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Information Resources and Technology Management Strategic Plan

U.S. Fish and Wildlife Service

Department of the Interior

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Executive Summary

Beginning in 2000, with the establishment of the E-Government component of the President's Management Agenda, OMB began to promote government-wide IT system modernization and consolidation. It became increasingly clear that the Department of the Interior (Department or DOI) and the U.S. Fish and Wildlife Service (Service) needed an effective governance structure to direct information technology (IT) investments in support of management objectives and coordinate them with activities at higher levels in the Federal government.

Thus, the Department and all DOI Bureaus are developing enterprise architectures to guide future investments and facilitate the integration and coordination of IT systems among all DOI Bureaus. DOI is actively promoting improvement of IT capital planning and investment control, security, and project management to improve the performance, efficiency, and effectiveness of IT Department-wide. DOI has initiated several major initiatives to consolidate, standardize, and integrate information technology and operations across the Department.

Since the last Service IT Strategic Plan of 1997, new customer demands, laws, technologies, and challenges have emerged that drive the need to update the plan. The Service faces significant funding, staffing, technological, communication, and business management challenges. Unresolved, these challenges could result in difficulties operating, maintaining and modernizing existing systems; implementing new Departmental and Government-wide systems; and improving IT program management. This plan is intended to help address those challenges through a comprehensive set of information resource and technology management (IRTM) activities for the Service. Due to the rapidly changing nature of IT, this plan will be re-evaluated on an annual basis to determine the need for additional updates in the future.

Our vision is to provide secure, efficient, and effective information resources, technology, and support for employees, customers, and partners to use in fulfilling the Service's mission. This plan is intended to guide future management of information resources and technology to ensure that this vision is fulfilled to the maximum extent possible. The plan attempts to strike balances between:

-- the need for local flexibility, autonomy, and creativity versus potential efficiencies that could be gained from standardization, centralization, and consolidation;
-- focusing on customer and employee needs versus complying with external requirements and directions;
-- reducing costs versus providing the best services possible; and
-- minimizing administrative process burdens versus ensuring adequate management controls and accountability.

All of these tradeoffs must be accomplished within the limitations of available resources – staff, funding, and infrastructure.

Successfully managing information resources and technology is one key to accomplishing the U.S. Fish and Wildlife Service's mission and goals. Information resources and technology can enable us to provide goods and services to our customers, partners, and employees better, faster, and cheaper. To leverage this productive potential, the Service needs to change the way it acquires and manages these assets. The primary focus of this strategic plan is to provide a

roadmap to better management and delivery of information services. The Service's IT systems, including Interior-wide and Government-wide systems used by the Service, need to be integrated and share data with each other more than in the past.

Information resources and technology is not an end unto itself; it is a means to achieve the Service's mission goals. An effective strategic plan must ensure that cost-effective, integrated solutions are tied to mission support and service to internal and external customers. Much of the work to implement this plan will be done by technical staff. However, it is important for all managers, supervisors, and employees, at all levels of the Service, to implement the parts of the plan that involve or affect them for the Service to gain the maximum benefit from its information resource and technology investments.

PART ONE – Mission and Background

1.0 Service Mission

The U.S. Fish and Wildlife Service (Service) is a Bureau within the Department of the Interior (Department or DOI) whose mission is working with others to conserve, protect and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

1.1 Background Information about the U.S. Fish and Wildlife Service

Although a relative newcomer to the Department, the Service's programs are among the oldest in the world dedicated to natural resource conservation. The Service traces its origins to the U.S. Commission on Fish and Fisheries in the Department of Commerce and the Division of Economic Ornithology and Mammalogy in the Department of Agriculture.

The Service manages the 96 million-acre National Wildlife Refuge System of more than 545 National Wildlife Refuges and thousands of small wetlands and other special management areas. It also operates 69 National Fish Hatcheries, one historic National Fish Hatchery, 64 fishery offices, and 78 ecological services field stations under the Endangered Species and Fisheries and Habitat Conservation programs.

Among its key functions, the Service enforces Federal wildlife laws, protects endangered species, manages migratory birds, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, and helps foreign governments with their international conservation efforts. It also oversees the Federal Assistance program that administers hundreds of millions of dollars from fuel taxes and excise taxes on fishing and hunting equipment and distributes the funds to State fish and wildlife agencies in the form of grants.

The vast majority of fish and wildlife habitat in the United States is located on non-Federal lands. Cooperative partnerships, such as Partners for Fish and Wildlife, Partners in Flight, Sport Fishing and Boating Partnership Council, Joint Ventures and other partnership activities, are the primary mechanisms for assisting voluntary habitat development on private lands and fostering aquatic conservation.

The Service employs approximately 9,500 people at facilities across the U.S. The Service is a decentralized organization with a headquarters office in Washington, D.C., seven regional offices, and nearly 700 field units.

1.2 The Information Resources and Technology Management Mission

The Information Resources and Technology Management (IRTM) program, along with the Directorate, is responsible for maintaining and enhancing management of the Service's information resources and technology, providing customer support, and developing policies, procedures, and guidance in support of the Service's mission.

1.3 The IRTM Vision

We will provide secure, efficient, and effective information resources, technology, and support for our employees, customers, and partners to use in fulfilling the Service's mission.

This plan is intended to guide future management of information resources and technology in the Service to ensure that this vision is fulfilled to the maximum extent possible. This plan attempts to strike balances between:

- the need for local flexibility, autonomy, and creativity versus potential efficiencies and effectiveness from standardization and consolidation;
- focusing on customer service and employee needs versus complying with external requirements and directions;
- reducing the total costs of ownership versus providing the best services possible;
- minimizing the burden of administrative processes versus ensuring adequate management controls and accountability; and
- coordinating within the IT community and involving management in IT decisions.

All of these tradeoffs must be accomplished within the limitations of available resources – staff, funding, and infrastructure.

1.4 The Need for IRTM Strategic Planning in the Service

Beginning in 2000, with the establishment of the E-Government component of the President's Management Agenda, the Office of Management and Budget (OMB) began to promote government-wide IT system modernization and consolidation. As a result, DOI initiated a number of major IT projects to modernize and consolidate multiple Bureau systems into single, consolidated Department-wide "enterprise" solutions. It became increasingly clear that the Service needed an effective governance structure to direct IT investments in support of management objectives and to coordinate them with activities at higher levels in the Federal government.

In order to leverage the productive potential of information resources and technology, the Service needs to change the way it acquires and manages these assets. The primary focus of this strategic plan is to provide a roadmap to better management and delivery of information services. Our IT systems, including Interior-wide and Government-wide systems that the Service will use, need to be better planned and designed to integrate and share data with each other. IT is not an end unto itself; it is only a means to achieve the Service's mission goals. An effective strategic IT plan must ensure that cost effective integrated IT solutions will be tied to mission support.

This plan will enable the Service to meet several Departmental directives. Secretarial Order #3244, "Standardization of Information Technology Functions and Establishment of Funding Authorities" says bureau CIO organizations are responsible for strategic planning including development and redesign of the organizations IT work processes. The Department's E-Government (E-Gov) Strategy requires each bureau and office to develop its own E-Gov Strategy and Tactical Plan to:

- drive business process engineering and management of IT resources,
- use E-Gov performance metrics as an effective management tool,

- work collaboratively with other bureaus to analyze business processes and plan enterprise or cross-cutting initiatives, and
- reengineer mission critical business processes.

Implementation of this plan will enable the Service to fulfill those requirements. While other programmatic plans may contain parts or aspects of information resources and technology management, this plan is needed to provide a comprehensive portrayal of planned IRTM actions across all programs and offices in one document. A glossary of the terms used in this strategic plan is provided in Appendix A.

