

2005



Information Technology Portfolio

Illustrating IT investments held by the



August 2005



Approvals

This document represents the current state of Information Technology (IT) for the Washington Department of Fish and Wildlife (WDFW) through the state fiscal year ending June 30, 2005.

A letter to the Information Services Board from the WDFW Director, certifying that the annual IT portfolio update had been completed, was mailed August 31, 2005. A copy of the letter is also included in Section 6 of this document, in accordance with portfolio management standards published by the Department of Information Services.

/s/ Jeff Koenings, PhD.	8/31/2005
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WA Department of Fish & Wildlife	
/s/ Ron McQueen	8/31/2005
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Cover photos:

(left) WDFW biologist David Nysewander performing sea bird survey.

Credit:: Pat Miller, WDFW Intranet Image Gallery

(right) Copper rockfish (Sebastes caurinus) Credit:: WDFW Intranet Image Gallery

Introduction



Jeff Koenings, PhD.Director, Washington
Department of Fish and Wildlife

We are pleased to present the 2005 Information Technology Portfolio, which provides an updated summary of the information technology (IT) investments of the Washington Department of Fish and Wildlife (WDFW).

IT helps WDFW fulfill its mission of providing sound stewardship of fish and wildlife – especially in this era of doing more with less. At WDFW, we rely on IT for e-government purposes ranging from online recreational license applications to access to cougar sighting and fish catch information. We use IT internally, too, to manage scientific information and effectively communicate with our field staff working from over a hundred different locations throughout the state.

In the pages that follow you will find information on recent technology initiatives, such as our Interactive Mapping applications (*SalmonScape, GoHunt,* and the *Marine Bird Density Atlas*) that harness the power of geographic information

systems (GIS) to present habitat information via the Internet. You'll also find capsule summaries of ongoing IT projects, including our desktop microcomputer lease program, hydraulic project management system (HPMS), contracts and project system (CAPS) and more.

On behalf of the employees of the Washington Department of Fish and Wildlife, I encourage you to peruse the contents of this update to our IT Portfolio and extend a personal invitation for you to visit our Internet Web site at http://wdfw.wa.gov.

Jeff P. Koenings, PhD., Director Washington Department of Fish and Wildlife August 2005



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2005 Information Technology Portfolio
Washington Department of Fish and Wildlife

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1. Agency IT Portfolio Overview

A. Purpose

This document, the 2005 Information Technology Portfolio, identifies and updates the investments in information technology (IT) held by the Washington Department of Fish and Wildlife (WDFW). Adjustments to the agency IT investment portfolio occur throughout the course of the fiscal year in the areas of hardware, software, network



Figure 1-1. Information technology helps WDFW to safely and effectively communicate key concepts of hunter safety to the public. (*Photo credit: Laser Shot, Inc.*)

infrastructure, maintenance, and staffing.

The Department of Information Services (DIS) defines an IT Portfolio as a "compilation of information about an agency's investments in its IT infrastructure. The information is organized to show how these investments support the agency's mission and programs and to demonstrate the relationships among current and planned investments. The portfolio enhances the ability of key decision-makers to assess the probable impact of investments on an agency's programs and infrastructure, as well as on the overall state IT infrastructure."

Accordingly, the purpose of this document is to allow the WDFW to manage its IT investments in the same manner as one would manage other investments, like financial instruments such as stocks or bonds, and real estate. The department recognizes the business value of IT in allowing it to meet its mandated mission of providing sound stewardship of fish and wildlife.

This Portfolio demonstrates the value of IT investments to senior managers in order to prepare them and other stakeholders to make important IT investment decisions. Those stakeholders include Division and Regional managers, the Corporate Data Oversight Committee (CDOC), the Executive Management Team, the Director/Deputy Director, the Fish and Wildlife Commission, DIS management and staff, the Information Services Board, and members of the Legislature.

WDFW will conduct an annual assessment of this IT Portfolio in conjunction with the biennial and supplemental budget process and make revisions as necessary during the year. Updates will be published on our Internet website. The annual assessment will allow WDFW management the opportunity to review:

- WDFW's IT Portfolio
- IT infrastructure changes, investments/projects, and operations
- Relationships between IT investments and the agency's vision, mission, strategies, and programs
- Business process changes that affect the agency's use of IT or plans for IT

As the Portfolio is updated, it serves as a tool to show the amount and location of IT investments, as well as to help define the capabilities, limitations, and benefits of the investment in terms of meeting agency business needs.

The WDFW IT Portfolio begins with an overview, followed by additional sections that provide detailed information on the IT infrastructure, technology investment/project summaries, planned investments/projects, and technology investment/project reviews. Among other things, this document:

- Discloses links among agency strategies, business plans and IT investments;
- Facilitates analysis of the risks associated with IT investments and helps ensure that appropriate risk mitigation strategies are adopted; and
- Provides a baseline for agency performance reporting.

Where possible, WDFW investments in IT have been compared with other organizations.

The Information Technology Portfolio is produced in order to document current status and chart a technology direction for the WDFW. In order to set this course, the Department established the following as objectives for the portfolio and the IT planning process:

- To communicate a technology vision to employees.
- To provide a basis to integrate information resources.
- To ensure that funds are spent wisely on information technology.
- To provide systems to support WDFW's internal and external customer base.

In 1999, Dye Management Group, Inc. worked with WDFW to establish the agency's technology needs, and assess the current architectures and information technology support in place at WDFW. These evaluations produced an Information Systems Strategic Plan (ISSP) for WDFW. The recommendations made by the Strategic Plan for the future architecture framework, along with alternatives for enhancing technology support, form one of the bases for the portfolio. The second foundation of the portfolio is the agency mission and strategic business plan, which identifies WDFW's goals, objectives, and strategies for the future

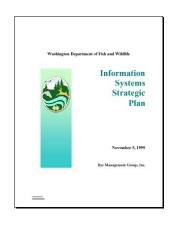


Figure 1-2. Information Sierra Systems completed Systems Strategic Plan (Dye Management)



Figure 1-3. IT Technical Architecture Study (Sierra Systems)

that provides IT architecture strategic planning direction for the next two biennia and beyond. The Sierra report provides an informed opinion on strategies for the future that encompass architecture frameworks for a corporate database, operating systems for network systems, email, web hosting, application development, and more. Commercial offerings in use by other state agencies, as well as open source solutions, were evaluated along with technologies currently used at WDFW.

B. Convergence of Business Mission and IT Vision

MISSION STATEMENT:

The Washington Department of Fish and Wildlife (WDFW) serves Washington's citizens by protecting, restoring and enhancing fish and wildlife and their habitats, while providing sustainable and wildlife-related recreational and commercial opportunities.

a new five-year plan for

WDFW in the fall of 2004

In pursuit of this mission, WDFW will strive to achieve the following goals:

- Healthy and diverse fish and wildlife populations and habitats
- Sustainable fish and wildlife-related opportunities
- Operational excellence and professional service

1. Synopsis of Strategies to Achieve the Mission

To achieve these goals, WDFW will use good science to manage fish and wildlife populations, protect habitats, and influence decision-making processes. The Department will work with customers, internal and external, to identify sustainable recreational and commercial opportunities, and to develop partnerships that assist in achieving the WDFW's mission. Operational excellence will be based on modern and efficient business practices and the infrastructure to support them.

2. Alignment of Current IT Investments with Business Objectives

The WDFW's current IT investments are focused on providing the operational support needed for resource and business management goals and objectives. The areas of IT investments include:

- Supporting and extending electronic communications.
- Providing information access for internal and external customers.
- Improving administrative business management systems.
- Supporting resource data management and providing decision-making support applications.

The aggregated investments provide significant support for carrying out the Department's mission.

3. The Role of IT in Helping WDFW Meet Its Goals

IT plays an important role in assisting the WDFW to meet its goals and objectives. IT provides the electronic communications infrastructure, and the tools to effectively manage and make available data resources. The tools, methods, and infrastructure provided by IT enable the agency to move forward in key areas. These success factors were recognized by the ISSP as building blocks for the future.

- Tools for effective management of fish and wildlife based on science
 - IT provides a data management environment, tools to analyze data, and methods to access data that promote a science-based resource management strategy.
- Business application systems that enable commercial and recreational opportunities

IT provides applications such as the Washington Interactive License Database (WILD), Licenses and Fish Tickets (LIFT), and Permit Odds Compensation Systems (POCS).

Communications and information access systems that promote partnerships

IT provides electronic messaging systems, Intranet content for employees, and Internet Web content that communicates the agency message to the public.

• Viewing IT as an agency asset to implement internal business strategies

IT provides support services, data management, and applications to support the agency drive to achieve internal operational excellence.

4. Future Needs for IT Investments

The following IT areas will need investment attention to improve support for the agency mission:

 Improved access, including remote access, to state and agency internal networks

> As the agency continues to develop webenabled applications, improvements in access to the agency network will be needed for all remote office personnel. New state government systems continue to emerge based on the assumption that all state employees have network connectivity.

Better network access facilitates improved communications and provides opportunities for more efficient, unified business support processes. Investigation into new remote network access technology, including an evaluation of wireless access alternatives, is needed.



Figure 1-4. WDFW Enforcement officers rely on IT for improved customer service and officer safety.

Improved agency IT security

Improvements outlined in the agency IT Security Plan are needed to bring WDFW into compliance with DIS mandated security practices. WDFW continues to make progress in improving its IT security and will phase in additional improvements and process changes throughout 2005-07 biennium.

Network infrastructure improvements

Infrastructure improvements will continue as business needs for better network performance drive the use of technical advances in the networking field. As bandwidth intensive needs such as GIS data access and video conferencing emerge, a migration away from traditional WAN technology toward a statewide integrated LAN based on fiber and high speed private Ethernet topology is expected to continue.

Improved desktop systems management practices

WDFW will continue its effective strategies for replacement of desktop computing systems and remote management of desktop software, to insure that all employees have the computer tools to communicate and perform their job. Increased funding is necessary to fully implement the program.

• New, more effective applications to support agency needs

Modern applications, including Web-based tools, will be implemented to improve administrative business processes and replace manual methods.

Improved access to, and integration of data

Public stakeholders and clients will benefit from better access to agency data resources. Improved web site tools will enable the flow of information in both directions

Fish and wildlife resource management and enforcement needs internally would be better served by improved access to data, and by using Web-based systems and GIS tools to service users statewide. New systems and access methods will provide the necessary linkage to ensure that information is available across all programs.

• Implement the IT standards, and methods recommended by the ISSP and Sierra Study

The agency can make IT more effective and efficient by continuing to follow and implement the recommendations from the WDFW *Information Systems Strategic Plan* (ISSP) and the updates contained in the Sierra study.

C. IT Plans, Proposals, and Acquisition Process

1. Review of IT Plans, Proposals and Acquisitions

WDFW views the IT Portfolio as the blueprint for its IT planning. Proposals and acquisitions must support activities included in the Portfolio. Major systems plans and proposals are reviewed at the executive management level. Budget and acquisition proposals follow established policies and procedures set forth by DIS, OFM, and the WDFW Divisions of Financial Services and Information Technology Services within the Business Services Program.

2. Acquisition Process

The acquisition process used by WDFW provides competition and accountability for purchases and expenditures and adheres to the provisions of the Information Technology Investment Policy. Acquisitions for small systems improvements and upgrades follow existing procedures from OFM, DIS, and the WDFW Divisions of Financial Services and Information Technology Services within the Business Services Program. WDFW makes active use of DIS Master Agreements for technology services, GA IT contractor lists for consultant services, and has entered into a lease agreement with DIS to refresh its microcomputer fleet.

3. Adherence to Standards

WDFW adheres to state technical standards for IT. As standards change and new standards come into play, WDFW has proven a willingness and ability to change its standards to remain in compliance.

An historical example is the former WDFW Prime minicomputer, which could not be made POSIX compliant to meet new state standards. WDFW migrated its legacy applications to UNIX servers and transferred the Prime system to the Office of the Attorney General in order to comply with the new technical standard.

A more recent example involves the de facto standard of the Microsoft Office desktop productivity suite. In order to be more compatible with other state

government entities and the general public, WDFW decided to abandon its internal standard of Corel Office (WordPerfect). The migration to Microsoft Office was completed in June 2003.

WDFW retained Sierra Systems to perform an independent review of its IT software and hardware architecture in fall 2004. The results from the Sierra study will be used as a planning tool to guide the direction of future information technology improvements in the coming biennia. WDFW has initiated communications with the new Enterprise Architect at DIS to ensure that the future architecture direction is consistent with state standards and principles.

4. Complaint and Protest Standards

WDFW adheres to state complaint and protest procedures as outlined in the IT Investment Policy and Standards documents. Prior to execution, all contracts and agreements entered into by WDFW undergo a review by the agency Contracts Office, including a review as to form by the Office of the Attorney General.

D. Overview of Infrastructure

The information that follows is intended as a summary of WDFW's technology infrastructure for the 12-month fiscal period ending June 30, 2005. For detailed information, please see section 3.

1. Personal Computer Hardware

WDFW has 1450 Personal

At A Glance As of 6/30/05 1530.8 Permanent agency FTEs 55.5 Central IT FTEs 32.4 Program IT FTEs 1450 Microcomputers 48 Network servers

WDFW IT Infrastructure

Figure 1-5. WDFW IT infrastructure summary.

Computers (PCs) in use, which are primarily desktop systems. Most WDFW microcomputers are equipped with Intel processors, ranging from Pentium III 700 MHz to Pentium 4 2.80 GHz systems. The median system is equipped with a Pentium IV 2.4 GHz processor.

During FY05, WDFW continued its microcomputer equipment lease with the Department of Information Services (DIS). The lease agreement was entered into in April 2001. The lease program allows WDFW to systematically replace existing, WDFW-owned systems, and, once all systems are enrolled, refresh its fleet over an

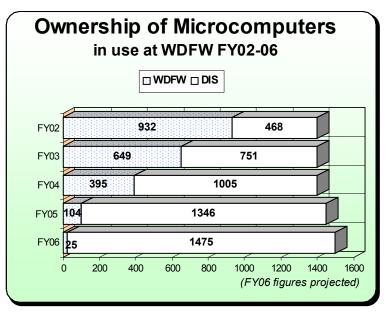


Figure 1-6. By the end of FY06, WDFW anticipates leasing nearly all of its PC fleet from DIS.

approximate 42-month product life cycle. Similar computer lease programs are in place at the Washington Departments of Transportation, Employment Security, and Social and Health Services.

As of June 30, 2005, WDFW has 1346 leased systems (1289 desktops and 57 notebooks) in its microcomputer fleet. This is an increase of 341 systems enrolled in the computer refresh program since the last Portfolio. WDFW expects to bring

an additional 129 systems into the program in FY06, bringing the total number of leased systems to 1475.

Prior to the DIS lease agreement, WDFW acquired PCs via conventional purchase methods without regard to a systematic, planned replacement strategy. This piecemeal purchase practice led to great disparity among its microcomputer investment, in terms of brands, processor platforms, operating systems, and ages of systems to support.

2. Personal Computer Software

a. Operating System

WDFW continues to standardize on the *Microsoft Windows 2000 Professional* operating system.

There are no plans for wholesale upgrades from older versions of Windows to 2000 Professional. Older versions will continue to be used until the PCs on which they reside are replaced with new leased systems via the agency's technology refresh initiative.

It is unknown at this time if WDFW will be forced to migrate from Windows 2000 Professional to Windows XP or the upcoming Windows Vista product. Since Microsoft typically supports only the last two versions of an operating system, a major factor in determining when to migrate will be the release date for Microsoft's Windows Vista operating system, expected for release in late 2006.

b. Office Productivity

Microsoft Office 2000 Professional is the agency standard office productivity suite. This allows WDFW to be more compatible with other government agencies. All new and leased microcomputer systems are licensed for use with Microsoft Office.

All new and leased PC systems are delivered to end users with Office 2000 Professional installed. Existing agency forms appearing on the WDFW Intranet Forms Library have been converted to Microsoft Word and Excel formats.

Recent statewide systems have assumed that users have newer versions of Microsoft Office. A change in the newer Office productivity standard would include a major financial investment in software licenses.

c. Other

Other PC software standards include Frisk Software's *F-Prot Antivirus for Windows*, the Microsoft *Internet Explorer* web browser and the *WinZip* file archival/extraction utility.

