



# **Developing the Wetlands Data Layer of the NSDI**

**Thomas Dahl**

**U.S. Fish and Wildlife Service  
Division of Habitat and Resources Conservation**

# National Spatial Data Infrastructure

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- Hydrography, wetlands, and wildlife habitat, vegetation, geology, and bathymetry for offshore areas may be partially collected using imagery and the federal government has a primary responsibility in each of these areas. (FGDC)
- Under the Office of Management and Budget Circular A-16, revised August 19, 2002, responsibility to coordinate **wetlands data** related activities is assigned to the Department of Interior, U.S. Fish and Wildlife Service.

# Wetlands Data Layer

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- The National Spatial Data Infrastructure (NSDI) was envisioned as a way of enhancing the accessibility, communication, and use of geospatial data to support a wide variety of decisions at all levels of society (The National Research Council 1993).

# Wetlands – Cowardin *et al.* 1979

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# Wetlands Data Collection

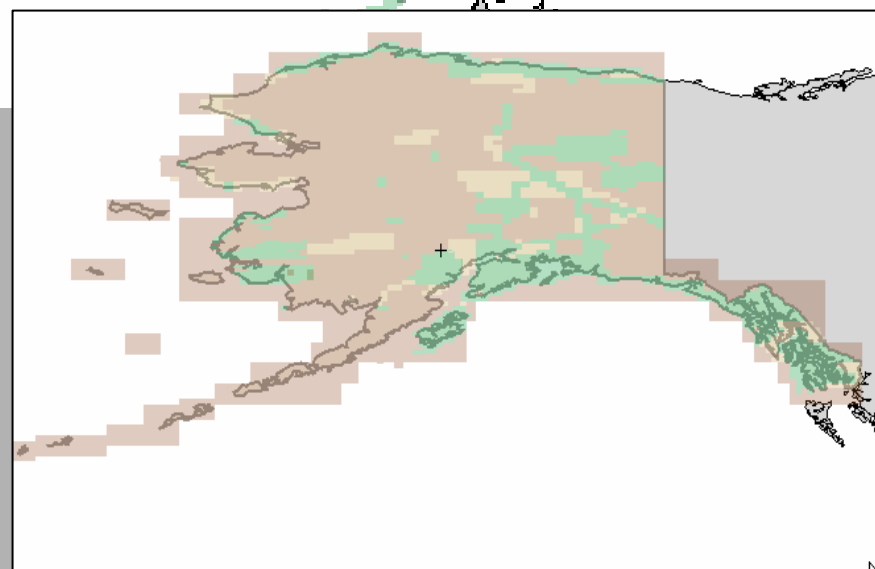
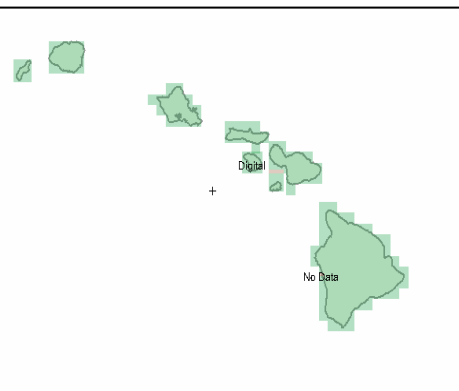
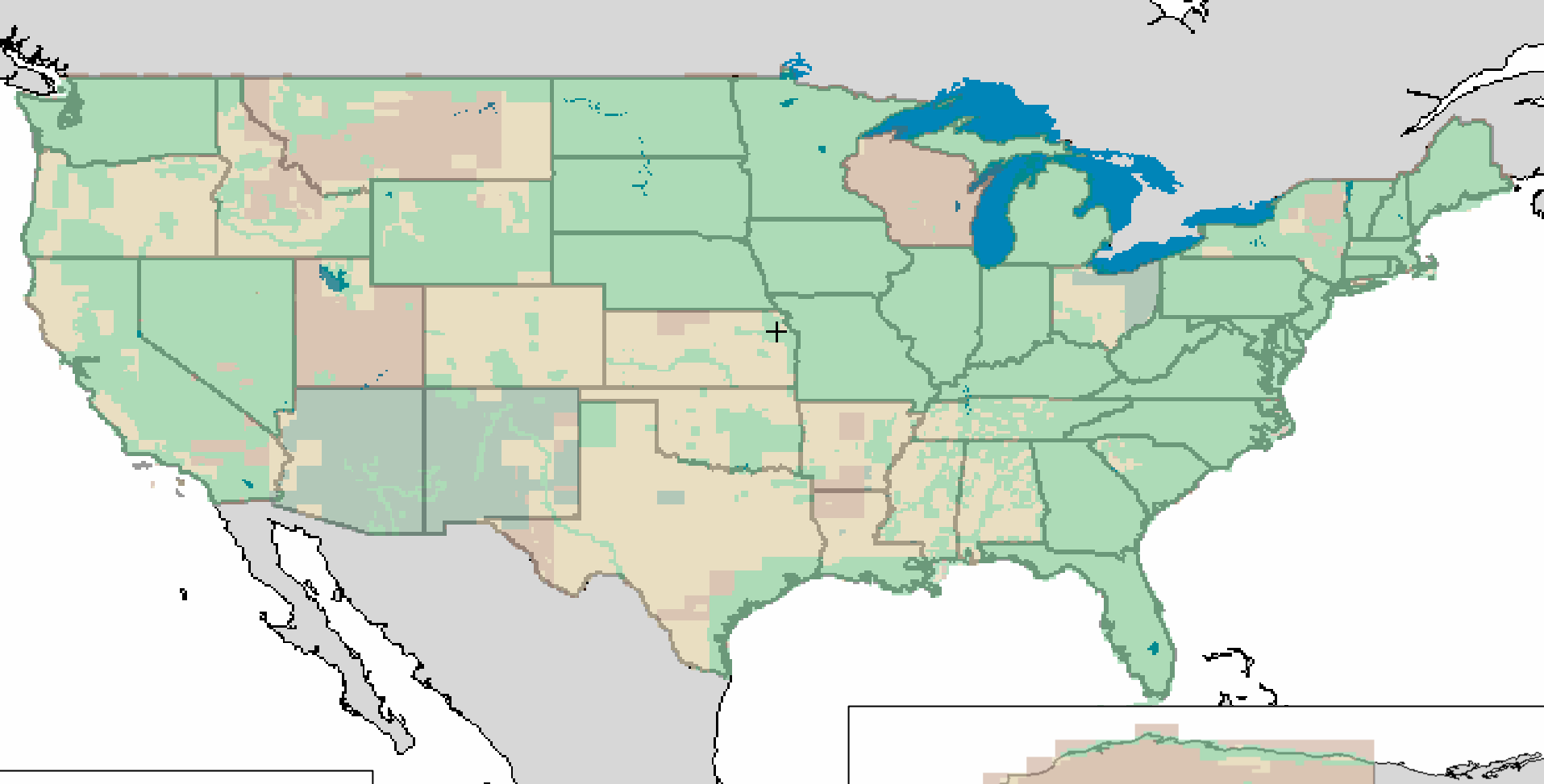
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- FWS has maintained a wetlands mapping effort for 30 years – National Wetlands Inventory
- FWS wetland definition is the FGDC standard
- FWS data form the framework for wetlands spatial data
  - Not all in digital format
  - Dates range 1980s to present

