restoration across 20 watersheds
- Benefit 4,000,000 people through improved wildfire safety, water security, and resilience
- Create 350 full-time and seasonal jobs

The Challenge

Catastrophic wildfire is a significant threat to American lives, health and the economy. Wildfires have become larger, more intense, and more frequent due to a century of wildfire suppression, resulting in a buildup of forest fire fuels exacerbated by warmer and drier conditions. Wildfires killed more than 100 Americans in 2023, and wildfire smoke is predicted to cause more than 27,000 excess deaths per year in the coming decades. Wildfires cost the U.S. economy up to \$893 billion annually (approximately 4% of U.S. GDP). Wildfire also threatens core infrastructure services, including drinking water (by adding silt, ash, and chemicals), roads and rail lines (due to flooding and landslides), housing (nearly 130,000 structures have been burned since 2005), and energy (due to public safety power shutoffs and reduced hydropower productivity).

While America's most fire-prone forests have too many trees, other communities have too few. Forests and wetlands have been lost around many of America's drinking water reservoirs, rivers and lakes, resulting in increased drought conditions, poor water quality, devastating floods, increased filtration needs and higher utility bills. At the same time, America's cities are grappling with rising temperatures, flooding, poor air quality and a lack of access to nature.

The Opportunity

There is robust evidence and broad agreement from experts on a set of solutions. Reducing overly dense vegetation through strategic thinning and prescribed burns can reduce wildfire severity by over 70%. Restoring forests and natural lands around water bodies can ensure increased water availability and cleaner drinking water while reducing utility costs. Regreening urban areas can make cities cooler, less prone to flooding, and healthier. Investing in such "natural infrastructure", especially in combination with traditional infrastructure (a hybrid approach known as "green-gray infrastructure"), is a win-win that can create new jobs, provide sustainable timber, boost energy security, support the local recreation industry, reduce risks for utilities and companies, all while generating returns for investors.

Although these solutions have proven effective, many communities lack the technical know-how and capacity, experience in convening diverse groups of stakeholders needed for collective action, the financial resources to implement projects at scale and the ability to measure and monitor progress and impact.

IMPACT BY THE NUMBERS: US Forests, Lands, and Water



15 STATES
WITH NATURE BASED
PROJECTS



**5 CONSERVATION
FINANCE
MECHANISMS**
DEPLOYED ACROSS
OUR PROJECTS



~50 PROJECTS
IN DESIGN,
DEVELOPMENT, OR
IMPLEMENTATION



\$158.5 MILLION+
OF FUNDING AND
FINANCING RAISED



331,000+ ACRES
PROTECTED OR
IN RESTORATION

Our Approach

Our program works with a coalition of partners to offer technical assistance and economic expertise, community engagement and capacity building, and innovative funding and financing strategies to help projects move from concept to implementation at scale.



In 2021, Oregon's Bootleg Fire burned over 400,000 acres in the Fremont-Winema National Forest. In areas where forestry crews conducted both thinning and prescribed burning treatments, the forest was more resilient to wildfire impacts.

Photo by Klamath Tribes Natural Resources Department

Engagement and Partnerships:

We convene and steward interdisciplinary alliances of partners to bring the necessary science, perspectives, expertise and finance to projects. We partner with local communities, public and private land managers, water and electric utilities, corporations, state and local governments, tribal entities, academia, private investors, foundations, conservation groups and more.

