



Developing the Wetlands Data Layer of the NSDI

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Wetlands 2007
Association of State Wetland Managers

National Spatial Data Infrastructure

- 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).

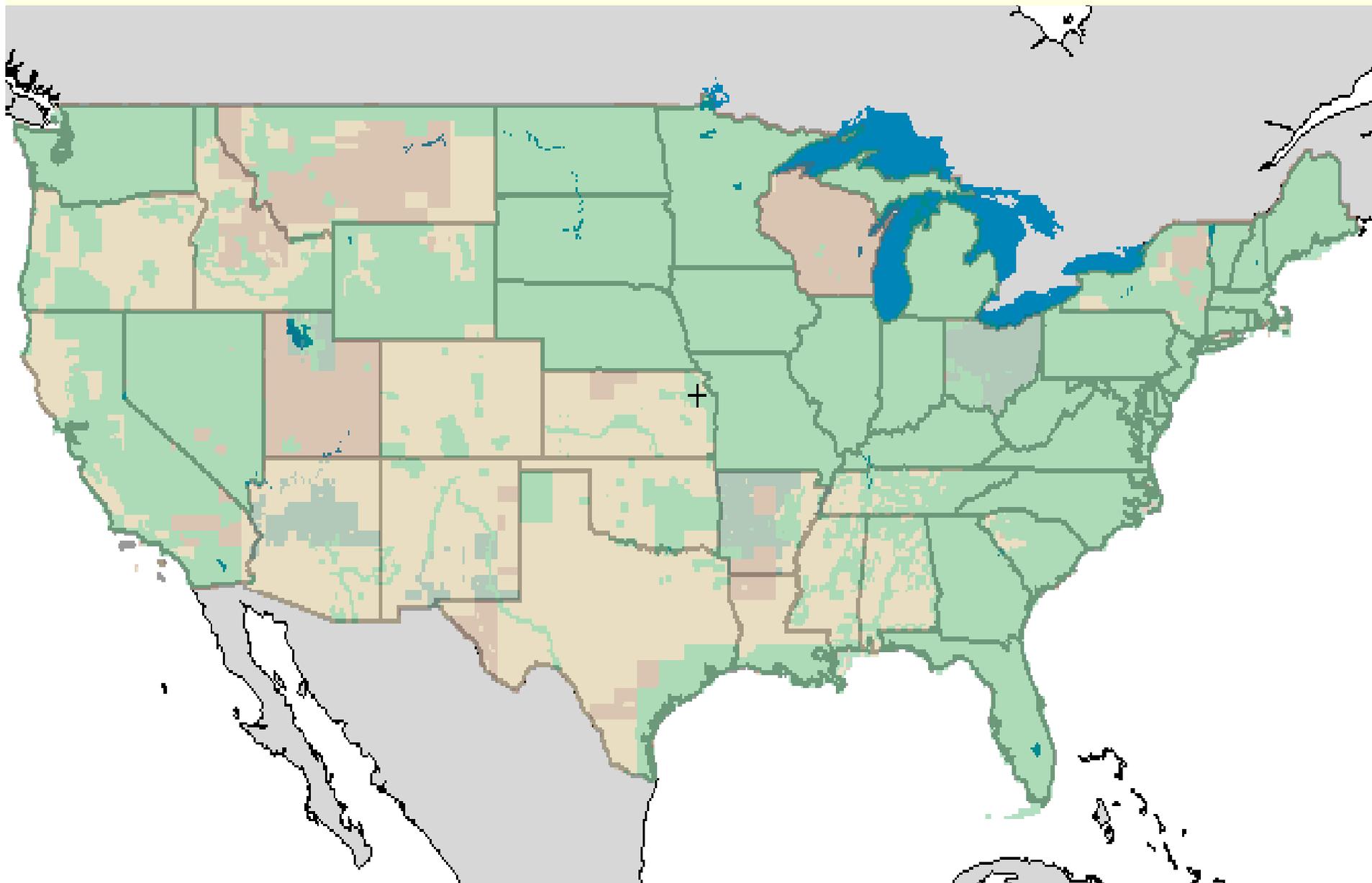
Wetlands Data Layer

