



USFWS National Wetlands Inventory (NWI)

Overview for CBP Wetlands Subcommittee II

Jonathan Phinney PhD, Branch Chief

U.S. Fish and Wildlife Service HQ



NWI. Who we are.

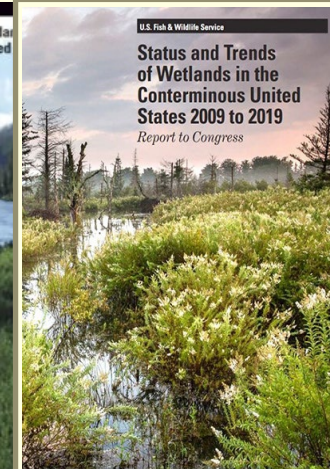
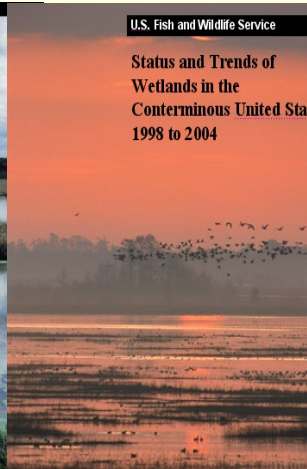
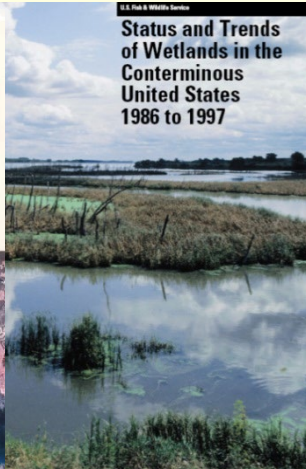
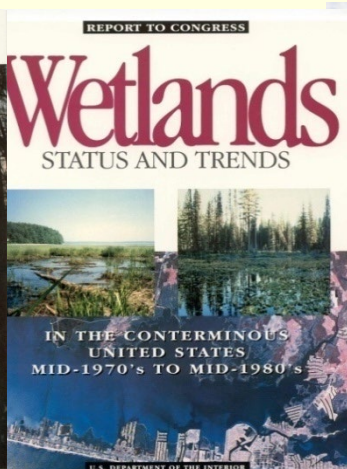
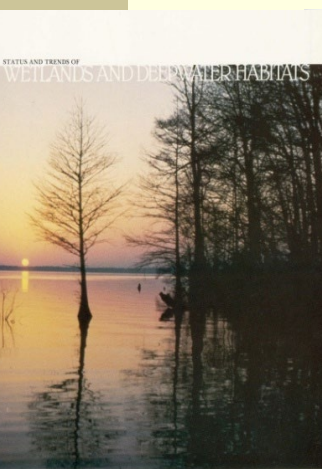
- Staff- 12 FTE's. All report to ES HQ.
 - HQ- Megan Lang (Chief Scientist), Jonathan Phinney B/C
 - Madison, WI Data Center- staff of four (5).
 - Management of the wetlands database and mapper.
 - Ensure data compliance to Federal Geospatial Data Committee (FGDC) wetland mapping and classification standards.
 - Final quality review of incoming data before added to database.
 - Regional Wetland Coordinators (4).
 - Coordination with states and other cooperators on expectations and data production.
 - Manage iterative Quality Control process.
 - Final quality control of data from producers before final quality review by the Madison Office.
 - 2 vacancies