# FWS Wetland Data - Status

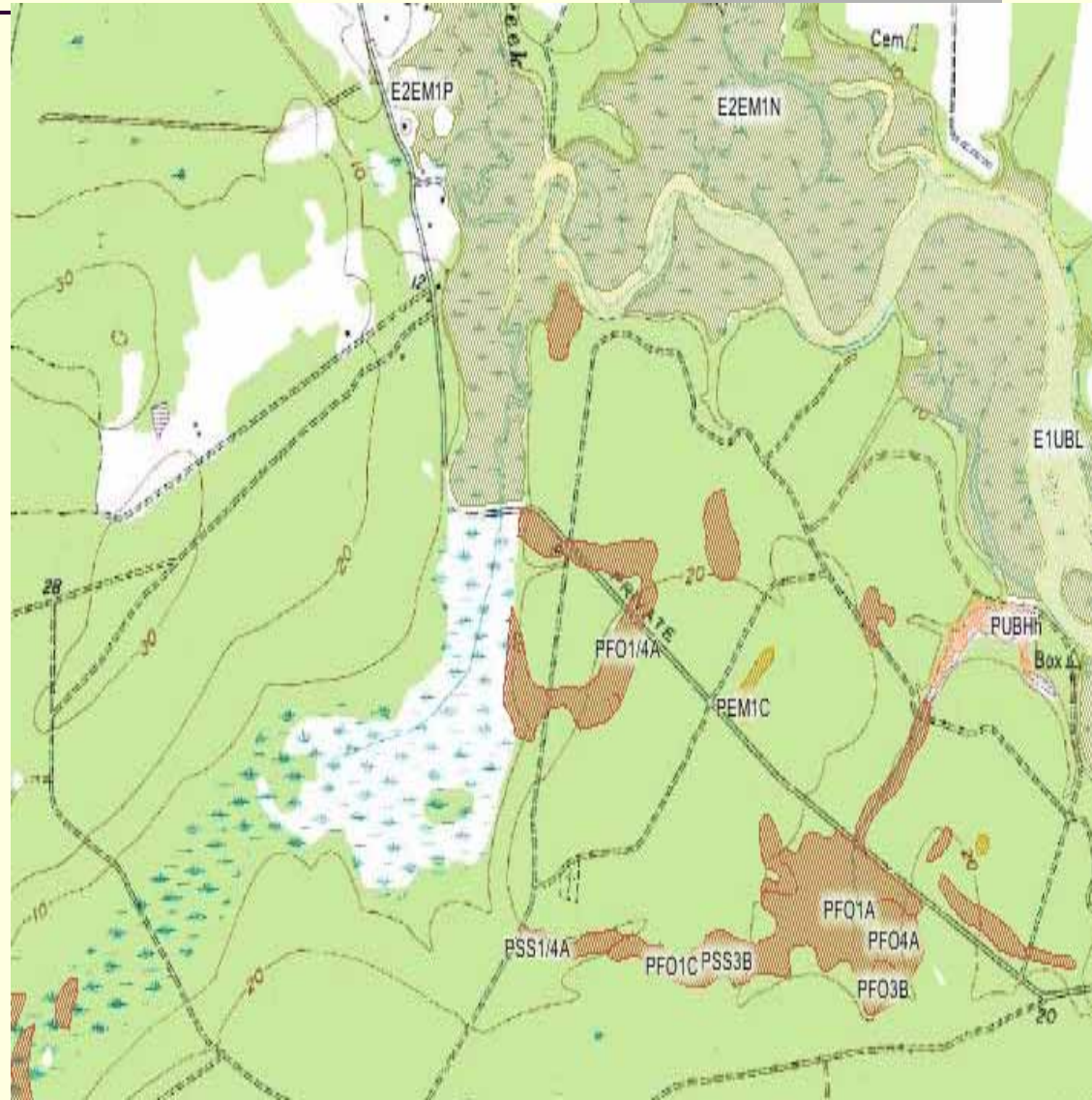
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- Over 30,000 maps in seamless ArcSDE
  - (17 million features, 45 Gigabytes)
  - 58 % of lower 48, 20% of Alaska, 100% Hawaii
- Standardized Format
  - map data in a single standard projection (Albers Equal-Area Conic Projection)
  - horizontal planar units in meters
  - horizontal planar datum – NAD '83
- Data Internet available Wetlands Mapper; ***“The National Map”***
  - WMS, OGC, GOS



# Wetlands Data - Status

The Wetlands dataset is designed to integrate digital map data with other resource information to produce timely and relevant management and decision support tools.





# Defining Data Layer Characteristics

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- National in scope
- Contemporary – technology and content\*
- Metadata compliant (FGDC)\*
- Easily expanded and updated\*
- Consistent, standardized format
- Temporal versions - historic data
- Integrate related geospatial data themes
  - Riparian data
  - Restorable wetland data

# Contemporary Data – technology and content\*

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- About 3.5 % of data mapped from source materials 10 years old or less
- FWS updates about 1 – 2 % per year
- Database increasing in size annually primarily due to existing data being converted to digits
- More/newer data will have to come from other sources

# Wetlands Layer




## National Spatial Data Infrastructure

### FY 2007 Projects

- 1 Salinas Valley
- 2 Houston/Galveston
- 3 Corpus Christi
- 4 Playa Lakes
- 5 Iowa DNR
- 6 Horry County SC
- 7 Jasper County SC
- 8 Mississippi Coast
- 9 Rhode Island Update
- 10 Western Long Island
- 11 Pigg Valley, Virginia
- 12 Shirley Basin, Wyoming
- 13 Rainwater Basin, Nebraska

