



# National Marine Fisheries Service (NMFS)

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**



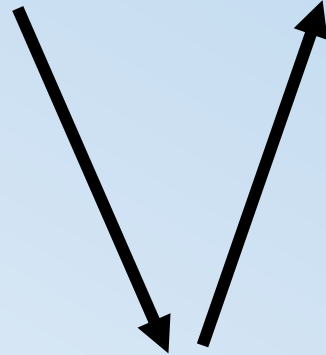








## FIFRA Registration



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

## ESA Consultation





## New framework for ESA-based mitigation

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



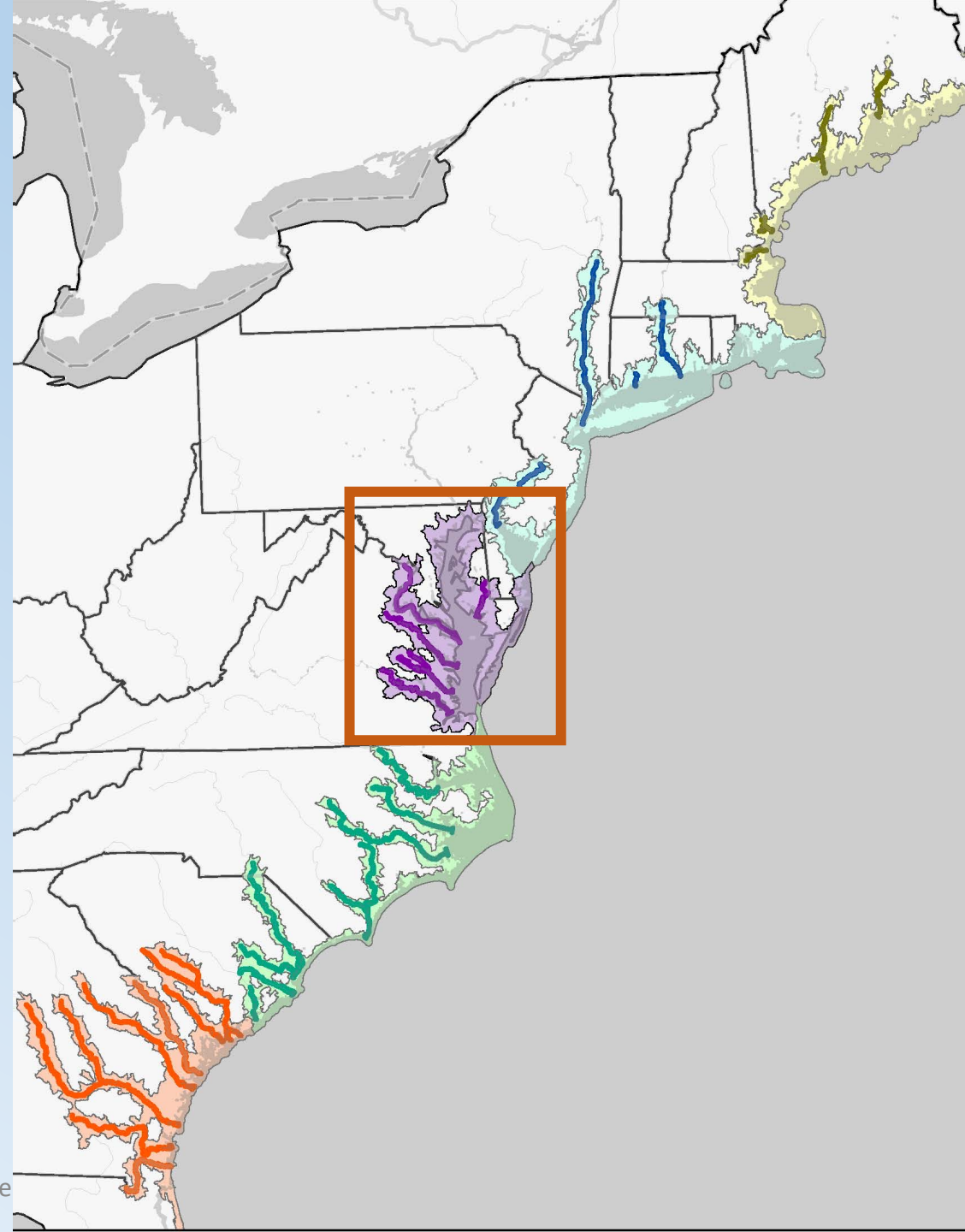


# Atlantic Sturgeon



## Five distinct population segments

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

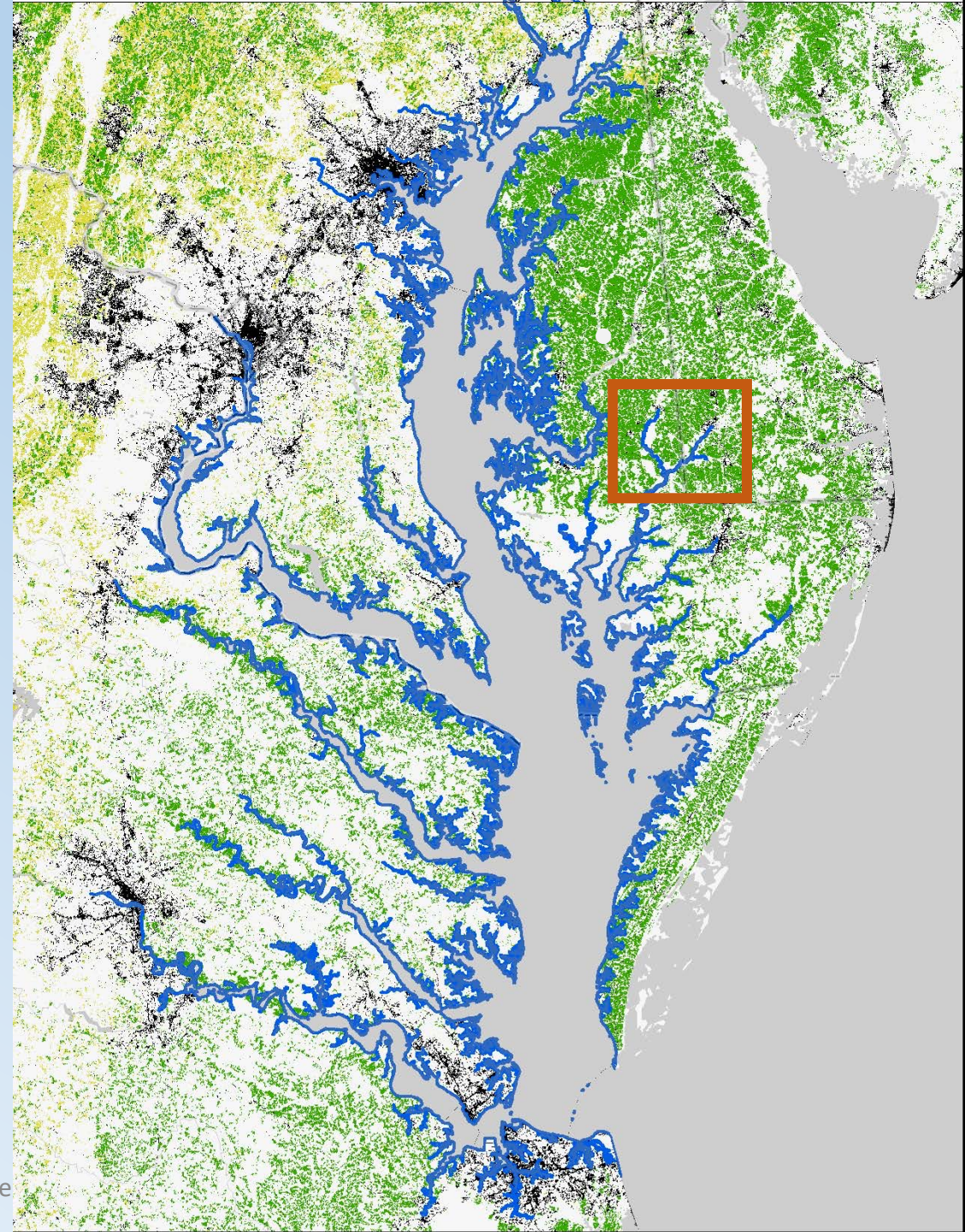




