

20-plus years of **SUSTAINABLE RIVERS:** *New era, same mission*

The Sustainable Rivers Program, established in 2002, improves the health of rivers by changing dam operations to restore and protect ecosystems while maintaining or enhancing other project benefits.

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In the early years of the Sustainable Rivers Program (SRP), there was a slogan that was part rally cry and part expression of potential: “From one to six to 600.”

The “one” was Green River in Kentucky. In 1998, The Nature Conservancy and the U.S. Army Corps of Engineers (USACE) Louisville District began working together to improve downstream ecosystems by changing release patterns from Green River Dam.

This initial collaboration inspired the Conservancy and USACE to identify “demonstration” rivers as part of a national proof of concept, an exploration of reservoirs as tools for ecosystem management and restoration. After some early shuffling, six rivers were chosen: the Ashuelot, Bill Williams, Roanoke, Savannah, West, and White rivers.

Six hundred is roughly the number of reservoirs owned and operated by USACE.

“Sustainable Rivers is showing that one of our most expedient and cost-effective ways to improve ecosystems is simply to modernize the ways that already-built infrastructure are

operated for the environment,” said Lt. Gen. Scott Spellmon, USACE commanding general and 55th Chief of Engineers.

The SRP officially started in 2002 with the designation of the demonstration rivers. Looking back at these first 20-plus years, the program has experienced three eras.

Methods

The first focused on methods. Between 2002 and 2009, Sustainable Rivers was actively honing methods for strategies like environmental flows, including constituency building, science-based approaches for defining flow targets for ecosystems, and the use of science in water management decision-making.

Processes

The second was about processes. In 2010, the SRP received its first national funding as part of the National Portfolio Assessment for Reallocations, an effort administered as part of the USACE water supply business line. In 2017, SRP spun off as its own budget item as part of the USACE aquatic ecosystem restoration business line.

Though SRP funding was somewhat modest — between 2010 and 2019, it averaged just over \$300,000 per year — having dedicated funding was hugely important for the SRP.



The Roanoke River below John H. Kerr Dam and Reservoir in North Carolina flows through a large, undisturbed area of bottomland hardwoods. In 2016, the reservoir was reoperated in a way that both evacuated flood storage more quickly and restored hydrologic condition for more than 90,000 acres of affected floodplain. (Photo courtesy of Fauna Creative)

It allowed the program to slowly grow to 16 rivers and to develop processes, especially the annual request for proposals that invites ideas for environmental work and the three-stage “advance, implement, incorporate” process that guides program work.

Impact

The third era is about impact — about getting to scale. It began in 2020 when the SRP’s budget was increased through congressional appropriations to \$5 million per year. For the first time, the program had the resources to openly invite and engage interest in environmental work at USACE

infrastructure. And, thanks to the earlier eras, the SRP had the methods and processes in place to provide an effective foundation for new sites.

The response has been clear. The SRP now involves 45 river systems with 23 more proposed for engagement in 2024. Expansion has broadened the types of infrastructure involved in the program. In addition to the general multi-purpose reservoirs the SRP has traditionally worked on, the program now has focus areas for navigation-oriented

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Paddlers explore Green River in Kentucky. The river was the site of the first collaboration between USACE and The Nature Conservancy focused on reservoir management and helped spark the Sustainable Rivers Program. (Photo by Jim Howe)

reservoirs (locks and dams) and flood risk management reservoirs that are normally empty (dry dams). Expansion has also broadened the types of environmental actions the program promotes. In addition to environmental flows, the SRP now supports pool level management for environmental benefits and

conservation locking.

“The Nature Conservancy and the Army Corps of Engineers have a long-standing partnership that has transformed the health of more than 12,000 river miles, benefiting both nature and people,” said Jennifer Morris, chief executive officer of The Nature Conservancy.

“The Sustainable Rivers Program is a tangible example of a collaborative effort that modernizes river infrastructure while maximizing results. It’s absolutely critical we continue to scale our efforts and increase resiliency as we tackle biodiversity loss and the climate crisis.”

Even with ongoing expansion and evolution, much about the SRP has not changed. The mission of Sustainable Rivers is still to improve the health and life of rivers by changing infrastructure operations to restore and protect ecosystems, while maintaining or enhancing other project benefits. And the program’s

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primary vehicle for realizing environmental benefits is still focused on enabling and supporting local teams to pursue environmental ideas that they propose and that align with program objectives. This proactive approach furthers environmental stewardship by helping teams advance, implement and incorporate environmental strategies.

“Moving forward, it is vital that lessons learned by Sustainable Rivers be broadly integrated into operational practices for all pertinent Corps water resources infrastructure. This is a collective challenge, involving many partners and Corps professionals, especially our water managers, operators and environmental planners,” Spellmon said.

With this in mind, the SRP moves into its third decade excited, hopeful and committed: excited to have engaged 45 rivers and over 12,000 river miles in a national effort to restore and protect ecosystems, hopeful for sustained funding and another 20 years as a vehicle for environmental benefits, and committed to strengthening its reputation as an effective environmental program. Engaging 29 new

ivers in the last four years with more inquiring is certainly encouraging and bodes well for delivery of future environmental benefits.

Any reflection on SRP would be incomplete without acknowledging the contributions of the people who have shaped and championed the program. Andy Warner and then Gretchen Benjamin were SRP leads for The Nature Conservancy and instrumental to the success of Sustainable Rivers as a program and as a partnership between the Conservancy and USACE. Ted Hillyer and then Jeannette Baker led the water supply business line while SRP was part of the National Portfolio Assessment, advocating for and supporting SRP in its first years as a funded program. Without the vision and efforts of Lisa Morales, USACE Headquarters, and Bob Pietrowsky, retired Director of USACE's Institute for Water Resources, the SRP would likely not have survived its first decade. And, while there are too many to recognize properly, Matt Rea, Rose Reilly, Joe Evelyn and Mike Turner are among the champions whose work both helped their SRP rivers and advanced the overall program.