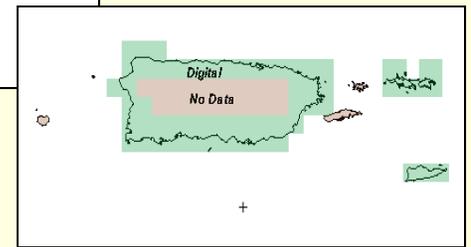
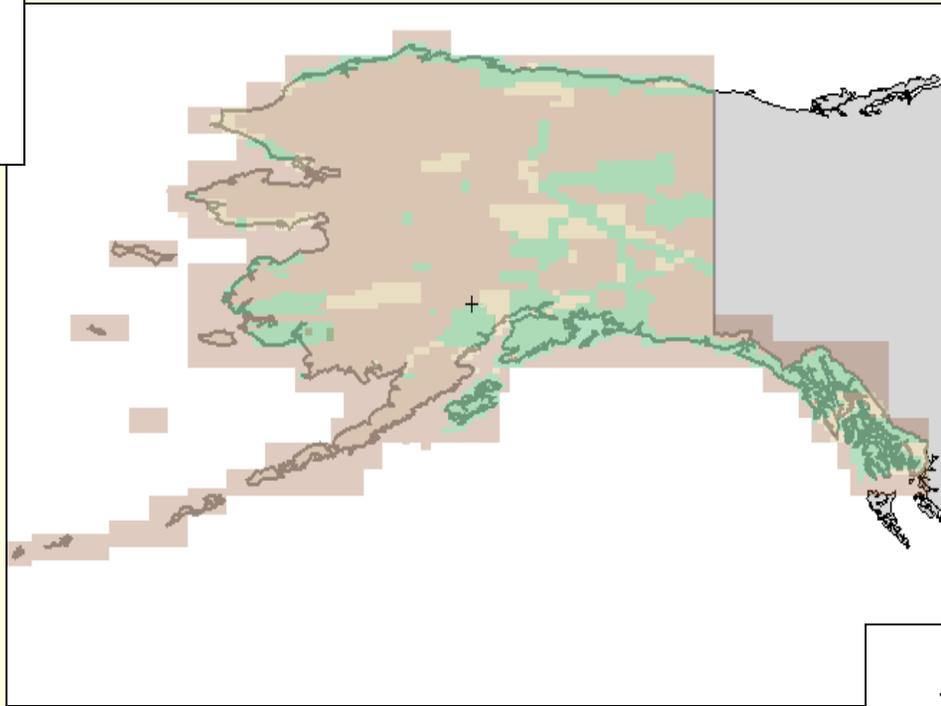
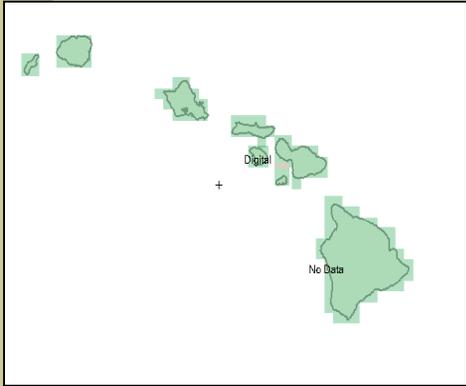
- Under the Office of Management and Budget Circular A-16, revised August 19, 2002, responsibility to coordinate **wetlands data** related activities is assigned to the Department of Interior, U.S. Fish and Wildlife Service.