# Atlantic Sturgeon



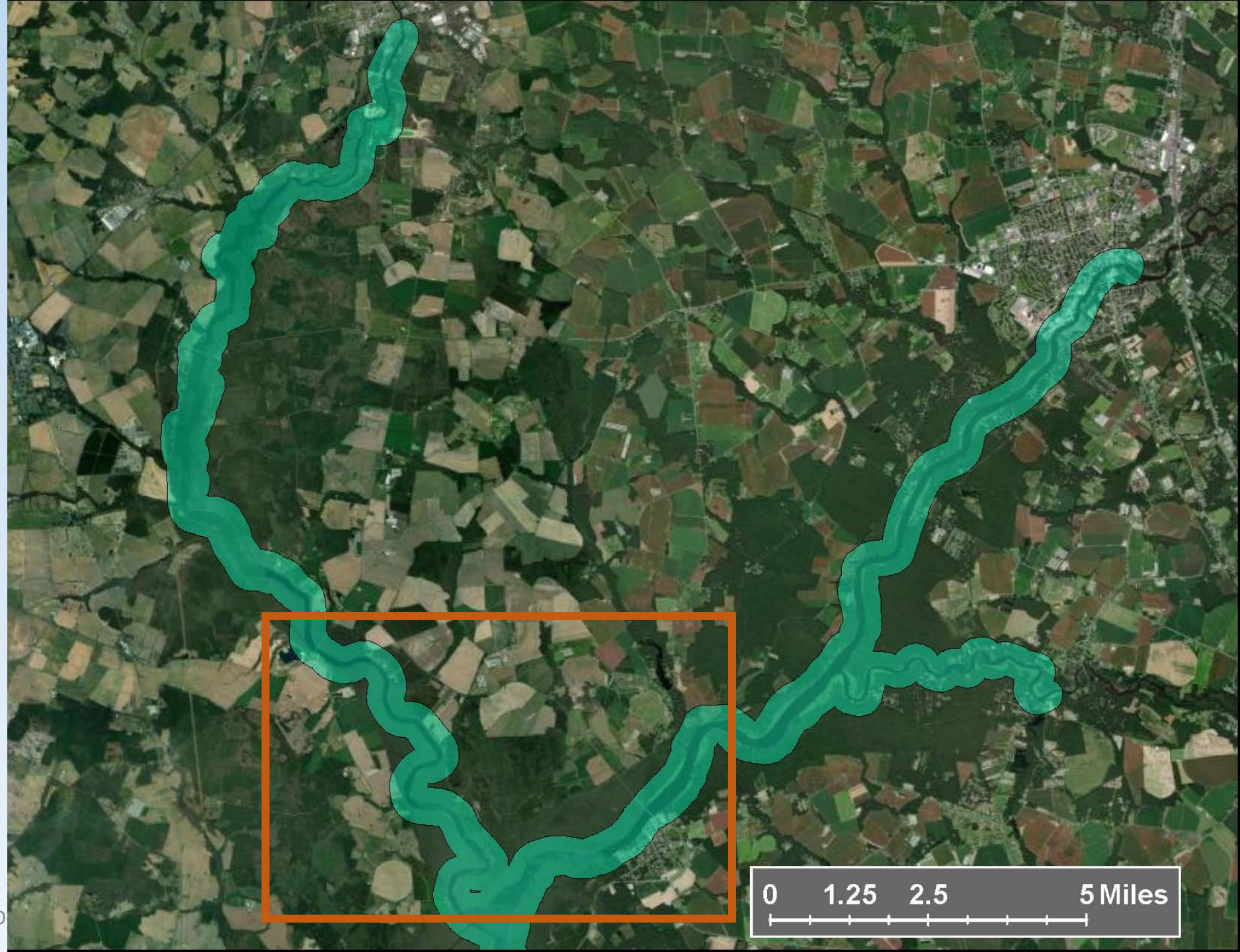
- Spawning: April-May
- Juveniles spend two to five years in freshwater
- Sub-adults move to coastal and estuarine habitats
- Adults spend most of their life in the marine environment





