



USACE and Service Implement an Innovative Conservation Approach that Yields Success for Wildlife

USACE and USFWS collaborate under Section 7(a)(1) to achieve better outcomes for three species and habitat.

Section 7(a)(1)

Section 7(a)(1) of the Endangered Species Act (ESA) requires all Federal agencies to utilize their authorities, in consultation with the U.S. Fish and Wildlife Service (Service), to develop and carry out programs to conserve all species listed under the ESA. The purpose of Section 7(a)(1) conservation programs is to improve endangered and threatened species baselines (population and habitat) within the scope of Federal action-agency authorities, thereby contributing to the conservation of all species within that habitat. The Corps and USFWS are committed to use this authority in appropriate programs or projects to achieve better outcomes for species and cost effective ESA compliance for the Agencies.

Conservation plans developed by Federal agencies under the 7(a)(1) authority offer another example of the flexibility we are using within the ESA to achieve



Least tern and young, credit Kaiti Tirherington/USFWS



Corps research crew fishing for sturgeon near Tunica, Mississippi (river mile 686), credit USFWS.

positive conservation results. It's good for our mission, good for conservation, and good for our economy. It provides greater predictability and efficiency to federal agency partners and puts in place a transparent and continuous process of effective interagency communication, review, and feedback at all levels of management. This ensures a strong adaptive management component of cost-effective conservation program execution that helps streamline the 7(a) (2) consultation process.

Background

In 2013, U.S. Army Corps of Engineers (USACE) Mississippi Valley Division (MVD) released the Conservation Plan for the Interior Least Tern, Pallid Sturgeon, and Fat Pocketbook Mussel in the Lower Mississippi River (Channel Improvement Program (CIP) Conservation Plan), which outlines a process to conserve the three endangered species within the footprint of the CIP in the Lower Mississippi River (LMR) (USACE 2013). The Service conducted a consultation under Section 7(a)(2) of the ESA with the USACE on the their conservation plan.

The consultation process required close inter-agency communication and collaboration during all phases of development. The USACE's ongoing implementation, including basic research

and data gathering on the species and their habitats, channel engineering design and testing, modeling, development of Best Management Practices protective of the species and their habitats, and monitoring and analyzing results.

Over the course of the consultation, it became apparent the very programs (e.g., the CIP) that most significantly affected the endangered species and their river habitats could be important and effective tools to maintain and enhance its ecological functions. This resulted in the identification of conservation opportunities that could be effectively incorporated into existing channel improvement or maintenance projects, with little to no additional program costs, and with no negative impact to the USACE's primary flood management and navigation safety missions. It also resulted in significantly improved habitat and population baselines for all three endangered species within the LMR portion of their ranges. The CIP consultation demonstrates that numerous benefits for the species, the ecosystem, and the agencies can be derived under Section 7(a)(1).

Largely as a result of this work, the Service recommended in a five-year status review last year that the Interior Least Tern (ILT) should be delisted.

U.S. Fish & Wildlife Service

Benefits to the USACE

- Improves communication, coordination, cooperation and trust among the USACE, the Service, States, and nongovernmental partners.
- Promotes and ensures institutional knowledge and memory through establishing Best Management Practices and standard operating procedures.
- Increases regulatory predictability.
- Provides a cost-effective process to identify and address research and monitoring needs.
- Improves listed species baselines related to USACE project areas.
- Streamlines the consultation process under Section 7(a)(2).
- Provides for adaptive management and restoration as new information is developed.
- Increases USACE awareness of the species baseline.
- Provides a strong administrative record demonstrating compliance with the ESA.
- Increases USACE control through the 7(a)(1) consultation process.
- Provides a path for compliance and success under other federal laws and/ or agency regulations relating to ecosystem protection and management (e.g., NEPA, Environmental Operating Principles, Civil Works Ecosystem Restoration Policy Executive Order 13186: Responsibilities of Federal Agencies to Protect Migratory Birds.
- Provides predictability for future actions and budget needs.

Benefits to the Service

- Improves communication, coordination, cooperation, and trust among the Service, Federal action agencies, States, and non-governmental partners.
- Provides a path to ecosystem management through Strategic Habitat Conservation planning.
- Uses the best science.
- Promotes and ensures institutional knowledge and memory through establishing Best Management Practices and standard operating procedures.



Lower Mississippi River

- Improves the baseline of the species (conservation), particularly as it relates to action agency activities.
- Provides a mechanism to systematically compensate for past, present, and future impacts to the species or its habitat due to federal activities.
- Ensures advanced consideration of the species in planning of routine activities and prior to design or funding of future projects that may affect it.

Overall Cost

Over the course of twelve years the USACE, the Service, USGS, state partners, non-governmental organizations, and private industry partners have collectively invested time and financial resources to research and compile data to inform BMPs and population estimates. BMPs designed to improve habitat for the three listed species were incorporated into the USACE CIP activities as they were developed at little to no additional cost. This collective investment was critical to support a recommendation to delist the species.

Additionally, these partners have collaborated through the Lower Mississippi River Conservation Committee to improve flow in more than 50 miles of secondary channel, increasing connectivity to almost 7,000 acres of associated in-channel habitat.

Cumulative construction cost for these projects (<\$1 million) was provided by LMRCC partner agencies with in-kind engineering and design support by the USACE.

USACE 7(a)(1) Conservation Plan and Recreational Benefits

The USACE Conservation Plan, strategies and actions to maintain and enhance ecosystem complexity of the LMR include significant benefits for recreational uses of the river. For example, secondary channels, dike notches, and dike tips provide spawning and feeding areas for multiple game and forage fish species, and provide the most productive fisheries habitats in the Mississippi River. Secondary channels also provide safe fishing, paddling, and wildlife viewing opportunities outside of the navigation channel.

Section 7(a)(1) and Recovery

Documentation of ILT recovery on the Lower Mississippi River, and it's rangewide contribution to the species was fully documented under USACE Section 7(a)(1) actions. Monitoring techniques were developed in the mid 1980s and the results of annual monitoring of ILT nesting areas and bird numbers conducted by the Memphis District between 1985 and 2012 were used in the five-year status review. Additionally, the USACE's Dredging Operations and Environmental Research Program funded efforts by the USACE's ERDC Environmental Lab collaborated with non-governmental organizations and other partners for almost a decade to compile ILT records across the range. The data compiled under this 7(a)(1)effort demonstrated the representation, resiliency, and redundancy of the species across its range, and was critical to the 2013 five-year review analysis and recommendation to delist the species.

For more information about the expanding use of this tool, just visit: http://www.fws.gov/mississippies/lmr.html, or contact

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