

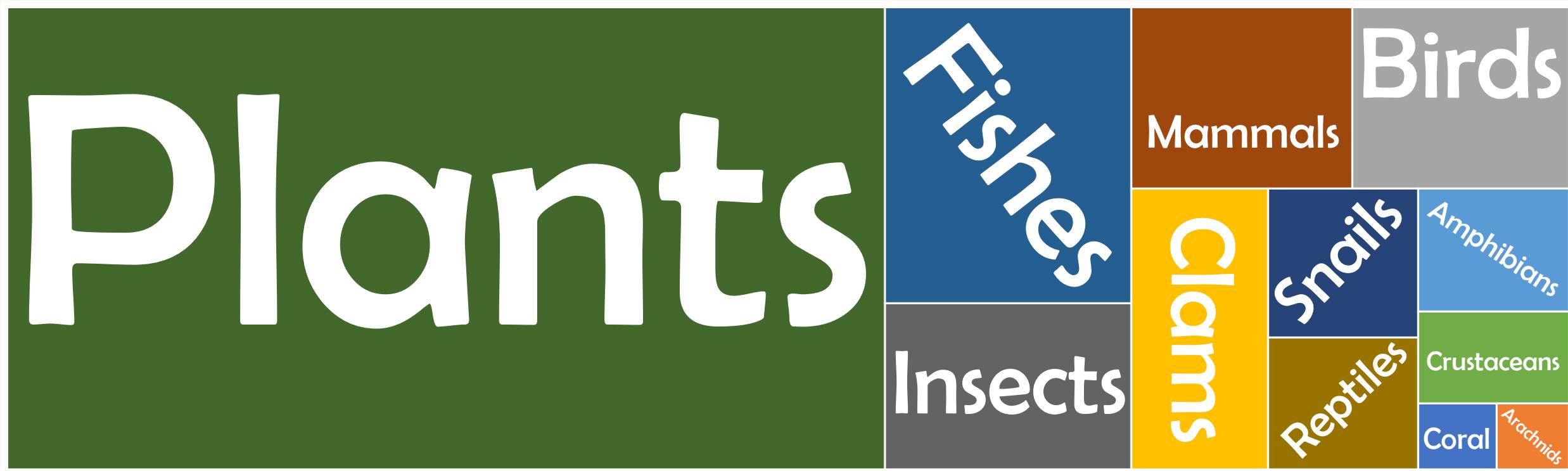


National Marine Fisheries Service (NMFS)

An aerial photograph showing a patchwork of agricultural fields in various stages of cultivation (green, brown, and yellow). A large body of water, likely a river or lake, is visible in the background. A road with a few cars is visible on the left. The foreground is dominated by green fields and a line of trees.

Ryan DeWitt
Office of Protected Resources

About 1,700 Species on the Endangered Species Act



U.S. Fish & Wildlife Service

NMFS

really cool = NMFS

kind of boring = FWS



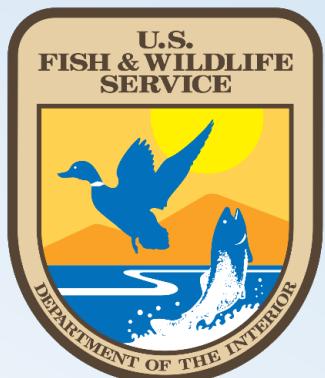




FIFRA Registration



ESA Consultation



- General label changes
- **ESA-specific label changes**

New framework for ESA-based mitigation

- Geographically specific “Pesticide Use Limitation Areas”
- List of mitigation options to choose from:
 - Drift
 - Runoff