## 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:

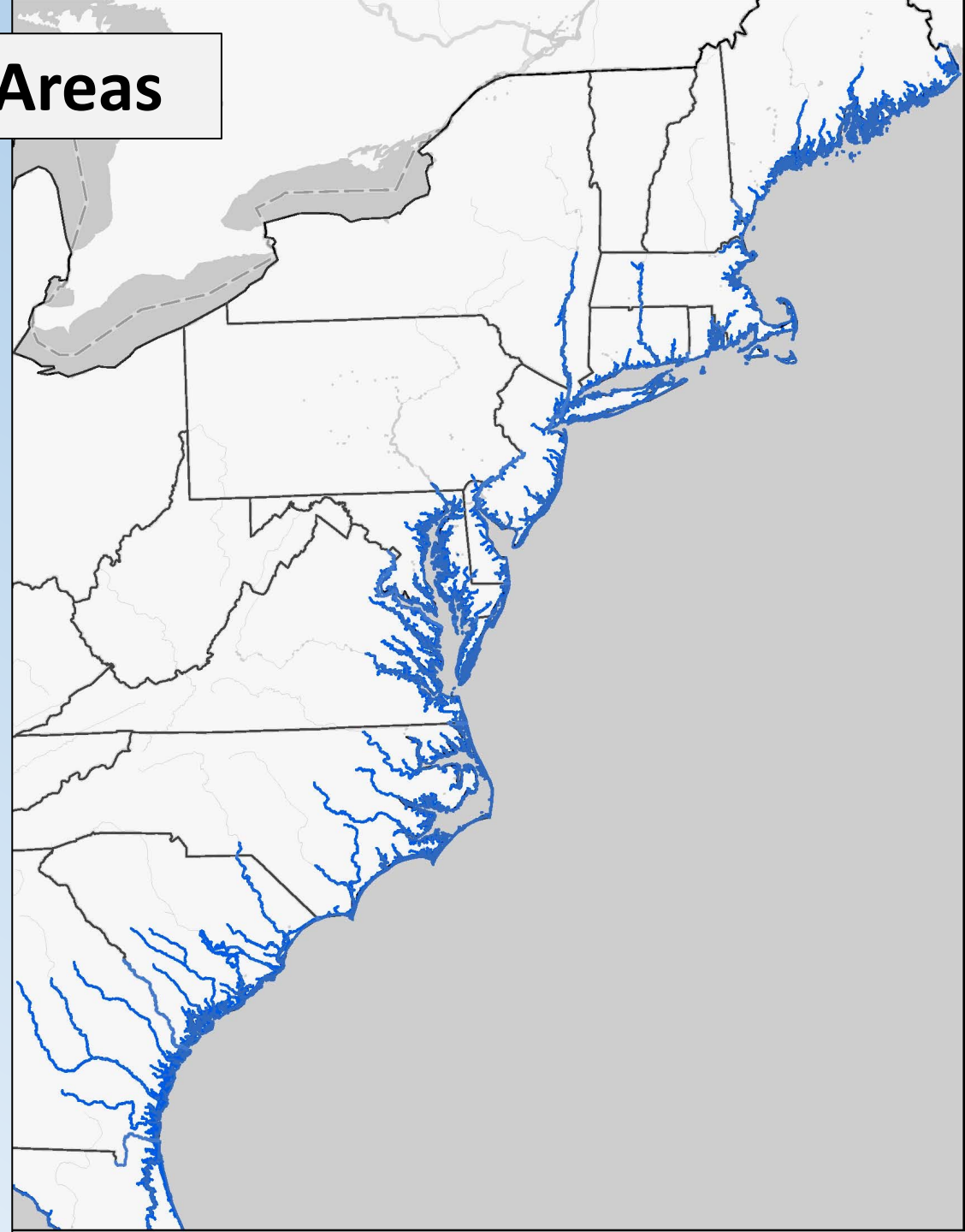
Bromoxynil  
Prometryn  
1,3-D (Telone)  
Metolachlor  
Chlorpyrifos  
Malathion  
Diazinon

## In Bulletins Next Year:

Carbaryl  
Methomyl

## TBD:

Cyantraniliprole  
Inpyrfluxam  
Pyraclostrobin  
Sulfoxaflor  
Enlist  
Fluazaindolizine





# Carbaryl

An aerial photograph showing a river meandering through a rural landscape. The river is surrounded by dense green forests on one side and agricultural fields in shades of green and brown on the other. A road with a bridge crosses the river in the lower-left portion of the image.