3. Networks

Including direct and virtual private network connections, nearly all permanent employees -- as well as some temporary staff -- utilize some form of agency network access.

a. Agency Network

The WDFW network connects personnel in 17 facilities (six buildings in the greater Olympia area, nine buildings in the Regional Offices, and two District Offices). In FY03 WDFW began a project to replace traditional frame relay WAN links between these sites with new technology. Working with NoaNet, private vendors, and DIS,

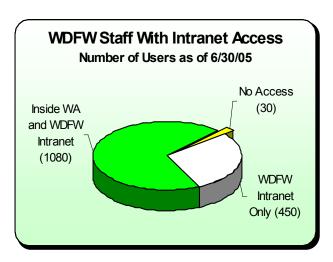


Figure 1-7. Despite a large number of small offices distributed throughout the state, most WDFW staff have access to the state and/or agency Intranet.

WDFW has implemented a high speed integrated Ethernet LAN connecting the Regional Offices into the Olympia LAN.

As of FY05, high-speed network links are now in place at all six WDFW Regional Offices. Connection speeds to these sites have increased from a WAN speed of 768 kbps to LAN speeds of 10 to 100 mbps. A similar transition will take several years to complete for all major field offices.

b. VPN

The WDFW Virtual Private Network (VPN) allows remote staff to connect to the agency WAN via the Internet on an ad-hoc basis. A total of 1500 staff are licensed to utilize the VPN as of June 30, 2005. Of this number, 450 are field staff who use the VPN as their primary method to access the agency WAN.

Note: Additional information about the VPN is contained in the *WDFW IT Security Plan*.

c. Servers

WDFW utilizes Intel-based servers with Novell NetWare to provide authentication, storage, directory, email, and Intranet services.

Sun servers running the Sun Solaris operating system are used for legacy database and Web applications.

A migration to SQL server has begun, which will decrease the WDFW Sun server investment in favor of Intel-based systems running Microsoft Windows Server. WDFW is increasing its Windows Server investment to host applications, such as the agency IT inventory system and GIS web services.

WDFW has begun the migration to Novell SuSE Linux, in accordance with the server platform recommendations of the Sierra study.

4. Staffing

In FY05, WDFW devoted 87.9 full-time equivalents (FTEs) to the administration, development and support of its IT investment. Of this number, 55.5 FTEs report to the central Information Technology Services Division under the Business Services program.

The remaining 32.4 FTEs are organizationally situated in other programs and divisions across the agency.

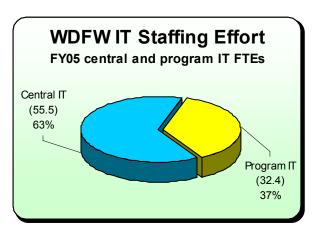


Figure 1-8. Thirty-seven percent of WDFW's IT staff are located outside the central IT Services division – a one percent increase from FY04.

The mission of the centralized Information Technology Services Division (ITSD) within the Business Services Program is *Leading and Powering Information Technology for Fish and Wildlife with Quality Service and Solutions.*

The ITSD is composed of seven functional work units: Administration; GIS; Data Management; Systems Administration; Web Site Administration; End User Support; and Applications, Standards and Policy.

- Administration (3 FTEs) This unit provides overall administration and support of agency IT. The positions include the agency IT Services Division Manager, secretary, and procurement specialist.
- Geographic Information Systems (5 FTEs) This unit performs agency "corporate data" GIS data administration, data access application development and maintenance, and fulfillment of corporate data requests from the public.
- Data Management (9.3 FTEs) This unit includes the functions of the agency data custodian/unit manager (1 FTE), resource statistics (1 FTE), HPA data custodian (1 FTE), license data manager (1 FTE), fish ticket scanning support (0.5 FTE), financial services IT support (1 FTE), and data entry section (3.8 FTEs).

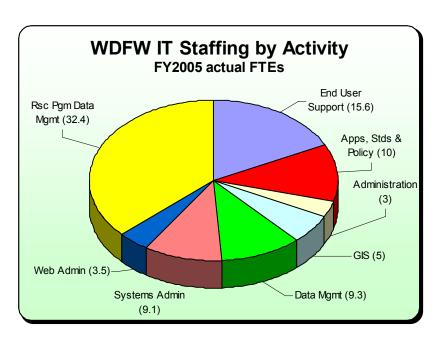


Figure 1-9. WDFW information technology staffing covers a wide array of functions and activities.

- Systems Administration (9.1 FTEs) This unit provides Wide Area
 Network (WAN) and telco administration and support for the agency.
 Functions performed include unit management (1 FTE), UNIX server and
 network backup administration (2 FTE), email administration (1.1 FTE),
 Novell network/WAN (2 FTEs), VPN and Windows server administration
 (1 FTE), and telco/voicemail/cabling support (2 FTEs).
- Web Site Administration (3.5 FTEs) This unit provides web site administration and webmaster functions for the agency Internet home page and Intranet.

- End User Support (15.6 FTEs) This unit maintains and supports WDFW microcomputers and office productivity software. Functions performed include unit administration (1 FTE), specialized support and audit (1 FTE), Eastern WA support (2 FTEs), off-campus support (1 FTE), NRB support manager (1 FTE), program support/Help Desk (9 FTEs), and 0.6 FTE of support provided by community college work-study students.
- Applications, Standards and Policy (10 FTEs) In FY05, the Application Development unit merged with the Standards and Policy unit. The work performed by the consolidated unit covers a wide range of activities including unit management (1 FTE); development, maintenance, and oversight of new and existing applications (5 FTEs), database administration (1 FTE), project management and oversight (1 FTE), data administration (1 FTE), and IT security and data policy development (1 FTE).

An organizational chart and value statements for the centralized Information Technology Services Division of the agency Business Services Program appear on the pages that follow.



Figure 1-10. WDFW IT Services Division logo.

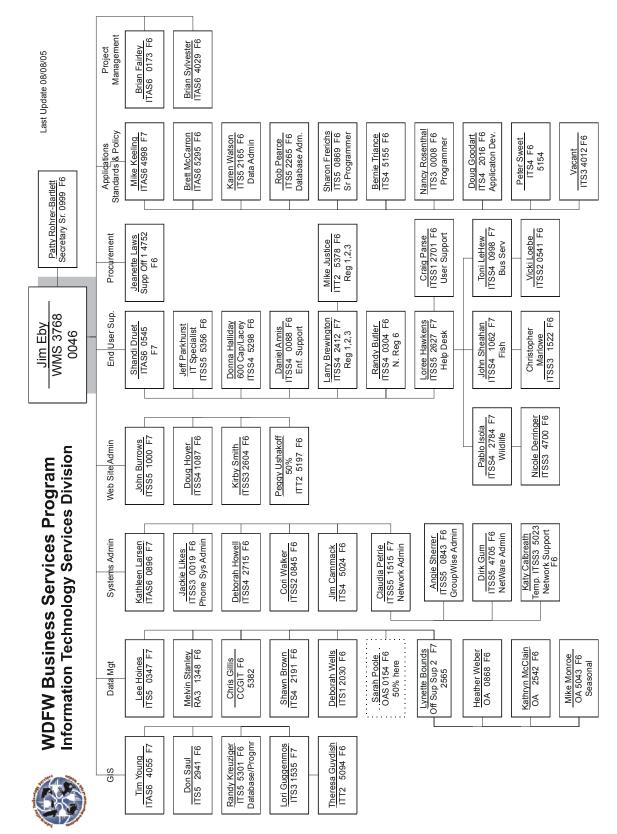


Figure 1-11. Organizational structure of the WDFW IT Services Division.



WDFW Information Technology Services (ITS)



Mission – Leading and Powering Information Technology for Fish and Wildlife with Quality Service and Solutions

Shared Values and Operating Principles

ITS Customer Service

We will provide responsive, knowledgeable, and accurate service.

We will be available and attentive to our customers.

We will respect the customer and provide courteous service.

We will learn and understand the customer's needs.

We will communicate quickly and effectively with our customers.

ITS Technology Solutions

Our technical solutions will link and empower WDFW staff.

We will provide professional and knowledgeable advice and expertise.

Our service and solutions will foster partnerships and accomplish agency goals.

We will provide accessible, reliable and supportable systems.

We will provide responsive and effective systems management.

We will provide a safe and effective computing environment for conducting agency business.

Enabling ITS Staff

We will trust staff to make decisions within their area of expertise and level of responsibility.

We will create a pleasant and enjoyable work environment.

We will seek opportunities for job cross-training and assignment rotation.

We will learn the business of other agency programs.

We will strive for continuous improvement in staff skills and expertise.

E. Analysis

1. Agency IT Staffing Effort

The state fiscal year 2005 (FY05) staffing authority for WDFW was 1530.8 full-time equivalents (FTEs).

The level of actual agency IT staffing, 87.9 FTEs, was just over 5.7% of the total WDFW FY05 staffing authority.

The projected FY06 agency IT staffing level is 89.0 FTEs, an increase of 1 FTE for the central IT Services Division (ITSD) and an additional 0.1 FTE in resource

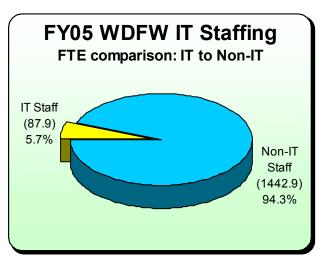


Figure 1-12. Employees performing IT functions accounted for nearly 6% of WDFW's total staffing effort in FY05.

program IT. The projected increase is a result of temporary project management.

Figure 1-13 illustrates that staffing levels within the ITSD have remained virtually unchanged from fiscal years 2002 through 2005 (FY02-05). Program (distributed) IT staffing levels have increased by a total of three FTEs from FY02 through FY05.

The IT staffing increases are due to new initiatives (such as the WILD automated license system

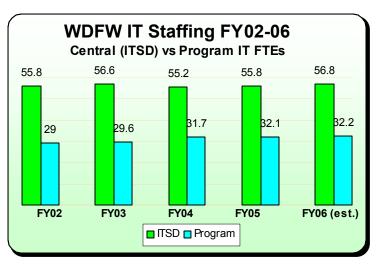


Figure 1-13. WDFW's central IT staffing effort has remained relatively constant from FY02-05. A project management position is expected to be filled in FY06.

renewal), as well as an increasing reliance on the use of IT to support agency goals and objectives.

2. Agency IT Training

FY05 training costs at the agency level totaled \$245,500. This equates to an average expenditure of \$160 per agency FTE.

FY05 professional development costs (exclusive of travel) for IT staff totaled \$17,900 during the same period. IT staff training costs average out to \$200 per IT FTE.

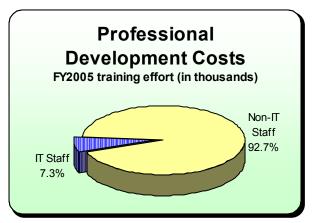


Figure 1-14. Professional development and training for IT staff amounted to slightly more than 7% of overall agency training costs in FY05.

The IT portion accounts for 7.3% of the total amount expended for agency training.

Professional development costs include a mix of hands-on classroom training, conferences and seminars from private sector organizations, and online sources, such as the *e-Learning* training provided through the state Department of Personnel.

It is expected that training costs will increase in FY06 and future years, as WDFW continues to implement recommendations contained in the Sierra study.

3. Hardware and Software Purchases

WDFW spent \$1.514 million on IT software and hardware purchases, maintenance and leases during FY05.

Hardware expenditures of \$1.1 million include amounts spent for microcomputers; servers; peripherals such as printers and scanners; and devices such as portable data loggers and Personal Data Assistants (PDAs).

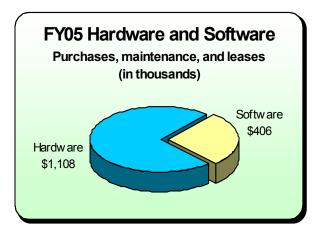


Figure 1-15. WDFW hardware and software costs totaled \$1.51 million in FY05.

Included in the hardware total are costs to begin implementation of the Sierra study including replacements of servers, hubs and switches, and their associated maintenance costs.

The hardware total also includes \$504,000 in lease payments to the Department of Information Services (DIS) for continued participation in the WDFW microcomputer refresh program. This amount is expected to increase in FY06, as the lease program expands to encompass virtually all remaining microcomputers in the WDFW PC fleet.

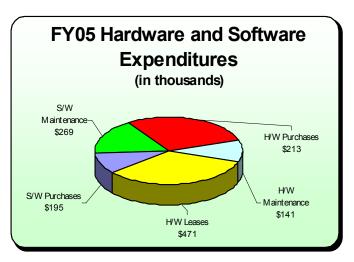


Figure 1-16. WDFW fiscal year 2005 hardware and software expenditures breakdown by major category.

FY05 software purchases and maintenance totaled

\$406,000. Included in this figure are software license renewals for such products as *Novell NetWare* (network operating system and client licenses), *F-Prot* (PC anti-virus), and *ArcINFO* (GIS). Also included are new software acquisitions for leased microcomputers that entered the lease program during FY05, and standalone products such as the Hunter Education simulation software from Laser Shot Technologies.

Figure 1-16 (above) provides a visual summary of the major hardware and software cost categories for FY05.

4. Total Agency IT Expenditures

Agency IT expenditures totaled \$11.1 million for the fiscal year ending June 30, 2005 (FY2005). This equates to 7.4% of the \$149,812,122 WDFW total FY05 operating budget.

FY2005 total IT expenditures increased \$850 thousand from FY04. \$265 thousand of the increase is due to increased hardware lease costs as more agency PCs are brought into the PC refresh lease plan. Personal

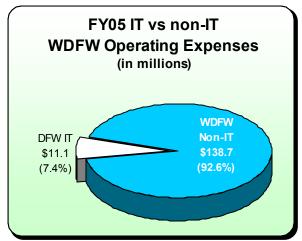


Figure 1-17. FY05 WDFW IT expenditures total 7.4% of the \$149.8 million agency budget.

services costs also increased by nearly \$200 thousand as application development efforts continued for projects such as HPMS, SalmonScape, GoHunt, and the Genetics database. An additional \$265,000 of IT staffing effort was produced in FY05, to support implementation of the Sierra Study and continuation of ISSP recommendations.

A comparison of IT spending and the WDFW agencylevel operating budgets for fiscal years 2002-2005 appears in Figure 1-18. Percentages of IT spending, as compared to the total agency operating budget, for fiscal years 2002-2005 ranged from a low of 5.7% in FY02 to 7.4% in FY05.

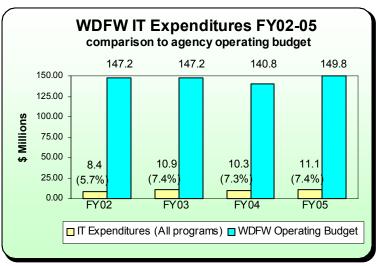


Figure 1-18. WDFW IT spending comparison to total agency operating budget for fiscal years 2002 through 2005.

A breakdown of the major expenditure components for FY05 agency IT appears in Figure 1-19.

The three largest FY05 IT expenditure categories were salaries and benefits (51.9%); telecommunications (18.6%); and data processing services (8.5%). Dollar amounts associated with the major FY05 agency IT cost

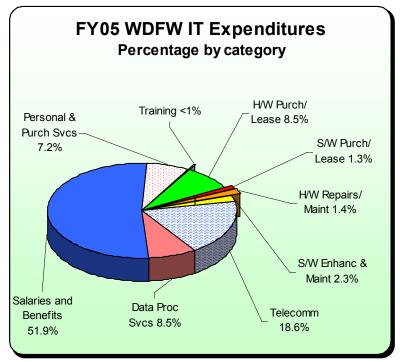


Figure 1-19. FY05 WDFW IT breakdown by category.

elements are identified in Section 3, parts A and B.

F. Challenges and Opportunities

WDFW has opportunities to meet challenges in information technology with innovative solutions.

Dealing with a geographically dispersed organization is a significant technology problem, and can be addressed by enhancing and expanding webbased methods and applications. The integration and expansion of remote access technologies,



Figure 1-20. WDFW Enforcement officers release a radio collar-wearing cougar at a remote Eastern Washington location.

including VPN and wireless, will make a significant difference in dealing with geographic span.

- The agency is still faced with a significant task of upgrading administrative business systems in many areas. WDFW continues to exploit new web technologies, and the wide-ranging e-government initiatives happening in other state agencies. WDFW has the opportunity to make a significant contribution to the e-government solutions in Washington.
- Providing adequate IT support and expertise for WDFW given the rapidity of technological changes and limited fiscal resources is a challenge. The IT Services Division strategic plan (Sierra report) provides a five-year vision for agency information technology that will help set direction and priorities.

