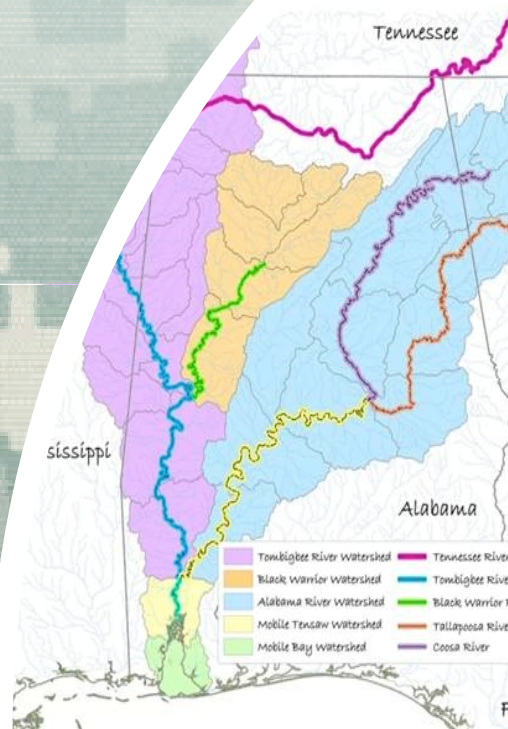


Threatened and Endangered Species Team (TEST)

Richard A. Fischer, Ph.D.
Research Wildlife Biologist
USACE – ERDC
Environmental Laboratory

3 September 2015



Fischer



Reaser/Killgore

Section 7(a)(1) of the Endangered Species Act—Supporting the Mission through Proactive Conservation Planning and Endangered Species Recovery



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Hoover/Killgore

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



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Federal TES Expenditures

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NPS – 84 million acres	\$ 12,340,382
FWS – 89 million acres	\$217,939,379
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USFS – 193 million acres	\$ 43,564,300
DoD – 42 million acres	\$393,000,000
U.S. Military	\$141,000,000
USACE	\$252,000,000



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What is the Problem?

USACE TES Expenditures

- USACE TES conservation and compliance spending averages
~\$230 million per year

FY14 Top Ten Costliest TES Species

	Common Name	Total
1	Salmon, chinook	\$65,209,235
2	Sturgeon, pallid	\$62,619,597
3	Steelhead	\$31,828,548
4	Salmon, sockeye	\$10,715,945
5	Tern, least	\$8,431,784
6	Plover, piping	\$8,307,257
7	Flycatcher, southwestern willow	\$3,847,451
8	Salmon, coho	\$3,270,107
9	Salmon, chum	\$2,305,573
10	Trout, bull	\$2,302,528
Top 10 Total		\$198,838,025
Percent of FY14 Total		87.57%



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What is the Problem?

- 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



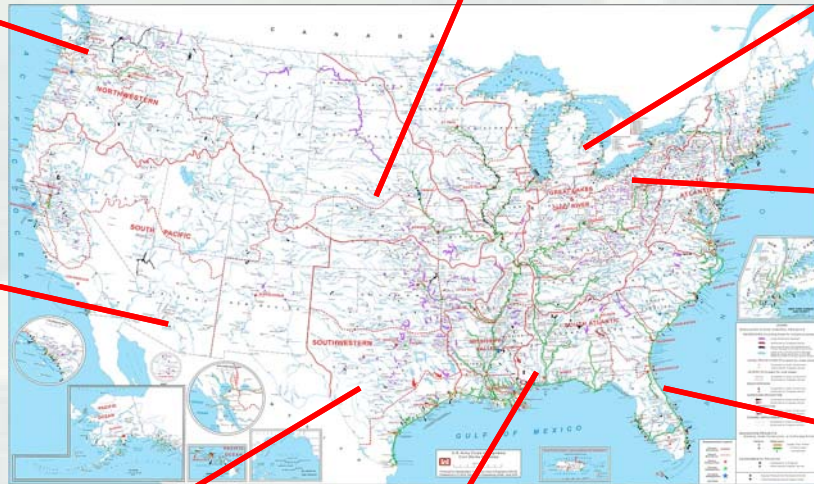
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What is the Problem?