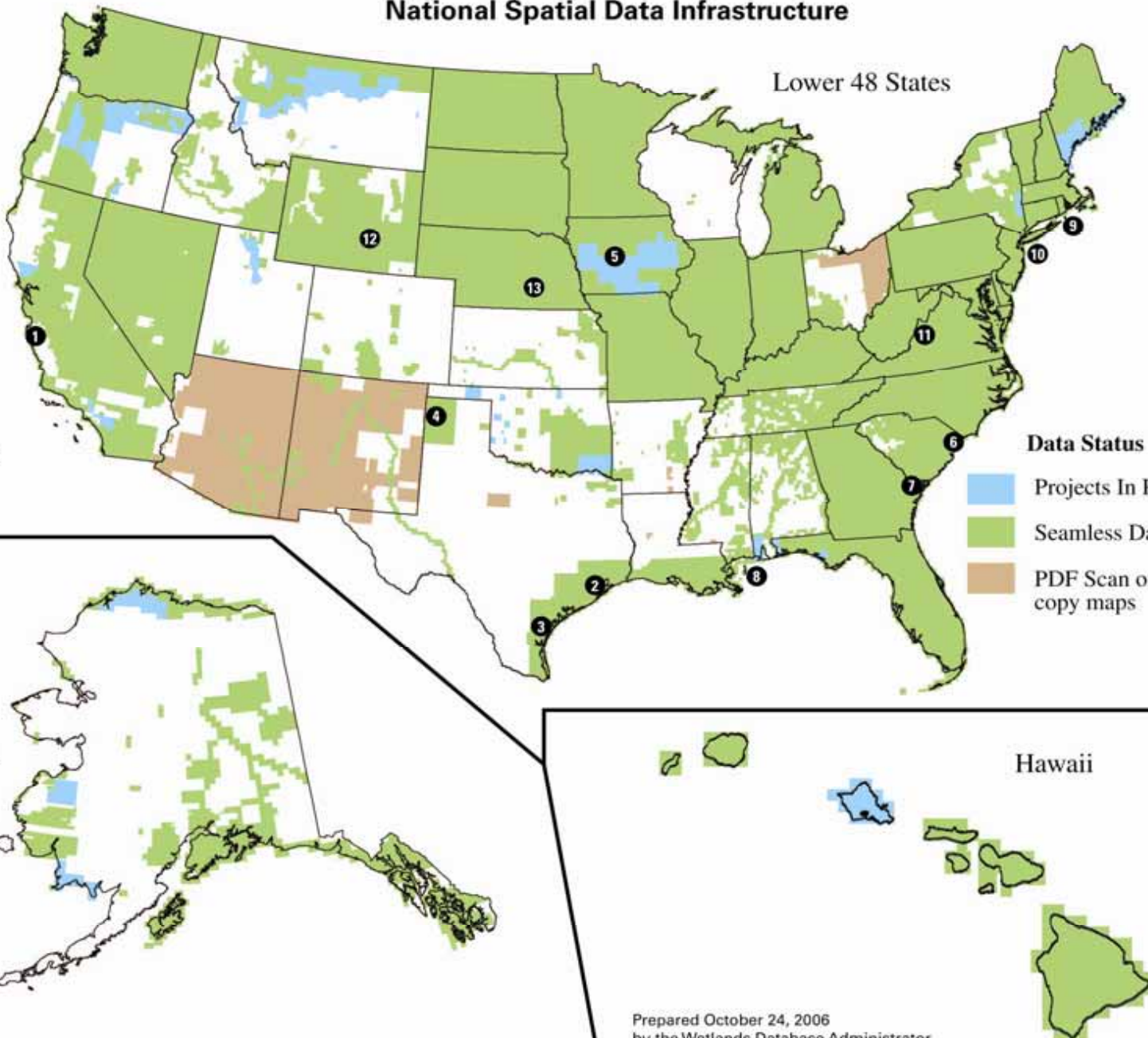
Lower 48 States

### Data Status

-  Projects In Progress
-  Seamless Data
-  PDF Scan of hard-copy maps

Alaska

Hawaii