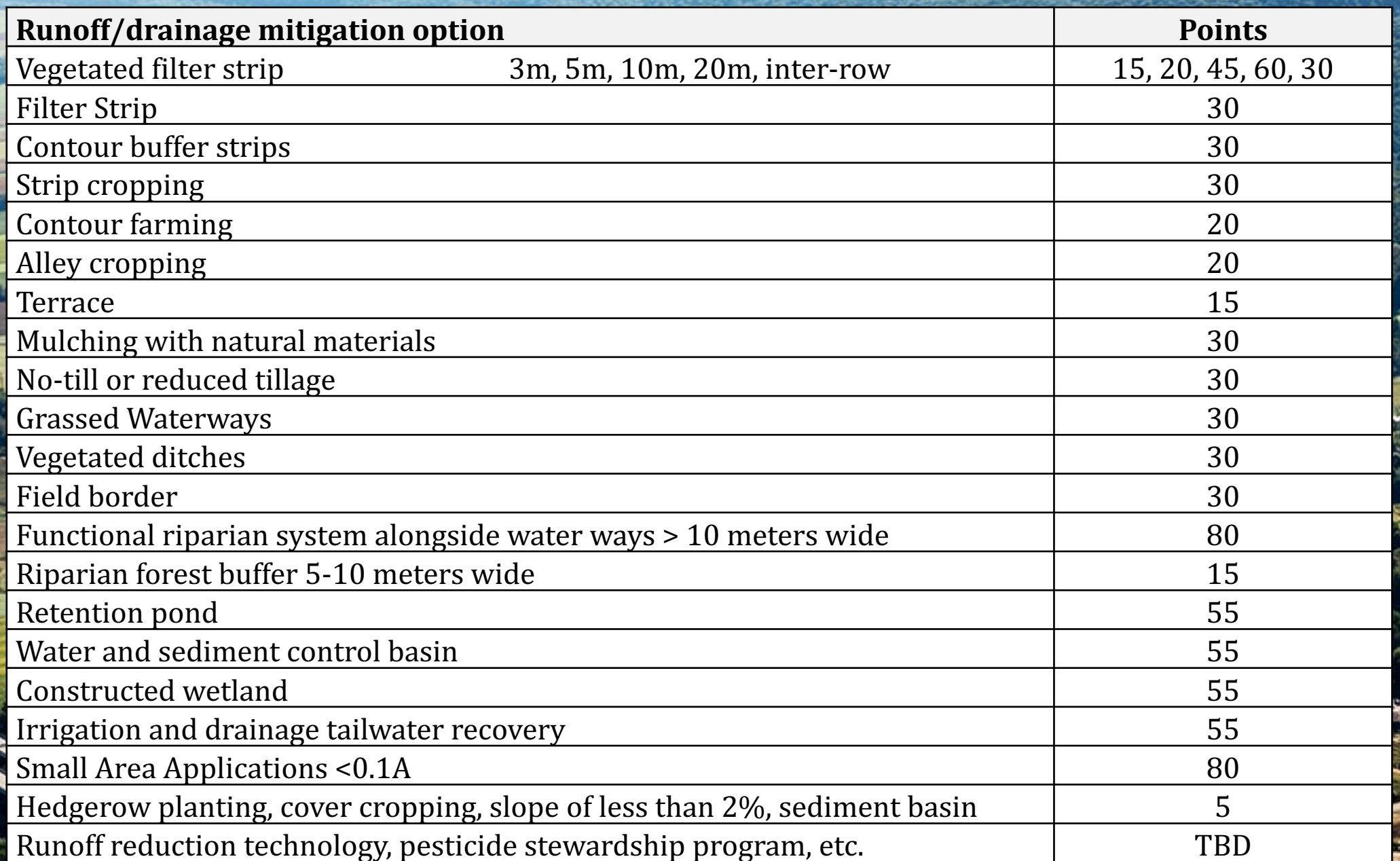
## Drift buffers

- 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

## **Tanya Dobrzynski**

Chief, NMFS Interagency Cooperation Division

[tanya.dobrzynski@noaa.gov](mailto:tanya.dobrzynski@noaa.gov)

### **Pesticide consultation contacts:**

#### **Ryan DeWitt, M.E.S.**

[ryan.dewitt@noaa.gov](mailto:ryan.dewitt@noaa.gov)

#### **Tony Hawkes, Ph.D.**

[tony.hawkes@noaa.gov](mailto:tony.hawkes@noaa.gov)

#### **David Baldwin, Ph.D.**

[david.baldwin@noaa.gov](mailto:david.baldwin@noaa.gov)