1.5 Legislative and Regulatory Background

While there are many other reasons for the Service to engage in strategic planning for information resources and technology management, a significant number of laws, regulations and guidelines affect all Federal government agencies, driving the need for planning to ensure implementation and compliance. The following list includes many, but not all, of them:

- The **Information Technology Management Reform Act (Clinger-Cohen Act) of 1996 (P.L. 104-106)** establishes procedures for the evaluation and acquisition of information technologies.
- The **Federal Information Security Management Act of 2002** establishes specific Government-wide requirements for security of hardware, software, and information.
- The **Electronic Government Act of 2002** uses information technology to "empower citizens," "break down bureaucratic walls," "advance e-government," and offer "easier access to information."
- The **Privacy Act (1974)** protects the privacy of information about individuals held by Government agencies.
- The **Freedom of Information Act (1966)** requires that U.S. Government agencies release their records to the public on request, unless the information sought falls into a category specifically exempted, such as national security, an individual's right to privacy, or internal agency management.
- The **Government Paperwork Elimination Act of 1998** seeks to minimize the paperwork burden imposed by the Federal Government; increase the usefulness and public benefit of information collected; and reduce the costs of data and information collection, management, dissemination, and disposition.
- **The Rehabilitation Act Amendments (Section 508)** require that Federal agencies' electronic and information technology is accessible to people with disabilities.
- The **Federal Acquisitions Reform Act** governs acquisitions using full and open competition, moderated by use of methods consistent with the need to efficiently fulfill the Government's requirements.
- The **Federal Records Act (Chapter 31 of title 44 U.S.C.)** establishes policies for the archiving and preservation of Government records.
- The **Information Quality Act (Section 515 of Public Law 106-554)** requires agencies to ensure the quality, objectivity, utility and integrity of information disseminated to the public.
- **OMB Circular A-11** directs agency IT reporting and planning and ties management to budget formulation.
- **OMB Circular A-130** that focuses on the management of Federal information resources and implements the Clinger-Cohen Act.

- **OMB Circular A-16** that focuses on the coordination of geographic information and related spatial data activities across government agencies.

- **OMB Circular A-76** that directs agencies to inventory all inherently governmental and commercial activities and establishes Federal policy for the competition of commercial activities.

- OMB's **Federal Enterprise Architecture Program** requires each Government agency to develop an overall blueprint for their information technology and infrastructure, based on their mission-related goals and priorities.

1.6 Current Status of IT Strategic Planning in the Service

In January 2005, the Service filled a new Assistant Director for Information Resources and Technology Management position that also serves as the Bureau Chief Information Officer. At present, each region and most program offices have a Chief Technology Officer (CTO) to establish guidance and direct IT management; but organizational structures, CTO responsibilities and authorities, and staffing and funding levels vary widely across the Service. Program CTO's plan and advise their Assistant Directors on IT strategic direction for national, Service-wide systems, oversee operations and maintenance of those systems, and provide internal support to their respective offices.

The Service is establishing an IT Investment Review Board to advise the Director about all Service investments in information technology. The CTO's will serve in an advisory role to the Service IT Investment Review Board (IRB). Through sound management of IT investments, the IT IRB will ensure that the Service IT portfolio provides the capability to meet its mission, strategic goals, business, employee and customer needs. The IT IRB will also help minimize risks and maximize the return on these investments by measuring performance. The IT IRB will help ensure that all Service IT investments conform to the Service, DOI and OMB enterprise architectures, IT security requirements, and other laws, regulations, and policies. The Service IT IRB has adopted and will use the formal DOI Capital Planning and Investment Control (CPIC) process to formulate sound IT investment recommendations.

The Service has a reasonably adequate core IT infrastructure, but there is also outdated and obsolete technology scattered throughout the Service. The Service does not currently have a consistent, reliable life-cycle based planning and funding process to address this issue. The Service faces significant funding, staffing, communication, and business process change management challenges that lead to difficulties in:

- operating, maintaining and modernizing its existing systems;
- implementing the new Departmental and Government-wide systems that will be coming online starting this year; and
- improving IT program management activities including security, enterprise architecture, and capital planning and investment control and project management.

The Service also faces significant technical, logistical, and cost challenges due to the large number of remote sites that house small numbers of employees. Providing adequate telecommunications to these sites to enable effective use of IT systems is often cost prohibitive.

This decentralized structure will pose ongoing major challenges as new systems are deployed and become fully operational over the next several years.

This plan replaces the existing Service IT Strategic Plan that was established in 1997. Since then, new customer demands, laws, technologies, and challenges have emerged that drive the need to update the plan. Drivers and trends affecting this plan include:

- our customers, partners and employees expect to be able to use information technology including the Internet and automated systems to interact with their government;
- virtually every Service business process relies in some way on the use of information technology;
- rapid changes in technology, obsolescence of existing systems, and new technologies and capabilities drive the need for ongoing modernization and replacement;
- performance planning, reporting, and accountability are required in all areas of Federal agency management including information resources and technology management;
- decreasing budgets and increasing demands for service in ever-shorter response times are pressing Federal agencies to change their organizations and processes to become more efficient and responsive and cut costs;
- increasing and ever-changing threats and risks to our systems from hackers, identity thieves, and disgruntled employees; and
- increasing complexity in our systems can lead to system failures, increased costs, and poor performance.

Many agencies are simplifying and standardizing their IT systems and organizations to address these issues.

This plan is intended to cover all information resource and technology management activities at a high level in the Service. Additional more-detailed plans may be needed for specific programs, offices, etc. This plan will be reviewed on at least an annual basis to determine the need for future revisions.

This plan makes no assumptions about available funding. It is intended to identify strategic improvements needed in information resources and technology management. Funding to make those improvements will be addressed through the normal budget process. If adequate funding is not available, some of the target results and objectives may not be met within the proposed timeframes. Funding impacts on actual accomplishments will be addressed in the annual updates to the plan.

1.7 Relationship to DOI Mission and IT Goals

The Department is developing enterprise architecture, based on the Federal Enterprise Architecture Framework, to guide future investments and facilitate the integration and coordination of IT systems among all DOI Bureaus. The Department is actively promoting improvement of IT capital planning and investment control (CPIC), IT security, and IT project management to improve the performance, efficiency and effectiveness of IT Department-wide. The Department has initiated several major initiatives to consolidate, standardize, and integrate information technology and operations Department-wide. In similar fashion, the Office of Management and Budget (OMB) is promoting 25 Government-wide IT system consolidation

initiatives under the President's E-Government Agenda. It is important for the Service's IT activities to be well coordinated, documented, and to take advantage of the DOI and OMB requirements.

The Department's Strategic Plan for FY 2003-2008 has established five mission goals that encompass the major responsibilities of the Department. These goals provide a framework for Bureaus to use as an umbrella for developing their Operational Plans and link them to the Department's Strategic Plan mission goals. The Service's plan explicitly incorporates these goals and measures. The Departmental mission goals are:

1. **Resource Protection**: Protect the Nation's natural, cultural and heritage resources.
2. **Resource Use**: Manage resources to promote responsible use and sustain a dynamic economy.
3. **Recreation**: Provide recreation opportunities for America.
4. **Serving Communities**: Safeguard lives, property and assets, advance scientific knowledge, and improve the quality of life for the communities we serve.
5. **Management Excellence**: Manage the Department to be highly skilled, accountable, modern, functionally integrated, citizen-centered, and result-oriented.

This IRTM Strategic Plan relates most directly to the Management Excellence goal. The mission goal for "Management Excellence" " includes "**End Outcome Goal 3 – Modernization**," with performance measures for:

- *IT Management*: Improve the Department/Bureau IT Management Process to reach Level 2 along GAO's ITIM framework in FY 2005 and Level 3 by FY 2008. The Service has formally adopted the Department's Capital Planning and Investment Control Guide and is establishing an IT Investment Review Board to accomplish this objective.
- *Security*: Percent of systems that will be certified and accredited by FY 2005, and will maintain accreditation on a 3-year recurring cycle.
- Percent of time that networks are operational for all users.

The "Management Excellence" mission goal also includes "**Strategy 4: Citizen-Centered E-Government and Information Technology Management**," and includes the following performance measures:

- *Enterprise Architecture*: All enterprise architecture models are developed in concert with the Federal Enterprise Architecture by FY 2006 and maintained current through FY 2008.
- *IT Investment Management*: Percent of IT investment expenditures for which actual costs are within 10% of cost estimates established in the project or program baseline.
- Percent of IT investments expenditures reviewed/approved through the CPIC process.

The Department developed an E-Government Strategy and an E-Government Governance Framework to guide IT investments in support of the strategic plan goals listed above. The Department uses an E-Government scorecard to periodically measure bureaus' and offices' performance in using information technologies to achieve these goals. Appendix C contains the scorecard. This IRTM Strategic Plan for the Service has been designed to align with the Departmental goals and to measure the Service's performance in achieving those goals over time.