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



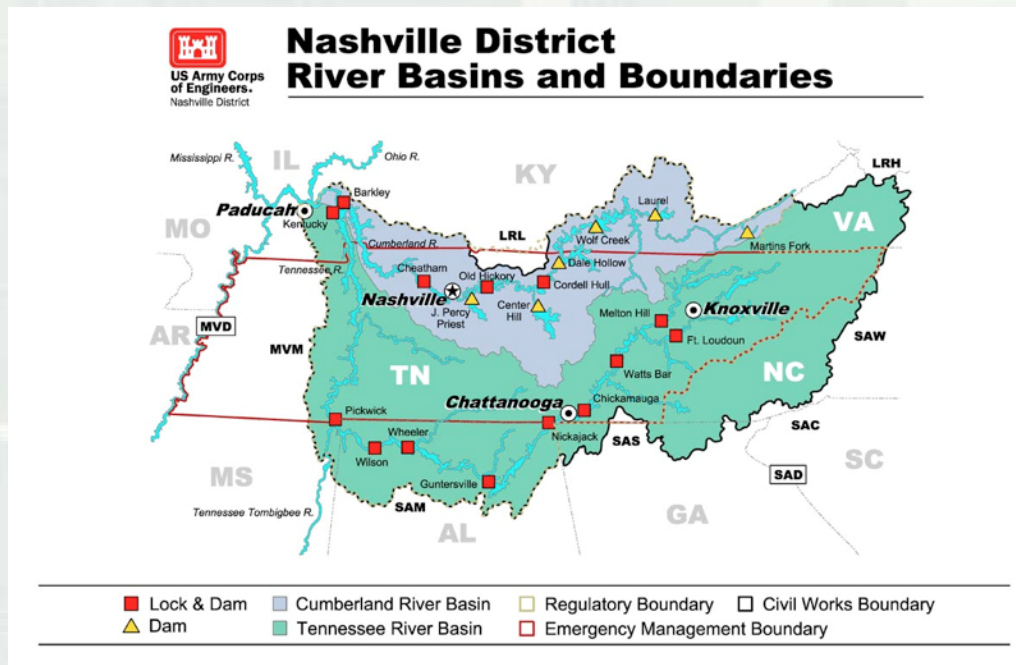
A piping plover incubates its eggs in a sandy hollow. Image courtesy of the U.S. Army Corps of Engineers.



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What is the Problem?

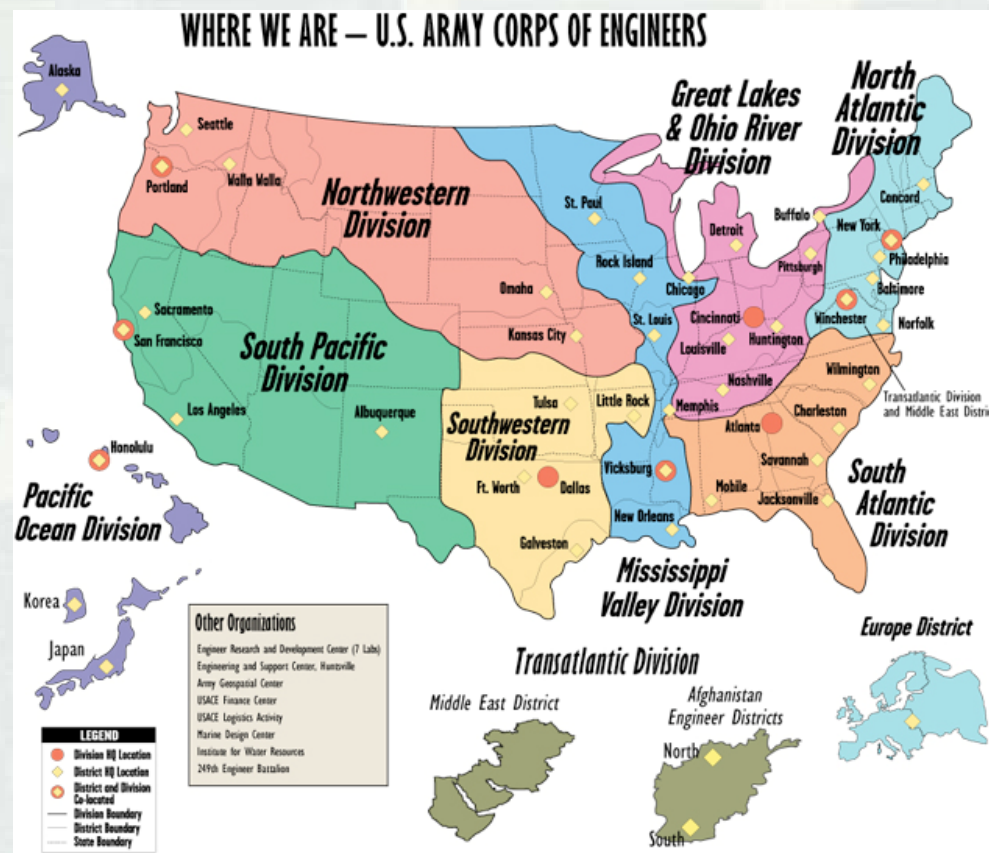
- An additional 250 species listings or critical habitat designations are expected to occur by 2018



