

# CWSRF 2021 ANNUAL REPORT





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## A MESSAGE FROM THE OFFICE DIRECTOR



Dear Colleagues,

I am pleased to present the Clean Water State Revolving Fund (CWSRF) 2021 Annual Report. 2021 was another superlative year for CWSRF programs. The states funded over 1,700 new infrastructure projects totaling more than \$8.2 billion in communities of all sizes, more funding than any year in the program's previous decade.

Since the program's inception in 1988, the 51 CWSRFs have provided \$153.6 billion in 44,555 assistance agreements. These funds have provided communities significant savings for projects across a very wide range of eligibilities, like those highlighted projects in this report. A historic investment

made in the Bipartisan Infrastructure Law (BIL), also known as the Infrastructure Investment and Jobs Act (IIJA), will allow projects like these to be funded and enable communities to build needed water quality infrastructure that otherwise would not have been built due to the lack of financial capacity.

The BIL provides over \$12 billion in additional CWSRF appropriations over the next five years. The long-term success of the program is due to the collaboration between states and EPA, as well as the CWSRF's statutory and regulatory flexibility. That flexibility allows states to adapt their programs to meet the specific needs of communities in their states. This versatility and adaptability will be crucial to the successful implementation of the BIL, which focuses on investing in disadvantaged communities and addressing emerging contaminants.

We look forward to strengthening our collaboration with states to implement programs that provide affordable water quality improvements to communities most in need, and build safer, more resilient water infrastructure and communities for generations to come.

I welcome this opportunity to share our accomplishments with you and thank you for your dedication to the critical work ahead.

Sincerely,

**Andrew Sawyers, Ph.D.** Director, Office of Wastewater Management Office of Water, United States Environmental Protection Agency

## 2021 HIGHLIGHTS

#### ASSISTANCE PROVIDED: **\$8.2 Billion**

### disbursements: \$6.6 Billion



#### **KEY TAKEAWAY:**

In fiscal year 2021, the CWSRF provided 1,700 low-interest loans to help communities cost-effectively implement clean water projects.

## SINCE 1988 PROGRAM HIGHLIGHTS



## ASSISTANCE PROVIDED: \$153.6 Billion

(with \$48.1B in federal investments)

disbursements: \$137.1 Billion

#### **ASSISTANCE AGREEMENTS: 44,555**

## 11%

of assistance agreements went to state-defined disadvantaged communities



#### **KEY TAKEAWAY:**

Since the program's inception, the CWSRF has provided \$5.9 billion in additional subsidies to communities. These grant-like dollars help keep water rates affordable.

## LOOKING AHEAD: CWSRF AND THE BIPARTISAN INFRASTRUCTURE LAW





## CWSRF CASE STUDIES

#### City of Flagstaff, AZ: Flagstaff Watershed Protection Project



The Water Infrastructure Finance Authority of Arizona provided the city of Flagstaff a CWSRF loan for \$6 million, with \$1 million in loan forgiveness, to help protect two priority watersheds. In recent years, the mountainous forests that surround the city have become increasingly susceptible to high-intensity wildfires. The build-up of vegetation, steadily declining precipitation, and climbing temperatures create ideal conditions for more frequent, dangerous fire events. This project will preserve drinking water treatment costs and protect watershed health through modernized forest management practices on roughly 10,000 acres by reducing dry debris and thinning the forest by removing small and medium diameter trees. These practices have been proven to be effective in preventing significant environmental, financial, and social impacts from wildfires.

Photo credit: Coconino National Forest, City of Flagstaff



The Flagstaff Watershed Protection Project will **reduce the risk** of high-intensity wildfires and postfire flooding that can carry large amounts of debris, ash, chemicals, and sediment into the region's water sources.