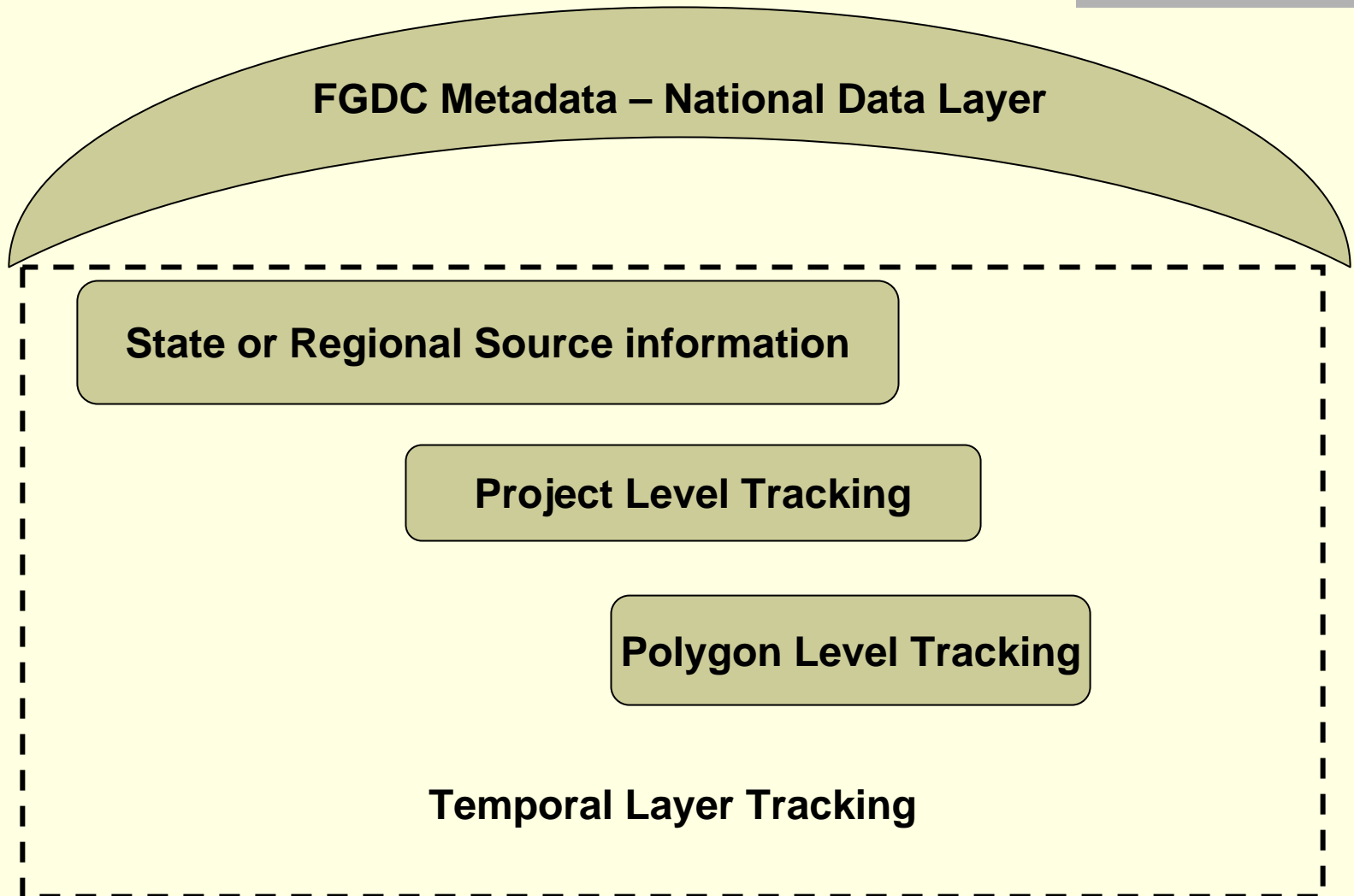
# Metadata\*

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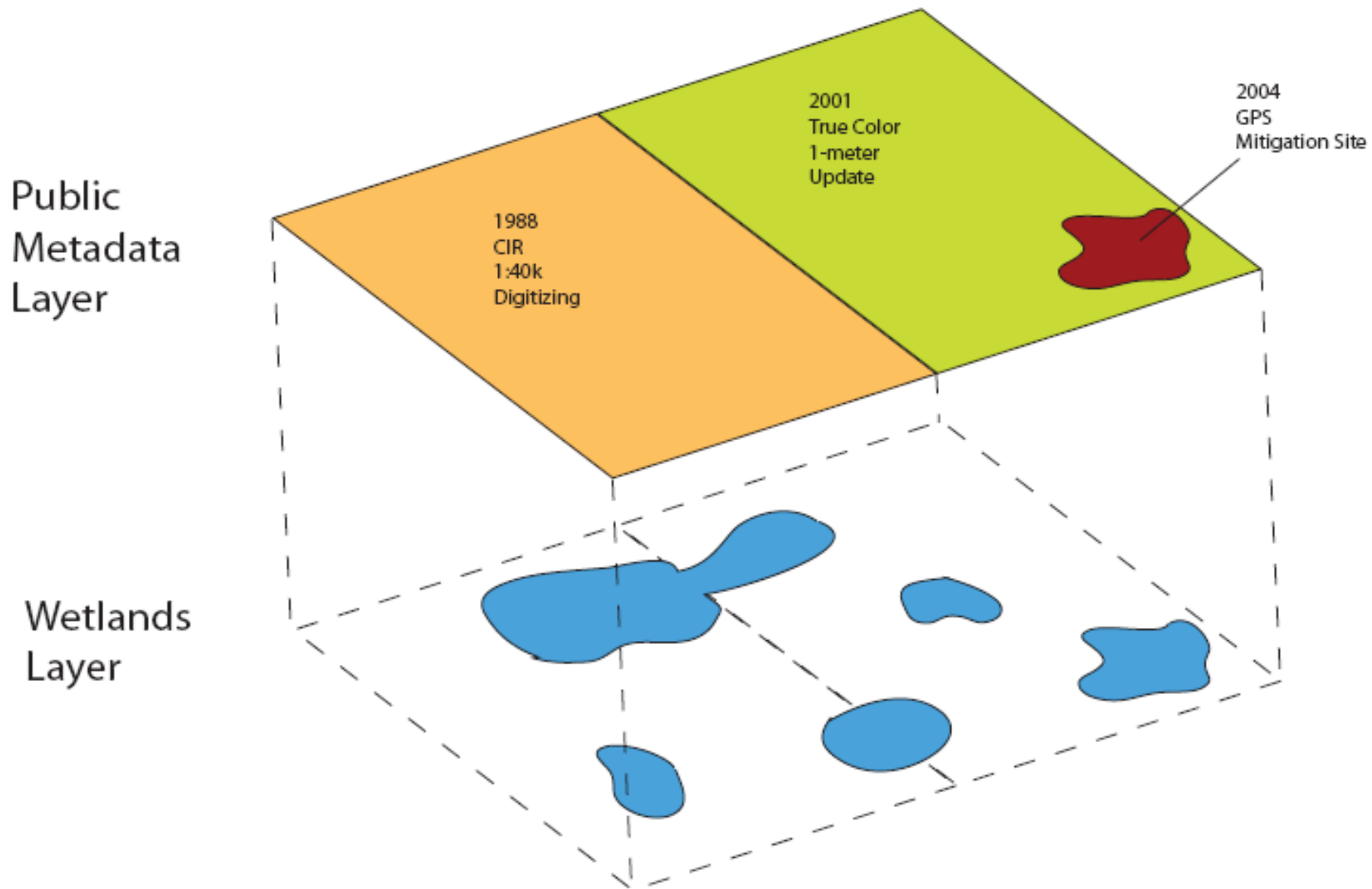
- FGDC metadata formats work well for tracking single data themes
- Producing and tracking multiple data contributors, with overlapping geospatial data at different time frames is a challenge

