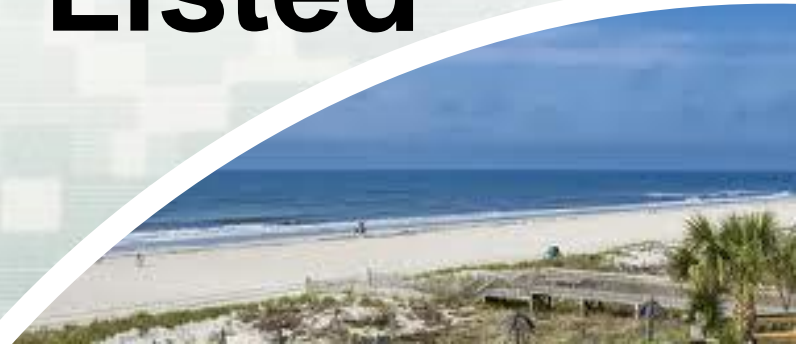
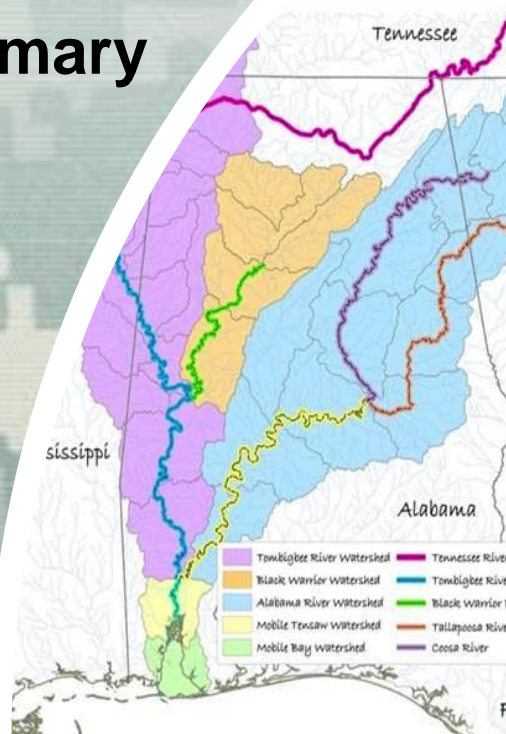


Conservation Planning to Recover Federally Listed Species

Threatened and Endangered Species Team (TEST) Summary

Joe Wilson, CECW-CO-D



What is the Problem?

- TES conservation concerns currently exist at over 430 USACE O&M projects, for over 300 different species



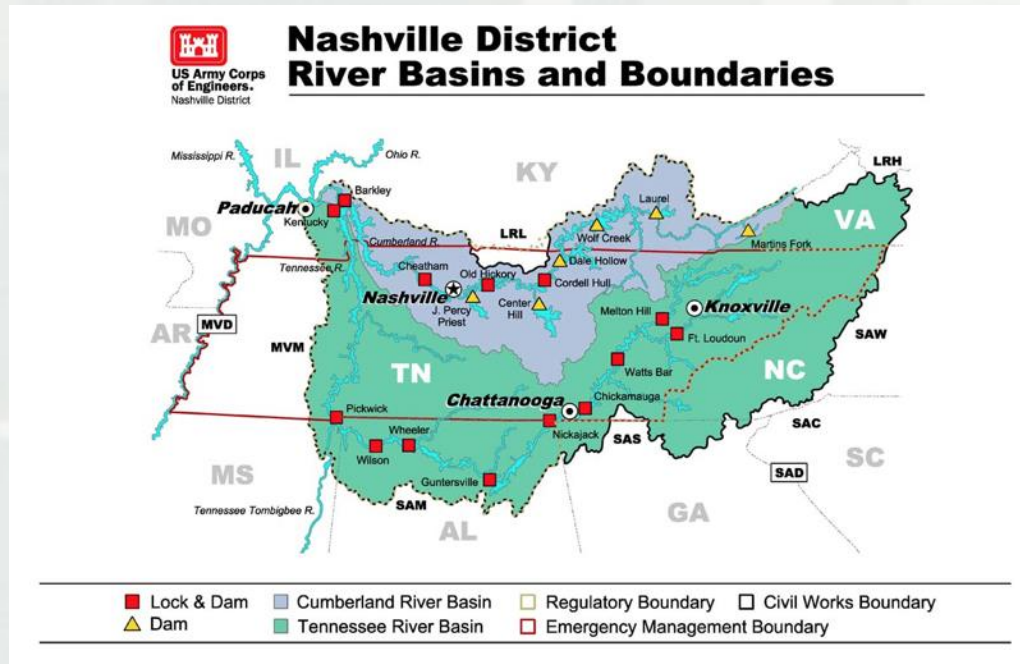
A piping plover incubates its eggs in a sandy hollow. Image courtesy of the U.S. Army Corps of Engineers.