#### City of Bartlesville, OK: Bartlesville Municipal Authority Indirect Potable Water Reuse Solution



In 2001, a "Drought of Record" left Bartlesville Municipal Authority with less than a 90-day supply of water for its approximately 36,500 residents. The experience served as the impetus for the region to explore the reuse and recycling of treated wastewater. When a working group study revealed that indirect potable water reuse was possible due to the locations of existing water treatment and wastewater treatment plants, a plan was developed to pump treated effluent from the wastewater treatment plant three miles upstream and discharge it into the Caney River, where it would mix with stream water for approximately seven miles before being pumped to the water treatment plant to produce potable water. The total project cost is \$8.9 million with \$750,000 coming from a Bureau of Reclamation grant and \$8.2 million from the CWSRF.

Photo credit: City of Bartlesville

This **reuse project** will extend Bartlesville Municipal Authority's water supply by **20-40 years**, depending on water consumption.

## CWSRF CASE STUDIES

#### **Nisqually Tribe, WA: Mashel River Protection Project**



The forests around Washington state's Mashel River are in recovery from massive clear-cut logging in the early and mid-1900s, and continue to be commercially logged today. These practices impact river headwaters by reducing water retention, elevating stream temperatures, and reducing the woody-debris accumulation needed for salmon spawning—jeopardizing an important salmon habitat and the Nisqually River Basin, which is home to the Nisqually Indian Tribe. Salmon is a prominent part of the Nisqually culture. The river also serves as the direct source of water for the town of Eatonville and is the indirect source for many rural residents. The largest sub-basin and headwaters for the Mashel River is the Busy Wild Creek, a declared federal critical habitat site for two endangered species, chinook salmon and steelhead trout. To restore river quality and preserve the habitat, the Nisqually Tribe received a \$14.2 million loan from the state Department of Ecology to purchase 1,240 acres of land along Busy Wild Creek's north fork.



New forest growth will permanently protect Busy Wild Creek headwaters and help restore the Mashel River's critical salmon habitat.

#### ReHarvest Partners in Iowa: ReHarvest Pay for Success



The Soil and Water Outcomes Fund was established by ReHarvest Partners, a partnership created by Quantified Ventures and the Iowa Soybean Association. The Iowa CWSRF invested \$7.5 million in ReHarvest Partners—16 years at 2 percent interest— which will allow ReHarvest to sign up 85,000 acres in priority Iowa watersheds in 2021, paying farmers \$20 to \$40 per acre. This partnership utilizes a "pay for performance" structure to incentivize farmers to implement new conservation practices that improve water quality and sequester carbon. Farmers are paid for the verified environmental outcomes these practices produce. The carbon and nutrients captured by these practices (utilizing no-till farming and planting cover crops) are verified, and the credits are then sold to a variety of private and public customers.



By earning slightly more from selling the credits than what is paid to the landowners, the structure is **self-sustaining**, enabling the repayment of the CWSRF's investment and a consistent source of program funding for the future, without state or federal appropriations.

## CWSRF CASE STUDIES

#### Virginia: Garber Farms, Inc. Agriculture BMPs



Garber Farms, a cattle farm located in Augusta County, Virginia, was experiencing significant over-grazing alongside a nearby stream that created severe streambank erosion. The stream that runs through the farm is a tributary to the Middle River, part of the Potomac River watershed in the Shenandoah Valley, and discharges to the Chesapeake Bay. Direct livestock access to the stream resulted in high bacterial and nutrient loads from livestock manure deposited in the stream. To address these water quality issues, the producer worked with the Headwaters Soil and Water Conservation District to draft a land management plan that incorporates new grazing practices and includes a riparian buffer along the stream's edge. The farm was eligible to receive funding from the Virginia Department of Conservation and Recreation Agricultural Best Management Practices (BMP) Cost Share program. The newly relaunched Agricultural BMP Loan program, part of the Virginia Department of Environmental Quality's CWSRF, was provided a no-interest loan of nearly \$230,000 to Garber Farms for the full project cost.



The project installed over **5 miles** of stream exclusion fencing, over **2 miles** of water lines, and **11** watering troughs. It created **77 acres** of riparian buffers.





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