G. Solutions: Current and Future IT Investments

1. Current IT Investments

a. ISSP Implementation – Phase III

This activity will continue implementation of recommendations outlined in the WDFW Information Systems Strategic Plan (ISSP) and updated in the Sierra Study. Completed projects include network upgrades and management tools, deployment of IP-based video conferencing and implementation of network intrusion detection tools. The PC leasing program financed through DIS also continues.

The Sierra Study recommendations for future IT systems architecture were published in September 2004, with some implementation planning starting in FY05. Work in 2005 has concentrated on highest priorities, such as server replacements and other infrastructure improvements.

b. Contracts and Projects System (CAPS), Release 2

The WDFW CAPS application is based on the PRISM system in use at IAC. The design of CAPS Release 1 began in March 2003. CAPS Release 1 is in production and over 300 staff have been trained in its use. This application provides staff the capability to manage contract documents; track project activities and tasks; and perform summary level budget management, approval routing, and contract amendment processing.

Release 2 of CAPS is currently in development. New features planned include spending plan management, contract balance tracking, and expenditure monitoring. Completion of Release 2 is expected by September 2005. (Additional CAPS application and database information is located in sections 3.G. and 3.H.)

c. Hydraulic Permit Management System (HPMS), Release 2

In the winter of 2004, WDFW completed planning and requirements definition for a system to automate the processing of applications for Hydraulic Project Approval (HPA) permits. By state statute, any citizen, organization, or government must obtain an HPA before beginning a project within state waters.

The new Hydraulic Permit Management System (HPMS) will support the review and processing of all HPAs, covering a wide range of business functions in the Habitat and Enforcement Programs. The new system will be built on the agency standard web-enabled architecture, extensible to

public interfaces in the future. Release 1 of HPMS was completed in November 2004. The Legislation authorized \$300,000 for work on Release 2 in the 05-07 biennium. Completion of Release 2 is expected by October 2006.

d. Automated Recreational License Sales System

The agency currently sells recreational licenses to the public with an automated license sales system known as WILD (Washington Interactive Licensing Database). The agency contracts with MCI to operate WILD. The five-year contract with MCI will expire on June 30, 2006. WDFW has begun the planning process for the next generation of a recreational license sales system. System requirements have been identified, an RFP issued, and a successful bidder named in spring 2005.

The internal agency development cycle costs for this project will be funded by agency resources and state appropriations. The Legislature provided \$300,000 for the 2005-07 biennium for WILD implementation. As in the existing WILD system, the vendor selected to develop, deploy, and operate the next generation replacement will be funded through transaction fees paid by system users.

2. Planned IT Investments

a. Information Systems Strategic Plan - Continued Implementation

The major new emphasis for FY06-7 will be the recommendations of the Sierra Study for IT architecture and systems, which looked at the alignment of WDFW IT systems with state government and industry standards and trends. Implementation of the Sierra recommendations for new architecture began in FY05 and will continue for two biennia.

b. Court Data Automation

A need exists to develop an automated system to extract data from Superior and District court data systems. Data will be used to process suspensions and revocations in WILD, and to identify felons. A supplemental budget request to start the first phase of the project is pending. If approved, scoping and requirements work would begin in FY07.

c. Hunting and Fishing Rules Database

Currently, recreational regulations are developed and managed via a manual process using documents formatted in Microsoft Word and Excel, Adobe PageMaker, and others. Development and management of regulations would be standardized and all information catalogued in a database. Publishing and reporting would be performed from the database. Public access, custom queries, and GIS applications of the regulation database would provide a capability that does not now exist.

WDFW expects to conduct internal scoping discussions in FY06, then select future direction.

d. Licenses and Fish Tickets (LIFT)

The LIFT System, built in the 99-01 biennium, manages commercial licenses and fish tickets for commercial fishing. The client/server base of LIFT is not included in the agency's architecture direction and is not webenabled. During the 05-07 biennium WDFW expects to conduct internal scoping and requirements discussions, then select a future direction.

e. Fleet Management

WDFW operates a fleet of over 1,000 vehicles and assorted heavy equipment. The current approach of using VMTS (see sections 3.G.8 and 3.H.14), Voyager, EPIC, and manual accounting systems may not meet the Governor's executive order 05-01 sustainability requirements. WDFW will conduct internal scoping and requirements studies in FY06 then select a future direction

f. Emerging and Recent Technologies

WDFW also plans to continue investigation and integration of emerging technologies such as wireless and voice over IP (VoIP) telephony. Currently, WDFW utilizes wireless technology with its field Enforcement officers to access the Info-Cop database application (see section 3.G.7). VoIP was successfully deployed in August 2005 in the new WDFW Region 1 headquarters office in Spokane (see section 3.F).

H. Prioritization Process

The Executive Management Team (EMT) functions as the department's IT policy setting body. The Business Services ITSD Manager, working with the Deputy Director, prepares issues for consideration by the EMT. The Information Technology Technical Committee, comprised of the top information systems experts in the agency, provides technical advice and staff work for the EMT.

The Corporate Data Oversight Committee (CDOC) is responsible for the coordination of natural resource data across program lines. Membership is composed of the agency ITSD Manager and the Chief Scientists for the Fish. Wildlife, and Habitat programs. CDOC promotes integrated data management in support of science-based management strategy.

Figure 1-21 provides a pictorial representation of the various WDFW committees and their roles in establishing, reviewing, and prioritizing agency IT policy.

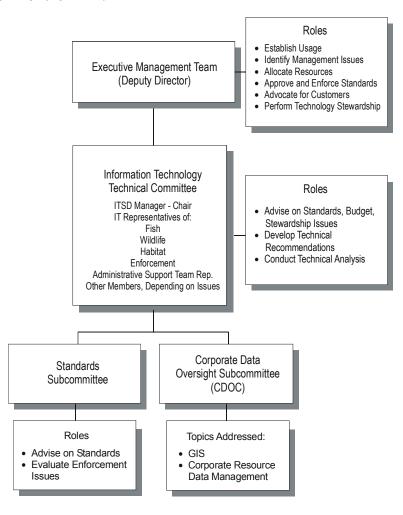


Figure 1-21. A number of committees help shape WDFW IT policy.

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2. Agency Strategic Business Plan

The WDFW updated its Strategic Goals, Objectives and Performance Indicators in September 2004. The document is available online at http://wdfw.wa.gov/depinfo/strategic_plan05-07.pdf.

A. Strategic Goals and Objectives

Mission Statement:

The Washington Department of Fish and Wildlife serves Washington's citizens by protecting, restoring and enhancing fish and wildlife and their habitats, while providing sustainable and wildlife-related recreational and commercial opportunities.

Goal 1: Healthy and Diverse Fish and Wildlife Populations and Habitats

WDFW will maintain healthy, diverse and self-sustaining fish and wildlife populations and their habitats.

- Objective 1: Develop, integrate and disseminate sound fish, wildlife and habitat science.
- Objective 2: Protect, restore and enhance fish and wildlife populations and their habitats.
- Objective 3: Ensure WDFW activities, programs, facilities and lands are consistent with local, state and federal regulations that protect and recover fish, wildlife and their habitats.
- Objective 4: Influence the decisions of others that affect fish, wildlife and their habitats.
- Objective 5: Minimize adverse interactions between humans and wildlife.

Goal 2: Sustainable Fish and Wildlife-related Opportunities

WDFW will provide sustainable recreational and commercial opportunities that are compatible with healthy, diverse fish and wildlife populations and their habitats. WDFW recognizes that management of both native and desirable non-native species are valuable components in providing sustainable opportunities.

• Objective 6: Provide sustainable high quality fish and wildlife-related recreational and commercial opportunities while improving the economic well-being of Washington, compatible with maintaining healthy fish and wildlife populations and habitats.

• Objective 7: Work with Tribal governments to ensure fish and wildlife management objectives are achieved.

Goal 3: Operational Excellence and Professional Service

Operational and service excellence is critical to building and maintaining credibility.

- Objective 8: Provide excellent professional services.
- Objective 9: Develop Information Systems infrastructure and coordinate data systems to provide access to services and information.
- Objective 10: Connect with those interested in Washington's fish and wildlife.
- Objective 11: Provide sound sustainable operational management of WDFW lands, facilities, and access sites
- Objective 12: Improve the effectiveness and efficiency of WDFW through sustainable operational and support activities.

B. Strategic Plan Goals, Objectives, Activities, and Performance Measures

Please refer to <u>Appendix A</u> for a complete listing of WDFW's updated strategic plan goals, objectives, activities, and performance measures.

3. Agency Technology Infrastructure

A. Current and Projected IT Budget

The IT expenses and budget figures shown here reflect the entire agency, not just the Information Technology Services Division of the Business Services Program. All information is as of June 30 of the applicable fiscal year, unless otherwise noted.

Beginning with this Portfolio update, WDFW will also include the previous fiscal year figures for comparison purposes.

FY04 and FY05 totals are actuals, rounded to the nearest hundred; FY06 figures are estimated.

Reporting Period	Total Agency IT Expenditures	Hardware Purchases and/or Leases	Software Purchases and/or Leases	Hardware Repairs and Maintenance	Software Enhancements and Maintenance
FY04	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)
	\$10,261,400	\$684,400	\$195,000	\$141,500	\$269,200
FY05	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)
	\$11,111,800	\$947,500	\$146,100	\$161,000	\$259,900
FY06	(Projected)	(Projected)	(Projected)	(Projected)	(Projected)
	\$11,152,800	\$972,700	\$214,400	\$145,700	\$330,100

Reporting	Telecommunications	Data Processing Services	If applicable, list & identify other major IT expenses here
Period	(Object EB, less GA Mail)	(Object EL)	
FY04	(Actual) \$1,984,900	(Actual) \$851,200	None
FY05	(Actual)	(Actual)	(Actual)
	\$2,061,600	\$945,600	None
FY06	(Projected)	(Projected)	(Projected)
	\$2,113,100	\$945,600	None

B. IT Personnel

The information below is for the state fiscal year ending June 30, 2005 (FY2005).

Reporting Period	Total Agency IT FTEs (includes WMS positions)	Salaries and Benefits	Personal and Purchased Services	Professional Development of IT Staff
FY04	(Actual)	(Actual)	(Actual)	(Actual)
	86.9	\$5,507,300	\$607,600	\$20,200
FY05	(Actual)	(Actual)	(Actual)	(Actual)
	87.9	\$5,772,000	\$800,100	\$17,900
FY06	(Projected)	(Projected)	(Projected)	(Projected)
	89.0	\$6,060,600	\$500,000	\$18,700

C. Personal and Workgroup Computing

The information below is as of the state fiscal year ending June 30, 2005 (FY2005).

Personal Computers				
1. Total Agency FTEs	2. Total number of PCs (excludes servers)	3. Planned number of PC replacements next fiscal year	4. Agency intended refresh cycle in months	5. PCs donated to schools in last 12 months
1,530.8	1450	600	42	125

Servers			
6. Total number of servers	7. Number of servers to be replaced in next fiscal year	8. Number of servers planned to be added in next fiscal year	9. Factors driving server acquisition strategy
48	6	8	New application deployment
			Increased application utilization
			Adoption of Sierra architectural study recommendations

Network Connectivity	
10. % agency staff with Inside WA (intranet) access	11. Agency primary network operating system
71.9% (1100/1530.8 users)*	Novell NetWare
* An additional 450 users have <i>WDFW Intranet</i> access (1550/1530.8 users), but cannot view <i>Inside WA</i> .	

Desktop Office Suite	
12. Primary desktop office product suite	13. If not XML enabled, do you plan to be within 12 months? (yes/no)
Microsoft Office 2000 Professional	Yes

Category Descriptions

During the preparation of this portion of the IT Portfolio, WDFW staff compiled data based on the following definitions, found in the *Information Technology Portfolio Management Standards* document, supplied by DIS:

<u>Hardware purchase and/or lease</u> - Purchase or lease payments for machines, devices, and transmission facilities used in information processing, such as servers, routers, personal computers, laptops, terminals, personal digital assistants, printers, and cables. Do not include multi-purpose machines that are predominately used as copiers.

<u>Software purchase and/or lease</u> - Purchase or lease payments for the object code version of computer programs and any related documentation, and/or licenses for use of software products (e.g. Microsoft Select Agreement). Software also means the source code version, where provided by vendor.

<u>Hardware repairs and maintenance</u> - Payments made to external providers for repairs, preventive maintenance, and/or support for hardware.

<u>Software enhancements and maintenance</u> - Payments made to external providers for enhancements, maintenance, and/or support for software.

<u>Telecommunications</u> - Telecommunications services and equipment for voice, including telephones and local service (e.g. Centrex, PBX, voice mail, IVR) and long distance (SCAN, 800 number), wireless (cellular phones, pagers); videoconferencing services and equipment; and telecommunications services and equipment for data (e.g. modems, routers, gateways, transport, Internet).

Note: Agency financial reporting codes also include freight in this category. These costs have been excluded only when they can be identified at the subsubobject level (i.e., EB 0004 GA Consolidated Mail payments were excluded from the Telecommunications total).

<u>Data processing/information technology services</u> - Payments made to a third party (e.g. DIS) for services that assist the agency in the electronic capture, collection, storage, manipulation, transmission, retrieval, presentation, and distribution of information in the form of data, text, or image, and/or facilities management of agency equipment.

Other - IT resources or special projects that may not be captured in the categories listed here.

<u>Agency IT FTE</u> - Total number of staff in IT job classifications. Includes other staff (e.g. WMS) whose responsibilities are mostly IT-related.

Salaries and benefits - Total salaries and benefits for agency IT FTEs.

<u>Personal and Purchased Services</u> - Personal Services are professional or other technical expertise provided by a consultant to accomplish a specific study, project, task, or other work statement. Purchased Services are provided by a vendor to accomplish routine, continuing, and necessary functions such as data entry, scanning and indexing, programming services and analysis. Do not include hardware and software repairs and maintenance in this category.

<u>Technical and professional development of IT staff</u> - Tuition/fees, travel, per diem and materials for classes, seminars, conferences, and online courses that contribute to the development of agency IT personnel.

NOTE: WDFW did not include travel and per diem costs associated with training, since they are accounted for separately by the state financial reporting system. Travel costs, where significant, are reported under "other major expenses" in 3.A.

D. Geographic Information Systems (GIS) Resources

The information below applies to the state fiscal year ending June 30, 2005 (FY05). See also *Significant GIS Datasets*, incorporated herein as Appendix B.