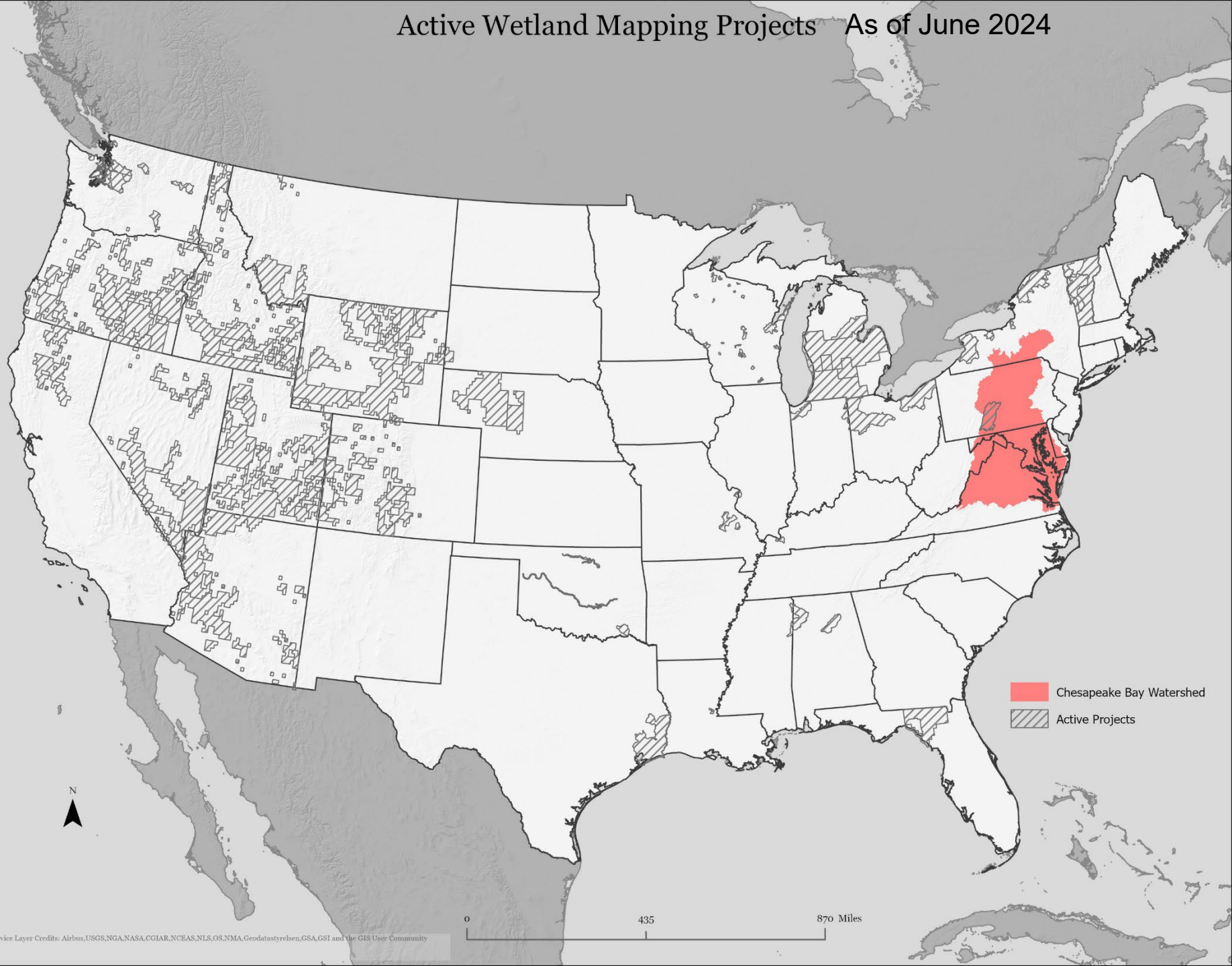
National Wetlands Status and Trends

- ❑ NWI is mandated to provide 10-year reports on the status and trends of the Nation's wetlands to Congress.
- ❑ Yardstick used to quantify policy outcomes and support wetland decision-making, notably the Swampbuster Provision in the 1985 Farm Bill.
- ❑ 6th National Report published 2024 (delayed by Covid).
- ❑ 8 Regional Reports to date- most recently: Coastal Wetlands (2), Prairie Pothole Region (1).

1950s to 1970s 1970s to 1980s 1986 to 1997 1998 to 2004 2004 to 2009 2009 to 2019