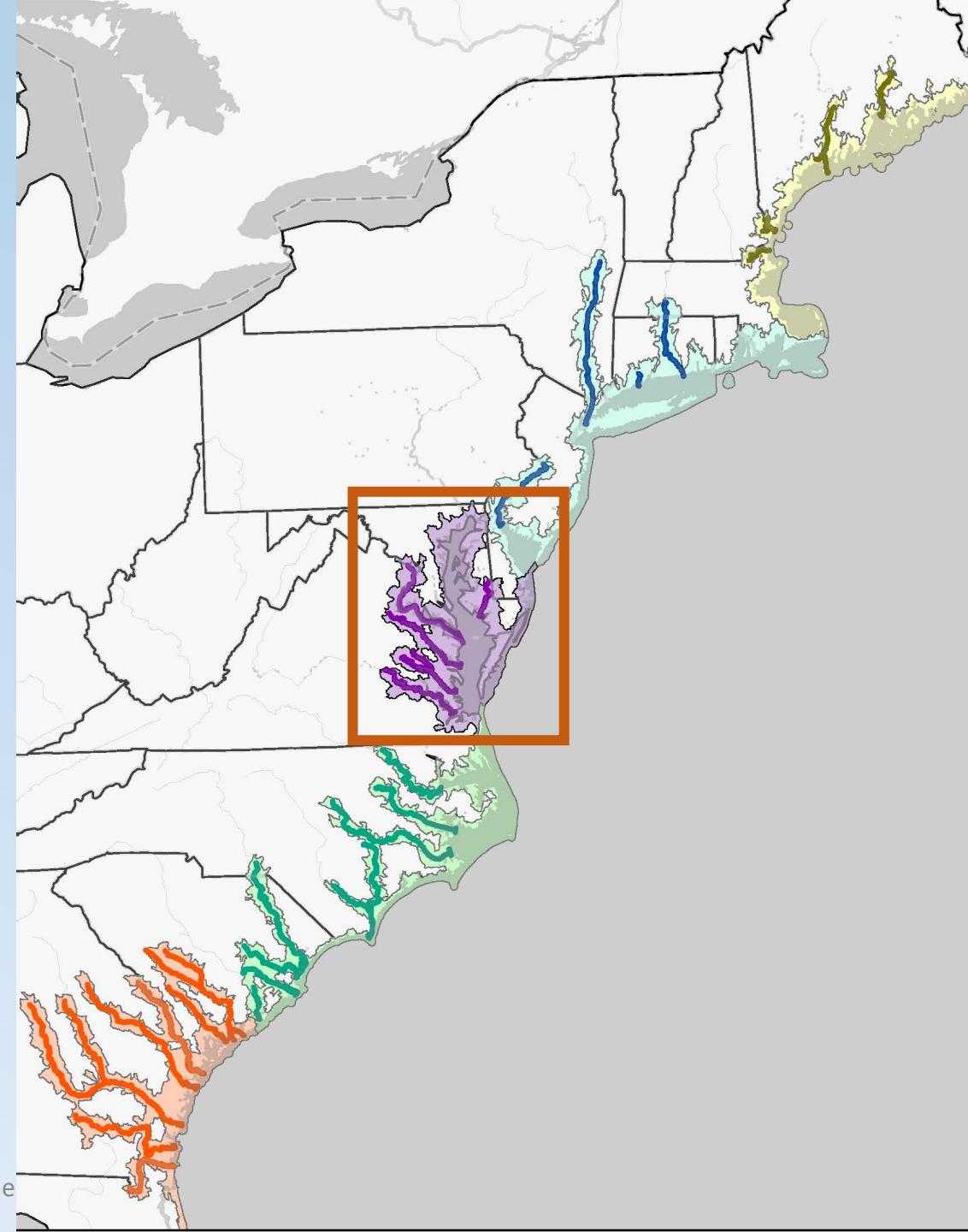


Atlantic Sturgeon



Five distinct population segments