	1. Number of GIS Staff (FTEs)	Indicate here if included in 3.B.1 "Total Agency IT FTEs"
Central Support	5	Yes
Program Area Support	17	Yes

	2. GIS Software
Vendor Name	ESRI
Product Name	Arc/Info (node lock)
Number of Licenses	12

Vendor Name	ESRI
Product Name	Arc/Info (concurrent)
Number of Licenses	21

Vendor Name	ESRI
Product Name	SdeServer
Number of Licenses	2

Vendor Name	ESRI
Product Name	17
Number of Licenses	ArcIMS
Number of Licenses	3
Vendor Name	ESRI
Product Name	·-
Number of Licenses	Arcview3 for Unix
Number of Licenses	1
Vendor Name	ESRI
Product Name	Arcview3 for MS Windows
Number of Licenses	8
Number of Elections	0
Vendor Name	ESRI
Product Name	Arcview ArcGIS (standalone)
Number of Licenses	48
	10
Vendor Name	ESRI
Product Name	Arcview ArcGIS (concurrent)
Number of Licenses	22
	122
Vendor Name	ESRI
Product Name	Spatial Analyst (standalone)
Number of Licenses	5
Vendor Name	ESRI
Product Name	Spatial Analyst (concurrent)
Number of Licenses	15
	1
Vendor Name	ESRI
Product Name	Grid (nodelock)
Number of Licenses	6
	1
Vendor Name	ESRI
Product Name	3d Analyst (standalone)
Number of Licenses	2
Vendor Name	ESRI
Product Name	3d Analyst (concurrent)
Number of Licenses	8
	1
Vendor Name	ESRI
Product Name	Tin (nodelock)
Number of Licenses	3

Vendor Name	ESRI
Product Name	Network (concurrent)
Number of Licenses	2

Vendor Name	ESRI
Product Name	Publisher (concurrent)
Number of Licenses	1

Vendor Name	MapInfo
Product Name	Mapinfo
Number of Licenses	7 Development, 1 runtime

Vendor Name	ESRI
Product Name	GeoStatistical Analyst (concurrent)
Number of Licenses	1
Vendor Name	ESRI
Product Name	ArcPress
Number of Licenses	3

	3. GIS Hardware
Make/Model	Sun E450
How Many	1
Included in Section 3C.2 "Total Number of PCs?"	No
Included in Section 3C.6 "Total Number of Servers?"	Yes

Make/Model	Sun E250
How Many	1
Included in Section 3C.2 "Total Number of PCs?"	No
Included in Section 3C.6 "Total Number of Servers?"	Yes

Make/Model	Sun 280R (ims servers)
How Many	2
Included in Section 3C.2 "Total Number of PCs?"	No
Included in Section 3C.6 "Total Number of Servers?"	Yes

Make/Model	Compaq/HP Proliant ML570
How Many	1
Included in Section 3C.2 "Total Number of PCs?"	No
Included in Section 3C.6 "Total Number of Servers?"	Yes

Make/Model	Compaq/HP Proliant DL580
How Many	1
Included in Section 3C.2 "Total Number of PCs?"	No
Included in Section 3C.6 "Total Number of Servers?"	Yes

Major GIS Application(s) Application Name / SalmonScape – Web application for public access to salmon Description related spatial information PSAMP – Web application for displaying seabird and waterfowl densities and related information based on seasonal surveys Priority Habitats and Species Data Release System – Unix based system supporting production of maps and data CDs. SSHIAP – Salmon and Steelhead Habitat Inventory and Assessment Program. Information system that characterizes freshwater and estuary habitat conditions and distribution of salmonid stocks in Washington. WLRIS – Washington Lakes and Rivers Information System. Information system for tracking the distribution and status of Salmon, Steelhead, and resident fish. Includes a set of unix based tools for cleanup, routing and eventing hydrography ECA – Ecoregional Conservation Assessment. Information system used to evaluate biodiversity on an ecoregional scale for conservation prioritization and planning purposes for fish and wildlife resources RMAP – Road Management and Abandonment Planning System. A system for inventorying road conditions on WDFW managed lands to support compliance efforts with the State Forest and Fish Law.

Cadastre – System for tracking the location and attributes of real estate managed by WDFW (in development)
MapSys – Unix based application for creating seabird density maps based on PSAMP data.
GoHunt – Web application for public access to hunting and outdoor recreation related spatial information.
Ortho Photo Image Service – Web based service to provide access through Fortress and on internal WDFW network to seamless ortho photography. Service can be accessed by client side ESRI map display tools.
Wildlife Survey Data Mangement (WSDM) System – Database and tools to support integrated management of formerly disparate species occurrence datasets (in development)

	5. GIS Database(s) Environment
Vendor Name	Microsoft SQL Server
Number of applications	5 in production (salmonscape, GoHunt, PSAMP, Orthophoto Image Service) 2 in development (wsdm, , cadastre)

	6. Critical GIS Datasets
Name(s)	See Appendix B

E. Security and Disaster Recovery/Business Resumption Plans

1. IT Security Plan

- a. The annual security verification letter due August 31 per state government IT Security Policy and Standards is included in Section 6 of this Portfolio. This letter has also been submitted under separate cover to the Information Services Board (ISB). The verification indicates review and acceptance of agency security processes, procedures, and practices as well as updates to them since the last review.
- b. The IT Security Plan is included in this Portfolio by reference.
- c. The custodian of the IT Security Plan is Jim Eby, WDFW Information Technology Services Division Manager.
- d. The IT Security Plan is developed and maintained in accordance with published ISB policy.
- e. The Office of the State Auditor completed a compliance audit of the WDFW IT Security Plan in June 2003. This satisfies the DIS/ISB requirement for an independent audit of agency IT security plans by October 6, 2003. The next audit will be completed on or before October 6, 2006.

2. Disaster Recovery/Business Resumption Plan

- a. The annual state government Disaster Recovery/Business Resumption Plans verification letter due August 31 is included in Section 6 of this Portfolio. This letter has also been submitted under separate cover to the Information Services Board (ISB). The verification indicates review and acceptance of agency disaster recovery practices/business resumption processes, procedures, and practices as well as updates to them since the last review.
- b. The Disaster Recovery/Business Resumption Plans are included in this Portfolio by reference.
- c. The custodian of the Disaster Recovery/Business Resumption Plans is Scott Loerts, WDFW Safety Officer.
- d. The Disaster Recovery/Business Resumption Plans were developed and maintained in accordance with published ISB policy.

F. Public Access

WDFW continues to make significant progress toward providing electronic access to public information and enabling citizens to have two-way interaction for obtaining information and services, per RCW 43.105.270.

The main egovernment public
access portal for
WDFW information
is the WDFW
Internet site. This
popular Web



Figure 3-1. The WDFW Internet site is a popular destination for Web-enabled citizens and prospective visitors to Washington state.

destination contains both static and dynamic content, including hunting and fishing regulations; online events calendar; annual reports and news releases; contact information, including phone numbers, email addresses, and information on WDFW regional offices; *WildWatch* web cameras; and the ability to request hunting and fishing licenses online.

• A new feature since the last Portfolio update is the **Interactive Mapping** web portal. This page serves as the entry point for three interactive applications that provide a convenient way for the public to directly view WDFW geographic information system (GIS) data. The applications (*SalmonScape*, *GoHunt*, and the *Marine Bird Density Atlas*) draw data from WDFW GIS databases and present it in a web browser interface.

http://wdfw.wa.gov/mapping/index.html



Figure 3-2. Online mapping allows the public to access WDFW GIS data.

• Also new is the **Cougar Incident Reporting** application, which went online in July 2005. Reports of cougar interactions with people, pets and livestock in Washington state are now available online through the WDFW website. The database allows the public to view reported cougar sightings from the past 30 days. The application was created at the direction of the Legislature as a result of continued public concern over human/cougar interactions. http://wdfw.wa.gov/enf/danger/reporting



Figure 3-3. Cougar incident reports are now available from the WDFW Internet site.

The new WDFW Region 1 headquarters office in Spokane was dedicated and toured on August 4, 2005, with Governor Christine Gregoire and many other federal, state, and local elected officials, WDFW administration and staff, and 200 members of the public. The new facility is the first major WDFW facility to use a Voice over Internet Protocol (VoIP) telephone system. http://wdfw.wa.gov/reg/region1.htm



Figure 3-4. Gov. Gregoire dedicates the new WDFW Region 1 headquarters in Spokane.

• In August 2005, WDFW's main telephone number, (360) 902-2200, was consolidated into the WDFW Licensing Division call center. Consolidation provides several benefits including improved response time to customers; after hours coverage; and enhanced performance monitoring (reports will monitor call volume, average talk time, and high volume calling periods. Reporting capabilities will assist in measuring resources required to process incoming customer calls.).

G. Application (Systems) Information

According to DIS' *Information Technology Portfolio Management Standards*, an application or a system is a "group of related automated procedures that support a business objective." Mission-critical applications in use at WDFW include:

- Licenses and Fish Tickets (LIFT) see 3.G.1.
- Permit Odds Compensation Systems (POCS) see 3.G.2.
- Hydraulic Permit Management System (HPMS) see 3.G.3.
- Washington Interactive License Database (WILD) see 3.G.4.
- Equipment and Property Inventory Control (EPIC) see 3.G.5.
- Contracts and Projects System (CAPS) see 3.G.6
- Info-Cop see 3.G.7
- Vehicle Mileage Tracking System (VMTS) see 3.G.8

1. Licenses and Fish Tickets (LIFT)

- a. Application owners: Frank Hawley, Business Services Program Licenses Division (data steward licenses); Lee Hoines, Business Services Program Information Services Division (data steward fish tickets); Sharon Frerichs, Business Services Program Information Services Division (code responsibility)
- b. Customer/business area owner: Business Services Licenses Division; Fish Program - Biological Data Systems Division
- c. Application type: Client/Server, PowerBuilder/Sybase
- d. Description: An agency system to track the sale of commercial licensing information and the related catch data associated with those licenses. Historical data dates back to 1970.
- e. Number of users: 10 operational, 30 decision support
- f. Agency programs, business processes supported: Commercial License sales and Fish Ticket Excise tax; revenue from sales and tax helps support agency activities

- g. Implementation date: October 1, 2000
- h. Date significantly modified: intermittent improvements
- i. Number of technical FTEs for maintenance and support: 1 FTE
- j. Planned replacement or modifications: continuing
- k. Ownership of application: Agency
- 1. Application size and technical characteristics: Application is of moderate size and quite complex. Current database contains roughly 9 million observations.
- m. Interfaces to other major systems: Scheduled data feeds to the PacFIN research database (NMFS/NOAA). Ad/hoc data feeds to other databases and researchers throughout the US and internationally.

2. Permit Odds Compensation System (POCS)

- a. Application owner: Agency
- b. Customer/business area owner: Rajbir Deol, Wildlife Program
- c. Application type: Client/Server, PowerBuilder/Sybase
- d. Description: Special hunting permit applications for a variety of game species are purchased and submitted through WILD (see 3.G.6., below). The data are obtained via the WILD system, transferred to WDFW from WorldCom, and loaded into the POCS database. A weighted random process is used to select applicants from a pool of applicants greater than the number of permits available. The system tracks the application history of individuals based on an identification code which usually takes the form of either the WILD identification number, a social security number, or driver's license number. Query screens, reports, and a variety of other utilities are incorporated into the application.
- e. Number of users: The permit drawing manager is the primary user with full edit capability. There are currently three other users with read-only access.
- f. Agency programs, business processes supported: The Wildlife Program is the primary beneficiary of the output of the application. Documents printed as a result of the drawings are consulted and inspected by

- Enforcement Program personnel. Listings of permit holders are prepared for agency staff and for public disclosure.
- g. Implementation date: The first business cycle of the system was in 1996.
- h. Date significantly modified: Significant enhancements were made in 2001 in conjunction with the WILD system. Further performance enhancing refinements were made in 2003.
- i. Number of technical FTEs for maintenance and support: 0.25 FTE; majority of support is contracted out.
- j. Planned replacement or modifications: Continuing improvements will be made as necessary.
- k. Ownership of application: Agency
- 1. Application size and technical characteristics: Developed using PowerBuilder; Sybase database is located on agency Unix server.
- m. Interfaces to other major systems: POCS has a major tie to the WILD licensing system. WILD is the source of permit application data and allows web-enabled transactions for hunters.

3. Hydraulic Permit Management System (HPMS)

- a. Application owner: Business Services Program Information Services Division
- b. Customer/business area owner: Habitat Program, Peter Birch (business process owner); Habitat Program, Gayle Kreitman (primary contact)
- c. Application type: Web-enabled application (front end); Sybase database (back end)
- d. Description: Hydraulic Project Approvals (HPAs) are legislatively mandated permits issued by the agency for protection of fish life. Between 6,000 and 8,000 permits are issued annually.
- e. Number of users: All Habitat biologists, plus administrative staff
- f. Agency programs, strategies, or business processes supported: Habitat protection and Public Affairs hydraulic permit application process
- g. Implementation date: 1989

- h. Date significantly modified: 2002. (HPMS Release 1: 2004)
- i. Number of technical FTEs for maintenance and support: 2.0 (nominal)
- j. Planned replacement or modifications: Depends on availability of funding. Further refinements to the application and replacement of the database are desired. Developing second design-build of a web-enabled application. Target implementation is spring 2006. Additional funding is desired to complete all design features identified.
- k. Ownership of application: Agency
- 1. Application size and technical characteristics: The application is PC based (moving to web-enabled).
- m. Interfaces to other major systems: No digital interfaces to other systems (moving to web-enabled application).

4. Washington Interactive License Database (WILD)

a. Application
owner: Chris
Gillis, Business
Services Program
Information
Technology
Services Division
(data steward)



Figure 3-5. The recreational razor clam season fills Washington beaches with licensed diggers.

b. Customer/ Washington beaches with licensed diggers.
 business area
 owner: Frank Hawley, Business Services Program - Licenses Division (data steward licenses)

- c. Application type: Point of Sale -- Recreational Hunting and Fishing license sales terminals (MS Windows) connected to a central database using standard MODEM connections; Internet Sales -- Recreational Hunting and Fishing license sales application connected to a central database through the internet.
- d. Description: Statewide system with 700+ POS terminals that sell all types of recreational licenses. The license dealers are located at Sporting Goods stores, Department Stores, Bait Shops etc. The sales data are stored at the MCI facility in Sacramento CA. and transferred to WDFW and other state agencies for our use.
- e. Number of users: 1.3 million
- f. Agency programs, business processes supported: Directly related to license sales revenue; supports agency activities in Fish, Wildlife and Business Services.
- g. Implementation date: March 2001
- h. Date significantly modified:
- i. Number of technical FTEs for maintenance and support: 1
- j. Planned replacement or modifications: The contract ends June 30, 2006. A new vendor has been selected, following the conclusion of the RFP process begun in 2005.
- k. Ownership of application: MCI
- 1. Application size and technical characteristics: Large system of moderate to high complexity. Supports high volume sales.
- m. Interfaces to other major systems: Directly supports the WILD replication database and WILD Reporting System (intranet and internet versions) in IS. Interfaces to systems at DSHS, OST and OFM.

5. Equipment and Property Inventory Control (EPIC)

- a. Application owner: Shawn Brown Information Technology Services Division, Business Services Program (data steward)
- b. Customer/business area owner: Lorrie Nerney Purchasing Office, Financial Services Division, Business Services Program

- c. Application type: Microsoft Visual FoxPro 8.0
- d. Description: Application allows entry/modification of Agency Assets.
 Barcode labels are printed from the EPIC System. State reporting is also built into the EPIC System. Barcode Scanners interface with the EPIC System. The EPIC System replaced the State System CAMS
- e. Number of users: 75
- f. Agency programs, strategies, or business processes supported: Financial Services Division, Business Services Program
- g. Implementation date: 1999
- h. Date significantly modified: none
- i. Number of technical FTEs for maintenance and support: 0.5 (majority of programming support is contracted through WSU Cooperative Extension)
- j. Planned replacement or modifications: barcode data input
- k. Ownership of application: Agency
- 1. Application size and technical characteristics: 130 MB
- m. Interfaces to other major systems: none

6. Contracts and Projects System (CAPS)

- a. Application owner: Business Services Program Administration
- b. Customer/business area owner: Business Services Program Administrative Division, Brian Fairley (data steward)
- c. Application type: Client-based Visual Basic 6 user interface with a MS SQL Server database
- d. Description: User interface allows users to manipulate contract and project related data, within the limits of Agency approved business rules.
- e. Number of users: Internal: 339, External: 0
- f. Agency programs, strategies, or business processes supported: Supports Agency-wide administrative and processing processes associated with contracts and projects.

- g. Implementation date: 2004
- h. Date significantly modified: Modifications, on average, occur quarterly (application is still being implemented).
- i. Number of technical FTEs for maintenance and support: 0 (unable to document time spent by ITS staff to support users)
- j. Planned replacement or modifications: Spending plan module is being added for contracts along with a stand-alone process for state funded spending plans. There is also a module to create and browse Master Index codes.
- k. Ownership of application (Agency, DIS, vendor facility): Agency
- 1. Application size and technical characteristics: Executable file: 2.5MB; Directory (associated files on local drive): 8.66 MB
- m. Interfaces to other major systems: AFRS, DOP data warehouse

7. Info-Cop

- a. Application owner: Enforcement Program
- b. Customer/business area owner: Captain John Broome, Enforcement Program
- c. Application type: Client/Server, Third-party application/Sequel
- d. Description: Info-Cop is an application that enables Fish and Wildlife Officers to make



Figure 3-6. Info-Cop provides Enforcement staff with fast, accurate data. (photo credit: Info-Cop)

inquires to Criminal Justice Databases. The application allows officers to make entries into the application database, which is linked to the information from the criminal justice databases. This allows the comments made by an officer to be made available when the subject or vehicle is the result of a future inquiry. In addition, officers post their current location and /or status to facilitate operations and officer safety. The application also provides chat and message functionality to application users.

