U.S. Army Corps of Engineers (USACE)
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Hydrologic Engineering Center (CEIWR-HEC) Sustainable Rivers Project (SRP)

Background

- SRP, is a national partnership between the U.S. Army Corps of Engineers (USACE) and The Nature Conservancy (TNC), established in 2002.
- The purpose of SRP is to implement environmental flow strategies at USACE reservoirs to enhance habitat conditions for plants and animals that depend on downstream river flows within the context of existing project purposes.
- Green River Dam, a project in the USACE Louisville District, was the first SRP site. In 1998, TNC and USACE began working together to improve conditions for downstream ecosystems while maintaining the reservoir's flood risk management and recreation functions.
- SRP is currently involved at eight river basins in the U.S., with thirty-six reservoirs, which make this one of the largest coordinated efforts in the world.
- USACE & TNC staff are sharing their environmental flow knowledge through joint training sessions & other technology transfer avenues with water managers worldwide.

"The SRP is not only demonstrating how sustainability can be incorporated into project planning and operations, it is also bringing to light new opportunities for collaboration in areas such as training and software development. Sustainable Rivers is a shining example of how our Environmental Operating Principles are being put into practice."
— Lt. Gen. Carl A. Strock, as Director of Civil Works, U.S Army Corps of Engineers (2004)

Mission

- Ecological sustainability goals can be achieved with existing reservoir purposes
- Collaborative nature of SRP activities brings communities, businesses, government agencies, universities, & non-governmental organizations together
- Improving the health of rivers through modification of reservoir operations to achieve ecologically sustainable flows
- Mission is advanced through training, staff exchanges, and the development of new technology
- Explore reservoir re-operations that will benefit humans as well as wildlife
- Implement environmental flows that will improve the conditions for the natural environments that depend on our nation's rivers
- Continue to discover and refine our understanding of the connections between ecosystems and the rivers that flow through them

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Sites

- Green River - catalyst for SRP; environmental management strategies incorporated into reservoir operations policies; increase in the number and diversity of downstream natural communities
- Savannah River - actively working on modification of reservoirs operations, with special interest in the continuing drought conditions in the basin; development of new approaches

- Bill Williams River - critical ecological importance and unique; watershed is mostly undeveloped; aids in understanding connections between water and nature

- Big Cypress Bayou - a globally significant wetland; seeking to introduce variability in river flow so that rare cypress forests and fish habitats will regenerate
- Willamette River - expansion of the concept of holistic watershed management; improve the in-stream and side-channel habitats for salmon while maintaining the crucial human uses of the river

- White River - a watershed with new development scheduled for the future; determining water needs to support wildlife, floodplain ecosystems, support of outdoor recreation; healthy habitat for migrating birds at Mississippi Flyway
- Connecticut River - large watershed; research on benefits of existing projects, environmental needs, and the effects of potential modifications

- Roanoke River - create an adaptive management policy that advances and supports the use of scientific knowledge in water release decisions

Future Innovations

- Development and application of new approaches to river management.
- Implementation of environmental flows connects science and management when dealing with our natural systems.
- A nationwide survey has been conducted which will provide information to accelerate the growth of ecologically sustainable reservoir management
- Developing environmental flow recommendations for international partners - Yangtze River, China; Zambezi River, Africa
- Yearly joint training sessions