The following table shows existing Service major applications and general support systems that support the various DOI mission goals. Each of these systems' functions is briefly described in Appendix B.

<table>
<tr><td>1. Resource Protection
Environmental Conservation Online System
Federal Aid Information Management System
Fire Management Information System
Law Enforcement Management Information System
National Conservation Training Center Enclave
Refuge Management Information System
Service Permit Issuance and Tracking System</td><td>2. Resource Use
National Conservation Training Center Enclave</td></tr>
<tr><td>3. Recreation
Federal Aid Information Management System
Refuge Management Information System</td><td>4. Serving Communities
Fire Management Information System
Law Enforcement Management Information System
Refuge Management Information System</td></tr>
<tr><td colspan="2">5. Management Excellence</td></tr>
<tr><td>Improved Financial Management (Strategy 2):
Budget Allocation System
Director's Tracking System
Personal Property Management System
Federal Aid Information Management System</td><td>Citizen-Centered E-Government & IT Management (Strategy 4):
Environmental Conservation Online System
Federal Aid Information Management System
Fire Management Information System
Law Enforcement Management Information System
National Conservation Training Center
Refuge Management Information System
Service Permit Issuance and Tracking System
Service Wide Area Network
Lotus Notes</td></tr>
</table>

The Service also has a multitude of Internet web pages that provide a wealth of information about the resources, our program management activities, and our organization to our customers, partners, employees and others that contribute to achieving the goal of Citizen Centered Electronic Government.

PART TWO - Goals

2.0 IRTM Strategic Goals

This plan has a five year horizon, with annual reviews and updates to address changes in priorities, circumstances, and technology from the previous plan. The IRTM Strategic Goals are as follows:

Goal 1: **Improve Management of IRTM Assets**. Establish an environment that fosters productive IRTM investments in support of Service and Departmental mission goals, that provides a common architecture to ensure that IRTM assets are mutually supportive, that provides for reliable acquisition, implementation, operation and maintenance, and disposal of adequate IRTM assets over time, that enforces security protocols to protect assets, and ensures communication, planning and design down to the field office level of the organization.

Goal 2: **Improve the Delivery of IRTM Products and Services**. Improve procedures and standards that govern the creation, protection, reliability, and interpretation of data in support of Service and Departmental mission goals, as well as eliminate redundant data and information. Develop effective processes for evaluating emerging technologies.

Goal 3: **Enhance IRTM Skills of Service Employees**. Through planning, assessment, and education efforts establish and maintain an adequately skilled workforce to optimize the productive use of IRTM. Continue to partner closely with the National Conservation Training Center to ensure that IRTM information is incorporated in the appropriate classes.

Goal 4: **Improve IRTM Communications.** Enhance communications between programs, regions, field stations, and the IRTM program about program support needs, opportunities to apply technology to meet those needs, and IT policies and activities. Enhance communications with the Department, OMB, other Federal agencies, state, local and Tribal governments, interest groups and private citizens about information resources and technology capabilities, services and opportunities.

2.1 Relationship between IRTM Goals and DOI Mission Goals

The following table shows how the Service's IRTM goals related to the DOI Strategic Plan Mission Goals.

	IRTM Goals			
Department's Mission Goals	**1. Improve Management of IRTM Assets**	**2. Improve the Delivery of IRTM Products and Services**	**3. Enhance IRTM Skills of Service Employees**	**4. Improve IRTM Communications**
1. Resource Protection	Supports	Necessary	Supports	Supports
2. Resource Use	Supports	Necessary	Supports	Supports
3. Recreation	Supports	Necessary	Supports	Supports
4. Serving Communities	Supports	Necessary	Supports	Supports
5. Management Excellence	Necessary	Necessary	Necessary	Supports

2.2 Relation between IRTM Goals and Departmental E-Government Scorecard

This plan focuses areas of IRTM that link to goals in the Department's E-Government Scorecard (Appendix C) as shown in the table below:

E-Government Scorecard Criteria	**IRTM Goal/Objective**
Criterion 1: DOI Enterprise Transformation	Goal 1/Objective 1
Criterion 2: IT Security	Goal 1/Objective 3
Criterion 3A : Business Management - Enterprise Architecture	Goal 1/Objective 1
Criterion 3B: Business Management – IT Investment Management	Goal 1/Objective 2
Criterion 3C: Business Management - Implementing E-Gov Strategy	Goal 1/Objective 1, Goal 2/Objective 2, Goal 2/Objective 3
Criterion 4: Government-wide E-Gov and Line Of Business Initiatives	Goal 1/Objective 1, Goal 2/Objective 2, Goal 2/Objective 3

PART THREE - OBJECTIVES, TARGETS, AND MEASURES

3.0 IRTM Strategic Plan Goals and Objectives

For each IRTM strategic goal described in section 2.0, there are objectives designed to achieve that goal. Further, each objective has target results needed to accomplish the objective, high-level actions required, parties responsible, and target completion dates. Performance measures are provided that will be used to measure progress toward achieving the objectives. Some performance measures have targets established in advance. Other performance measures will require the collection of information to establish a baseline before future targets can be established. Still other measures reflect statistics that will be collected after the fact to measure progress. The four IRTM strategic goals are listed below along with their respective objectives. Following that, each goal and its objectives are described in detail, together with their associated target results and performance measures.

Goal 1: Improve Management of IRTM Assets.

- Objective 1.1: Implement and maintain the Service Enterprise Architecture consistent with the Departmental and Federal Enterprise Architecture Program.
- Objective 1.2: Improve the Service's IT Investment Management (ITIM) processes.
- Objective 1.3: Improve IT security.
- Objective 1.4: Promote and improve IT Project Management.
- Objective 1.5: Improve Life Cycle Management, IT Acquisition, Configuration Management, and Asset Inventory Processes and Guidance.
- Objective 1.6: Improve IT Operations, Maintenance and User Support.

Goal 2: Improve the Delivery of IRTM Products and Services.

- Objective 2.1: Standardize IRTM functions to conform with Secretarial Order #3244, dated November 12, 2002.
- Objective 2.2: Improve the use of Geographic Information Systems (GIS).
- Objective 2.3: Improve Data Management.
- Objective 2.4: Evaluate emerging technologies and implement proven IRTM solutions.
- Objective 2.5: Improve Records Management.

Goal 3: Enhance IRTM Skills of Service Employees.

- Objective 3.1: Recruit and retain sufficiently skilled IRTM personnel, competent in current and emerging technologies, to optimize the productive use of information resources and technology.
- Objective 3.1: Provide easy to use decision-support tools to all Service employees that enhance productivity.
- Objective 3.2: Develop, maintain and engage a user community that understands and can employ modern technologies to maximize business benefits.

Goal 4: Improve IRTM Communications.

- Objective 4.1: Improve communications related to IRTM within the Service.
- Objective 4.2: Improve communications related to IRTM between the Service and outside entities, including DOI, OMB, GAO, customers, constituents, and partners.

3.1 Target Results and Performance Measures

Goal 1: Improve Management of IRTM Assets. Establish an environment that fosters productive IRTM investments in support of Service and Departmental mission goals; provide a common architecture to ensure that IRTM assets are mutually supportive; provide for reliable acquisition, implementation, operation and maintenance, and disposal of adequate IRTM assets over time; enforce security protocols to protect assets; and ensure communication, planning and design down to the field office level of the organization.

Objective 1.1: Implement and Maintain the Service Enterprise Architecture consistent with the Departmental and Federal Enterprise Architectures.

The Department of Interior is developing an Enterprise Architecture in which all Bureaus are participating. The objective is to ensure that investments in hardware, software, systems, data, and services support the business of DOI and the Bureaus in a way that leverages efficiencies, avoids redundancies, and facilitates partnerships in projects where appropriate. A key component of this objective is to improve the efficiency and effectiveness of business processes and the use of information resources and technology to enhance delivery and efficiency of services to customers.