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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.



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What is the Problem?

Expenditures on TES by USACE Division

USACE TES Costs by Division, Comparison of FY12-14

Division	FY14	%	FY13	%	FY12	%	Prior Yr Change
NWD	\$187,183,216	82.4%	\$197,636,509	79.4%	\$280,786,918	83.5%	(\$10,453,293)
SPD	\$15,608,569	6.9%	\$31,755,211	12.8%	\$28,556,186	8.5%	(\$16,146,642)
SAD	\$9,869,724	4.3%	\$9,285,603	3.7%	\$12,777,165	3.8%	\$584,121
NAD	\$4,196,641	1.8%	\$3,008,131	1.2%	\$2,116,730	0.6%	\$1,188,510
MVD	\$3,524,474	1.6%	\$3,052,687	1.2%	\$1,923,351	0.6%	\$471,787
LRD	\$3,231,315	1.4%	\$1,061,633	0.4%	\$1,079,457	0.3%	\$2,169,682
SWD	\$2,819,784	1.2%	\$2,309,651	0.9%	\$2,984,665	0.9%	\$510,133
POD	\$620,383	0.3%	\$844,116	0.3%	\$6,239,536	1.9%	(\$223,733)
Total	\$227,054,106	100.0%	\$248,953,541	100.0%	\$336,464,008	100.0%	(\$21,899,435)



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What is the Problem?

FY14 TES Expenditures by CESP

SpeciesName	Species Total	SPA	SPK	SPL	SPN
Flycatcher, southwestern willow	\$3,847,401	\$2,739,591	\$42,730	\$1,063,480	\$1,600
Steelhead	\$2,520,643		\$793,695	\$131,050	\$1,595,898
Minnow, Rio Grande silvery	\$1,877,852	\$1,877,852			
Salmon, Chinook	\$1,536,929		\$1,458,072		\$78,857
Salmon, coho	\$1,436,860				\$1,436,860
Vireo, least Bell's	\$1,233,896		\$22,766	\$1,204,730	\$6,400
sturgeon, green	\$481,602		\$407,302		\$74,300
Beetle, valley elderberry longhorn	\$461,901		\$461,901		
Smelt, delta	\$243,949		\$190,749		\$53,200
Sucker, Santa Ana	\$243,416			\$243,416	
Frog, California red-legged	\$195,480		\$49,548	\$37,132	\$108,800
Mouse, salt marsh harvest	\$190,600				\$190,600
Salamander, California tiger	\$96,486		\$47,686		\$48,800



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What is the Threatened & Endangered Species Team (TEST)?