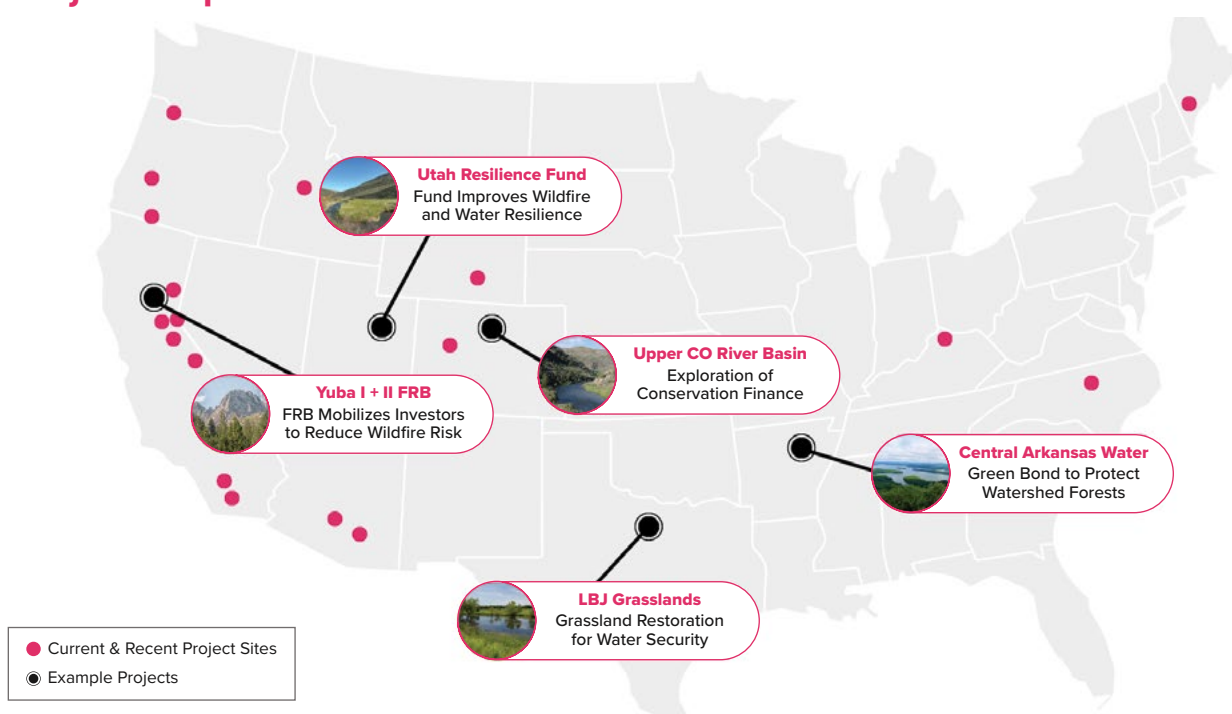
Technical Assistance & Capacity Building:

We help partners design and implement effective source water protection, green-gray infrastructure and wildfire-risk reduction projects. We advise on policy, planning and strategy; conduct cost-benefit analyses; and develop tools that leverage the latest technologies for mapping, measuring and impact monitoring.

Economics, Finance & Investment:

We help our partners evaluate economic opportunities linked to nature, identify revenue streams, quantify return on investment and structure the financing to make projects happen. We build pipelines of investable opportunities by helping projects create strong business cases and implementation plans. Our team develops and deploys innovative funding and financial instruments to facilitate investment and repayment. And we conduct matchmaking between project developers, beneficiaries and investors.

Project Map



Our Success Stories

Utah Resilience Fund Aggregates Funding from a Unique Alliance

Summit County, Utah suffers from high wildfire risk, endangering communities and the health of the rivers that feed the Great Salt Lake. WRI and a coalition of partners—including Summit County, multiple local utilities, the U.S. Forest Service, and others—developed the [Utah Resilience Fund](#), a public-private partnership that pools funds for cross-boundary forest health treatments (e.g., fuel reduction), safeguarding water supplies, tourism, and local industry.

The Fund has raised more than \$11 million to pay for [wildfire mitigation planning and treatments](#) that will benefit over 61,000 acres of public and private lands, protecting property, infrastructure and water supplies for 700,000+ residents; and created a state [endowment](#) for recurring maintenance treatments.

Our conservation work in northern Utah also protects priority landscapes through complementary funding approaches. The historic 910 Ranch, an area of more than 8,500 acres, was acquired for conservation by our partners in Summit County through a voter-approved bond and a U.S. Forest Service grant from the Forest Legacy Program. WRI also helped secure a “Sentinel Landscape” designation by the U.S. Department of War (DoW), conferring additional protections to safeguard source water for military installations and communities.

“The brilliance of this whole initiative is that we’re bringing people together to have a conversation about how everyone depends on water, and fire puts the water at risk,” says Jess Kirby, Summit County Director of Lands & Natural Resources. “The Resilience Fund invests in forest and watershed restoration so that when a wildfire comes, there is less damage.”