Target Results	Responsible Parties	Date
Alignment of Service IT assets with Department Enterprise Architecture Repository (DEAR) and Bureau Enterprise Architecture Repository (BEAR). This includes integration of Service IT systems with the various enterprise architecture reference models (Technical, Service, Performance, Business, and Data).	IRTM	2005 – ongoing
Modernization blueprints are used to re-engineer, modernize, consolidate, and integrate Service IT systems and measure performance.	Program Managers, IRTM, CTOs, IRB	2005-ongoing
Implementation of DOI modernization projects including: Enterprise Services Network, Active Directory, Enterprise Messaging, Enterprise Web, E-Authentication	IRTM, CTOs, IRB	2005-2007
Improvement of FWS hardware and software infrastructure through standardization, consolidation, and modernization	IRTM, CTOs, IRB	2005 – ongoing
Migration of Service applications to DOI Enterprise applications including: Finance and Business Management System, Incident Management Accounting and Reporting System, and Single Platform Maximo facilities management systems	ABMO, OLE, ANRS, IRB	2005-2008
Participation in DOI and Presidential E-Government initiatives.	Program Managers, IRTM, CTOs, IRB	2005 – ongoing

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Percentage of major applications and general support systems that conform to DOI and Federal enterprise architectures.	-	Baseline	TBD	TBD
Number of reengineered business processes with documented cost savings.				
Number of standalone systems eliminated by consolidation into enterprise systems.				
Number of government-wide or cross-cutting E-Gov projects in which the Service participates.		15	15	15

Objective 1.2: Improve the Service's IT Investment Management (ITIM) processes.

Increase the effectiveness of investments in information resources and technology. The Government Accountability Office has developed an ITIM model that recognizes five stages of an organization's ability to manage its IT investments. The Department will use that model to work with Bureaus to improve IT investment management processes and to measure progress.

Target Results	Responsible Parties	Date
Creation and ongoing use of an IT Investment Review Board to advise the Director on IT investment management in the Service.	IRTM, ADs, RDs	2006
Improved Capital Planning and Investment Control (CPIC) process. Required actions include revising the Service's IT Capital Planning chapter 270 FW 2 to align with Department's CPIC Guide and GAO ITIM model.	IRTM, CTOs	2006
Integration of program, budget, and finance offices in the process of managing investments of new and existing IT projects. Required actions include: • developing criteria for selecting new IT investments and for reselecting (retiring, enhancing, integrating) ongoing investments. • developing criteria for rating & ranking IT investments. • ensuring that program budget submissions and IT capital planning submissions match. • ensuring that IT projects are not funded without Investment Review Board approval. • Tracking actual spending and performance against plans for all IT investments	IRTM, IRB, ABPHR, ABMO, Program Managers	2006

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
ITIM Level achieved		2	2	3
Percent of IT investment expenditures for which actual costs are within 10% of cost estimates	100%	100%	100%	100%
Percent of IT investment reviewed and approved by the Service Investment Review Board	-	100%	100%	100%

Objective 1.3: Improve IT Security

Protect the availability, confidentiality and integrity of Service information resources and technology assets, ensure full compliance with OMB Circular A-130 and Federal Information Security Management Act (FISMA) requirements, to reduce the number of security vulnerabilities and incidents, and maximize the number of systems that are certified and accredited.

Target Results	Responsible Parties	Date
Improved use of Plans of Action and Milestones (POA&Ms) as a management tool including accurate identification, planning, funding, remediation, and reporting closure of weaknesses. Implementing the DOI required system for managing POA&Ms.	IRTM, System Owners	2006
Improved Certification and Accreditation (C&A) process. Required actions include improving C&A guidance, instruction, and training.	IRTM, CTOs	2006
Improved operational security. Required actions include developing a strategy for reducing internal vulnerabilities.	IRTM, CTOs	2006
Improve IT Security Training program. Required actions include tying IT Security Training with Statement of Responsibility and review of Acceptable Use Policies.	IRTM, CTOs	2006
Improved implementation of IT security policies and guidance. Required actions include developing a strategy for implementing IT security requirements (passwords, patches, etc.) that dovetails with infrastructure capabilities (e.g. Active Directory, E-Authentication, etc.)	IRTM, CTOs	2006

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Percent of systems that will be certified and accredited and maintained on a 3-year recurring cycle	90%	100%	100%	100%
Percent of employees who receive general IT security awareness training and IT security employees who receive required specialized training	100%	100%	100%	100%
Percent of reportable IT security vulnerabilities tracked and managed through POA&Ms	100%	100%	100%	100%
Number of hosts disclosed by external network scans with potential vulnerabilities.				
Number of hosts disclosed by internal network scans with potential vulnerabilities.				
Number of IT Security Incidents				

Objective 1.4: Promote and Improve IT Project Management *Ensure that IT systems are designed and developed in full compliance with approved Service and DOI life-cycle and project management methodologies.*		
Target Results	**Responsible Parties**	**Date**
Project management policies, procedures, standards and guidance are developed. Required actions include adopting a project management methodology in conformance with Departmental standards and guidance.	IRTM	2006
Implementation of project management in the Service. Required actions include ensuring that all major IT investments undergoing development, modernization or enhancement have certified project managers. This may require providing project manager certification training and project management tools.	Project Managers and System Owners, IRTM, CTOs, IRB	2006
Adopt and implement a standard, documented Software Development Life Cycle Process (SDLC)	Project Managers and System Owners, IRTM, and CTOs, IRB	2007

Performance Measures	**FY 2005 goal**	**FY 2006 goal**	**FY 2007 goal**	**FY 2008 goal**
Percentage of IT projects undergoing development, modernization or enhancement with certified project managers		100%	100%	100%
Percentage of projects completed within 10% of planned schedule, budget, and deliverables		100%	100%	100%
Number of systems successfully deployed on schedule				

Objective 1.5: Improve Life Cycle Management, IT Acquisition, Configuration Management, Change Management, and Asset Inventory Processes and Guidance.

Ensure that all Service IT assets are properly planned, acquired, managed, accounted for, and disposed of.

Target Results	Responsible Parties	Date
Develop and implement configuration management and change management policies, procedures and guidance.	IRTM, CTOs	2006
Develop and maintain an accurate inventory of IT assets. Required actions include acquiring asset management tools well integrated with system administration and user support tools (see objective 1.6).	IRTM, CTOs	2006
Develop and implement processes to plan for and acquire adequate infrastructure to meet growth of existing systems and implementation of new systems over time.	IRTM, CTOs, IRB	2006
Develop long range capital replacement plan for IT infrastructure and assets, including IT asset depreciation and life-cycle standards.	IRTM, CTOs	2006

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Percentage of hardware and software changes performed in conformance with asset management policies and procedures	-	-	100%	100%
Percentage of IT assets current with life cycle asset replacement plan	-	-	100%	100%

Objective 1.6 Improve Operations, Maintenance and User Support of Service IT Assets *Ensure high availability of Service IT assets and a high level of user support to maximize the productivity of IT assets in accomplishing the Service's mission.*		
Target Results	**Responsible Parties**	**Date**
FWS IT assets are available for users to do their jobs a very high percentage of the time.	IRTM, CTOs	2006
Problems with IT assets are rapidly and effectively resolved to enable users to resume their duties.	IRTM, CTOs	2006
IT assets are installed, operated and maintained in a highly efficient and effective manner. Actions include acquisition of tools to integrate help desk functions with asset inventory (see objective 1.5) and remote administration and assistance.	IRTM, CTOs	2006

Performance Measures	**FY 2005 goal**	**FY 2006 goal**	**FY 2007 goal**	**FY 2008 goal**
Percentage of time IT asset available for use. Maintenance and repair activities scheduled to minimize disruption to users during core business hours.	95%	97%	97%	97%
Percent of time hardware and software installation, upgrade, and patching completed within schedule.	95%	97%	97%	97%
User/customer satisfaction with IT support.	-	Baseline	TBD	TBD

Goal 2: Improve the Delivery of IRTM Products and Services. Improve procedures and standards that govern the creation, protection, reliability, and interpretation of data in support of Service and Departmental mission goals, as well as eliminate redundant data and information. Develop effective processes for evaluating emerging technologies.

Objective 2.1: Standardize IT functions to conform with Secretarial Order #3244, dated November 12, 2002.

Secretarial Order #3244 requires bureaus "to standardize along select functional areas … to improve the delivery of IT products and services Department-wide by minimizing the significant variability that currently exists."

