



U.S. FISH AND WILDLIFE SERVICE TRANSMITTAL SHEET

PART	SUBJECT	RELEASE NO.
270 FW 1, 2, 4, 6, 7 & 8	ITM Program Management	406
FOR FURTHER INFORMATION CONTACT Division of Information Technology Management		DATE September 30, 2002

EXPLANATION OF MATERIAL TRANSMITTED:

270 FW 1 describes the Fish and Wildlife Service Information Technology Architecture (SITA).

270 FW 2 defines policies for planning and managing investments in information technology and automated information systems.

270 FW 4 establishes policies and procedures for performing management control reviews of automated information systems in the Service.

270 FW 6 defines data management practices and the process for establishing data standards.

270 FW 7 identifies the policies, procedures, and responsibilities that form the basis of the Service's automated information technology (IT) security program.

270 FW 8 states the objectives of the spatial data management program.


Deputy DIRECTOR

FILING INSTRUCTIONS:

Remove:

270 FW 3, 03/08/94, FWM 130 (5 pages)
270 FW 4, 03/08/94, FWM 130 (4 pages)
Illustration 1, 270 FW 4, 03/08/94, FWM 130 (1 page)
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Chapter 8 Geographic Information Systems

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8.1 What is the purpose of this chapter? This chapter states the objectives of the Service's spatial data management program and how Geographic Information System (GIS) technology is used within the Service. It also describes the role of the GIS Steering Committee and general authorities under which it operates.

8.2 To whom does this chapter apply? This chapter applies to all Service offices utilizing GIS technology and spatial data.

8.3 What is our authority for taking this action?

A. Executive Order 12906, Coordinating Geographic Data Acquisition and Access: the National Spatial Data Infrastructure

B. OMB Circular A-16, Coordination of Geographic Information and Related Spatial Data Activities

C. OMB Circular A-130, Management of Federal Information Resources

8.4 What is the Service policy on Geographic Information Systems?

A. GIS technology has a proven track record in assisting resource managers to correlate and analyze large amounts of spatial and tabular data and to make scientifically sound resource management decisions. Its use is encouraged when Service managers need its functionality for data analysis and graphic display, and where field office staff are capable of managing the technology and the automated data. Managers will ensure that GIS data and technology is used within the Service to enhance resource management and administrative activities, through the cost-effective creation and analysis of spatial data with GIS technology. Duplication of effort will be avoided through coordination of projects within the Service and with our partners.

B. Data collections should include a spatial reference whenever possible to facilitate future inclusion of the data in GIS systems, as mandated in the Service Information and Technology Architecture (SITA). See 270 FW 1.

C. Service offices should use the Spatial Data Inventory to simplify their acquisition of data. New data acquired by or created by Service offices for use with GIS should be documented with Federal Geographic Data Committee (FGDC) compliant metadata and added to the Spatial Data Inventory for distribution (where appropriate).

8.5 Who is responsible for implementing the provisions of this chapter?

A. Assistant Directors and Regional Directors are responsible for ensuring that their staffs implement these policies and procedures.

B. The Chief Technology Officer (CTO):

(1) Appoints a chair for the GIS Steering Committee.

(2) Develops policies and procedures for managing automated data and using computer technology, including geospatial data and GIS technology.

C. Regional Directors and Assistant Directors are responsible for:

(1) Designating a representative to the GIS Steering Committee who will be responsible for coordinating the Regional or Program spatial data management program, and serving as liaison with the National GIS Coordinator.

(2) Establishing Regional and Program priorities for spatial data management and use of GIS technology.

D. The National GIS Coordinator is responsible for:

(1) Coordinating with GIS representatives from other Government agencies on GIS activities that cross agency boundaries, such as the Department of the Interior (DOI) High Priority Digital Base Data Program.

(2) Organizing the National FWS GIS Workshop, with assistance from the National Conservation Training Center (NCTC). The workshop is an official NCTC class.

(3) Maintaining tools such as the Service's GIS Internet pages or GIS listserv that enable Service GIS staff to communicate with each other, our partners, and the general public about GIS technology and data

(4) Investigating, and implementing where useful, new tools and technologies for making spatial data more accessible to Service staff and Service partners, such as the implementation of Internet Map Server technology.

(5) Developing and maintaining an inventory of the Service's spatial data holdings, based on consistent metadata standards; determining the best way to share the Spatial Data Inventory with Service staff, partners, and the general public; and facilitating that data access.