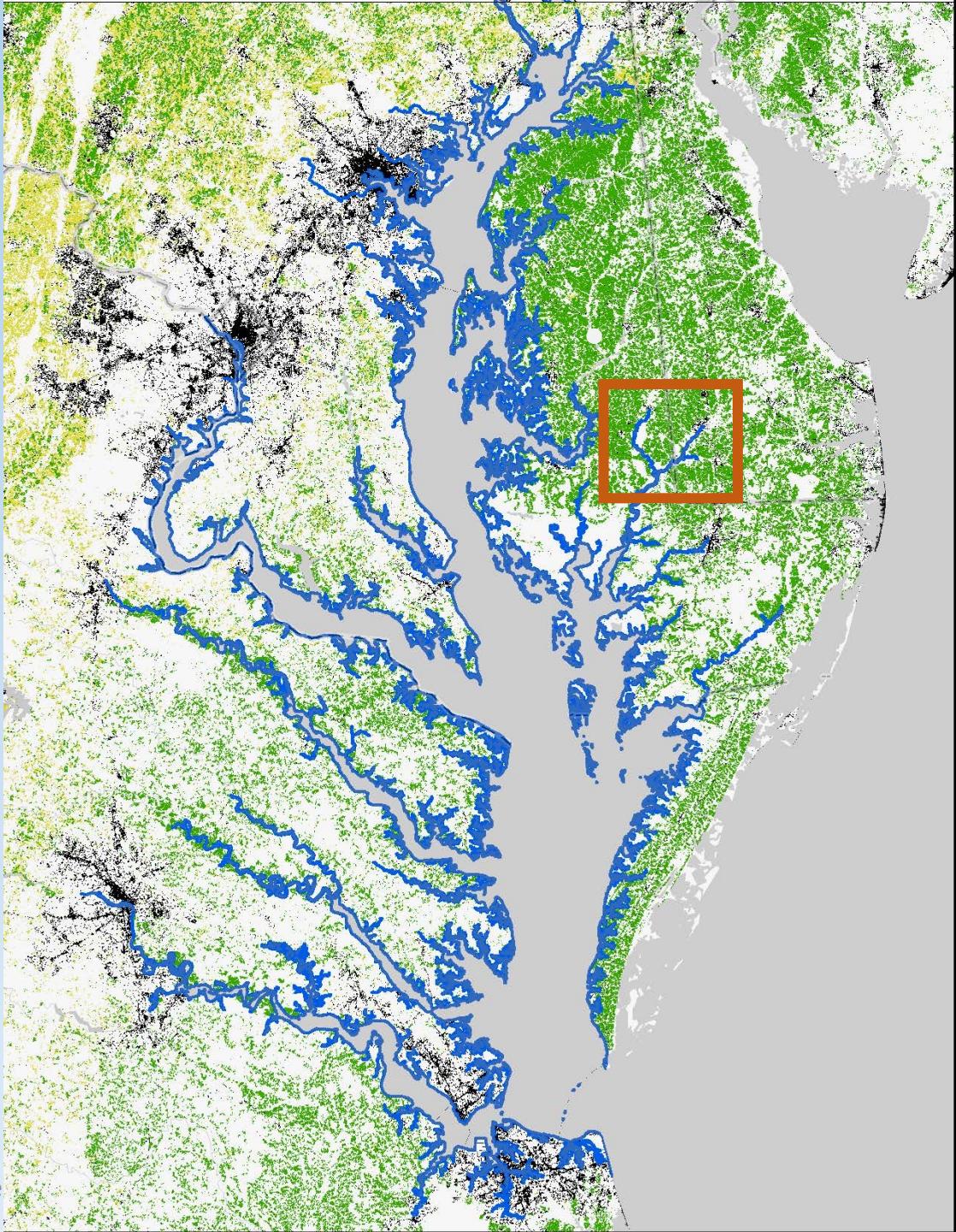
- South Atlantic
- Carolina
- Chesapeake Bay
- New York Bight
- Gulf of Maine