Target Results	Responsible Parties	Date
Assess existing Regional and Assistant Director responsibilities in regard to responsibilities under Secretarial Order #3244.	CTOs, RDs, AD's, CIO	2006
Plan to re-structure CTO organizations to align with Secretarial Order #3244.	CTOs, RDs, AD's, CIO	2006
Implementation of plan	CTOs, RDs, AD's, CIO, IRB	2006-2008

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Assistant Director for Information Resources and Technology Management's office restructured to conform with Secretarial Order #3244		X		
Regions develop plans to re-structure Regional CTO organizations to align with Secretarial Order #3244.		X	-	-
Number of Regions that have implemented the plans	3	5	7	7
Number of Offices that have implemented the plans	-	TBD	TBD	TBD

Objective 2.2: Improve the use of Geographic Information Systems (GIS) *Enhance delivery of geographical data to partners and the public and increase the ability of Service employees to use GIS data and tools to accomplish mission goals.*		
Target Results	**Responsible Parties**	**Date**
Increased centralization of geographic database(s) at Regional and National level. Required actions include: • Evaluate existing and developing geographic databases and recommend appropriate location for each. • Make appropriate IT resources available for effective centralization of databases (hardware, software, bandwidth, staff support).	IRTM, CTO Council, GIS Steering Committee, Program Staff	2005-2008
Geographic references included in databases where applicable. Required actions include: • valuate the need for geographic components in existing and developing non-geographic databases; recommend appropriate geographic integration. • Add geographic references to databases as they are developed or during major redesign.	IRTM, CTO Council, GIS Steering Committee, Program Staff	2005-2008
Increased participation in cross-cutting E-Gov projects and activities to meet OMB Circular A-16 requirements. Required actions include: • FGDC compliant metadata for all shareable geographic data published on the National Spatial Data Infrastructure (NSDI) and accessible via Geographic One-Stop Portal. • All public geographic applications registered with the Geospatial One-Stop Portal.	IRTM, GIS Steering Committee, Data Stewards and Metadata Contacts	2005-2008
Maintenance of robust Internet Map Servers (IMS) at Regional and/or National level for public access and government-to-government E-Gov initiatives. Required actions: • Evaluate existing and developing IMS applications and recommend appropriate location for development. • Make appropriate IT resources available for effective IMS operation (hardware, software, bandwidth, security assistance, staff support).	IRTM, CTO Council, GIS Steering Committee	2005-2008
Implementation of consistent, adequate GIS coordination and technical staffing at Regional and National levels.	RDs, ADs	2005-2008

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Percentage of geographic databases migrated to centralized locations in conformance with the FWS GIS Strategic Plan.	-	100%	100%	100%
Percentage of databases or programs where spatial components have been added or integrated in conformance with the FWS GIS Strategic Plan.	-	25%	50%	100
Number of geographic data files available for download on FWS Internet sites.	600 (Baseline)	+ 20%	+ 30%	+ 30%
Percentage of public NSDI metadata nodes and IMS applications linked to Geographic One-Stop.	-	100%	100%	100%
Percentage of existing IMS applications migrated to robust servers in centralized locations in conformance with the FWS GIS Strategic Plan.	-	50%	100%	100%
Number of Regions with designated, full-time GIS Coordinators.	3	+ 50	+ 80	100%
Number of Programs with designated GIS technical support staff and GIS Coordinators (applies only to FWS Programs actively using GIS technology).	2	+ 50%	+ 80%	100%

Objective 2.3: Improve Data Management *Minimize data redundancy and promote more effective data sharing and participation in cross-cutting projects.*		
Target Results	**Responsible Parties**	**Date**
Increased effectiveness of data management policy and standards. Required actions: • Participate in the development of Interior's data architecture and data standardization process. • Review and evaluation of enterprise architecture models developed for DOI business lines for implementation by the Service.	IRTM, CTOs, GIS Steering Committee, Data Stewards, System Managers, Subject Matter Experts, Database Administrators	2005-2008
Improved data sharing capabilities across major program areas. Required actions: • Increase awareness and implementation of FWS and DOI policy and procedures on data standardization. • Identify mission critical data that require Service-wide data standards. • Align Service data standards with the DOI Data architecture and standards.	IRTM, CTOs, GIS Steering Committee, Data Stewards	2005-2008
Increased participation in cross-cutting E-Gov projects and activities to meet OMB Circular A-16 requirements. Required actions: • Ensure that metadata records are fully compliant with Federal Geographic Data Committee (FGDC) standards, and approved for publication on the National Biological Information Infrastructure (NBII) and NSDI Clearinghouse sites. • Prepare a plan for constructing and maintaining a Geographic Data Clearinghouse for Service metadata.	IRTM, GIS Steering Committee, Data Stewards	2005–2008
Increase quality of content, access to information, and ease-of-use on all FWS external (Internet) and internal (Intranet) web sites. Required actions: • Implement standard design for consistent "look and feel". • Provide search capability. • Purge outdated content and maintain remaining content in a current and accurate condition on an ongoing basis.	External Affairs, Program Staffs, IRTM, CTOs	2008

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Implementation of DOI data resource management policies and standards developed for DOI business lines.	-	25%	50%	75%
Official designation of data resource manager (data architect) and data stewards for established DOI business lines.	-	100%	100%	100%
Number of FGDC-compliant metadata records processed and approved for publication on the NBII and NSDI Clearinghouse sites.	600	+20%	+30%	+30%
Written plan for constructing and maintaining a Geographic Data Clearinghouse for Service metadata.	-	X	-	-
Percentage of Service web pages updated in conformance with DOI Web Council standards.	-	25%	50%	100%

Objective 2.4: Evaluate emerging technologies and implement proven IT solutions.

Evaluate new technologies in an organized way, select those that have strategic value to accomplishing the mission of the Service, and implement them in a well disciplined manner. Rapid changes in technology pose a challenge to understand and assess their potential application to Service work. Without a framework to perform evaluation, implementation of new technologies will be haphazard and expensive.

Target Results	Responsible Parties	Date
Identify and adopt best practices for evaluating new technology to determine applicability in the Service and changes to IT and business processes. Includes a decision-making process to determine which new technologies to evaluate.	IRTM, CTOs	2006
Issue bulletin to establish and document standards and procedures for evaluation, testing, and best practices of new technologies.	IRTM, CTOs	2006
Test and implement new technologies with minimum disruption to existing production systems	IRTM, CTOs	2007

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Number of technology upgrades successfully evaluated, selected, and implemented without significant disruption to the Service's work				
Number of technology innovations that are incorporated in the Service's IT architecture				
Employee and customer satisfaction with the adoption of appropriate modern technologies.		Baseline		

Objective 2.5: Improve Records Management

Ensure compliance with records management laws, regulations, policies and procedures through an effective and efficient records management program and to promote development of electronic records management capability as soon as practical.

Target Results	Responsible Parties	Date
Update the Fish and Wildlife Service's records schedule.	Bureau Records Officer, CTO	2006
Upon National Archives and Records Center (NARA) approval of the updated records schedule, explore options to electronically connect the records schedule to the bureau's organizational structure.	Bureau Records Officer, CTO	2007

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Publication of the records schedule in the Federal Register for public comment.		X		
Submit a plan to electronically connect the records schedule to the bureau's organizational structure		X		
Percentage of records managed in conformance with policies, procedures and records management schedules		25%	50%	100%

Goal 3: Enhance IRTM Skills of Service Employees. Through planning, assessment, and education efforts, establish and maintain an adequately skilled workforce to optimize the productive use of IRTM. Continue to partner closely with the National Conservation Training Center (NCTC) to ensure that IRTM information is incorporated in the appropriate classes.

Objective 3.1: Recruit and retain sufficient skilled IT personnel, competent in current and emerging technologies, to optimize the productive use of IT.

Ensure that the Service has an adequate number of sufficiently skilled IT personnel on an ongoing basis to realize the potential benefits from the use of IT by all employees.

Target Results	Responsible Parties	Date
All regions, programs, and offices assess existing IT staff, skills, workload, organization and future needs and develop workforce plans to meet those needs.	IRTM, CTO Council	2006
Improved outreach to support IT skills. Required actions include: • Partnerships with programs, regions, and NCTC to improve outreach and education. • Partnership with NCTC to ensure that current IT initiatives and polices are incorporated in appropriate training classes. • Partnerships with DOI IT Training Team to take advantage of global training requirements and not duplicate or compete same technology among bureaus.	IRTM, NCTC, CTOs	2006

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Number of Regions and programs in compliance with policy on IT skill sets.	-	Base-line		
Regions and Offices with IT workforce plans in effect	-	All	All	All

Objective 3.2: Provide easy to use decision-support tools to all Service employees that enhance productivity.

