USACE Natural Resource Management Fĭsh



Purpose

As the manager of over 12 million acres of public lands and waters, the U.S. Army Corps of Engineers (USACE) works to manage and conserve natural resources while providing quality outdoor recreation experiences to the public. USACE employs both passive and proactive management which sustains healthy ecosystems, promotes vibrant biodiversity, and protects special status species. The following factsheets were developed by the USACE's Natural Resources Manage-ment (NRM) Program in order to highlight species specific conservation efforts occurring at USACE projects.



Across USACE's projects there are over 300 unique, federally listed species for which conservation concerns exist. USACE expenditures relating to the Endangered Species Act average around \$230 million each year. Recognizing that USACE missions occur in a complex environment of regulations,

 Occur in a complex environment of regulations, compliance requirements, and high costs, the Engineering Research and Development Center (ERDC) and USACE Headquarters formed the Threatened & Endangered Species Team (TEST). TEST works to accelerate the development of solutions for threatened and endan-gered species issues that will improve budget planning capabilities and operational flexibility to reduce future costs and adverse impacts to USACE mission execution. These factsheets are intended to complement the TEST initiative by highlighting unique project efforts and promote collaboration initiative by highlighting unique project efforts and promote collaboration.

As part of this effort, the NRM based factsheets also highlight species which are not federally listed. A goal of the NRM Program is to maintain a factsheet for each species reported annually through the NRM Assessment and those for which special conservation efforts at lake and river projects are ongoing. Often these species may be listed at the state level, in State Wildlife Action Plans, or are target species for specific conservation initiative(s).



Neosho Madtom

Conservation occurs in a multifaceted, ever-changing set of circumstances which may challenge project-level efforts. For instance, unpredictable changes in temperature and precipitation stemming from climate change will likely influence species' distribution. This complicates planning for future impacts as species may emigrate from, or immigrate to, the project in unpredictable fashions. Similarly, habitat loss, degradation, and fragmentation on lands surrounding USACE projects will influence species' abundance and distribution at the local scale. Changes in habitat and climate may also allow for the increased spread of non-native, invasive species which have the potential to degrade habitat past the species which have the potential to degrade habitat past the point of usability for a species. Funding can also be a hurdle to conservation efforts, as it fluctu-ates with fiscal years.



August 2021



Left: The Green River Lock and Dam system was one of the first Sustain-

able River Program sites. Learn more about the Sustainable Rivers Program on page 3!

Photos Above (left to right): Cape Fear Shiners (USFWS), Chinook Salmon (USÉWS), & Delta Smelt (USFWS)

These factsheets have been informed by information provided by the USFWS, the NatureServe Explorer, and many other federal, state, and local organizations.

> Natural Resources Management (NRM)

This fact sheet has been prepared as an unofficial publication of the

U.S. Army Corps of Engineers (USACE). This online publication is produced to provide its readers information about best management practices related to special status species. Editorial views and opinions expressed are not necessarily those of the Department of the Army. Mention of specific vendors does not constitute endorsement by the Department of the Army or any element thereof.

Fish Habitat Partnership

The National Fish Habitat Partnership (NFHP) was established in 2001 with support from the Sport Fishing and Boating Partnership Council. The NFHP has four primary goals. First and foremost, they aim to protect and maintain intact, healthy aquatic systems. Second, the Partnership works to prevent further degradation of fish habitats that have been adversely affected. Third, the NFHP aims to reverse declines in the quality and quantity of aquatic habitats. Ultimately, the goal is to improve the overall health of fish and other aquatic organisms. Lastly, the group wishes to increase the quality and quantity of fish habitats that support a broad, natural diversity of fish and other aquatic species.

The Partnership recognizes that in order to achieve national-scale conservation success, work must be done at the local and regional scale. Thus the NFHP has 19 geograph-



ically based and recognized partnerships as well as 1 partnership for reservoirs. NFHP nurtures existing fish partnerships while also fostering new ones at the local, regional, and nation scale.

Fish and Wildlife Service and other part- unique projects across 34 states.

Topeka Shiner

Once widespread and abundant within por-



Photo, above: This map depicts the boundaries of the regional partnerships across the contiguous U.S. Additional partnerships exist in Hawaii and Alaska. Some partnerships overlap geographically

ners, the program would be able to provide more than \$34.5 million to support fish habitat conservation projects In June of 2021, the NFHP program an- in the coming year. These funds, which represent nearly nounced that with the support of the U.S. an 8-to-1 match for federal funding, would support 85

Species Examples



Sustainable Rivers Project

The Sustainable rivers Project (SRP) is a national partnership between USACE and The Nature Conservancy. Established in 2002, the SRP focuses on modifying operations at USACE dams in order to enhance habitat conditions for the plants and animals that depend on downstream river flows.

At SRP sites, scientists gather data on river flows and provide this information to water managers. Water managers then work with the scientists to modify dam and reservoir operations within existing water control policies. The environmental response to various management decisions are then monitored to further improve managers' knowledge and better inform decision-making.

In 2015, the SRP included just eight rivers and 36 sites across the nation. By 2019 the program had expanded to include 66 federally managed dams on 16 unique rivers across 15 states. This proven track record of success helped U.S. legislators to recognize the value of the program and in 2020 the nation's annual investment in the program grew from



Photo, above: A map of SRP Rivers

\$400,000 to \$5 million. The SRP currently invests in 5,058 of river miles regulated by the USACE, but the program's expansion could add another 6,319 river miles. The SRP has potential applicability to the more than 600 dams, 403 million acre-feet of water storage and almost 53,000 miles of river impacted by USACE dams.