- e. Number of users: Internal: 130, External: None
- f. Agency programs, strategies, or business processes supported: Supports Strategic Plan Objective #2 "Protect, restore and enhance fish and wildlife populations and habitat"; Activity #9 "Ensure Compliance with WDFW Regulations"; Objective #3 "Provide excellent professional service; and Activity #22 "General Law Enforcement".
- g. Implementation date: 2004
- h. Date significantly modified: NA
- i. Number of technical FTEs for maintenance and support: One
- j. Planned replacement or modifications: None
- k. Ownership of application (Agency, DIS, vendor facility):
 Agency/Enforcement Program (Purchased with USDOJ COPS Grant funds).
- 1. Application size and technical characteristics: Client application: 18.5 MB; Server side: SQL Database on Windows 2000 Server.
- m. Interfaces to other major systems: Communication to Washington State Patrol ACCESS Communications switch via DIS Inter-governmental Network. Access to InfoCop in the field is provided by a NetMotion appliance.

8. Vehicle Mileage Tracking System (VMTS)

- a. Application owner: Shawn Brown Information Technology Services Division, Business Services Program (data steward)
- b. Customer/business area owner: Karen McManus General Accounting Office, Financial Services Division, Business Services Program
- c. Application type: PowerBuilder 9.0
- d. Description: Application allows entry/modification of Agency Vehicles and Credit Cards. Each vehicle is assigned a operating master index code referred to as the "Home Code". The VMTS System downloads AFRS coding daily and has the capability to refresh manually as needed. Mileage expenditures are charged to the appropriate master index code after the collection of mileage information via the Web based Mileage

collection application. The Voyager Credit Card bill is also processed via the VMTS System to charge the appropriate expenditure master index with credit card charges. The Journal Voucher is submitted electronically via the IBM mainframe after FTE file to the IBM Mainframe. Safeguards are in place to ensure expired expenditure codes cannot be used. Email is incorporated in VMTS as a way of communicating with the vehicle contacts and program contacts. The VMTS System has multiple reports available for management and journal voucher backup. The VMTS System replaced an agency mainframe system.

- e. Number of users: PowerBuilder (6), Web App (567)
- f. Agency programs, strategies, or business processes supported: Financial Services Division, Business Services Program
- g. Implementation date: 2001
- h. Date significantly modified: none
- i. Number of technical FTEs for maintenance and support: 0.25
- j. Planned replacement or modifications: Upgrade to PowerBuilder 10 in 2005
- k. Ownership of application: Agency
- 1. Application size and technical characteristics: 20 MB
- m. Interfaces to other major systems: AFRS Master Accounting information

H. Database Information

DIS' *Information Technology Portfolio Management Standards* states that mission critical databases support high risk application systems. With a mission critical database, even short-term loss of the functionality provided by the application and database would have significant negative impact on:

- The health or safety of the public or state workers;
- Income maintenance for citizens or government employees,
- Payments to vendors for goods and services; or
- The legal or fiscal integrity of state operations.

Databases deemed mission critical to the business functions of the agency include the following:

- Auxiliary Fish Catch Record System (AFCRS) see 3.H.1.
- Licenses and Fish Tickets (LIFT) see 3.H.2.
- Permit Odds Compensation Systems (POCS) see 3.H.3.
- Heritage Database (HRTG) see 3.H.4.
- Hydraulic Permit Management System (HPMS) see 3.H.5.
- Marbled Murrelets Database (MAMU) see 3.H.6.
- Personnel Database see 3.H.7.
- PHS Polygon Database (PHSPOLY) see 3.H.8.
- Spotted Owl Site Centers (SOCEN) see 3.H.9.
- Washington Interactive License Database (WILD) see 3.H.10.
- Equipment and Property Inventory Control (EPIC) see 3.H.11.
- Contracts and Projects System (CAPS) see 3.H.12.
- Info-Cop see 3.H.13.
- Vehicle Mileage Tracking System (VMTS) see 3.H.14.
- Sport Catch Harvest Data (CRC) see 3.H.15.

- Hatchery Data System see 3.H.16.
- Spawning Ground Survey System see 3.H.17.
- Washington Lakes and Rivers Information System (WLRIS) see 3.H.18.
- SSHIAP Database (Segments) see 3.H.19.
- Local Habitat Assessment Database see 3.H.20.
- Intensive Monitoring of Watersheds Database see 3.H.21.
- Fish Passage and Diversion Screening Inventory Database see 3.H.22.

1. Auxiliary Fish Catch Record System (AFCRS - QuickReports)

- a. Database commercial name: MS Access (Windows)
- b. List of applications supported: MS Access Applications QuickSoft.mdb, QuickSoft_NWIFC_DataExchange.mdb
- c. High-level description/type of data collected: In-season commercial salmon and steelhead summary catch data for Washington waters. Data source is commercial fish tickets, treaty data file input records, and non-treaty ticket data reported by dealers via phone or fax.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Susan Markey, Fish Program (data steward)
- f. Size of database (in terms of storage requirements): 110 MB
- g. Number of records in database: Annual data tables are 10,000 records.
- h. Frequency with which records are added, modified, and deleted: Daily bi-weekly, depending on fishing season
- i. Backup frequency: Local PC-based treaty data files copied weekly to CD-ROM. Network server (NRB2) MS Access data files backed up in routine agency server backup process.

2. Licenses and Fish Tickets (LIFT)

- a. Database commercial name: Sybase
- b. List of applications supported: WDFW commercial licensing, WDFW Fish Ticket catch accounting, NMFS/NOAA PacFIN research database, various other departmental and external databases.
- c. High-level description/type of data collected: Commercial fishing license sales and transfers, catch data statistics based on species / geographic area / capture-method / date / vessel / person / etc.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Business Services Program Licenses Division (data steward licenses); Business Services Program Information Technology Services Division Data Management section (data steward fish tickets)
- f. Size of database (in terms of storage requirements): Operational and reporting requirements are roughly 330 MB.
- g. Number of records in database: 100,000
- h. Frequency with which records are added, modified, and deleted: Daily
- i. Backup frequency: Daily

3. Permit Odds Compensation System (POCS)

- a. Database commercial name: Sybase
- b. List of applications supported: POCS, (Weighted Points Special Permit Drawing System) an application developed using PowerBuilder. SAS Access is supported, but is only used for querying the database.
- c. High-level description/type of data collected: Permit applicant name, address, telephone number, social security number, driver's license number, hunting license number, game transport tag number, date of birth, and hunt choices.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Jim Rieck, Wildlife Program

- f. Size of database (in terms of storage requirements): 612 MB (current storage allocation on server)
- g. Number of records in database: This depends on the table, of which there are several. The applicant table contains some 150,000 records. The application table contains approximately 790,000 records.
- h. Frequency with which records are added, modified, and deleted: Records are added prior to each drawing. There are currently two drawings held. The first drawing adds approximately 1,000 records to the database annually. The second adds approximately 100,000. Individual records are modified or deleted year-around.
- i. Backup frequency: Backups are clustered around the time of each drawing and processing time frame. The times in between the drawings do not require backups as frequently due to insignificant modifications in the database.

4. Heritage Database (HRTG)

- a. Database commercial name: ARC/INFO, SAS
- b. List of applications supported: The data locations and attribute data are digitized via an ARC/VIEW entry application, which then feeds SAS and ARC/INFO job streams.
- c. High-level description: WDFW's Wildlife Heritage database (HRTG) consists of locations and descriptions of point occurrences of wildlife species of concern (monitor, sensitive, threatened, and endangered). The database is the agency's primary repository for threatened and endangered species data.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Raj Deol, Wildlife Program
- f. Size of database (in terms of storage requirements): Two versions of the database are simultaneously maintained in the UNIX environment, one in SAS (24 MB in size) and one in ARC/INFO 22 MB in size. The entire HRTG database UNIX work area consumes 2.0GB. This work area includes multiple generational data sets, a large library of ad hoc type analytical programs and mapping routines, and the ARC/VIEW entry application.
- g. Number of records in database: 28888

- h. Frequency with which records are added, modified, and deleted: Weekly
- i. Backup frequency: Its generation data sets are periodically TARed and then deleted from disk. Data residing on servers are backed up daily via agency automated Unix server backup system.

5. Hydraulic Permit Management System (HPMS)

- a. Database commercial name: Sybase
- b. List of applications supported: HPA approval process
- c. High-level description/type of data collected: Information is collected from HPAs, letters, and applications. Current data (1989 to present) has been converted to Sybase.
- d. Location (Agency, DIS, vendor facility): Agency



Figure 3-7. Drainage culvert projects are one type of activity contained in the HPMS database.

- e. Ownership of database: Business Services Program Information Technology Services Division Data Management section, Debbie Wells (data steward)
- f. Size of database: 260 MB.
- g. Number of records in database: 94,000
- h. Frequency with which records are added, modified, and deleted: Daily/weekly
- i. Backup frequency: Daily

6. Marbled Murrelets Database (MAMU)

- a. Database commercial name: ARC/INFO, Access
- b. List of applications supported: Access entry application and an ARC/INFO digitizing application.

- c. High-level description/type of data collected: MAMU) is comprised of three databases: an INFO table, MMSURVEYS.TBL which contains individual survey effort information (who, when, weather, etc.), and two ARC/INFO covers MMDETECTIONS and MMSTATIONS. MMDETECTIONS contains the actual location, observed behavior, date, time, and observer of all murrelet detections (visual observation and audio detections) reported to WDFW. MMSTATIONS contains the locations of the survey stations from which most detections are reported from.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Jane Jenkerson, Wildlife Program
- f. Size of database (in terms of storage requirements): Attribute information is stored in the Novell environment in Access using 1 MB. There are SAS versions of the attribute data sets as well using 6.9 MB, 408 KB, and 6.4 MB for the survey, station, and detection data respectively. UNIX disk use for data only equals 15.8 MB. Total disk space used for all UNIX data and program libraries equals 279.6 MB.
- g. Number of records in database:

MMSURVEYS.TBL: 28077 (5 MB) MMDETECTIONS: 30066 (8 MB) station cover: 15771 (1.5 MB)

- h. Frequency with which records are added, modified, and deleted: Daily/Weekly
- i. Backup frequency: Daily via agency automated Unix server backup system

7. Personnel Database

- a. Database commercial name: Microsoft Access (HRMS: Human Resource Management System)
- b. List of applications supported: Standalone; Ad-hoc reports used by agency managers.
- c. High-level description/type of data collected: Human resource actions, tracking and workflow management; Safety and injured worker tracking and management; Employee training tracking; Correspondence generation (appointment letters, reminder and tracking letters).

- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Office of the Director: Personnel Office Penny Cusick
- f. Size of database (in terms of storage requirements): 99 MB (Front end/Queries/Reports) 103 MB (Tables)
- g. Number of records in database: 64 tables; 260,000 records
- h. Frequency with which records are added, modified, and deleted: Daily. Two tables with bi-monthly downloads from HRISD.
- i. Backup frequency: Daily

8. PHS Polygon Database (PHSPOLY, PHSPTS, ZAPPOLY)

- a. Database commercial name: ARC/INFO Workstation and ARCSDE (Spatial Database Engine)\SQLServer RDBMS
- b. List of applications supported: Ad hoc extractions are used to help answer 500-600 annual requests for information from the general public. The database also supplies information to Habitat, Wildlife, and Fish Program staff for HPA, forest practices act, and SEPA reviews.
- c. High-level description: Database contains polygonal information about habitats and species defined as priorities for management, conservation, and preservation.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Habitat Program: David Price (business process owner); Terry Johnson (data steward)
- f. Size of database (in terms of storage requirements): 2.8 GB

ArcINFO Workstation:

 PHSPOLY Database (ArcInfo coverage located at /resdat/dfwlib/statewide and in the PHSDIGI/PHS_STATEWIDE workspace):

23152 total polygons (4080 regions) in 1 coverage in 1 workspace (number of total polygons and regions will vary throughout the year) (45 MB - size will vary throughout the year)

- TABLES_PHS PHS Tables Directory (located at /resdat/dfwlib/system):
 Numerous Info tables (number will vary throughout the year)
 Most Important Tables: PHSPOLY_XREF (polygon cross-reference table for PHSPOLY) 37134 records; PHSEO (general information table) 5415 records; PHSDSCRP (descriptive information) 5415 records; PHSSRC (sources of information) 7937 records; PHSLULC (land use/land cover information) 2764 records, EOCODE_TBL (eocode descriptions) 901 records, and CRIT_TBL (mapping criteria code descriptions) 21 records. (6 MB though size will vary throughout the year)
- PHSDIGI PHS Digitizing Workspace (located at /resdat/gis_data_mgmt):
 12 permanent upper-level workspaces. A number of temporary workspaces will be created and deleted throughout a year. The most important workspaces are listed below. (1.7 GB though size will vary throughout the year)
- PHS_STATEWIDE PHS Spatial Data Update Workspace (located in the PHSDIGI workspace):
 Work directory for updating the PHSPOLY database (contains Arc Macro Language scripts for updating the database). There are currently 7 upper-level workspaces in the directory and several ArcInfo coverages. (564 MB – size will vary throughout the year)
- ATTENTRY PHS Attribute Data Update Workspace (located in the PHSDIGI workspace):
 Work directory for updating the PHS attribute tables: PHSEO, PHSDSCRP, PHSLULC, PHSSRC (contains Arc Macro Language scripts for updating the database). There are currently 3 upperlevel workspaces in the directory and several older versions of the tables. (53 MB size will vary throughout the year)
- ROLLBACK PHS Archive Directory (located in the PHSDIGI workspace):
 Currently 7 coverages in rollback directory (number will vary eventually will be archived on CD). (338 MB)
- ZAPPOLY Database (located in the ZAPPOLY_STATEWIDE workspace):
 ArcINFO coverage for zapped (lost to development) information from the PHSPOLY coverage. Currently 1 coverage in the directory. (133 KB)

- ZAPPOLY_STATEWIDE Update Workspace (located in the PHSDIGI workspace):
 Work directory for updating the ZAPPOLY coverage. Currently 4 upper-level workspaces in the directory.
 (5 MB)
- PHSPTS Database (located in the PHS_POINTS workspace): ArcINFO coverage for priority habitat points. Currently 1 coverage in the directory. (123 KB)
- PHS_POINTS Update Workspace (located in the PHSDIGI workspace):
 Work directory for updating the PHSPTS coverage. Currently 3 upper-level workspaces in the directory.
 (300 KB)

ArcSDE:

- PHSPOLY Polygon Feature Class (ArcSDE data layer stored on SQLServer RDBMS):
 23152 total polygons in 1 data layer (number of total polygons and regions will vary throughout the year) (250 MB size will vary throughout the year)
- PHSREGION Overlapping Polygon Feature Class (ArcSDE data layer stored on SQLServer RDBMS):
 4080 polygons) in 1 data layer (number of total polygons will vary throughout the year). (250 MB size will vary throughout the year)
- PHS Attribute Tables (stored on SQLServer RDBMS):
 PHSPOLY_XREF (polygon cross-reference table for PHSPOLY)
 37134 records; PHSEO (general information table) 5415 records;
 PHSDSCRP (descriptive information) 5415 records; PHSSRC (sources of information) 7937 records; PHSLULC (land use/land cover information) 2764 records, EOCODE_TBL (eocode descriptions) 901 records, and CRIT_TBL (mapping criteria code descriptions) 21 records.
- PHS_GEODATABASE Update Directory (located under the PHSDIGI workspace):
 Work directory for updating the PHSPOLY and PHSREGION feature classes, plus the PHS attribute tables. Currently contains 5 geodatabases but PHS_HARN.mdb (291 MB) is the most important. PHS_HARN83.mdb contains PHSPOLY, PHSREGION and the PHS attribute tables that were converted

from the ArcInfo coverage format to the ArcGIS geodatabase format. (637 MB – size will vary throughout the year)

- g. Number of records in database: See above
- h. Frequency with which records are added, modified, and deleted: Several times a year.
- i. Backup frequency: Daily via agency automated Unix server backup system.

9. Spotted Owl Site Center (SOCEN) Database

- a. Database commercial name: ARC/INFO, Ascii
- b. List of applications supported: In-house use for data extractions; portions sent to DNR TRAX (see item c., below).



c. High-level description: SOCEN is comprised of four databases: an

Figure 3-9. Spotted owl (Strix occidentalis).

ARC/INFO cover of the site center locations and summary site characteristics (SOCEN), an ascii file named TRAKREF that is an audit trail of all editorial and input transactions, an ascii file of site center history and biological status (FINALSOFILE), and an ascii file of all sections (FINALTRSNEW) impacted by spotted owl 2.7 or 1.8 mile management buffer circles which is shipped to DNR's TRAX system.

- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Wildlife and Habitat Programs; Wildlife Program Raj Deol (data steward)

f. Size of database (in terms of storage requirements): The total project work area consumes 94 MB of disk space, but this also contains a number of compressed generational data sets and analytical programs:

ARC cover: 1236 records (196 KB) TRAKREF: 5619 records (1.2 MB) FINALSOFILE: 1236 records (357 KB) FINALTRSNEW: 28145 records (966 KB)

- g. Number of records in database: The total record count is 39,360 with total current data (as opposed to generational data sets kept online for recovery) use of disk at 2.6 MB.
- h. Frequency with which records are added, modified, and deleted: weekly
- i. Backup frequency: Daily via agency automated Unix server backup process. Data sets are periodically TARed and removed from disk.

10. Washington Interactive License Database (WILD)

- a. Database commercial name: Sybase, Oracle
- b. List of applications supported: WILD System, WILD replicated database and WILD Reporting System (intranet and internet versions), and various other departmental and external databases.
- c. High-level description/type of data collected: Recreational hunting and fishing license sales data.
- d. Location (Agency, DIS, vendor facility): Agency, DIS, MCI vendor facility
- e. Ownership of database: Business Services Program Licenses Division (business owner); Business Services Program Information Technology Services Division (data steward)
- f. Size of database (in terms of storage requirements): Operational and reporting requirements are roughly 20 GB.
- g. Number of records in database: 15 million
- h. Frequency with which records are added, modified, and deleted: Near real-time
- i. Backup frequency: Daily

11. Equipment and Property Inventory Control (EPIC)

- a. Database name: Microsoft Visual FoxPro 8.0
- b. List of applications supported: EPIC
- c. High-level description/type of data collected: Asset, location and cost information about DFW-owned capital equipment and property.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Financial Services Division, Business Services Program (business owner); Data Management Unit, Information Technology Services Division, Business Services Program Shawn Brown (data steward)
- f. Size of database (in terms of storage requirements): 100 MB
- g. Number of records in database: 28,000
- h. Frequency with which records are added, modified, and deleted: Daily
- i. Backup frequency: Daily

12. Contracts and Projects System (CAPS)

- a. Database commercial name: MS SQL Server
- b. List of applications supported: CAPS
- c. High-level description/type of data collected: Contracts and projects data (financial, legal, and administrative)
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Business Services Program Administrative Division, Brian Fairley (ITS) (data steward)
- f. Size of database: 250 MB (server allocation)
- g. Number of records in database: There are over 90 tables with varying record counts (several thousand).

- h. Frequency with which records are added, modified, and deleted: Daily
- i. Backup frequency: Daily

13. Info-Cop

- a. Database commercial name: SQL
- b. List of applications supported: Info-Cop Application
- c. High-level description/type of data collected: Officer's status entries, inquires, responses, chat and messages of officers utilizing the application.
- d. Location (Agency, DIS, vendor facility):
 Agency
- e. Ownership of database: Enforcement Program
- f. Size of database: 70 MB.
- g. Number of records in database: 8,000
- h. Frequency with which records are added, modified, and deleted: Daily
- i. Backup frequency: Monthly

14. Vehicle Mileage Tracking System (VMTS)

- a. Database name: Sybase
- b. List of applications supported: VMTS
- High-level description/type of data collected:
 Mileage and credit card cost information for WDFW-owned vehicles and other gas/diesel operated equipment.
- d. Location (Agency, DIS, vendor facility): Agency



Figure 3-10. Mobile computer mounted in vehicle of WDFW Enforcement officer.

- e. Ownership of database: Financial Services Division, Business Services Program (business owner); Data Management Unit, IT Services Division, Business Services Program – Shawn Brown (data steward)
- f. Size of database: 150 MB (server allocation)
- g. Number of records in database: 433,000
- h. Frequency with which records are added, modified, and deleted: Daily. (Most new records are added shortly after the last workday of each month.)
- i. Backup frequency: Daily

15. Sport Catch Harvest Data (CRC)

- a. Database Commercial name: MS Access (Windows)
- b. List of applications supported: None
- c. High-level description/type of data collected: Estimated salmon sport harvest in state marine and freshwater areas
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Terrie Manning, Fish Program (data steward)
- f. Size of database (in terms of storage requirements): Marine harvest: 67 MB, Freshwater harvest: 7 MB
- g. Number of records in database: Marine harvest: 16,000 records, Freshwater harvest: 8,000 records
- h. Frequency with which records are added, modified, and deleted: Annual catch data added; occasional revisions.
- i. Backup frequency: MS Access data files backed up in routine agency server backup process. Local PC copy backed up to CD-ROM when revised.

16. Hatchery Data System

- a. Database Commercial name: MS Access (Windows)
- b. List of applications supported: Standard retrieval, error-check and summarization reports designed for internal use only (MS Access)
- c. High-level description/type of data collected: adult salmonid returns to WDFW hatcheries; eggs taken, disposition of adult carcasses, juveniles reared and released by size, age, species, stock
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Brodie Cox, Fish Program (data steward)
- f. Size of database (in terms of storage requirements): 4 GB
- g. Number of records in database: 250,000
- h. Frequency with which records are added, modified, and deleted: Daily to weekly, depending on time of year
- i. Backup frequency: Monthly, to CD-ROM

17. Spawning Ground Survey System

- a. Database Commercial name: MS Access (Windows)
- b. List of applications supported: Standard retrieval, error-check and summarization reports designed for internal use only (MS Access)
- c. High-level description/type of data collected: wild adult salmonid live and dead counts, wild juvenile redd counts in streams of the Puget Sound and Coastal regions of western Washington
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Dong Nguyen, Fish Program (data steward)
- f. Size of database (in terms of storage requirements): 170 MB
- g. Number of records in database: 295,000

- h. Frequency with which records are added, modified, and deleted: Daily to monthly, depending on time of year (peak from January through May)
- i. Backup frequency: Monthly to CD-ROM during update season

18. Washington Lakes and Rivers Information System (WLRIS)

- a. Database Commercial name: ESRI ArcInfo (Unix environment)
- b. List of applications supported: Data entry, data check, data retrieval routines for internal use (AML: ArcInfo Macro Language)
- c. High-level description/type of data collected: spatial data representations of the 1:24,000 resolution streams and lakes of Washington state; anadromous and resident fish distribution; known spawning and rearing usage; salmonid stock identification and status (SaSI); agency facilities
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Martin Hudson, Fish Program (data steward)
- f. Size of database (in terms of storage requirements): 426 MB
- g. Number of records in database: 612,000 (includes lookup and other related tables)
- h. Frequency with which records are added, modified, and deleted: Weekly, or as needed
- i. Backup frequency: Nightly/weekly to tape (with Unix systems backups); quarterly to CD-ROM

19. SSHIAP Database (Segments)

- a. Database commercial name: ArcView 9 personal geodatabase (MS Access Database), ArcSDE (Spatial Database Engine)\SQLServer RDBMS
- b. List of applications supported: Ad hoc extractions are used to help answer requests for information from the general public. The database also supplies information to Habitat and Fish Program staff for HPA, forest practices act, and SEPA reviews. Stream_Net is the base layer in the Family Forest & Fish Passage Upstream Habitat Estimator application. Segments and EDT layers are displayed on the SalmonScape IMS application.

- c. High-level description: Segments feature class contains polyline information about stream gradient, confinement, channel habitat, and Rosgen. Stream_Net is a geometric network with network connectivity and flow direction. Stream_Net_Junctions is a network junction layer with one junction at every polyline end. EDT_pres is a polyline feature class which stores Ecosystem Diagnosis and Treatment Preservation results. EDT_rest is a polyline feature class that stores Ecosystem Diagnosis and Treatment Restoration results.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Habitat Program: David Price (business process owner); Tracy Trople (data steward)
- f. Size of database (in terms of storage requirements):

ArcView 9 Personal Geodatabase:

- WRIA# Database (ArcView 9 personal geodatabase):
 One personal geodatabase exists for each WRIA. Segments,
 Stream_Net (geometric network built on segments layer), and
 EDT_pres & EDT_rest are contained in this database. The size of
 the database varies depending on the size and stream density of the
 WRIA.
- SSHAIP Staging_Area Workspace: Working directories for updating the SSHIAP personal geodatabase (contains ArcMap projects and WRIA# personal geodatabase). Each personal geodatabase contains a segments, Stream_Net, and Stream_Net_Juctions feature class split at the WRIA boundary. WRIAs 22- 29 contain EDT_pres and EDT_rest feature classes. There is one directory for each WRIA (size of directory will vary depending on WRIA). Size of Staging_Area directory: 19 GB.
- SSHAIP Statewide Workspace: Working directory for merged statewide SSHIAP layers (12 GB)

ArcSDE:

 Segments – Polyline Feature Class (ArcSDE data layer stored on SQLServer RDBMS):
 1043377 total polylines in 1 database.

- EDT_pres Polyline Feature Class (ArcSDE data layer stored on SQLServer RDBMS):
 5745 total polylines in 1 database.
- EDT_rest Polyline Feature Class (ArcSDE data layer stored on SQLServer RDBMS):
 17279 total polylines in 1 database.
- g. Number of records in database: See above
- h. Frequency with which records are added, modified, and deleted: As changes get made to the agencies hydro layer or more EDT data becomes available.
- i. Backup frequency: Daily via agency automated backup system.

20. Local Habitat Assessment Database

- a. Database commercial name: ARC/INFO Workstation
- b. List of applications supported: Developmental data models are used to help identify the value of wildlife habitat on a county scale for county planning activities.
- c. High-level description: Data layers are primarily a raster based GRID format and depict various theme layers such as ecoregional assessment data, road and population density, landcover, zoning, and PHS significant areas, and these are used in combination within data models to derive information on the value of wildlife habitat.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Habitat Program: Tim Quinn (business process owner); John Jacobson (data steward)
- f. Size of database (in terms of storage requirements): 500 MB per county and currently includes Kitsap and Thurston, with partial datasets assembled for Pierce and Whatcom. Database is still in developmental state.
- g. Number of records in database: Each raster data layer typically has 10 records describing the data value range.

- h. Frequency with which records are added, modified, and deleted: Because of the developmental nature of these data, they are changed periodically throughout the year.
- i. Backup frequency: Daily via agency automated Unix server backup system.

21. Intensive Monitoring of Watersheds Database

- a. Database commercial name: MS Access
- b. List of applications supported: For use by WDFW personnel, other public agencies, researchers, etc.
- c. High-level description: Intensive and extensive surveys of streams, including smolt, spawner, and redd counts.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Habitat Program: David Price (business process owner); Kevin Samson (data steward)
- f. Size of database (in terms of storage requirements): N/A (still in developmental stage)
 - Intensive Survey dB:
 Will hold EMAP-Protocol data collected from summer Intensive Survey, starting from 2004 survey.
 - Extensive Survey dB: Will hold data from on-going Extensive Survey, starting from 2004 survey.
 - Crest Gauge Data dB: Pending
 - Temperature Datalogger Data dB: Pending
 - Fish Program Data dB:
 Pending. Will hold data from smolt, spawner, and redd surveys.
- g. Number of records in database: N/A (still in developmental stage)

- h. Frequency with which records are added, modified, and deleted: Several times a year.
- i. Backup frequency: Daily via agency automated Unix server backup system.

22. Fish Passage and Diversion Screening Inventory Database

- a. Database commercial name: MS Access
- b. List of applications supported: WDFW uses the data to identify, locate, and prioritize correction of human-made fish passage barriers and unscreened surface water diversions. Data have been provided to SSHIAP, Conservation Commission limiting factors analysis, regional fisheries enhancement groups, counties, cities, tribes, etc for salmon recovery planning. The database also supports the Fish Passage Barrier components of Salmonscape and Streamnet.
- c. High-level description: Database contains information on the fish passage status of human-made instream structures and the screening status of surface water diversions.
- d. Location (Agency, DIS, vendor facility): Agency
- e. Ownership of database: Habitat Program: David Price (business process owner); Brian Benson (data steward)
- f. Size of database (in terms of storage requirements): N/A (still in developmental stage)
 - Tables (MS Access), DFW-NRB2\APPS\FPDSI\Tables, 40MB
 - Images (jpeg), DFW-NRB2\APPS\FPDSI\Images, 1.15GB
 - Workstations (MS Access) FPDSI user interface; 33 users including 1 administrator, 22 data entry, 10 read only; 2MB each.
- g. Number of records in database: 21,000 in the primary table plus related tables.
- h. Frequency with which records are added, modified, and deleted: Daily.
- i. Backup frequency: Daily via agency automated Unix server backup system.

4. Current Technology Project/Investment Summaries

The table below provides summary information on WDFW's FY2005 technology investments.

Title	Description	Cost Estimate	FTE's	Schedule	Scope	Business Strategy	Executive Sponsor	Project Manager
Business Systems	CAPS project. Automate business systems for contracts management.	Release 2 of CAPS (financial modules) currently under construction, est. cost of \$300K	Agency IT support – 2+ FTE	Devel 7/1/04 to 9/30/05	Business Services, and all resource program contract managers	Operational excellence	Ron McQueen Business Services Program Asst. Dir. (360) 902-2204 mcquerjm@dfw.wa.gov	Brian Fairley Project Manager (360) 902-2199 fairlblf@dfw.wa.gov
Business Systems	Work on the new HPMS application to support the management of hydraulic permits. Release 1 completed. Release 2 will start later this year.	\$300K for requirements assessment and build of Release 2.	Agency IT support, 2 FTEs	Completion of Release 2 expected by 03/31/07.	Business Services, Habitat Program, public applying for permits.	Healthy fish, wildlife, and habitats. Operational excellence	Greg Hueckel, Habitat Program Asst. Dir. (360) 902-2416 hueckgjh@dfw.wa.gov	Brian Fairley Project Manager (360) 902-2199 fairlblf@dfw.wa.gov
Business Systems	The WILD system (recreational license sales) will be replaced in 2006 with a new generation application. The acquisition and development cycle started in July 2004. Current vendor is MCI. The new vendor is Outdoor Central.	\$300K for FY06 to cover agency costs to work with the vendor on the new system. The operating and development costs will be covered by a transaction fee. Estimated revenue to the system contractor is \$1-2M per year.	Est. 4 FTE during 2005-06. Agency will manage some services internally	Development started in Aug 2005 with rollout target of April 2006.	Statewide with public impact.	Operational excellence. Sustainable opportunities	Larry Peck, Deputy Director. 902-2650, pecklwp@dfw.wa.gov Ron McQueen Business Services Program Asst. Dir. (360) 902-2204 mcquerjm@dfw.wa.gov	Brian Sylvester Project Manager (360) 902-2626 sylvebjs@dfw.wa.gov
IT Enabling Project	Implement the organization, policies, and procedures of the ISSP. Current activity covers implementation of new IT architecture. Lower than requested funding will limit the activity to server and mass storage solutions.	\$175K for the 05-07 biennium for architecture study implementation.	Agency IT support – 2 FTE	Architecture study completed in August. Work in 2005 will concentrate on highest priorities.	IT personnel agency wide, all employees.	Operational excellence	Larry Peck Deputy Director (360) 902-2650 pecklwp@dfw.wa.gov	Jim Eby Information Technology Services Division Manager (360) 902-2303 ebyjre@dfw.wa.gov

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5. Planned Projects/Investments

This table captures the major technology investments identified by WDFW as the top priorities for fiscal years 2006 and 2007.