Wetlands Data Collection

- 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

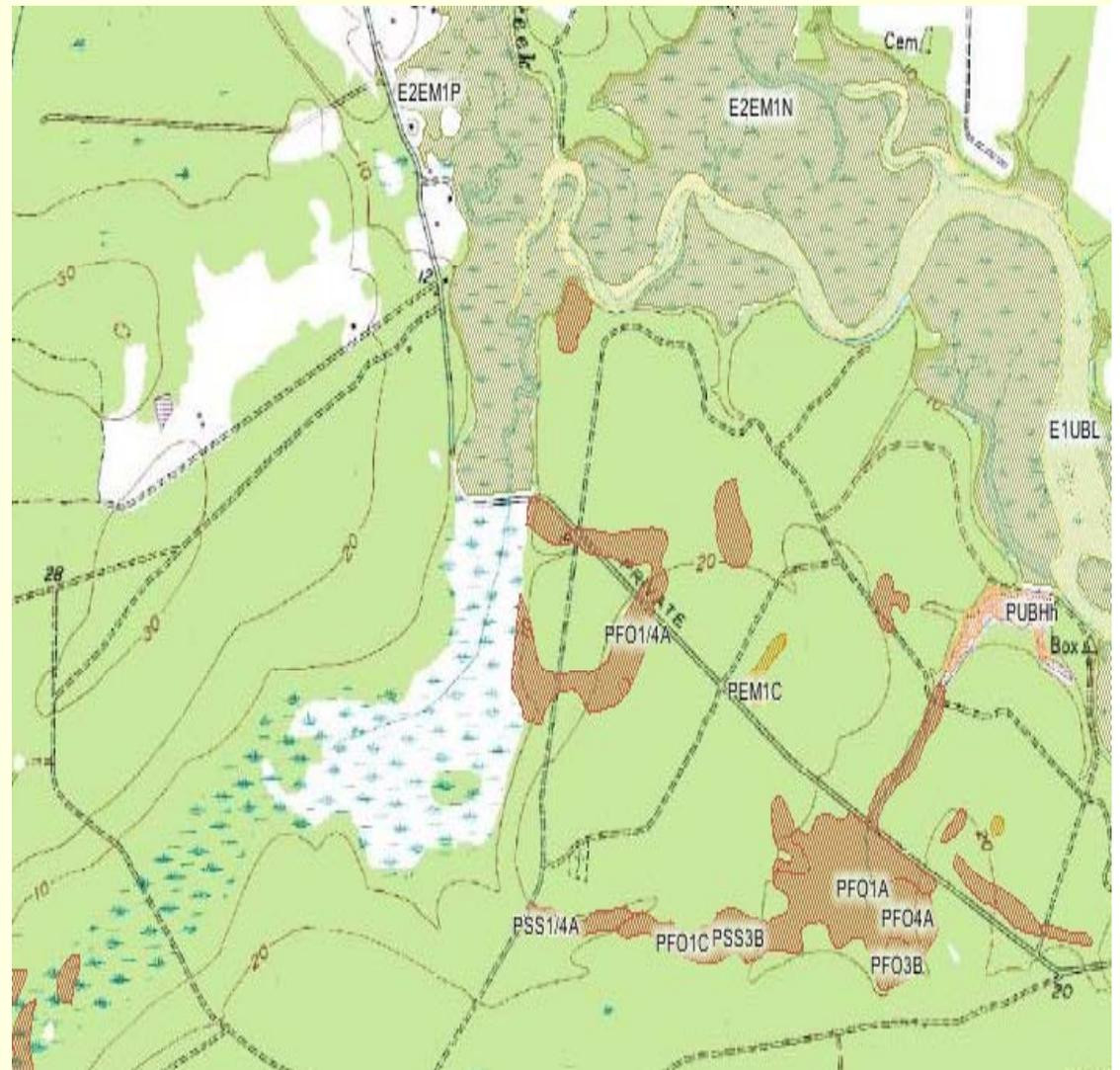
<http://www.fws.gov/wetlands/>





FWS 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.



FWS Wetland Data - Status

- 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 Geodatabase Info.

- <http://wetlandsfws.er.usgs.gov/index.html>



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Branch of Habitat Assessment

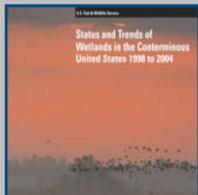
Wetlands Information

Whats New?

[Mapping project metadata and historic map footprint data are now available on the Wetlands Mapper](#)

Now Available!

[The 2005 Status and Trends Report](#)



Wetlands Digital Data and Mapping

Build, search, query, and download custom digital maps in the area you choose using the Wetlands Online Mapper:

[Go to the Wetlands Mapper Home Page](#)

Wetlands Status and Trends



U.S. Fish & Wildlife Service

Wetlands Online Mapper

Metadata

Please select a region

- [The Lower 48 States](#)
- [Alaska](#)
- [Hawaii](#)
- [Puerto Rico and the U.S. Virgin Islands](#)
- [Pacific Trust Islands \(Guam, Saipan\)](#)

For USGS Quad specific metadata please visit the National Wetlands Inventory, [Wetland Metadata and Map Search website at http://www.nwi.fws.gov/metadata.htm](#)