Atlantic Sturgeon

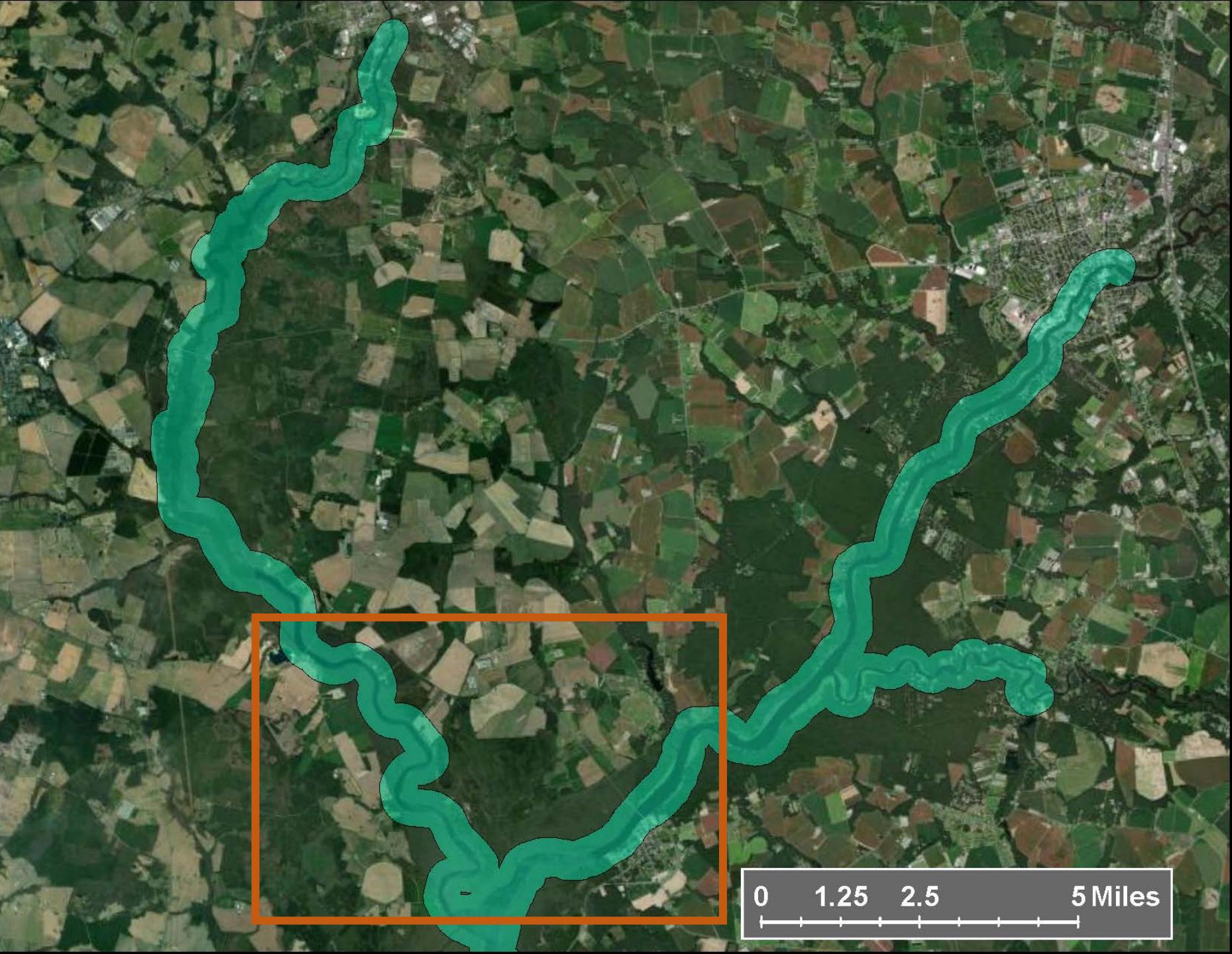


- Spawning: April-May
- Juveniles spend two to five years in freshwater
- Sub-adults move to coastal and estuarine habitats
- Adults spend most of their life in the marine environment



Atlantic Sturgeon

PULA: 300 meter
from either edge of
the habitat.



Atlantic Sturgeon

PULA: 300 meter
from either edge of
the habitat.