Title	Description	Cost Estimate	FTE's	Impact on Existing Investments	Schedule	Scope	Business Strategy	Executive Sponsor	Project Manager
IT Enabling Project	Implement the organization, policies, and procedures recommended by the ISSP. Activities in 06-07 include overall systems architecture implementation.	Current funding is only \$175K of the \$500K needed to implement new architecture in 05-07.	No net change	Keeps architecture and infrastructure up to standards	Implementati on of new architecture will begin in FY05 and continue for 2 biernnia.	Agency wide	Operational excellence	Larry Peck Deputy Director (360) 902-2650 pecklwp@dfw.wa.gov	Jim Eby Information Services Division Manager (360) 902-2303 ebyjre@dfw.wa.gov
Court Data Automation	Build an automated system to extract data from Superior and District court data systems. Data will be used to process suspensions and revocations in WILD, and to identify felons.	Supplemental Budget request for \$350K is pending	No net change	Improves the capability of WILD.	If funded, scope and requirements work would begin in FY 07.	Enforceme nt Program and all WILD customers	Operational excellence. Sustainable opportunities	Bruce Bjork Enforcement Chief (360) 902-2373 bjorkbb@dfw.wa.gov	Brian Sylvester Project Manager (360) 902-2626 sylvebjs@dfw.wa.gov
Hunt/Fish Rules Database	Develop a database to house and manage all recreational hunting and fishing regulations. Provides the foundation for automated public queries and GIS applications.	Preliminary estimate is \$250K. No funding has been requested.	No net change	Improves public web site capability.	Expect to conduct internal scoping discussions in FY06, then select future direction.	Agency wide and all public license holders.	Operational excellence. Sustainable opportunities	Larry Peck Deputy Director (360) 902-2650 pecklwp@dfw.wa.gov	Jim Eby Information Services Division Manager (360) 902-2303 ebyjre@dfw.wa.gov

Title	Description	Cost Estimate	FTE's	Impact on Existing Investments	Schedule	Scope	Business Strategy	Executive Sponsor	Project Manager
LIFT System – Future Direction	LIFT manages commercial licenses and fish tickets from commercial fishing. LIFT is rapidly becoming obsolete technology and does not match the current IT architecture direction.	There is no cost estimate for LIFT replacement yet.	No net change	Standardizes IT architecture. Reduces maintenance costs.	Expect to conduct internal scoping discussions in FY06, then select future direction	Business Services, Fish Pgm, and commercial license holders.	Operational excellence. Sustainable opportunities	Larry Peck Deputy Director (360) 902-2650 pecklwp@dfw.wa.gov	Jim Eby Information Services Division Manager (360) 902-2303 ebyjre@dfw.wa.gov
Fleet Management	Executive Order 05-01 mandates new fleet management standards. The agency is studying the options which include expanded in-house software.	There is no cost estimate yet for Fleet Management	No net change	Potential replacement of existing VMTS	Expect to conduct internal scoping discussions in FY06, then select future direction	Agency wide and GA	Operational excellence	Ron McQueen Business Services Program Asst. Dir. (360) 902-2204 mcquerjm@dfw.wa.gov	Jim Eby Information Services Division Manager (360) 902-2303 ebyjre@dfw.wa.gov
Emerging and Recent Technologies	Continued evaluation of technologies to improve remote access, such as VoIP and wireless. Implement cost- effective solutions within state architecture and security guidelines.	There is no cost estimate yet for Emerging and Recent Technologies	No net change	Potential to extend the network reach	Expect continued technology evaluations in FY06	Agency wide	Operational excellence	Ron McQueen Business Services Program Asst. Dir. (360) 902-2204 mcquerjm@dfw.wa.gov	Jim Eby Information Services Division Manager (360) 902-2303 ebyjre@dfw.wa.gov

6. Annual Certification



State of Washington **DEPARTMENT OF FISH AND WILDLIFE**

Mailing Address: 600 Capitol Way N • Olympia, WA 98501-1091 • (360) 902-2200, TDD (360) 902-2207 Main Office Location: Natural Resources Building • 1111 Washington Street SE. Olympia, WA

August 31, 2005

Ms Tracy Guerin, DIS Policy and Oversight Manager Liaison to the Information Services Board Post Office Box 42445 Olympia, Washington 98504-2445

Dear Ms Guerin:

The Washington Department of Fish and Wildlife (WDFW) is submitting its annual Information Technology (IT) policy certification letter regarding Information Services Board (ISB) policy compliance for security, portfolio, disaster recovery, and Geographic Information Systems (GIS).

In the past year, WDFW has made significant progress in the area of IT policy and security. We have instituted improved security practices to safeguard the state government network; agency representatives continue their participation on the statewide WACIRC e-security committee; and an IT architecture strategy update was completed to help determine agency IT strategies for the next two biennia and beyond.

In the area of IT security, WDFW has completed its annual update of the IT Security Plan. The Plan covers all aspects of IT security and is consistent with ISB IT security requirements. WDFW completed an IT security audit in June of 2003. The audit was conducted by the Washington State Auditor's Office. WDFW continues to update the IT Security Plan and develop associated policies based on internal action items and ISB policies and requirements.

This letter also acknowledges the requirement for continuing to update the WDFW IT Portfolio. A Portfolio update will be completed by August 31, 2005, and will be forwarded electronically to DIS via the ePortfolio application.

In the area of disaster recovery, a comprehensive agency IT disaster recovery review and update was completed in July 2005. The IT disaster recovery materials are integrated into the complete WDFW Disaster Recovery Plan. This Plan is available for review at WDFW's Safety Office.

Ms. Tracy Guerin August 31, 2005 Page 2

6. Annual Certification

WDFW has a long history of GIS technology use, and was deeply involved in the development of GIS standards. WDFW has completed the most recent ISB standards implementation, the standards for map projection and datum. WDFW is also a key participant in the current GIS discipline application of concepts and principles from the ISB Enterprise Architecture Subcommittee.

In summary, the agency continues to operate on a sound base for IT policy and security planning. WDFW has substantially met all ISB requirements, and expects to continue to refine and improve policy and process in the coming year. If you have any questions, please call Jim Eby, Information Technology Services Division Manager, at 902-2303.

Sincerely,

/s/ Jeff P. Koenings, Ph.D. Director

cc: Larry Peck, Deputy Director
Gary Robinson, Director, DIS
David Koch, Technology Management Consultant, DIS
Ron McQueen, Assistant Director, Business Services
Jim Eby, IT Manager

Appendix A:

Performance Measures by Agency Goal, Objective, and Activity

The material on the pages that follow will provide the reader with a complete listing of the WDFW's strategic plan goals, objectives, activities and performance measures. See also Section 2.

This document is also available on the agency's web site at:

http://wdfw.wa.gov/depinfo/strategic_plan05-07.pdf

2005 Information Technology Portfolio
Washington Department of Fish and Wildlife
Annendix A

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WASHINGTON DEPARTMENT OF FISH AND WILDLIFE (WDFW)



STRATEGIC PLAN 2005-07 BIENNIUM

The Fish and Wildlife Commission

The Washington Fish and Wildlife Commission oversees the Department of Fish and Wildlife. The Commission consists of nine members serving six-year terms. Members are appointed by the governor and confirmed by the senate. Three members must reside east of the summit of the Cascade Mountains, three must reside west of the summit, and three may reside anywhere in the state. However, no two Commissioners may reside in the same county.

While the Commission has several responsibilities, its primary role is to establish policy and direction for fish and wildlife species and their habitats in Washington and to monitor the Department's implementation of the goals, policies and objectives established by the Commission. The Commission also classifies wildlife and establishes the basic rules and regulations governing the time, place, manner, and methods used to harvest or enjoy fish and wildlife.

Through formal public meetings and informal hearings held around the state, the Commission provides an opportunity for citizens to actively participate in management of Washington's fish and wildlife.

Chair: Will Roehl, Bellingham

(Western Washington)

Occupation: Attorney/Business Current Term: 1/21/03 - 12/31/08

Vice Chair: Ron Ozment, Cathlamet

(At-large)

Occupation: Dairy producer and cattle breeder

Current Term: 9/13/01 - 12/31/06

Commission Members:

John A. Hunter, Cashmere

(Eastern Washington)

Occupation: Self-employed consultant Current Term: 7/24/03 - 12/31/08

Holly Ledgerwood, Pomeroy

(At-Large)

Occupation: K-12 Educator

Current Term: 4/30/04 - 12/31/08

Lisa Pelly, Bainbridge Island

(At-Large)

Occupation: Project Manager Current Term: 2/24/99 - 12/31/04

Dr. J. Pete Schroeder, Sequim

(Western Washington)

Occupation: Marine mammal veterinarian

Current Term: 7/26/04 - 12/31/06

Fred Shiosaki, Spokane

(Eastern Washington)

Occupation: Retired, Washington Water Power

Current Term: 2/24/99 - 12/31/04

Bob Tuck, Selah

(Eastern Washington)

Occupation: Consultant on fisheries and water

projects

Current Term: 9/13/01 - 12/31/06

R.P. "Van" Van Gytenbeek, Seattle

(Western Washington)

Occupation: CEO, Federation of Fly Fishers

Current Term: 2/24/99 - 12/31/04

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE (WDFW)



STRATEGIC PLAN 2005-07 BIENNIUM



Will Roehl Chair Washington Fish and Wildlife Commission



Jeff Koenings, PHD
Director
Washington Department
of Fish and Wildlife

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE STRATEGIC PLAN

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WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

MISSION STATEMENT

The Washington Department of Fish and Wildlife serves
Washington's citizens by protecting, restoring and enhancing fish and
wildlife and their habitats, while providing sustainable and wildliferelated recreational and commercial opportunities.





MANDATE

RCW 77.04.012 - Wildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters.

The department shall conserve the wildlife and food fish, game fish, and shellfish resources in a manner that does not impair the resource. In a manner consistent with this goal, the department shall seek to maintain the economic well-being and stability of the fishing industry in the state. The department shall promote orderly fisheries and shall enhance and improve recreational and commercial fishing in this state.

The commission may authorize the taking of wildlife, food fish, game fish, and shellfish only at times or places, or in manners or quantities, as in the judgment of the commission does not impair the supply of these resources.

The commission shall attempt to maximize the public recreational game fishing and hunting opportunities of all citizens, including juvenile, disabled, and senior citizens.

Recognizing that the management of our state wildlife, food fish, game fish, and shellfish resources depends heavily on the assistance of volunteers, the department shall work cooperatively with volunteer groups and individuals to achieve the goals of this title to the greatest extent possible.

Nothing in this title shall be construed to infringe on the right of a private property owner to control the owner's private property.





VALUES STATEMENT

Healthy and diverse fish and wildlife populations

We live in a state that has a large variety of different fish and wildlife populations and their habitats. These resources have been threatened in recent years by significant human population growth. It is vitally important that we continue to find new ways to maintain healthy, naturally-occurring fish and wildlife populations within healthy habitats. The Department will strive to maintain healthy, diverse and self-sustaining fish and wildlife populations and their habitats.

The public trust granted to us for resource stewardship

The people of Washington have granted a public trust to the State and the Department of Fish and Wildlife to manage these resources. The Department is committed to maintaining the public trust granted to it for resource stewardship. It will fulfill this trust responsibly through cost effective, professional resource and land management decisions.

The Department serves Washington's public by protecting, restoring and enhancing fish and wildlife and their habitats, while providing sustainable fish and wildlife-related recreational and commercial opportunities.

Science

Science is its most important tool and implementation of it is the Department's focus. The Department will instill confidence in its ability to develop, gather and deliver the best science into the hands of those who affect fish and wildlife with their decisions.

The Department will provide leadership in using the best applied science as the foundation for policy and management decisions that affect fish and wildlife and their habitats.

The Department is committed to working with people to find solutions that work. It recognizes the importance of integrating good science with constituent values and intergovernmental agreements into WDFW decisions.



Employees

Employees are the Department's greatest asset and the development of future leaders is critical to its success. The Department is committed to provide employees with the training and tools for them to be effective and efficient in their jobs.

Excellent professional service

The Department is committed to achieving high professional standards and providing high quality professional service. Every WDFW employee will provide excellent service to the public as well as internally to WDFW employees. Excellent service includes respectful, professional and timely responses to those requesting service or information.

Citizen assistance in accomplishing the Department's mission

The Department recognizes it cannot be successful alone. The health of Washington's fish and wildlife populations will require strong partnerships, collaborative approaches and effective communication.

A safe, healthy work environment

A safe and healthy working environment is critical for our employees being able to accomplish our mission. The Department is committed to providing a safe and healthy work environment for its employees.







MAJOR CHALLENGES AND PRIORITIES

State Wildlife Account - A strategy for State Wildlife Account spending must be developed that includes either a recreational hunting and fishing license fee increase, or a reduction in account spending. During the 2003-05 biennium, the Department spent more State Wildlife Account funds than incoming revenues can sustain in future years. That occurred because the account had a large fund balance at the beginning of the 2003-05 biennium. However, the June 2005 fund balance will be insufficient to allow spending at current rates. Therefore, the Department needs to seek legislative support for a license fee increase. If support is lacking, a spending reduction plan needs to be developed prior to the start of the 2005-07 biennium.

Salmon Recovery Plan Implementation – Salmon recovery plans are currently being drafted statewide and are scheduled to be completed for all Ecologically Significant Units (ESUs) or regions by June 2005. These plans must be implemented if recovery of listed salmon species is to occur. Implementation will require state coordination, resources and support of local watershed efforts. These efforts will include lead entity strategy and project list development, close coordination between lead entities and Regional Fish Enhancement Group programs, habitat and water policy decisions, and integration of recovery activities such as Shared Strategy, watershed planning, lead entity activities and co-manager compliance with harvest and hatchery production actions.

Hatchery Reform - Progress needs to continue on the Hatchery Reform initiative to ensure the state's hatcheries become an integral part of the watersheds where they are located and serve two roles: support wild fish conservation goals and provide hatchery fish for sustainable fisheries. In 2004, the Hatchery Scientific Review Group delivered its recommendations for Puget Sound and coastal area hatcheries. Policy discussions with co-managers, legislators and others must continue, program specific actions need to be defined, and fiscal support must be secured to implement agreed-upon infrastructure and operational improvements.

Lands Management - The Department needs to develop comprehensive criteria for the acquisition and disposal of lands, determine changes in land management practices necessary to comply with conservation needs of listed species, and identify funding for adequate operations and maintenance of all agency lands.



Problem Wildlife - While confirmed dangerous wildlife incidents have decreased the past two years over previous years, certain areas of the state continue to be exposed to significant public safety issues and personal property loss. Likewise, deer and elk damage to agricultural and horticultural crops also continues to be problematic. Damage claim filings continue to increase, as well as the value loss associated with those claims. The Department, working with landowners, must find new ways to mitigate and reduce these losses consistent with sound resource management.



Selective Fisheries - Continued improvement in wild fish production levels and higher rates of marked hatchery fish should allow new selective fisheries in 2005 in the ocean, Straits, Puget Sound and several Puget Sound tributaries. However, the Department must meet several immediate challenges prior to the establishment of these fisheries: (1) Sufficient funding to pay for monitoring and sampling of new fisheries above those held in 2004; (2) Tribal agreement on new fisheries; and (3) Successful discussions with Canada over that country's continued sampling of marked fish.

Puget Sound Shellfish Resource Management - Need to address significantly increasing workload in crustacean area – high market value, commercial-recreational allocation policy disputes, basic catch accounting problems, Treaty/Non-Treaty harvest sharing issues, conservation planning w/ co-managers. For recreational fisheries, incremental improvements are being made to catch record cards, but the system ultimately will need a comprehensive review of its viability with respect to current management needs vs. expanded use of direct survey estimates, and the relative cost of various alternatives. Additional IRM staff support needed in inter-tidal and sub-tidal species management planning to facilitate increased focus on workload for crab and shrimp. Long-term strategy needed to shift current staff investment from allocation accounting to basic resource assessment conservation, especially shrimp. Need additional support staff to be consistent and effective with various advisory groups and general public, especially on contentious issues.

Fishing And Hunting Access - As Washington has continued to become more densely populated and developed, access to traditional hunting and fishing areas has decreased and become extremely challenging to maintain. Private landowners have become increasingly reluctant to allow recreational access to their lands, while some public landowners have imposed access restrictions out of safety and other concerns. In the coming biennium, it will be imperative for the Department work with both private and public landowners to maintain and expand access to fishing and hunting areas and preserve recreational opportunity.

Personnel System Reform - Personnel system reform will accelerate in the 2005-07 biennium. As a Phase 1 participating agency, the Department of Fish and Wildlife has played a major role in the reform process. As collective bargaining, contracting of state services, an electronic payroll and personnel system and other major changes are implemented, significant agency resources will need to continue to be allocated.



FINANCIAL HEALTH OF THE DEPARTMENT

The financial health of the Department is deteriorating as its finds itself being squeezed by reductions in funding by both the federal government and the State General Fund:

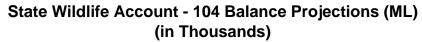
State General Fund - To provide a context for the Department's financial health it is necessary to briefly portray the change in the State General Fund support. Since the original 2001-03 Appropriations Act was adopted State General Fund support has declined by \$20.7 million or 20.2 percent. In order to lessen the impact of these reductions, the Legislature shifted \$8.6 million of these costs that had been traditionally from the state General Fund to the State Wildlife Account.