(6) Providing a central contact point for any questions on GIS in the Service from the general public, Government agencies, or Service staff.

(7) Managing and updating the GIS Architecture component of SITA and providing assistance in complying with that component.

E. The National GIS Coordinator in cooperation with the GIS Steering Committee is responsible for:

(1) Coordinating spatial data acquisition through commercial sources and partners.

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(2) Coordinating Service investments in GIS initiatives, especially spatial data collection/digitizing.

(3) Facilitating, with data stewards and the National Data Administrator, the formal adoption and implementation of Servicewide spatial data standards.

(4) Updating the National FWS GIS Strategic Plan for use of spatial data and GIS technology within the Service.

(5) Assisting the NCTC to identify GIS training requirements and opportunities that should be included in their GIS curriculum.

(6) Maintaining model configurations and identifying preferred sources, including Government contracts, for GIS software, hardware, and technical support for commercial, off-the-shelf systems.

(7) Identifying and sharing new opportunities for cost-effective use of GIS technology to perform Service tasks.

F. Users of GIS Technology and Geospatial Data are responsible for:

(1) Being familiar with and complying with all aspects of the GIS Architecture component of SITA. These include security, data standards, data accessibility, and a number of other IT mandates.

(2) Creating FGDC compliant metadata for all geospatial data that is created in Service offices and shared outside that office on a public platform such as the Internet or freely distributed CD.

(3) Complying with data related security mandates such as the Freedom of Information Act (FOIA) and the Privacy Act of 1974. See also 270 FW 7 and 282 FW 4.

8.6 What terms do I need to know?

A. Chief Technology Officer (CTO). The official who is responsible for coordinating IT issues on a Servicewide basis and for ensuring that information resources support the Service's strategic missions. The CTO is the Chief of the Division of Information Technology Management - Washington Office.

B. Data Steward. An individual in the Service who is responsible for managing a particular data standard and having a thorough knowledge of the subject matter of the standard. Responsibilities of stewards are defined in 270 FW 6.

C. Federal Geographic Data Committee (FGDC). A Federal level committee mandated by OMB Circular A-16 to oversee data standards at the Federal level, and to implement the National Spatial Data Infrastructure (NSDI).

D. Geographic Information System (GIS). A computerized system for analyzing and displaying map-related information (spatial data).

E. GIS Steering Committee. Established in accordance with 105 FW 1 to guide and coordinate map-related activities that cut across the organizational lines of responsibility in the Service. It includes representatives from each Region and each national Program within the Service. Regional GIS Coordinators and Regional GIS committees, where they exist, can also utilize the GIS Steering Committee and the National GIS Coordinator to facilitate cross program and cross Region cooperation.

F. Information Technology (IT). Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. Typically, IT includes hardware and software pertaining to computers, telecommunications, networks, and radio equipment.

G. Metadata. Data about the content, quality, condition, and other characteristics of data, comparable to the information in the card catalog describing books in the local library. Metadata are used in the implementation of the NSDI and other clearinghouses to document the quality, history, and availability of data. The creation of metadata and the format used are mandated by Executive Order 12906 and the FGDC Geospatial Metadata Standard.

H. National Data Administrator. A position in the Division of ITM-WO responsible for managing the process for adoption of Servicewide data standards, for maintaining the repository of such standards, and for coordinating data administration activities with data stewards.

I. National GIS Coordinator. A position in the Division of ITM-WO responsible for chairing the GIS Steering Committee, coordinating GIS activities with other Federal agencies, maintaining the Service's GIS and spatial data information on the Internet, and providing a central point of contact for GIS-related topics in the Service.

J. National Spatial Data Infrastructure (NSDI). A clearinghouse mandated by OMB Circular A-16 for the discovery and sharing of spatial data on the Internet, designed to reduce duplication of effort, to speed data access, and to distribute spatial data collected by Federal agencies to the public.

K. Service Information and Technology Architecture (SITA). The set of Service standards, policies, and procedures that align IT with the Service's mission and goals and guide information system owners and developers so they know the IT infrastructure that is supported in the Service. See 270 FW 1.

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L. Spatial data. Data that are, or can be, tied to a specific geographic location on the earth. It is synonymous with geospatial data.

M. Spatial Data Inventory. Refers to the Service's implementation of the NSDI. It is linked on the Service's GIS homepage on the Internet.