NMFS Species Pesticide Use Limitation Areas

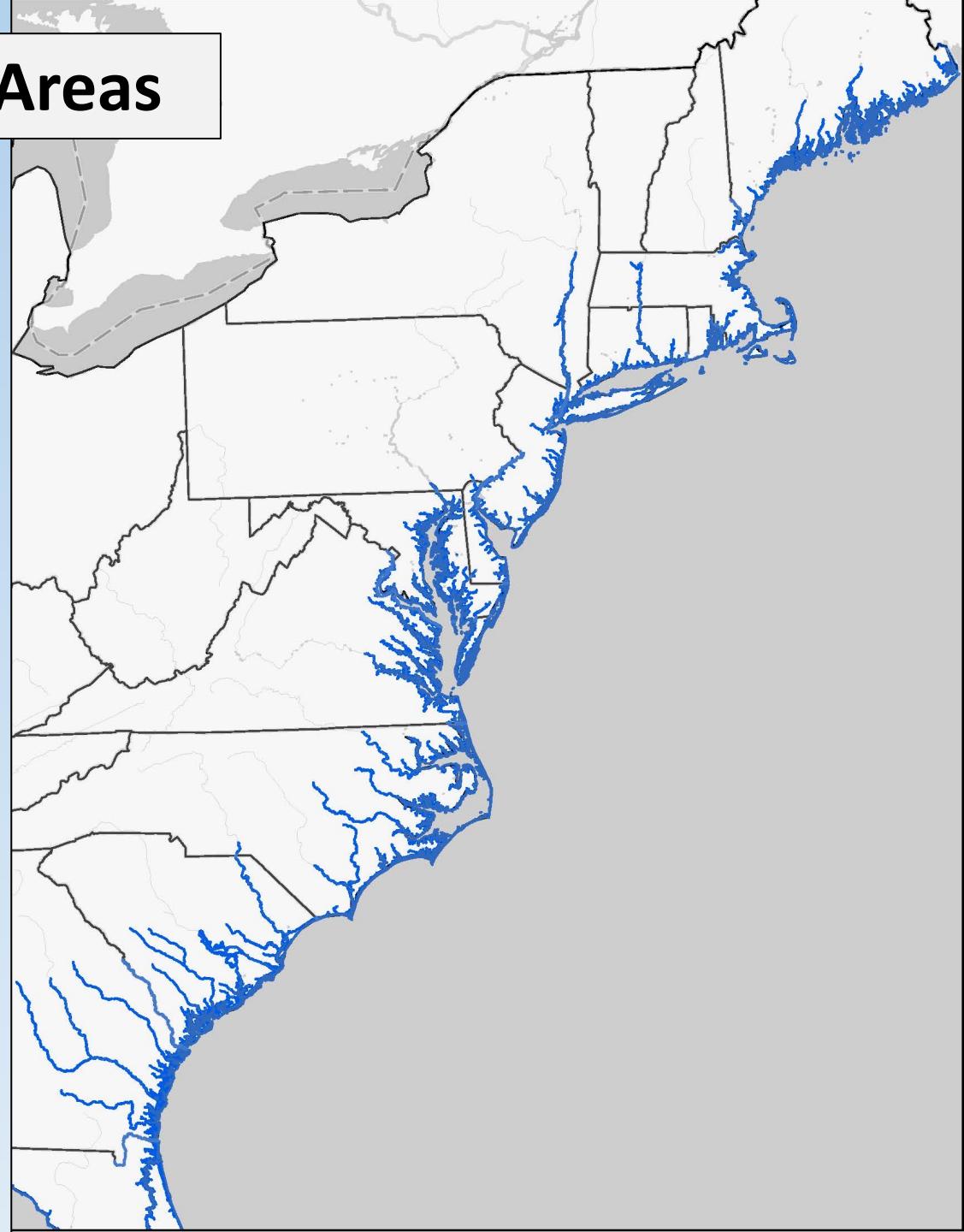
In Bulletins Now:

Bromoxynil
Prometryn
1,3-D (Telone)
Metolachlor
Chlorpyrifos
Malathion
Diazinon

In Bulletins Next Year:

Carbaryl
Methomyl

TBD:
Cyantraniliprole
Inpyrfluxam
Pyraclonil
Sulfoxaflor
Enlist
Fluazaindolizine



Carbaryl

Drift buffers

- Aerial application: 150ft
- Ground application: 25ft
- Airblast:
 - 55ft if rate if wind is blowing towards habitat
 - 25ft otherwise

Runoff

- For application rates of > 2 lb carbaryl/A: at least 50 points
- For application rates of 1 to 2 lb carbaryl/A: at least 30 points
- For application rates <1 lb carbaryl/A: No additional measures required

Runoff/drainage mitigation option	Points
Vegetated filter strip 3m, 5m, 10m, 20m, inter-row	15, 20, 45, 60, 30
Filter Strip	30
Contour buffer strips	30
Strip cropping	30
Contour farming	20
Alley cropping	20
Terrace	15
Mulching with natural materials	30
No-till or reduced tillage	30
Grassed Waterways	30
Vegetated ditches	30
Field border	30
Functional riparian system alongside water ways > 10 meters wide	80
Riparian forest buffer 5-10 meters wide	15
Retention pond	55
Water and sediment control basin	55
Constructed wetland	55
Irrigation and drainage tailwater recovery	55
Small Area Applications <0.1A	80
Hedgerow planting, cover cropping, slope of less than 2%, sediment basin	5
Runoff reduction technology, pesticide stewardship program, etc.	TBD

Localized Solutions for Pesticide Use in Diverse Cropping Systems:

Developing solutions for successful Endangered Species Act Implementation



Working on now

Improvements to the ESA/FIFRA consultation process, including mitigation.

Upcoming NMFS consultations:

New Registration

- Cyantraniliprole
- Inpyrfluxam
- Pyraclonil
- Sulfoxaflor

Registration Review

- Atrazine
- Simazine
- Glyphosate
- Clothianidin
- Imidacloprid
- Thiamthoxam



Contacts at NMFS

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