Objectives

- Identify and document TES with biggest impacts to USACE mission (monetarily and operationally)
- Prioritize resolvable TES issues with respect to potential ROI
- Investigate system-level approaches with high ROI (e.g., beach nourishment, RSM)
- Identify needed R&D with high impact to TES recovery or decreased mission impact
- Develop a R&D investment plan based on priorities and ROI
- Integrate *EWN* and *ESA 7(a)(1)* as proactive tools for conservation and recovery



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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



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TEST Workshop Action Items

- Develop comprehensive long-term strategy for addressing TES within USACE
- Establish a prioritized TES list to better inform how we make investments (and subsequent ROI)
- Develop proactive strategy for predicting unlisted species likely to impact future missions
- Explore modeling frameworks having concurrent monitoring, adaptive management and risk assessment
- Design big picture projects that will make a difference (rather than current piecemeal approach)
- Modernize internal and external communication (improved websites; social networking)

An aerial photograph of a river winding through a landscape with green fields and some trees. The image is slightly faded to serve as a background for the text.

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.

Endangered Species Act

Section 7(a)(1)

Benefits:

- 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 Programs under 7(a)(1) are designed to improve listed species baselines within the scope of Federal action agency authorities.

USACE/USFWS 7(a)(1) Coordination



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240



In Reply Refer To:
FWS/AES/DER/BCP/058968

JAN 09 2015

Memorandum

To: Regional Directors
Attn: Assistant Regional Directors, Ecological Services

From: Deputy Director *Steve Hunt*

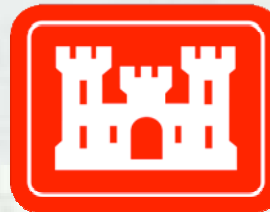
Subject: Working with the U.S. Army Corps of Engineers to Improve the Effectiveness of the Endangered Species Act (ESA) by expanding the use of Section 7(a)(1)

Section 7(a)(1) of the ESA requires all Federal agencies to use their authorities, in consultation with the Service, to carry out programs for the conservation of listed threatened and endangered species. Proactive and collaborative conservation using 7(a)(1) programs can improve outcomes for listed species and streamline Section 7(a)(2) consultation processes. In addition, larger scale, more integrated approaches to the conservation of these species should improve interagency communication, cooperation, and trust, as well as promote adaptive management, strategic habitat conservation, and operational flexibility.

Recently, USACE Mississippi Valley Division and the Service's Southeast Region broke new ground through collaborative development and implementation of a Section 7(a)(1) Conservation Plan for three species in the Lower Mississippi River as part of the Mississippi River and Tributaries Channel Improvement Program (see attached fact sheet). The USACE and Service believe this model can and should be replicated across the Nation.

By this memorandum, you are empowered and encouraged to work with your USACE counterparts to use creative solutions suitable to your Region to implement Section 7(a)(1). Major General John Peabody, Deputy Commanding General for Civil and Emergency Operations, USACE, recently transmitted a similar memorandum to USACE Divisional Leadership (attached).

For questions or comments regarding improving the effectiveness of the ESA through implementing Section 7(a)(1) please contact Mr. Craig Aubrey, our Ecological Services Division Chief for Environmental Review at 703-358-2442.



REPLY TO
ATTENTION OF

CECW-ZA

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET, NW
WASHINGTON, DC 20314-1000

30 June, 2015

MEMORANDUM FOR COMMANDERS, MAJOR SUBORDINATE COMMANDS, CHIEFS,
OPERATIONS DIVISIONS

SUBJECT: Improving the Efficiency of Project Operations and Effectiveness of Endangered
Species Act Compliance for U.S. Army Corps of Engineers Projects

1. References.

a. Endangered Species Act Section 7(a) Federal Agency Actions and Consultations.

(1) The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to Section 4 of this Act.

b. Endangered Species Act Section 7(a) Federal Agency actions and Consultations.
(2) Section 7(a)(2) requires Federal agencies to consult with the Service to ensure that actions they fund, authorize, permit, or otherwise carry out will not jeopardize the continued existence of any listed species or adversely modify designated critical habitats.

c. Fact Sheet, USACE and Service Implement an Innovative Conservation Approach that Yields Success for Wildlife, U.S. Fish and Wildlife Service, September 2014.

d. Memorandum for all Counsel, HQ, Divisions, Districts, Centers, Labs & FOA offices, subject: ESA Guidance, dated 11 June 2013.

e. Memorandum for See Distribution, subject: Reissuance of the U.S. Army Corps of Engineers (Corps) Environmental Operating Principles, dated 7 August 2012.