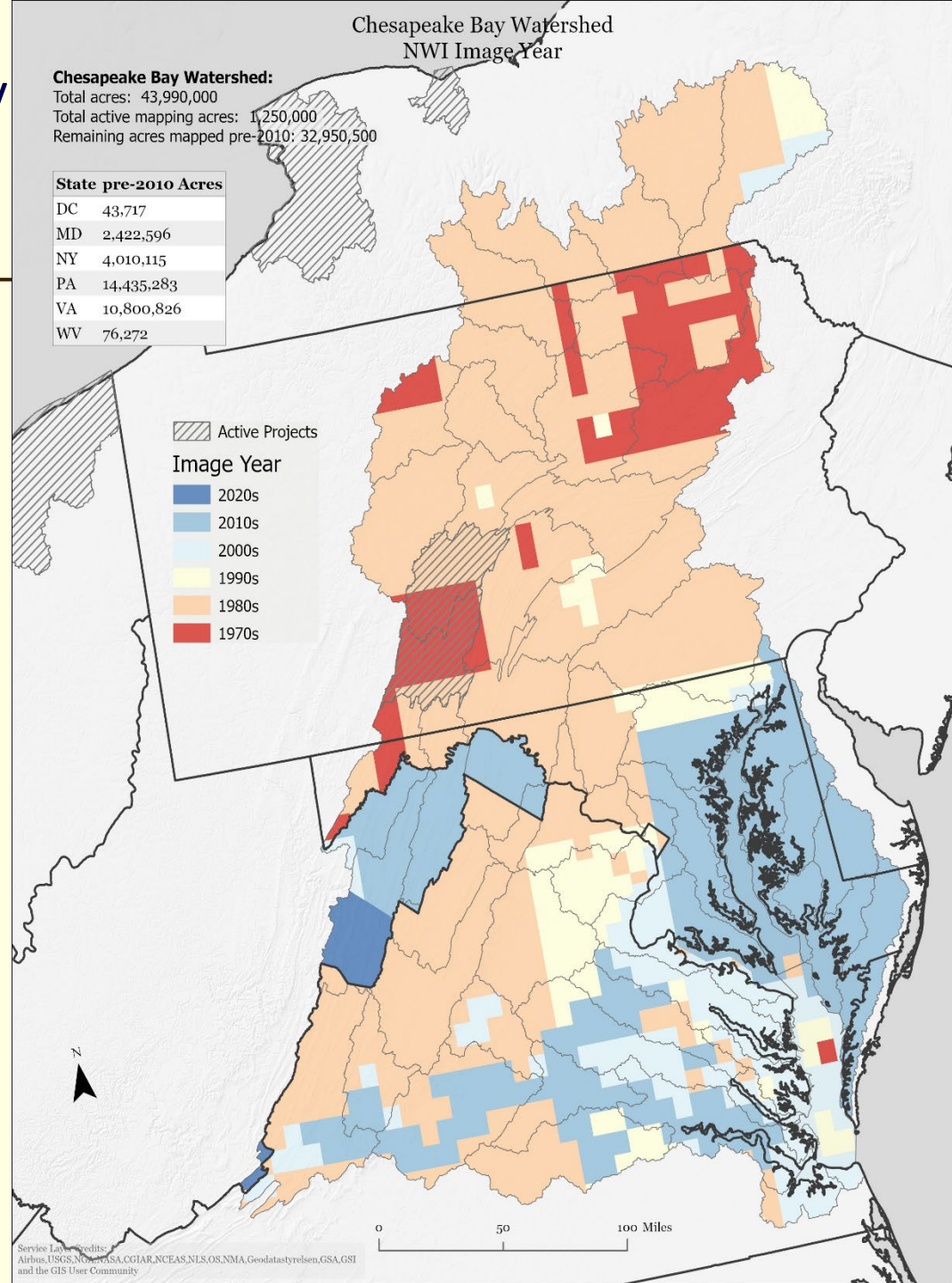


Active Wetland Mapping Projects As of June 2024





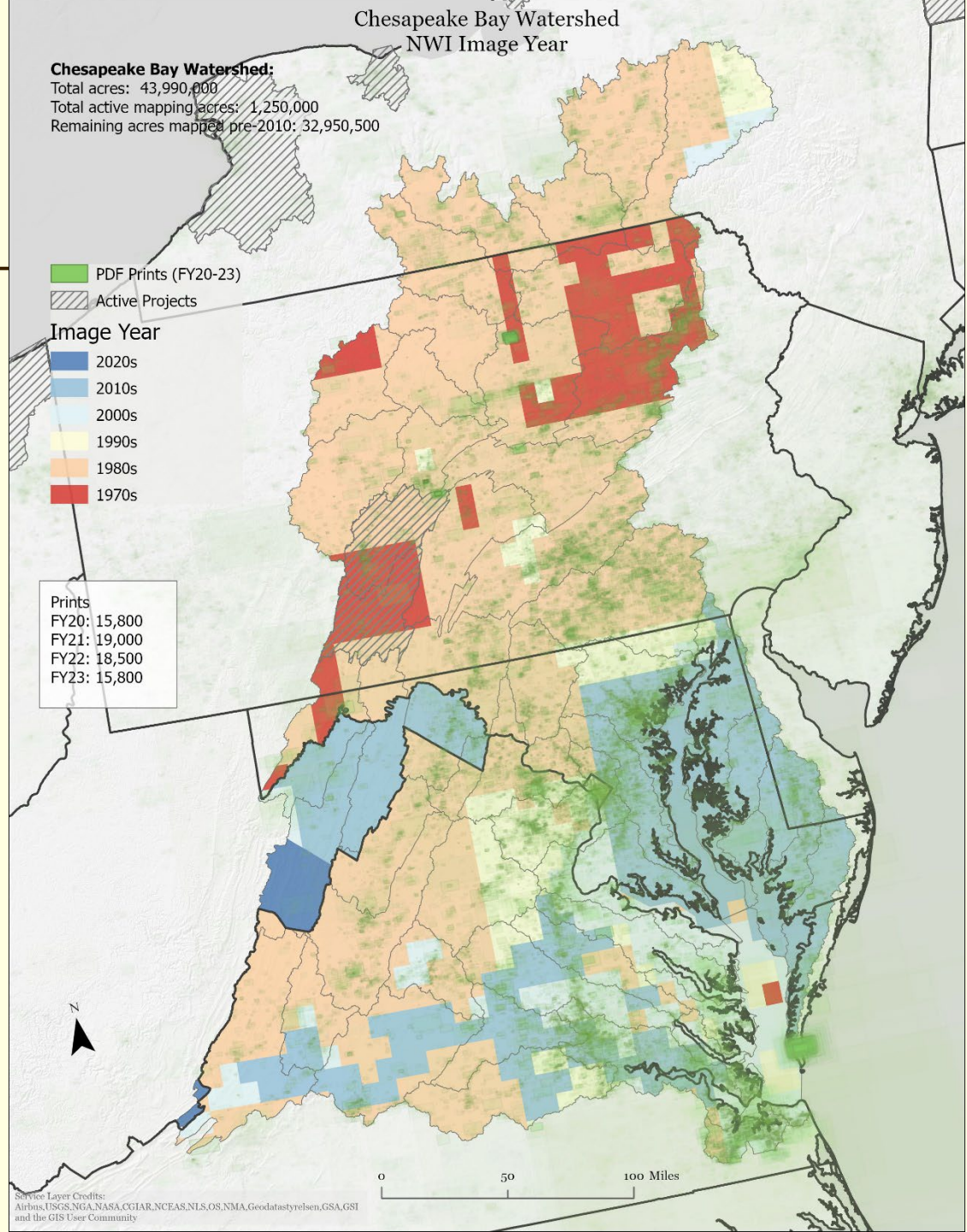
Age of NWI wetland data by decade for the Chesapeake Bay Watershed





Map Prints Downloads

FY20	15,800
FY21	19,000
FY22	18,500
FY23	15,800





Costs and time to update existing Chesapeake Bay wetland data

- Between 8-13 cents per acre depending on wetland density.
 - CB watershed ~44M acres total
 - 6.72M acres >2010 (15%)
 - 3.84M acres actively mapped
 - 33.44M acres pre-2010 (76%)
 - Total = ~\$2.68M - \$4.35M
-
- Estimated 8 -10 years to map the entire watershed (2022 overview)
 - **Closer to 5 years to complete**
- (reference: Ducks Unlimited estimated TN could be mapped in 5 years)



Reasons to update the CB wetlands data

- NWI data <1995 were digitized from paper maps.
 - Georeferencing of wetlands may be problematic.
 - Coarse scale images (e.g. 1:100K vs 1:15K or less today) and poor spectral resolution leads to omission/commission errors.
- NWI data <2010 not mapped to modern standards
 - Consequently, modeling results may be faulty.
- Wetland Functional Assessments (e.g. WQ, flood control, etc) and modeling require NWI baseline data.
- Monitoring wetland change requires contemporary digital data (see DE state Status & Trends report)



U.S. Fish and Wildlife Service
National Wetlands Inventory

NWI data comparison 1989 vs 2009 near V



U.S. Fish and Wildlife Service, National Standards and Support Team,
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Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Questions?

Wetland and Deepwater Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