# Metadata tracking – Wetlands Layer

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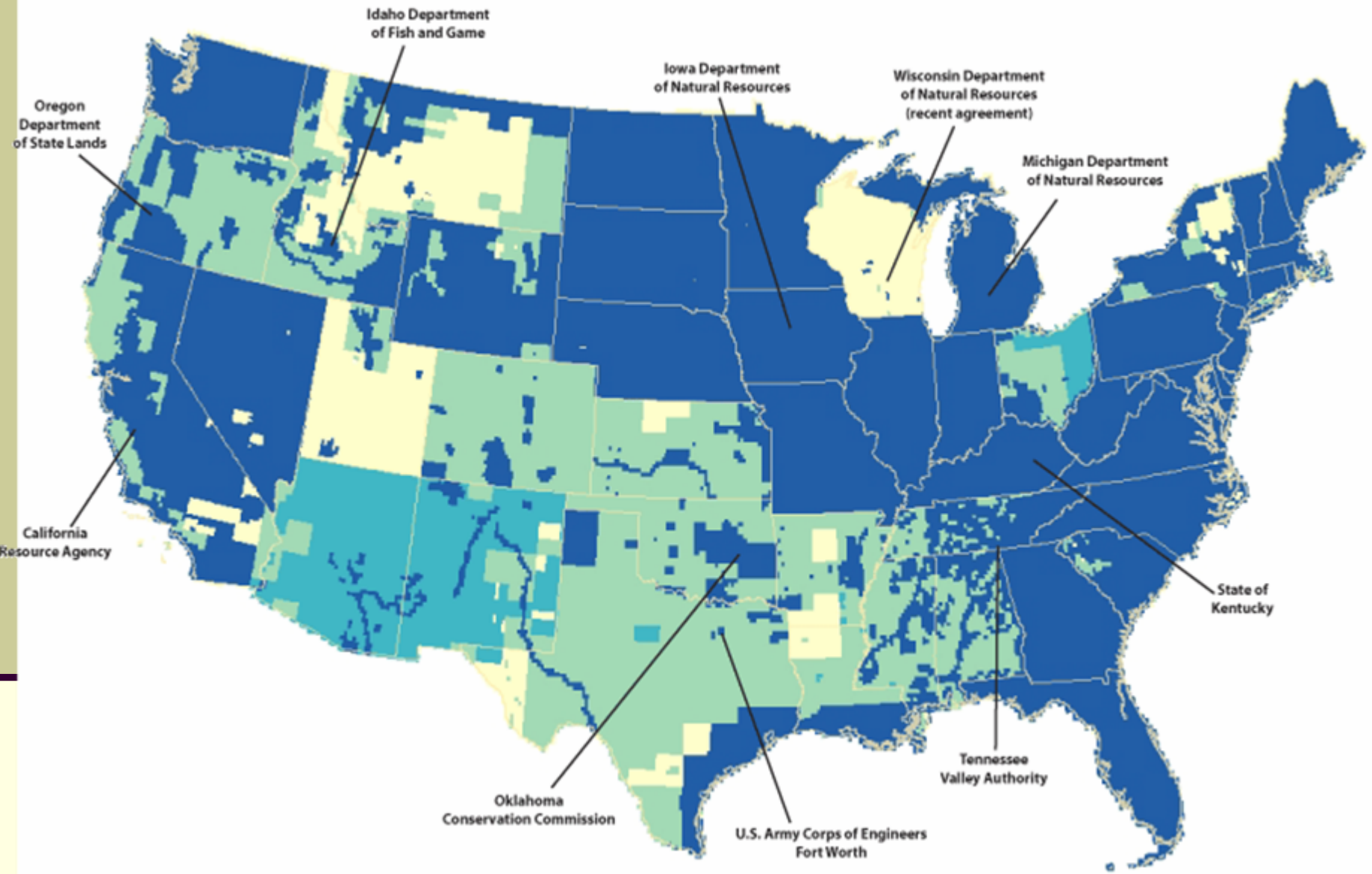
# MGD Wetlands Metadata 'Footprint'



# Easily expanded and updated data layer\*

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- For the federal Framework themes it is clear that local level data will enrich most of the layers of the NSDI (FGDC).
- Contributed data from other sources are vital to maintaining a viable data layer





# Additional data contributors



**U.S. Fish & Wildlife Service**

Branch of Habitat Assessment

## **Wetlands Geodatabase**

*Providing Wetland Information to the American People*

[Wetlands Digital Data](#)

[Wetlands Mapper](#)

[Wetlands data by Quadrangle](#)

[Wetlands Online Mapper](#)

[Wetlands Mapper Homepage](#)

## **Contribute your Data to the Wetlands Master Geodatabase**

### **Introduction**

Organizations or individuals have the opportunity to contribute wetlands data to the wetlands geospatial data layer maintained by the Fish and Wildlife Service. The wetlands data layer is the featured layer on the [Wetlands Mapper](#), forms a catalog component to [The National Map](#) and is registered through the [Geospatial One-Stop](#).

# Summary - Wetlands NSDI

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- FWS is actively developing the Wetlands Layer of NSDI
- Challenges in tracking a quilt-work of data
- Follow NSDI model to collaborate and coordinate with data producers
- Actively seeking data contributions

<http://wetlandfws.er.usgs.gov>