



# Proactive Assessment of Impacts to USACE Navigation from Proposed T/E Species

Dredging Innovations Group (DIG)

U.S. ARMY CORPS OF ENGINEERS

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## Problem

Between 1 May 2013 and 15 December 2013, 308 species (and/or critical habitats) were formally recommended by U.S. Fish and Wildlife Service (USFWS) for Federal Endangered Species Act (ESA) listing determinations and 106 species were under similar consideration by National Oceanographic and Atmospheric Administration (NOAA). The USACE typically initiates actions to identify potential impacts to navigation projects from threatened or endangered (T/E) species after the species has obtained final Federal ESA listing status. At that point, the USACE has little or no supporting data or documentation to confirm or refute the validity of the species protection measures designated by the regulatory agencies under Section 7(a)(2) consultations, or to recommend effective alternatives. By the time the USACE gathers the needed scientifically-based supporting data or documentation, it becomes increasingly difficult to challenge or alter already implemented protection measures. Unjustified, inappropriate, and ineffective species protection measures may be financially costly to the USACE and potentially environmentally costly to the T/E species. Concerted efforts are critically needed for the USACE to proactively identify potential impacts to navigation projects from proposed T/E species and their associated critical habitats prior to final Federal ESA listing.



Sand Tiger Shark (Photo: Jeff Kubina)

## Study Description

**Purpose:** Proactively evaluate the list of proposed USFWS and NOAA T/E species and critical habitats with reference to priority USACE navigation projects prior to final ESA listing determinations.

**Value:** This DIG evaluation and resulting data will:

- Identify vulnerabilities to the USACE navigation mission;
- Inform needed collaboration across USACE for coordinating and developing consistent, efficient, and effective T/E species regulatory compliance strategies.
- Identify species of concern for which targeted research and resource leveraging may be needed to obtain scientifically defensible data and establish appropriate and cost-effective T/E species protection measures;
- Provide USACE the opportunity to improve its navigation mission readiness.



Red Knot (Photo: Greg Breese)

## Products

This DIG-sponsored work evaluated the 414 US species being considered by USFWS (308) and NOAA (106) (as of 15 Dec 2013) for additional Federal ESA protection status. 37 species, including 8 coral species, were identified with life histories potentially vulnerable to impacts from navigation projects. The 2026 congressionally-authorized USACE navigation projects were ranked using a formula considering cargo tonnage as well as USACE 5-year average project expenditures.

The top 500 ranked USACE navigation projects were evaluated against the geographic distribution for the 37 high priority proposed species. A summary report, found at <http://el.erdc.usace.army.mil/dots/new.cfm>, presents the resulting data for both the top 500 and top 150 navigation projects by: species, USACE Division, USACE District, and geographic region.



Blueback Herring (Photo: Duane Raver)

## Summary

The results generated by this project strongly support the need to proactively address potential impacts to the navigation mission readiness from future Federal ESA listing actions to species identified in this assessment. More rigorous assessments of potential effects on these species from navigation projects should be determined prior to the species becoming Federally-listed. The species identified in this assessment fall within four geographic regions – Atlantic, Gulf of Mexico, Pacific, and Inland. For the species and projects identified in this assessment, it is recommended that USACE working groups be formed within each of these geographic regions to proactively develop scientifically-based strategies for understanding and addressing potential adverse impacts, identifying conservation actions, and ensuring mission sustainability.

*Addressing complex dredging challenges and building institutional capacity for long-term mission sustainability.*



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