

Geospatial Services

Supporting the Mission

Geospatial data and services are critical elements needed to meet the mission of the U.S. Fish and Wildlife Service.

Geographic Information Systems (GIS), Global Positioning Systems (GPS), and remote sensing are the primary elements which fall under the geospatial data and services umbrella. Geospatial services provide the technology to create, analyze, maintain, and distribute geospatial data and information. GIS, GPS and remote sensing play a vital role in all of the Service's long-term goals, including analyzing and quantifying the USFWS Operational Plan Measures.

Ways that critical FWS Programs/ Functions use Geospatial Services include:

Endangered Species and Fisheries & Habitat Conservation

- Monitor the extent and status of wetlands for management, research, policy development, education, and planning through the National Wetland Inventory
- Perform Natural Resources Damage Assessments including evaluating exposure of trust species to toxic spills
- Propose, designate and inform the public about critical habitat for threatened & endangered (T&E) species and deliver official species lists and Section 7 consultations
- Provide information about sensitive resources (T&E species, Refuges, critical habitat) within the vicinity of a proposed project
- Conduct large-scale, multidisciplinary, multi-species analysis for habitat conservation and landscape conservation planning and restoration
- Improve fish passage and model the effects of barrier removal



Migratory Bird Conservation

- Conduct bird surveys: survey design, navigation GPS files for pilots, and spatially referenced survey data
- Assess habitat conditions and monitor habitat improvement projects in joint ventures
- Conduct research on relationships between bird abundance/productivity and habitat quantity and quality, and migration movement patterns

National Wildlife Refuge System

- Develop alternatives for Comprehensive Conservation Plans and support Refuge operational activities including asset management, law enforcement, water resources, and fire management
- Map realty transactions and landstatus of FWS properties and proposed expansions
- Analyze strategic growth and land acquisition planning opportunities for the Refuge system

 Conduct biological surveys and manage data including inventory and monitoring, and invasive species control, and Habitat Management Plans

Landscape Conservation Cooperatives

- Evaluate, plan, and implement Strategic Habitat Conservation and adaptive management at the landscape level
- Perform biological planning, conservation design and delivery, monitoring and research for climate change and other stressors at the landscape level

Contact Information: US FWS GIS Coordinator: Chris Lett FWS/IRTM/BDSS, Denver, CO Phone: 303-275-2348 Email: chris lett@fws.gov

http://www.fws.gov/gis

March 2011