

Researchers Provide Threatened and Endangered Species Support to USACE Los Angeles District

Impact Statement: The USACE ERDC Environmental Laboratory (EL) Dredging Operations and Environmental Research (DOER) Program, Threatened and Endangered Species (TES) Team initiative develops solutions to priority TES issues that improve operational flexibility, reduce future costs, improve budget planning capabilities, reduce adverse impacts to mission execution, and improve species conservation outcomes (including Recovery)

In September 2023, Dr. Richard Fischer, ERDC Environmental Laboratory (EL), and his interdisciplinary team from Purdue University; Conservation Science and Data Visualization; and Rohde Environmental, met with representatives from the USACE Los Angeles District (SPL) to discuss opportunities for incorporating various management scenarios into an upcoming agent-based model designed to improve decision-making, as well as recovery potential, for the federally Endangered Least Bell's Vireo (LBVI). The model is being developed with funding from the Strategic Environmental Research and Development Program (SERDP) as part of an in-depth analysis of multiple interacting stressors affecting LBVI populations in California.

During the meeting (Figure 1), SPL identified potential noise (e.g., from construction activities) impacts on federally endangered birds, and subsequent project activity restrictions, as significant impediments to mission. The ERDC-EL is exploring opportunities as part of the USACE Dredging Operations and Environmental Research (DOER) Threatened and Endangered Species Team (TEST) effort to develop options for research with acoustic technologies (e.g., Autonomous Recording Units) to assess noise impacts on breeding and nesting LBVI, and to improve the science on recommended but largely untested requirements for sound buffers around noise-emitting activities.



Figure 1. ERDC Environmental Laboratory (EL) CW R&D researchers and contractors meet with the USACE Los Angeles District (SPL) to discuss issues and opportunities associated with impacts of federally endangered Least Bell's Vireo (LBVI) on civil works mission areas.

Subsequently, the team visited the Santa Clara River east of Ventura, CA, with the U.S. Fish and Wildlife Service (USFWS) Ventura Field Office (Figure 2). The riparian vegetation along the river supports a population of LBVI that is important as a source for expanding the population northward through its presently unoccupied former range.



Figure 2. ERDC Environmental Laboratory (EL) CW R&D researchers and contractors meet with the U.S. Fish and Wildlife Service (USFWS) to view riparian habitat on the Santa Clara River, CA, that supports multiple endangered species.

Joint fundings by the USACE Dredging Operations and Environmental Research (DOER) Program Threatened and Endangered Species Team (TEST), and by the Strategic Environmental Research and Development Program (SERDP), are contributing to civil works and military R&D in developing management methods to support the recovery of this imperiled species that impacts missions for multiple US Department of Defense (DoD) installations, including the US Army Corps of Engineers (USACE) projects.

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