BUILDING STRONG®

What is the Problem?

- An additional 250 species listings or critical habitat designations are expected to occur by 2018



BUILDING STRONG®

What is the Problem?

- ▶ USACE has no formal and organized strategy to address TES
- ▶ Single-species approaches used to date have provided mixed results in terms of meeting the objective of easing operational constraints on the Corps.



Federal TES Expenditures

Agency/Land Ownership	Expenditure (2011)
NPS – 84 million acres	\$ 12,340,382
FWS – 89 million acres	\$217,939,379
BLM – 253 million acres	\$ 23,481,938
USFS – 193 million acres	\$ 43,564,300



BUILDING STRONG®

Federal TES Expenditures

Agency/Land Ownership	Expenditure (2011)
NPS – 84 million acres	\$ 12,340,382
FWS – 89 million acres	\$217,939,379
BLM – 253 million acres	\$ 23,481,938
USFS – 193 million acres	\$ 43,564,300
DoD – 42 million acres	\$393,000,000
U.S. Military	\$141,000,000
USACE	\$252,000,000



BUILDING STRONG®

USACE T&E Expenditures

■ Background

- ▶ Scope of USACE Missions – Construction and O&M; unique, diverse & repeated activities, distant out-year budgeting, increasing demand
- ▶ Species distributions and life history – Wide ranges, complex trophic interactions, varied effects knowledge sets, characterizations, and 7(a)(2) outcomes.
- ▶ USACE ESA Section 7 Conservation
 - 400+ projects
 - 450+ species



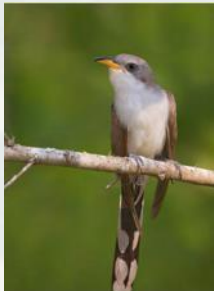
▶ Posture

- Reactionary
- Resource constrained
- Lacking scientific evidence for effects assessments
- Accustomed to confrontational consultation
- Without a strategic, corporate approach for addressing TES issues and mission impacts.



What is the Problem?

- USACE expends \$250-300 Million annually on T&E
- 85% of USACE expenditures are on fish
- ~10% on birds



Salmon, chinook (9 Populations)	\$73,851,410
Steelhead (11 populations)	\$51,907,342
Sturgeon, pallid	\$48,718,484
Salmon, sockeye (2 Populations)	\$14,293,621
Flycatcher, southwestern willow	\$7,668,176
Salmon, chum (2 Populations)	\$6,102,995
Minnow, Rio Grande silvery	\$5,787,904
Plover, piping (2 Populations)	\$5,339,877
Tern, least	\$4,467,906
Salmon, coho (4 Populations)	\$3,404,322
Sturgeon, Atlantic	\$2,248,191
Vireo, least Bell's	\$2,229,661
Sturgeon, shortnose	\$1,628,115
Sturgeon, North American green	\$1,385,026
Woodpecker, red-cockaded	\$1,058,791
Trout, bull	\$979,656
Smelt, delta	\$586,391
Bat, Indiana	\$560,676
Sea turtle, loggerhead	\$496,875
Manatee, West Indian	\$469,134