Enhance the use of information resources and technology to improve decision-making, improve the consistency of results in a decentralized environment, and improve the perceived value of information resource and technology investments.

Target Results	Responsible Parties	Date
Develop planning guidelines for decision support tools. Participation by the Service in the Department's portal project through the Departmental Web Council.	IRTM, CTOs, Web Publishing Council	2006
Create a web portal for electronic tools, regulations, acquisition vehicles, IT policies, standards, guidelines, etc.	IRTM, CTOs, Web Publishing Council	2007
Baseline user feedback on ease-of-use of enterprise applications. Required actions include conducting questionnaires of users of Service enterprise systems using best practices for ease-of-use.	IRTM, CTOs	2006

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Increased Service credibility in decision making from customer feedback	-	Base-line		
Increase in perceived value of IT investments from customer feedback.	-	Base-line		

Objective 3.3: Develop, maintain and engage a user community that understands and can employ modern technologies to maximize business benefits.

Service employees need to become familiar not only with how to use the technologies, but with their responsibilities as information collectors and providers. To respond to these needs, a training strategy must be developed using an appropriate mix of training techniques and technology to reach as wide an audience as possible. This objective involves an examination of current business processes to determine what steps could be taken to make them more efficient.

Target Results	Responsible Parties	Date
Identification and assessment of core IT competencies for employees and managers.	IRTM, CTOs	2006
Gap analysis to address deficiencies in core IT competencies.	CTOs	2006
Training courses for Service employees and managers to achieve core IT competencies	IRTM, NCTC	2007

Performance Measures	FY 2005 goal	FY 2006 goal	FY 2007 goal	FY 2008 goal
Number of regions and programs meeting core competencies.	-	Base-line		
Number of training courses to achieve core IT competencies	-	Base-line		

Goal 4: Enhance IRTM Communications. Enhance communications between programs, regions, field stations, and the IRTM program about program support needs, opportunities to apply technology to meet those needs, and IT policies and activities.		
Objective 4.1: Improve communications related to IRTM within the Service		
Target Results	**Responsible Parties**	**Date**
Improved communication of IT activities, plans, and policies with Service managers and employees. Employees at all levels of the organization and in all programs are well informed about IT activities, plans, and policies. Employees are able to effectively communicate needs, priorities, problems, and suggestions related to information resource management and receive feedback on actions taken, status, etc. Required actions include providing information in a timely manner to managers and employees about significant IT initiatives that will impact them and providing the means for them to raise issues, concerns, and questions for attention, response and resolution.	IRTM, RD's, AD's, Deputy RD's and AD's, ARD's, CTO's, IRB	2006

Performance Measures	**FY 2005 goal**	**FY 2006 goal**	**FY 2007 goal**	**FY 2008 goal**
IRTM communication plan developed and implemented		X		
IRTM web site redesigned and content of IRTM web site updated, current and accurate		X		
Managers and supervisors understanding, involvement, and commitment in accomplishing the goals of this plan		Baseline		
Employees satisfaction with the information and services provided	-	Baseline		

Objective 4.2: Improve communications related to IRTM between the Service and outside entities including the Department, OMB, GAO, customers, constituents and partners.		
Target Results	**Responsible Parties**	**Date**
Interested external entities have ready access to information about Service IT activities, plans, and policies. Required actions include contacting external entities to determine the type and amount of information about the Service's IRTM program that they desire.	IRTM, RD's, AD's, Deputy RD's and AD's, ARD's, CTO's	2006

Performance Measures	**FY 2005 goal**	**FY 2006 goal**	**FY 2007 goal**	**FY 2008 goal**
IRTM communication plan developed and implemented		X		
IRTM web site redesigned and content of IRTM web site updated, current and accurate		X		
User/customer satisfaction with information and services.	-	Baseline	TBD	TBD

Appendix A GLOSSARY

BEAR	Bureau Enterprise Architecture Repository
C&A	Certification and Accreditation
CIO	Chief Information Officer
CPIC	Capital Planning and Investment Control
CTO	Chief Technology Officer
DBA	Data Base Administrator
DEAR	Department Enterprise Architecture Repository
FGDC	Federal Geographic Data Committee
FWS	Fish and Wildlife Service
GAO	Government Accountability Office
GIS	Geographic Information Systems
IMS	Internet Map Servers
IRTM	Information Technology and Resource Management
IT	Information Technology
ITIM	Information Technology Investment Management
LOB	Line of Business
NARA	National Archives and Records Administration
NBII	National Biological Information Infrastructure
NCTC	National Conservation Training Center
NSDI	National Spatial Data Infrastructure
NWRS	National Wildlife Refuge System
OMB	Office of Management and Budget
POA&M	Plan of Action and Milestones
SDLC	Software Development Life Cycle Process

Appendix B Description of Fish and Wildlife Service Major Application and General Support Systems

Budget Allocation System (BAS)
BAS tracks all types of funding sources (but not individual payments, which are handled by the Federal Financial System) and supports all Service programs. The system provides current, detailed allocation information to employees at all levels of the Service. It gives authorized users the ability to report on and manipulate data with ease.

Environmental Conservation Online System ECOS
ECOS is a web-based system that provides access to endangered species, environmental contaminants and habitat conservation data systems. ECOS provides central access for data queries, generating reports and summaries, data editing, spatial analysis tools, map generation, and data export.

Director's Tracking System (DTS)
This system is used to track the processing of various forms of official Service correspondence.

Federal Aid Information Management System (FAIMS)
FAIMS contains agency and applicant information, grant document information, grant financial data, and grant performance information; interfaces with the Department of Health and Human Services' Payment Management System and the Service's financial system to process obligations and payments and maintain accurate financial records.

Fire Management Information System (FMIS)
FMIS is used to produce year-end fire statistics for the DOI fire report, annual red cards for fire fighting qualifications, and a fiscal year fire budget.

Law Enforcement Management Information System (LEMIS)
LEMIS is used to maintain a record of each criminal and civil investigation conducted by the Service. LEMIS supports the Office of Law Enforcement in its efforts to perpetuate fish and wildlife as national resources by deterring criminal activities. LEMIS assists Special Agents and Wildlife Inspectors by tracking and controlling workloads, wildlife shipments, employee information, staff activities, intelligence, and training.

Lotus Notes
This is the Service-wide electronic mail and groupware application.

National Conservation Training Center (NCTC) Enclave
This enclave contains the IT hardware and software used by the National Conservation Training Center to support training provided to Service employees and others.
It includes hardware, software, local area network, telecommunications infrastructure, radio communications, GIS training, and the guest services system of the NCTC located on 538 acres in Shepherdstown West Virginia. The NCTC provides the essential infrastructure and data systems to support approximately 250 end users and to manage

conservation and leadership training needs for approximately 10,000 USFWS employee visits as well as 500+ events annually.

Personal Property Management System (PPMS)
PPMS is the accounting system used to manage the Service's personal property and motor vehicle fleet.

Refuge Management Information System (RMIS)
The RMIS is a set of integrated databases with a wide variety of information of national scope that is used to manage the National Wildlife Refuge System (NWRS).

Service Permit Issuance and Tracking System (SPITS)
SPITS is used to issue and track a variety of permits issued by the Service.

Service Wide Area Network (SWAN))
The SWAN is the combination of telecommunications circuits, routers, switches, and hubs that form the Service's internal network backbone.

The Service uses additional systems to manage resources and fulfill its mission including the following:

Activity Based Costing/Performance Management (ABC/M) System
System developed to meet requirements of the PMA and the Secretary's directive that required all bureaus to implement an Activity Based Cost Management System that will provide improved visibility into costs of daily operations and outputs.

Lake Sturgeon Tributary Database and GIS (LSTD)
LSTD compiles available lake sturgeon data sources to help researchers, natural resource managers, and biologists within and outside the FWS focus restoration and research activities on priority lake sturgeon waters. It is a unified, interactive web-based GIS application and meta-database for use by researchers and managers in federal, state and provincial agencies as well as the public.