2. Purpose. The purpose of this directive is to increase the environmental value of how the U.S. Army Corps of Engineers (USACE) operates existing Civil Works projects by conducting a holistic review of Endangered Species Act (ESA) Section 7(a)(1) and (2). Designing projects in ways that are compatible with the conservation needs of listed species and their ecosystems can be one of the most effective methods of ensuring an efficient Section 7 consultation process, as well as species' recovery.

3. Summary. The USACE operates, maintains, and manages a variety of projects throughout the Nation, often in a complex and inter-mixed natural and built environment that includes the potential to affect species listed as threatened or endangered under the ESA or to affect such species' habitats. The purposes of the ESA are to provide a means for conserving the ecosystems upon which endangered and threatened species depend by

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Interior Least Tern – An Action Plan for Delisting

- Delisting the Interior Least Tern
 - Complete testing of TernPOP model and provide to USFWS
 - Complete 7(a)(1) Plans for SWD, LRD
 - Publish monitoring plan in PR literature
 - USFWS proposes delisting rule in Federal Register
 - USFWS receives comments from federal agencies, species experts, etc.
 - Final Rule



Other Opportunities?



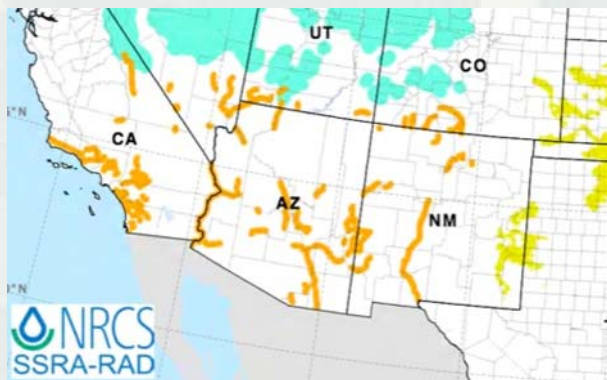
Western Yellow-billed Cuckoo



Least Bell's Vireo



Southwestern Willow Flycatcher



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TES Listing Impacts on USACE Navigation Program

Dena Dickerson

■ Problem

- ▶ Need to assess impacts of At-Risk Species (ARS) listing to the CE navigation program.
- ▶ Need to identify CE projects impacted by highest cost TES species.
- ▶ Need to assimilate data to facilitate ESA Section 7(a)1 plans and scientifically-based compliance strategies.

■ Objectives

- Identify At-Risk Species (ARS) impacting top 500 CE navigation projects
- Identify CE navigation projects impacted by top 50 TES species (cost priority)
- Develop a TES/CE project database website
- Establish interagency ARS Team (ARST):
 - Communicate ARS information
 - Identify navigation mission vulnerabilities



Sand Tiger Shark – SoC
Photo: Jeff Kubina



Blueback Herring-SoC
Photo: Duane Raver

■ Approach

- Identified the 150 and 500 priority (economics) CE nav. projects.
- Evaluated 879 ARS species (755 USFWS, 122 NOAA)
- Identified 62 ARS with potential impacts to nav. projects
- Identified CE nav. projects associated with 50 highest cost TES species
- Developed database website
- Monthly meetings w/ SEAFWA for ARS evaluations



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Partnering Opportunities Outside of USACE



WRP MISSION

WRP provides a proactive and collaborative framework for senior-policy level Federal, State and Tribal leadership to identify common goals and emerging issues in the states of Arizona, California, Nevada, New Mexico and Utah and to develop solutions that support WRP Partners and protect natural resources, while promoting sustainability, homeland security and military readiness.