FISH

BIRDS

MAMMALS

REPTILES/AMPHIBIANS



BUILDING STRONG®

USACE T&E Expenditures

- From FY10-FY14, USACE spent an average of:
 - ▶ \$204.6M on Fish (86% of expenditure)
 - ▶ \$ 25.7M on Birds (11% of expenditure)
 - ▶ \$ 3.5M on Sea Turtles
 - ▶ \$ 2.3M on Mammals
 - ▶ \$ 0.9M on Insects
 - ▶ \$ 0.4M on Mussels
 - ▶ \$ 0.3M on Plants



USACE Threatened & Endangered Species Team (TEST)

- Purpose

Accelerate the development of solutions to priority threatened and endangered species issues that will:

- ▶ *Improve operational flexibility*
- ▶ *Reduce future costs*
- ▶ *Improve budget planning capabilities*
- ▶ *Reduce adverse impacts to mission execution*
- ▶ *Improve species conservation outcomes*



BUILDING STRONG®

USACE Threatened & Endangered Species Team -TEST

Advancing the USACE Approach

■ “T” in TEST

- ▶ HQ - Mr. Joe Wilson, Coordinating Lead; Legal, Business Line Leaders, Others
- ▶ MSC & District Chiefs and T&E Leads
- ▶ ERDC - Dr. Todd Bridges, ST; Dr. Richard Fischer, Lead Coordinator; and Subject Matter Experts (SMEs) across labs
- ▶ District Staff – Project Managers, SMEs
- ▶ Additional USACE Resources – IWR, Mr. Jeff Krause (NRM); Military Programs T&E SMEs, others
- ▶ Resource Agencies, Industry, Academia, Other Stakeholders



Integratrix.com



BUILDING STRONG®

USACE Threatened & Endangered Species Team -TEST

Advancing the USACE Approach – Initial Activities (Sample)

- TEST Strategy Development, Awareness, Initial Collaborations
- Issue Identification, Action Planning and Decision Support Tools
 - Vulnerabilities & Opportunities - Web-enabled, GIS Map for TES & USACE Projects
 - Addressing “Species At Risk”
- Proactive Assessment of Potential Impacts – Upcoming ESA Listings
- Support to ILT 5-year Review & Delisting
- Collaboration w/USFWS, Region 4
- ESA Compliance Opportunity Assessments
 - Applying *Engineering With Nature*
 - Integrating ESA Section 7(a)(1)



ESA SECTION 7(a)(2)

Each Federal agency shall ... insure that any action ... is not likely to jeopardize the continued existence of any endangered species or threatened species...or result in destruction...of (critical) habitat...

Section 7(a)(2) consultations

- Occur when actions of a FEDERAL agency (funded, or permitted by) may adversely affect a listed species
- For example, dam operations by the USACE may affect Interior Least Terns & Great Plains Piping Plovers
- Action agency (USACE) writes Biological Assessment
 - ▶ If FWS determines that action is “likely to adversely affect...”
- FWS writes Biological Opinion (issues IT statement)
 - ▶ Jeopardy analysis (do actions jeopardize continued existence?)
 - ▶ If no, reasonable and prudent measures, terms and conditions
 - ▶ If yes, reasonable and prudent alternatives (jeopardy only)

An aerial photograph of a wide river flowing through a green, forested landscape. The river is light brown and meanders slightly. The surrounding land is covered in dense green trees and vegetation, with some lighter patches of land visible. The overall tone is somewhat muted, with a greyish-blue overlay.

History

Forty years of using ESA Formal Consultation through Section 7(a)(2)

- *Adversarial*
- *Confrontational*
- *Dictatorial*
- *Costly*
- *Little Flexibility*
- *Unpredictable*
- *Little or no control*
- *Losing process for the species*

PURPOSE OF SECTION 7(a)(1)

To address the conservation (recovery) needs of listed species relative to Federal Program impacts.

- ▶ Section 7(a)(1) conservation programs are to improve listed species baselines within the scope of Federal action agency authorities.