National Fish Strain Registry (NFSR)
The NFSR lists information about broodstock strains such as location, contacts, spawning, hatchery water quality, etc. for propagation and management of stocks as proscribed by the Service’s Strategic Plan. It allows fisheries biologists, state and private hatchery managers, educators, and wildlife conservationists to better track and understand different fish in the wild and in facilities around the country.

National Wetlands Inventory (NWI)
The NWI Wetlands Master Geodatabase (MGD) and Online Mapper provide digital wetlands and riparian data and maplike views for 52% of the nation for Service resource management and assessments. Additional data is also available for the U.S. Trust Territories. NWI provides the Service, other agencies, and the public with online views and free access to seamless, standards-compliant spatial wetlands data and metadata.

Pesticide Use Proposal (PUP) Database
This national database is used to submit, review, approve, archive, and share PUP information electronically. This web-based database is expected to increase the efficiency of the PUP process while making the data readily available to Service personnel at Regional and National levels.

Real Property Management Information System
RPMIS contains official records of land holdings of the Fish and Wildlife Service. Its primary database, the Land Records System houses information on all land owned or managed under easement or agreement by FWS. It is the official source for all information on lands ownership and is used to publish the annual document "Lands under control of the US Fish and Wildlife Service."

Appendix C DOI E-Government Scorecard

DOI E-Government Scorecard

_____
(Bureau or Office)

_____
(date)

SCORECARD CRITERIA:		SELF-ASSESSMENT CRITERION SCORE	ADJUSTED CRITERION SCORE
1.	DOI Enterprise Transformation		
2.	IT Security		
3.A.	Business Management - Enterprise Architecture		
3.B.	Business Management – IT Investment Management		
3.C.	Business Management - DOI E-Gov Strategy		
4.	Government-wide E-Gov and LOB Initiatives		
OVERALL			

Note: Rating criteria and metrics changed substantially for this rating period – Scores may be significantly lower than previous.

Signatures:

_____ / _____

E-Gov Member / Chief Information Officer

Previous Scorecard Results

CURRENT SCORECARD CRITERIA:		MAY 2004 SCORE	NOV 2003 SCORE
1.	Develop E-Government Strategy		
2.	E-Gov initiatives and GPEA implementation		
3.	Business Process Transformation		
4.	IT Capital Asset and Portfolio Management		
5.	IT Investment Management Framework		

E-GOV SCORECARD FOR (DATE)	
CRITERION 1: DOI Enterprise Transformation • Bureaus work cooperatively with other Bureaus and Departmental offices to consolidate existing projects/systems for multi-Bureau, DOI-wide, or multi-agency implementation, specifically including Enterprise Services Network (ESN), Active Directory (AD), E-Authentication and Enterprise Messaging Services (EMS). • Integration and mass purchases save significant resources and prepares DOI for reductions	
DESCRIPTION: • **ESN**: (1) Bureaus complete shut down of legacy Internet Points of Presence (28 IPOPs) by June 2005, (2) connect to the ESN intranet (5 Enterprise IPOPs) by June 2005, (3) complete migration of regional and other large offices to MCI VBNS+ by September 2006, and (4) transition network & security management to ESC NOSC. • **AD**: (1) Bureaus complete development of migration plans to DOI.Net root services by November 2004, (2) complete migration of user objects necessary for E-Authentication, ESN and FBMS 1A by dates needed for implementation of those projects, (3) complete migration of users objects necessary for E-Authentication, ESN and FMBS 2A by dates needed for implementation of those projects, and (4) complete migration of all user objects to DOI.Net by December 2005. • **E-Authentication**: Bureaus complete E-authentication plan by October 2004 and all employees use SmartCard for gaining physical and logical access to appropriate DOI-controlled systems by October 2005. • **EMS**: Bureaus transition from legacy electronic mail systems to enterprise MS Exchange. Bureau meets EMS project plan deadlines including organizational readiness, governance and workforce plans.	
METRIC **1-3 (Red)** – Bureau is in planning stages for implementing enterprise solutions for ESN, AD, E-Authentication, and EMS. Bureau uses enterprise blanket purchase agreements (BPA) or enterprise licensing agreements (ELA). **4-6 (Yellow)** – Bureau is behind schedule on milestones and implementation dates for ESN, AD, E-Authentication and EMS. Bureau has process in place to ensure full use of enterprise BPA or ELA. **7-9 (Green)** – Bureau has implemented or is on schedule to meet ESN, AD, E-Authentication and EMS milestones and implementation, and to meet needs for related enterprise projects such as FBMS. Bureau has process in place to ensure full use of enterprise BPA or ELA. **10 (Best Practice)** – Bureau provides leadership in one or more major enterprise project, such that Bureau can document savings from enterprise efforts; leadership of enterprise implementation enables other bureaus to create savings and improvements.	
BUREAU SELF-RATING: _____	
ADJUSTED SCORE	
PREVIOUS SCORE	Δ

E-GOV SCORECARD FOR (DATE)

CRITERION 2: IT Security

- Assure the confidentiality, integrity and availability of Interior's IT resources.
- Continue progress toward meeting the requirements of the Federal Information Security Management Act (FISMA) of 2002.

DESCRIPTION:

Focus areas (based upon ongoing FISMA reporting requirements):

- Certification & Accreditation (C&A) activities
- Configuration control and system management
- Plans of Actions and Milestones (POA&M) accomplishment and tracking
- Contingency plans and disaster recovery
- Incident Reporting
- IT security program reviews

METRIC

1-3 (Red) – Bureau has limited IT contingency plans in place and tested. Agency system inventory contains frequent inaccuracies or omissions on systems, components, or interconnections. POA&M fails to reflect substantial findings of self or independent inspections. Findings assessed at high risk remain within POA&M from prior year. Current and correct C&A packages for fewer than 70% of all IT systems in production. Program reviews reveal frequent, substantial, and persistent issues in compliance with DOI policy. Any high or moderate risk system is missing a contingency plan or less than 50% of contingency plans have been tested.

4-6 (Yellow) — Current and correct C&A packages for fewer than 80% of IT systems in production. Agency system inventory is accurate for all high risk systems, but has discrepancies with other systems regarding components or interconnections. With some frequency, self or independent inspection findings fail to be managed within the POA&M. A minority of high risk issues remain unresolved for moderate or higher risk systems. Program reviews reveal infrequent, but significant deviations from DOI policy compliance beyond the reasonable acceptance of risk. 100% of systems conduct contingency plan validation, but less than 50% of systems validate technical elements.

7-9 (Green) – Exceed 90% current and correct C&A packages for IT systems. Agency system inventory is 100% accurate at semi-annual checkpoints. 98% of self or independent inspection items are managed via the POA&M process. System owners schedule remediation of POA&M items into releases with 100% of high risk findings recorded and resolved within 180 days. 100% of contingency plans are in place and tested, with at least 50% of systems tested include technical validation.

10 (Best Practice) – All system C&A packages are current and all tasks independently validated. Agency system inventory is integrated with the change management process and maintains real-time updates. POA&M is tracking all self and independent findings with no high risk issue exceeding 180-days to resolve. Program reviews reveal full compliance with DOI policy or exceptions are appropriately noted and approved within C&A packages. 100% of systems have current and accurate contingency plans with 100% conducting annual testing. At least 75% of contingency plan tests include technical validation.