Trees and brush were thinned and stacked for pile burning during a fuel reduction project on 910 Ranch to reduce wildfire risk and improve forest health.

Photo by James Anderson/WRI.

Sentinel Landscapes for Military Readiness and Ecosystem Resilience

The U.S. Department of War (DoW) is investing in the protection of landscapes important for national defense through the [Readiness and Environmental Protection Integration \(REPI\) Program](#) and partnering with local organizations to reduce wildfire risk, and partnering with local organizations to reduce wildfire risk, safeguard water supplies, and protect critical training areas.

Designated in 2024, the [Great Salt Lake Sentinel Landscape](#) spans more than 2.7 million acres across northern Utah. WRI worked alongside the U.S. Forest Service, Hill Air Force Base and other partners to secure a \$2 million award through the REPI Program. The funds are helping reduce hazardous fuels across 1,500 acres of high-risk watershed lands.

Judy Flores, Installation Community Planner at Hill Air Force Base, explains, “At Hill Air Force Base, our mission readiness depends on reliable water. When upstream forests burn, it’s not just an environmental issue; it’s a national security issue. Projects like this help ensure we can keep our people safe, our infrastructure operational and our mission moving forward.”



Illustration by John Wamagata Nduru/WRI.

Utility Issues the First Certified Green Bond to Protect Forests for Water

The Central Arkansas Water (CAW) utility faced the threat of forest loss on private land surrounding Lake Maumelle, the main drinking water reservoir for Little Rock. WRI and Encourage Capital helped CAW issue the [first-ever certified green bond](#) to raise upfront financing from investors for both low-carbon [gray and green infrastructure](#) enhancements.

The ~\$32 million bond proceeds, purchased by Morgan Stanley, unlocked an additional \$6 million from the Forest Legacy Program, and enabled CAW to acquire and protect more than 3,000 acres of at-risk forest land surrounding Lake Maumelle. CAW is making repayments with revenue from a dedicated water rate surcharge and

the sale of sustainable timber from the protected lands, with the potential for additional revenue from carbon markets. The [Green Bond criteria](#), co-developed by WRI, has led to over \$2 billion of proceeds globally for water infrastructure, including natural systems.

“Morgan Stanley is deeply committed to the green bond market and its ability to capitalize much-needed sustainable infrastructure projects,” said Zachary Solomon, an executive with the bank. “We were excited by the opportunity to underwrite a bond that meets the markets’ demand for products that drive both financial and environmental outcomes.”



Lake Maumelle’s forested headwaters begin in the Ouachita National Forest and flow toward the reservoir that supplies drinking water to about 500,000 people in and around Little Rock.

Photo by Brad Sims.

Forest Resilience Bond Uses Finance to Fight Fire

California's Tahoe National Forest is threatened by catastrophic wildfires, endangering communities and threatening the water supply. Blue Forest and WRI codeveloped the [Forest Resilience Bond \(FRB\)](#) to accelerate and scale private finance for wildfire risk mitigation projects to protect communities and water supply.

Phase 1 of the Yuba FRB lowered fire risk across 15,000 acres, creating value for paying downstream [beneficiaries](#) and subsequently repaying \$4 million in loans. Phase 2 raised \$25 million to restore and protect across 48,000 acres; sparked eight more FRBs in California, Oregon and Washington; and catalyzed project pipelines in several states. The upfront capital for Yuba II is being repaid by a consortium of beneficiaries—Yuba Water Agency, the Silk almond milk brand, Target, and CalFire state agency—who have avoided significant wildfire-related costs, reduced operational water risk, and met public-facing water stewardship targets while delivering investors expected returns.

“Our investment and partnership in the FRB proved to be greatly successful in helping advance forest resilience work at a much faster pace and scale...to reduce the risk of catastrophic wildfire and protect our communities and water supply,” said Willie Whittlesey, Yuba Water’s general manager.

Tribal Youth Lead the Way in Oregon’s Wildfire Resilience

The Lomakatsi Restoration project, supported by Blue Forest and WRI, is [training tribal youth in Oregon](#) to restore forests and strengthen wildfire resilience. Through the [Tribal Youth Ecological Forestry Training Program](#), more than 70 tribal crew members have gained hands-on training and employment while helping restore 79,000 acres of federal and private lands, supported by a Forest Resilience Bond.