Defining Data Layer Characteristics

- 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
 - Coastal barriers

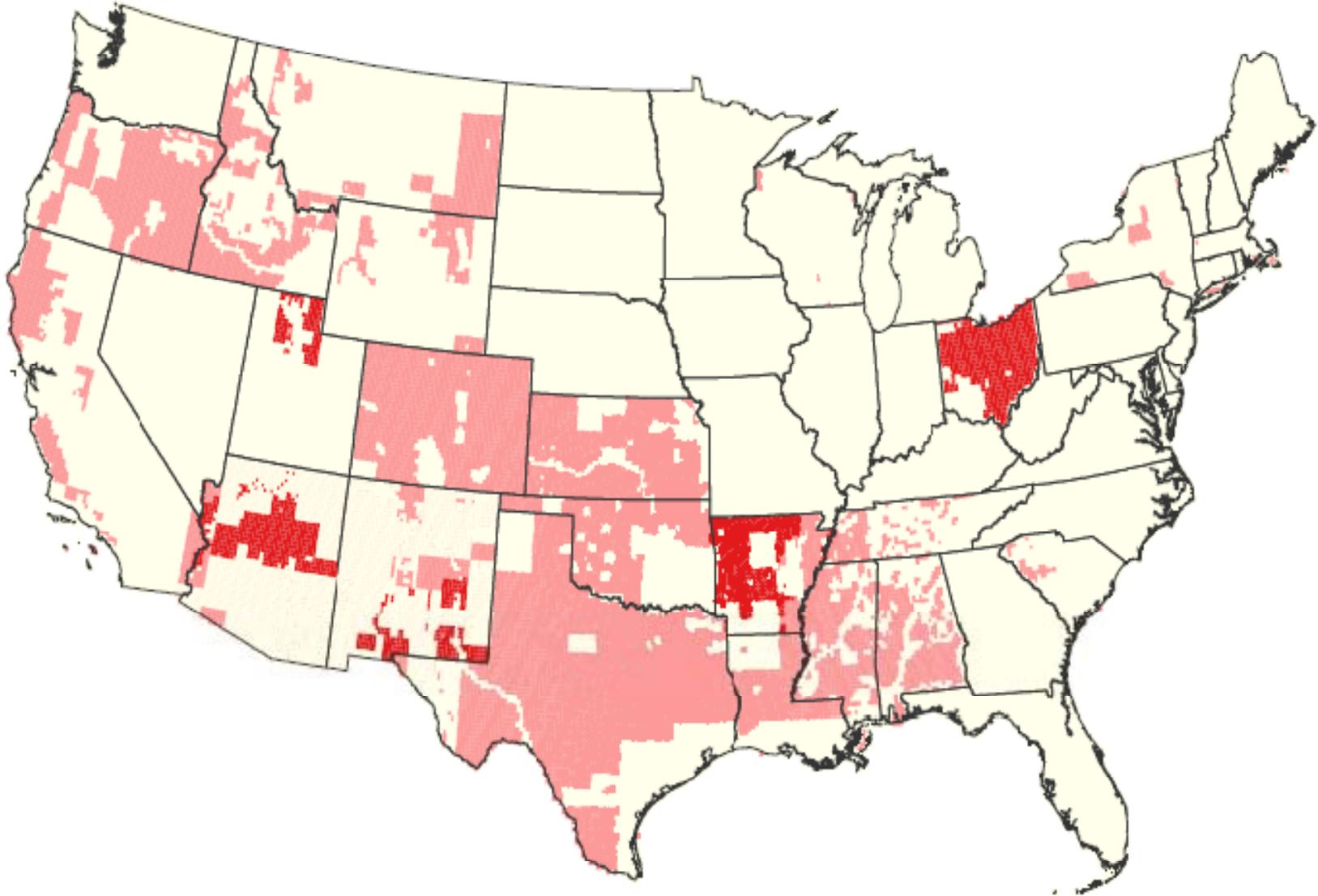
Contemporary Data – technology and content

- 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

Completion of Wetlands Layer

- Lead federal agencies develop and implement a plan for completion of each data theme (OMB)
- FWS Plan will use a tiered approach
 - Incorporation of existing data in various formats
 - Contributed data
 - Cooperator assistance
- Plan must be strategic

Potential Raster Image Files



Contributed Data

- NSDI planning incorporates contributed data
- Contributed data are vital to maintaining a viable data layer
- Contributed wetland data...
 - Contributors anxious to provide data
 - Mapping Standards lend to this effort

Additional Data Contributors



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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](#).

Benefits of Participation

- Recognition of your organization's data as a source of geospatial information
- Common use of your data by resource managers
- Justification for resources to maintain data
- Access to the most comprehensive geospatial data inventory at no cost
- Access to companion, Web-based resource data
 - HGM – type descriptors
 - Wetland Restorations

Contributed Data - Implications

- Challenges in tracking a quilt-work of data (metadata)
- Data handling, verification coordination with data producers
- Retain data integrity and security
- Develop cross-walks where needed
- Acknowledge contributors
- Data stewardship

Implications > Data Considerations

- FWS Standards/FGDC Standards
- Information Quality Guidelines
- OMB Peer Review Requirements
- Sound Science Initiative
- Geospatial Line of Business
- DOI Enterprise Architecture
- DOI IT Security Program
- FWS Database Security Plan

Summary - Wetlands NSDI

- FWS is actively developing the Wetlands Layer of NSDI - preparing plan to complete the data layer by 2010
- Challenges in tracking a quilt-work of data
- Follow NSDI model to collaborate and coordinate with data producers -- Actively seeking data contributions

<http://www.fws.gov/wetlands/>