Conservation Benefits

“Section 7a1 allows FWS or NMFS to work continuously with a Federal agency to develop a program of species conservation that uses all the agency’s authorities, is at the agency’s disposal at all times, and does not depend on the presence of a particular project for implementation.” (Ruhl 1995)

New Approach

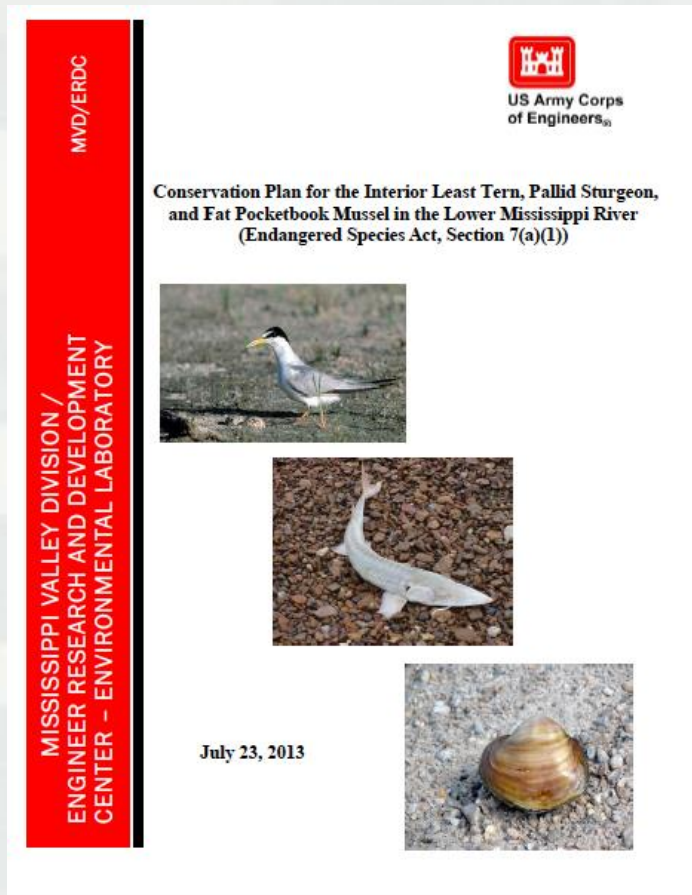
Section 7(a)(1)

- Allows USACE to be proactive in consultation and conservation processes rather than reactionary
- Reduces surprises and conflicts
- We commit to actions we would be predisposed to undertake anyway under 7(a)(2)
- Reduce future 7(a)(2) consultations
- Actions contingent upon availability of funds providing budget predictability
- Improves likelihood of species recovery

Conservation Management Agreements

- Explicit plan for specific management actions
- Formal agreement enables long-term management
 - ▶ Any combination of agencies and organizations
 - ▶ Partners must have legal authority for management
 - ▶ Agreement must contain funding mechanisms
 - ▶ Agreement must be legally enforceable
- De-listing possible (protections of ESA not needed)

MS River Habitat Conservation Plan



- Proactive and innovative
- Creates “buy-in” from multiple agencies and organizations
- Addresses multiple species
- Conserves habitat in perpetuity for listed species
- Provides template for others to follow
- Long-term cost-savings to USACE
- Supports USFWS 5-Year Status Reviews for listed species



BUILDING STRONG®

TEST Coordination - Districts/MSC's

- South Atlantic Division
 - ▶ 7(a)1 Plan for Alabama Shad and passage effort (SAM,FWS)
 - ▶ 7(a)1 Plan for Beach Nourishment (SAC)
 - ▶ Improving Florida's Beaches: USFWS and USACE Partnership under 7(a)(1) of the Endangered Species Act
- South Pacific Division
 - ▶ Los Angeles River (SPL - Tom Keeney)
 - ▶ Collaborative riparian rehab for endangered birds (SPL, SPA)
 - ▶ UC Davis - flume research on Delta Smelt swim speeds
- Great Lakes/Ohio River Division
 - ▶ RSM and endangered species habitat (LRB)
 - ▶ Regional TES plants assessment (LRC)
 - ▶ Piping Plover habitat restoration (LRE)
- North Atlantic Division (NAD/IWR)
 - ▶ Mitigation banking for T&E



Questions?

Type questions in the chat box.
We will answer as many
as time allows.

For more information:
<http://www.corpsplanning.us>



BUILDING STRONG®