BUREAU SELF-RATING: _____

ADJUSTED SCORE: _____

PREVIOUS SCORE	Δ

E-GOV SCORECARD FOR (DATE)	
CRITERION 3A: Business Management – Enterprise Architecture Use Enterprise Architecture to align DOI's IT resources with its Strategic Plan and OMB's Federal Enterprise Architecture. Improve efficiency, promote data sharing and minimize system redundancy. Develop and maintain an inventory of DOI's IT assets; develop and implement Modernization Blueprints.	
DESCRIPTION: • Document consolidated or streamlined business processes through business architectures. Bureau business architecture links to DOI business architecture and to DOI strategic plan. • Populate Departmental Enterprise Architecture Repository (DEAR) and the respective Bureau Enterprise Architecture Repository (BEAR) and update information on regular basis. • Participate in DOI Investment Review Board (IRB) Priorities process. • Implement IRB approved Modernization Blueprints by undertaking actions (e.g., transition planning, retiring/interfacing systems) identified in the blueprint for their respective bureau. • Launch or actively participate in new Modernization Blueprints for key Lines of Business (LOB). • Initiate business process reengineering efforts as needed.	
METRIC **1-3 (Red)** – Bureau is participating in modernization blueprint development efforts. Bureau has not fully populated or updated information in DEAR & BEAR or acted upon approved blueprint recommendations. Bureau has initiated planning for implementing Modernization Blueprint recommendations. **4-6 (Yellow)** – Bureau has partially validated information in DEAR & BEAR. Bureau is participating in the development of future Blueprint efforts. **7-9 (Green)** – Bureau has documented reengineered business processes in the Bureau/DOI enterprise architecture, and is moving toward implementing improvements. Bureau has fully populated, validated and regularly updates their information in DEAR & BEAR. Bureau is successfully implementing the approved modernization blueprint recommendations and has launched or is actively supporting development of future Blueprint efforts. **10 (Best Practice)** – Bureau fully meets green and is using architecture products to improve IT management and planning. Bureau identified specific process improvements resulting from business process re-engineering; Bureau can document savings from BPR efforts; leadership of multi-bureau Blueprint development and process re-engineering enables other bureaus to create savings and improvements.	
BUREAU SELF-RATING: _____	
ADJUSTED SCORE	
PREVIOUS SCORE	Δ

E-GOV SCORECARD FOR (DATE)	
CRITERION 3B: Business Management – IT Investment Management • Actively use CPIC process to manage DOI's IT portfolio • Reduce costs and improve efficiency through active management of IT resources. • Identify investment strategies to respond to budget direction.	
DESCRIPTION: Bureau has 100% of IT spending, including IT infrastructure and steady state systems, on Ex. 53. Bureau accounts for at least 60% of its IT spending in Exhibit 300's. All information about investments is consistent between all planning documents. Bureau routinely monitors IT investments in development, modernization or enhancement states to ensure they operate within 90% of cost, schedule, and performance targets identified in their baseline, and has certified project managers for all major investments. On a regular cycle, Bureau evaluates steady state systems to decide future actions, such as enhancement, integration, or retirement. CPIC practices successfully integrate other IRM disciplines including architecture, security and information management. Bureau achieves Stage 2 of IT Investment Management under GAO model, and is moving toward Stage 3.	
METRIC (If two criteria are met, use lowest score; four, use middle score; all, use high score. To reach best practice (10) all criteria must be met.) **1-3 (Red)** – Bureau has select policies, procedures, and practices in place for some key process areas defined under Stage 2. Bureau has inadequate tools for managing and consolidating IT systems or assets. Not all major investments receive a passing score. Major investments have greater than 10% variance in cost, schedule or performance for more than one quarter. Bureau has no process for conducting operational analysis on steady state systems. **4-6 (Yellow) -** Ex. 53 details 100% of IT spending; all major investments receive passing score for the Ex. 300s, and most project managers are certified; Bureau is using CPIC processes to integrate most internal systems; is meeting milestones for consolidating multi-Bureau or –agency systems. Bureau has one or more major investments with greater than 10% variance in cost, schedule or performance for more than one quarter. Bureau has a process for operational analysis of steady state systems. **7-9 (Green)** – Bureau or Office has all policies, procedures, and practices in place for the 9 key process areas to reach ITM Stage 2 requirements. Achievement of ITIM Stage 2 must be documented through a Self-Assessment. Ex. 53 details 100% of IT spending; all major investments receive passing score for the Ex. 300s, and have certified project manager in place; CPIC practices successfully integrate other IRM disciplines including architecture, security and information management. Bureau has no major investments with greater than 10% variance in cost, schedule or performance for more than one quarter. Bureau is conducting operational analysis of steady state systems on a systematic basis. **10 (Best Practice)** – Bureau meets ITIM Stage 2, has completed an independent validation and verification, and work is under way toward Stage 3. Bureau contributes to the improvement of IT Investment Management maturity in Interior by sharing best practices and expertise, collaborating on policy and procedure development, supporting training or otherwise supporting and promoting progress in other organizations. All major investments have less than 10% variance in cost, schedule and performance all the time. Steady state systems are being evaluated in a systematic basis for retirement, enhancement, or integration. Results of analysis are incorporated into future investment planning and documented in Department and/or Bureau Enterprise Architecture Repository.	
BUREAU SELF-RATING: _____	
ADJUSTED SCORE	
PREVIOUS SCORE	Δ

E-GOV SCORECARD FOR (DATE)	
CRITERION 3C: Business Management – Implementing E-Gov Strategy Technology for citizen-centered, integrated, secure services.	
DESCRIPTION: • E-Government at the Department of the Interior enhances services for citizens and increases efficiency by using technology and business process reengineering to improve the effectiveness of services. • Bureau management of IT assets advances Interior's E-Gov goals and objectives: 1. Use technology to improve Interior's ability to protect the nation's natural, cultural, and heritage resources; 2. Use technology to improve Interior's ability to manage resources to promote responsible use and sustain a dynamic economy; 3. Use technology to improve Interior's ability to provide recreation opportunities for America; 4. Use technology to improve Interior's ability to safeguard lives, resources and property, advance scientific knowledge, fulfill trust responsibilities to Indian tribes and individuals, and improve the quality of life for the communities we serve; 5. Employ E-Gov solutions to achieve the Department's management excellence goals and the President's Management Agenda; 6. Reinforce the underlying structures and processes necessary to successfully develop, implement, and operate E-Gov solutions.	
METRIC **1-3 (Red)** – Bureau appoints a senior executive to the E-Gov team who leads Bureau E-Gov efforts, and actively participates in DOI E-Gov efforts. Bureau supports improvements in DOI organizational E-Gov capabilities (E-Gov Goal 6). Bureau has draft E-Gov Strategy and Tactical Plan to implement the DOI E-Gov plan. Bureau has plans for business process reengineering. **4-6 (Yellow)** – Bureau participates in refining DOI E-Gov processes. Bureau E-Gov Strategy and Tactical Plan is used to drive business process engineering and management of IT resources. Bureau uses E-Gov performance metrics as an effective management tool. Bureau is working collaboratively with other bureaus to analyze business processes and plan enterprise or cross-cutting initiatives. Bureau has initiated reengineering of mission critical business processes. **7-9 (Green)** – Bureau implements refined E-Gov processes. Bureau can demonstrate how implementing bureau and DOI E-Gov strategies and cross-cutting or enterprise initiatives enhances service delivery for citizens, businesses and other governments, and the efficiency of business processes. Bureau has made significant progress in reengineering mission critical business processes. **10 (Best Practice)** – Bureau leadership of E-Gov is generally recognized by E-Gov team. Bureau demonstrates that DOI information and services are accessible when and where citizens, businesses and other government entities need them. Bureau has identified specific process improvements resulting from business process reengineering; Bureau can document specific savings from BPR efforts.	
BUREAU SELF-RATING: _____	
ADJUSTED SCORE	
PREVIOUS SCORE	Δ

E-GOV SCORECARD FOR (DATE)	
CRITERION 4: Government-wide E-Gov and Lines of Business Initiatives	
DESCRIPTION: • Interior is managing partner for Geospatial One-Stop and Recreation One-Stop, and is one of four Governmental providers for E-Payroll. • DOI is proposing Center of Excellence solutions for the Finance and Human Resources LOBs, and is participating in the Grants Management and Case Management LOBs. • DOI is participating in government-wide E-Gov initiatives led by other managing partners. • DOI is implementing government-wide E-Government solutions as they become available.	
METRIC 1-3 (Red) – Bureau is developing migration plans for implementing E-Gov solutions as they become available. Bureau is participating nominally in E-Gov initiatives of other agencies. 4-6 (Yellow) – Bureau is participating in E-Gov initiatives sufficient to develop migration strategies. Bureau is behind schedule for implementing migration plans according to managing partner project plans. Bureau is actively participating in one LOB initiative. 7-9 (Green) – Bureau completes implementation of migration plans or is on schedule to meet project plans. Bureau is on schedule for retiring or integrating all E-Gov-related legacy systems. Bureau's participation in other agency E-Gov or LOB initiative results in savings or improvements in the initiative implementation. 10 (Best Practice) – Bureau provides leadership in one or more government-wide E-Government solutions, such that Bureau can document savings from the initiative; and leadership of implementation within DOI enables other bureaus to create savings and improvements.	
BUREAU SELF-RATING: _____	
ADJUSTED SCORE	
PREVIOUS SCORE	Δ