By investing in local tribal youth and rural workers, this partnership is creating living-wage jobs, building the next generation of forestry leaders, improving forest health, protecting drinking water and critical habitat, and reducing wildfire risk.

“Lomakatsi’s mission, restoring Earth—we’re putting Earth back in balance as it once was,” said Seneca Hescock, a tribal crew member. “We all seem to follow that because we all grew up out here. This is our home, our home away from home.”



Lomakatsi ecological forestry technician Seneca Hescock, an enrolled member of The Klamath Tribes, takes measurements to determine which trees should be thinned as part of a forest restoration effort.

Photo by Natasha Collins, WRI.

A Wyoming Community Protects Its Drinking Water

Small rural communities like Encampment, Wyoming, often depend on a single drinking water source, making them especially vulnerable to wildfire. Severe fires can damage watersheds, degrade water quality, and disrupt safe drinking water supplies for years.

To address this risk, Encampment, WRI, and partners secured Wyoming's first-ever [Clean Water State Revolving Fund \(CWSRF\)](#) for wildfire risk reduction. A \$1.23 million loan is helping restore nearly 600 acres in the town's watershed, reducing wildfire risk while supporting local jobs and Wyoming's forest products industry.

The financing was made possible through a multi-year collaboration with Encampment, WRI, National Forest Foundation, U.S. Forest Service, City of Cheyenne, Cheyenne Board of Public Utilities, Wyoming State Forestry, and Wyoming Association of Rural Water Systems. Combined with an additional \$300,000 of state

Every dollar invested in proactive forest management can generate a [sixfold return](#) in avoided damages by reducing losses to homes, communities, and ecosystems.

grant funding, the investment is accelerating watershed protection and advancing a landscape-scale approach to wildfire resilience.

Importantly, this project demonstrates a new model for using water infrastructure financing to protect drinking water at its source—one that could be replicated by vulnerable communities across the fire-prone West.

“I think this Encampment project is probably the truest green project we have ever funded in my 10 years with the program.” — Shawn King, Wyoming Office of State Lands and Investments



The Encampment River flows through the Sierra Madre Mountain Range. The Town of Encampment is focusing efforts on forest restoration to protect the town's water supply.

Photo by Chris Harris/Flickr.

Companies Invest in Nature to Manage their Water Risk

Many companies face significant water-related risks, including wildfires and droughts, which can disrupt water supplies for factories, farms, offices, and data centers. Our program, in collaboration with the Bonneville Environmental Foundation and Blue Forest, is working with [15+ companies](#) across 12 states, unlocking over \$11 million for nature-based projects that improve watershed health.

With our partners, we connect companies' water stewardship strategies with on-the-ground restoration projects to help achieve their goals, such as enhanced water benefits associated with wildfire risk reduction in California, [grassland restoration](#) and erosion control in Texas, and community tree planting to mitigate flooding in Kentucky.

Companies funding projects:

- Apple
- Cargill
- Caterpillar Foundation
- Coca-Cola Co.
- Coca-Cola USA
- Danone
- EdgeCore
- FedEx
- Google
- Hunter Industries
- Intel
- L'Oreal
- Meta
- Microsoft
- Procter & Gamble
- Silk
- Swire
- Coors USA
- Target

"We're investing in forests because of the direct link between forest resilience, water quality, water quantity, and plant-based food systems that are essential to our business, to community health, and to our planet," said Deanna Bratter, former VP at Danone North America.

Developed through extensive corporate consultation, our [Volumetric Water Benefit Accounting 2.0 guidebook](#) is a best-practice resource that transforms how companies comparably implement, evaluate, and claim the benefits of water stewardship activities, opening the door to scaled investment opportunities.



Contact and Learn More

We welcome new partnerships to explore opportunities for investment and impact.

For more information, visit Cities4Forests.com or contact:

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The WRI U.S. Forests & Water program is part of the Cities4Forests initiative, a global alliance of cities acting to conserve, restore, and sustainably manage nature, especially the world's forests, for human well-being.