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Natural Resources Conservation Service

United States Department of Agriculture

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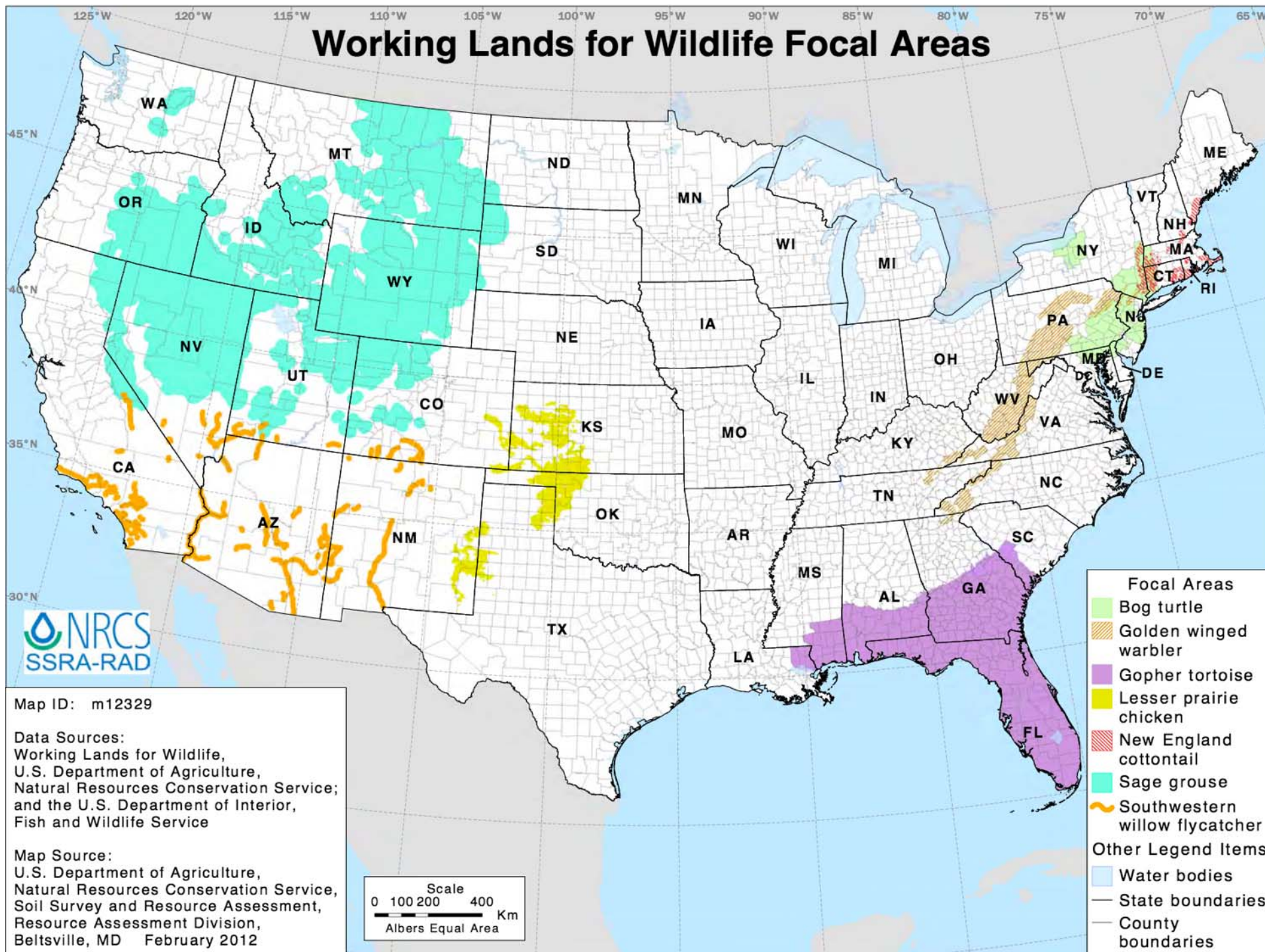
Working Lands for Wildlife



Working Lands for Wildlife is a partnership between NRCS and the U.S. Fish and Wildlife Service (FWS) to use agency technical expertise combined with \$33 million in financial assistance from the Wildlife Habitat Incentive Program to combat the decline of seven specific wildlife species whose decline can be reversed and will benefit other species with similar habitat needs.



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Questions/Comments?



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