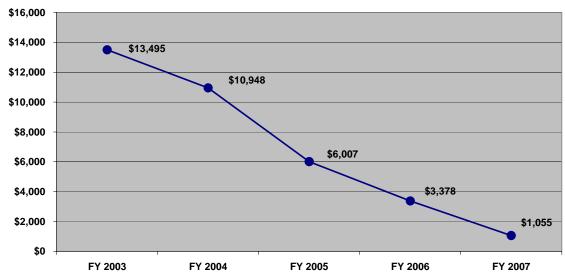
State Wildlife Account - The Department is currently spending more State Wildlife Account funds than incoming revenues can sustain. The ability to spend at the higher rate in the 2003-05 biennium is due to a \$13.4 million fund balance at the end of the last biennium. Currently, the June 30, 2005 fund balance is estimated to be \$6.0 million assuming the State Wildlife Account revenues remain constant. The June 30, 2007 fund balance is currently estimated to be \$1.1 million at maintenance level. This balance is significantly below the two-to three-month operating cushion needed for managing any unexpected decline in hunting and fishing license sales revenue. And that's if Wildlife Account spending rates and revenue remain constant.

The Department cannot sustain the current rate of State Wildlife Account spending without taking one of two approaches or both. One approach is to seek some form of recreational hunting and fishing license fee increase or another approach is to reduce State Wildlife Account spending to a level supported by current revenue collections.

The support or lack of support by the Legislature for a license fee increase during the 2005 Session will determine the management action required of the Fish and Wildlife Commission and the Department. The primary increase in license fees will be associated with temporary and out-of-state licenses. If there is no support in the 2005 Session to raise recreational license fees, the Department will automatically go into a State Wildlife Account reduction planning cycle prior to the fiscal year beginning July 1, 2005. Key program cuts and corresponding reductions in force would follow for the 2005-07 biennium.



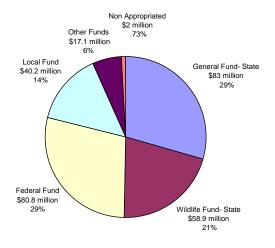




Note: Chart reflects projected Wildlife Account balance at Fiscal Year 2004 spending rates.

Federal Funds - The federal government has also had difficult funding decisions to make and has shifted funding from other areas of government into defense and anti-terrorist programs. Currently, it is unknown what other reductions might be expected over the next three years. However, it is anticipated that federal funding will decline.

Washington Department of Fish & Wildlife 2003-2005 Biennium Budget \$282,061,702





COST REDUCTION STRATEGIES

Licensing staff reductions - With the implementation of the automated recreational license sales system in March of 2000, the Department was able to reduce its licensing program by approximately 7.5 FTE staff beginning with the 2001-03 biennium. The legislature avoided having to fund those positions effective July 1, 2001. The cost avoidance was approximately \$337,500 per fiscal year since implementation of the Washington Interactive Licensing Database system (WILD).

Consolidation of functions - In late 2001, the Department began planning to consolidate its construction, engineering and maintenance functions from the Habitat and Fish programs into the Business Services Program, Capital Programs and Engineering Division. The intent was to redirect any savings from the consolidation back into maintaining aging Department facilities. State General Fund revenues were declining and the Governor requested budget reductions from state agencies. Rather than reduce additional staff elsewhere in the Department, the decision was made to propose taking the savings from consolidation. The legislature accepted this efficiency and reduced the Department's budget. Effective July 1, 2003, \$500,000 per fiscal year has been saved from the consolidation of WDFW construction, engineering and maintenance functions.

Hydraulic Permit Approval Process Improvements - The 2002 Legislature established a Hydraulic Project Approval Permit Program Technical Advisory Group to review the hydraulic permit approval process and to make recommendations for improvements. Based on the Advisory Group recommendations, efficiencies were identified and the Department was able to reduce the cost of the HPA program by 5.0 FTEs and \$690,000. The 2002 Legislature reduced State General Fund support to the Department and part of that reduction was achieved through HPA program administrative efficiencies.

Hydraulic Permit Management System – The HPA permit program technical advisory group has also recommended a new automated permitting system. While there is a cost to design, build and implement this system, when finished the issuance of Hydraulic Permits will be automated, permit information will be provided over the Internet for access by staff and the applicant. The first phase of the system will provide an automated means for issuing the permit and accessing relevant information in the database and monitoring. The second phase of the project will establish the ability to work with the system over the Internet allowing individuals with a need to know, access to the status of a particular permit or series of permits.



Contract and Project System (CAPS) - The Department receives approximately \$60 million per fiscal year through +/- 1,300 federal and local contracts. Prior to the implementation of Release 1 of CAPS, contracts were developed manually with very little reporting capability. Programs within the Department handled contracts in different ways and there was little or no consistency. Limited information was maintained in a central database and financial reporting was a snapshot in time derived from the hardcopy files. While there is a cost to develop the system and the system will be built in phases, contract issuance is now done using the system. Release 2 of the system will include financial tracking and reporting. As a result of using the system, the information is more accurate and the information is accessible to more people. At the completion of Release 2 (June 30, 2005), the Department will be able to run accurate reports reflecting programmatic information on any or all contracts and financial reports on what is being spent for what purposes. Staff efficiencies are anticipated and management of over 40 percent of the Department's operating budget will be improved.

Washington Conservation Corps (WCC) Partnership with DNR - The WCC program involves young adults doing work on public lands. As part of the State General Fund reductions implemented in the 2003-05 biennium, both WDFW and DNR's funding for the WCC was reduced. In the case of WDFW the reduction was \$410,000. To keep the program going, WDFW and DNR formed a partnership and created working circles for the remaining WCC crews. The outcome was the ability to leverage funding for WCC to provide crews with greater geographical coverage and completion of more work.





STATEWIDE CONSUMER AND ECONOMIC TRENDS OF FISHING, HUNTING AND WILDLIFE VIEWING

Age Groups

License	License	Under	16-19	20-29	30-39	40-49	50-59	60-70	>70	Ages	Total
Type	Year	16	10-19	20-29	30-37	40-47	30-39	00-70	>/0	Unknown	Customers
Big Game	2001	11,928	9,312	23,583	39,812	41,596	28,736	15,444	5,795	0	176,206
Big Game	2002	12,538	9,222	22,751	37,218	40,930	28,967	16,036	5,882	0	173,544
Big Game	2003	12,757	9,263	22,197	34,691	40,156	29,155	16,719	5,976	0	170,914
Small											
Game	2001	7,047	5,212	12,237	19,753	20,191	14,252	7,016	2,407	0	88,115
Small											
Game	2002	7,351	5,247	11,752	18,541	19,989	14,641	7,564	2,512	0	87,597
Small											
Game	2003	7,453	5,226	11,533	17,281	19,852	14,935	7,906	2,594	0	86,780
Fishing	2001	7,150	42,426	129,747	179,432	197,607	140,680	86,603	47,590	0	831,235
Fishing	2002	7,423	41,455	126,862	167,822	191,621	142,184	88,520	46,883	0	812,770
Fishing	2003	5,775	42,352	127,219	162,388	193,473	147,090	92,881	46,443	0	817,621

Female Licenseholders

	2001	2002	2003
Big Game	11,186	11,326	11,681
Small Game	3,090	3,196	3,324
Fishing	191,766	191,961	188,628
Others	196,456	208,354	219,101

Male Licenseholders

	2001	2002	2003
Big Game	164,870	161,569	158,586
Small Game	84,284	83,825	82,986
Fishing	615,680	620,066	616,601
Others	695,797	722,226	735,316



STATEWIDE CONSUMER AND ECONOMIC TRENDS OF FISHING, HUNTING AND WILDLIFE VIEWING (CONT.)

License sales trends

The largest gains are in fishing, with a 6.3% overall increase in fishing license sales. Interesting trends in this category include:

80% increase in annual shellfish license sales

9% increase in combination license sales

8.8% increase in saltwater fishing licenses

Seeking a quality outdoor experience

Significant gains in special hunt permit sales may indicate the consumer's interest in pursuing a "quality" outdoor experience not available to the general public.

Increased participation by baby boomers

The past three years have yielded steady increases in the number of 50- to 70-year-old license holders. As the "baby boomers" move into retirement, it appears many of them are choosing to reconnect with the environment and pursue outdoor recreation options.

Less leisure time

Slow but steady decreases in the numbers of middle-aged fishing and hunting license holders seem to correlate to the decreased leisure time among working individuals reported elsewhere.

Increased interest in wildlife viewing

Steady gains in vehicle-use permit sales appear to mirror increasing interest in statewide wildlife viewing.





STATEWIDE ECONOMIC TRENDS

According to the latest national survey released by the U.S. Fish and Wildlife Service, recreational fishers alone spent \$854 million per year in Washington state, placing the state *eighth nationally in total spending*.

1) Florida	\$ 4 billion
2) California	\$ 2 billion
3) Texas	\$ 1.9 billion
4) Minnesota	\$ 1.3 billion
5) North Carolina	\$ 1.11 billion
6) New York	\$ 1.1 billion
7) Wisconsin	\$ 1 billion
8) Washington	\$854 million
9) Michigan	\$839 million
10) Ohio	\$762 million
Source: U.S. Fish and V	Vildlife Service*

Other economic trends:

- Recreational and commercial fishing together generated an estimated \$1.14 billion a year in Washington.
- Fishing directly supports 22,000 jobs in Washington.
- Washington residents spent \$454 million per year on pleasure boats and related equipment, placing the state ninth nationally in sales.
- The Columbia River spring chinook sport fishery generated \$15.4 million in spending.
- The Lake Washington sockeye sport fishery generated \$6 million the same year.
- Strong ocean salmon fishing in coastal communities from Ilwaco to Neah Bay caused personal income in those coastal towns to climb by more than \$9 million—nearly triple the average of the previous five years.
- Hotel/motel tax receipts in Westport rose 25 percent, an increase attributed to the year's strong salmon fishery.
- Commercial fishers received \$140 million for catches ranging from chinook salmon to sea cucumbers
- Recreational hunting generated an estimated \$350 million a year in Washington.
- Wildlife related expenditures were estimated at \$980 million a year in Washington.

*Data for the U.S. Fish and Wildlife "2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation" was collected by the U.S. Census Bureau, with sample sizes designed to provide statistically reliable results at the state level.



ACTIVITY LINKS AND MAJOR PARTNERS

The **Lead Entity Program** was established by the state legislature in 1998 in an effort to encourage community-based salmon recovery efforts. Currently there are 26 WRIA-based lead entity groups in Washington State that are funded to establish salmon habitat priorities, develop strategies to achieve these priorities and to solicit salmon habitat projects that fulfill those priorities. The lead entity works with a variety of project sponsors to develop habitat restoration and preservation projects that uphold the watershed priorities. Lead entities then take these projects forward for funding through the Salmon Recovery Funding Board and other sources.

The lead entities are collaboratively identified at the watershed level and are composed of representative interests from counties, cities, tribes, conservation districts, conservation organizations, landowners and citizens. A subset of the lead entities serve on the Lead Entity Advisory Group, comprised of nine members appointed by the Director of WDFW, and work together to advise the agency and the Salmon Recovery Funding Board on issues relevant to the Lead Entity Program. The lead entity provides opportunities for collaboration, funding, and participation in the larger, statewide salmon recovery effort.

The Washington Department of Fish and Wildlife administers grants to these groups with funds provided by the Salmon Recovery Funding Board. Lead Entity Program staff also provide strategy development, coordination, and outreach assistance to the groups. In addition, WDFW biologists and watershed stewards provide technical assistance and scientific expertise.

Regional Fisheries Enhancement Group (RFEG) Program - The fourteen RFEGs work within specific geographic boundaries to implement salmon enhancement and recovery projects. These non-profit organizations utilize state and federal funding to attract tremendous local support for their work. The RFEG Advisory Board is made up of citizens appointed by the Director of WDFW, and advocates for and helps coordinate the efforts of the RFEG program. WDFW supplies staff support to the RFEG Advisory Board and provides policy and technical assistance to each RFEG.

RFEGs are invaluable project sponsors, working with landowners, volunteers and local contractors to complete on-the-ground restoration and enhancement projects. In addition, RFEGs often hold seats on lead entity committees and work collaboratively to shape the watershed's priorities and enhance coordination between the two groups. RFEGs are one of the most grassroots salmon recovery initiatives in the state, providing outreach and education, maintaining relationships with citizens and landowners, and building local support for salmon



recovery. The Department of Fish and Wildlife encourages two-way coordination and partnership between RFEGs and Lead Entities.

2010 Olympic Watchable Wildlife Activities - As part of the 2010 Olympics to be held in Vancouver,B.C., watchable wildlife staff will be working in partnership with the Department of Community, Trade and Economic Development to develop tourism activities in Washington state. This Watchable Wildlife partnership, dependant upon legislative budget support, will develop viewing opportunities and coordinate community wildlife activities in Skagit and Whatcom Counties; along the Cascade Loop – Highways 20 & 2 in Skagit, Whatcom and Okanogan counties; the Okanogan River Gateway along Highway 97 in Okanogan County; and the Coulee Corridor - Highway 17 & 155 in Grant and Douglas County.

This new initiative will capitalize on existing cooperative ventures in this geographic border area. Ongoing and planned joint activities include: the Skagit County Wildlife Festival; the Skagit River Bald Eagle Festival; the Skagit River Bald Eagle Interpretive Center; two Audubon Washington State Great Birding Trails – Cascades Loop and Coulee Country with 121 identified birding locations on federal, state and local lands; Ferndale's Tennant Lake Interpretive Center; Lake Terrell and Skagit Wildlife Areas with world-famous concentrations of tundra and trumpeter swans, snow geese and raptors; Blaine's Brant Festival; the joint U.S./B.C. initiative to preserve and promote the Okanogan and Similkameen river valleys as a destination/portal for both countries in the arid, desert climate; the Coulee Corridor Communities Committee; the Ephrata Balde Eagle Festival, the Othello Sandhill Crane Festival; Wenatchee River Salmon Festival and the Leavenworth Spring Bird Festival.

Watchable wildlife activities generate enthusiasm. In Western Washington, in response to the development of the legislatively-requested 2004 Strategic Plan for Wildlife Viewing in Washington, all Skagit County Chambers of Commerce, the Skagit County Chambers Executive Directors Association and the Economic Development Association of Skagit County requested operating and capital funds to host a county-wide "wildlife festival" in the 2004 Supplemental Budget. An Eastern Washington example is the development of an active, effective scenic highway plan for the Coulee Corridor, created by local citizens from a diverse group of ten communities spanning 103 miles.

Partners include local community and county parks and recreation offices; chambers of commerce and economic and community development offices; the Washington State Parks Commission; Washington Department of Natural Resources; Washington State Department of Transportation; Washington Interagency Committee for Outdoor Recreation; US Forest Service; US Fish and Wildlife Service; US Bureau of Reclamation; NOAA/Marine Fisheries Service; National Park Service; US Army Corps of Engineers; Tribes; Upper Skagit Bald Eagle Festival Committee; Audubon Washington state office and local chapters; and the Washington State Scuba Alliance.



Transportation Permit Efficiency and Accountability Committee (TPEAC) is a cooperative venture of transportation and resource agencies for both efficiency and accountability in environmental permitting and transportation planning.

The Washington Department of Fish and Wildlife is an active participant with other agencies, tribal, environmental and business representatives in TPEAC. TPEAC was formed as a result of the Environmental Permit Streamlining Act (ESB 6188 and 5279) passed in May 2001. Its purpose is to coordinate and streamline the environmental permitting process for transportation projects.

TPEAC goals are:

- Reduce the cost of environmental mitigation
- · Increase environmental benefit
- Reduce the redesign of transportation projects
- Reduce the time required to obtain permits
- Increase the number of project permits that receive programmatic approval

The committee includes senators and representatives from the state legislature, state agencies, local government, and business, trade and environmental organizations. Federal and tribal agencies are also invited to participate. TPEAC established a number of subcommittees to develop and test new methods to accomplish the goals. These Subcommittees include: Watershed-based alternative Mitigation; Permit Delivery; Training, Compliance and Reporting; Programmatic Permits, Planning and Local Government Subcommittee.

"Go Play Outside" (GPO) initiative is a groundbreaking public/private partnership based on a shared commitment to increase youth and family interest in, support for, and participation in outdoor recreation. GPO partnership linking the WDFW, the Washington Wildlife Federation (WWF), and the Washington Wildlife Coalition (Coalition) emphasizes empowering youth to experience the outdoors through hands-on participation in Coalition member-sponsored events. These activities are designed to introduce youth to basic skills, conservation ethics, and the excitement of outdoor recreation. Doing is always more fun than watching. The primary role of WDFW continues to be to act as a catalyst, and to provide statewide coordination and consistency for GPO clinics, workshops and other activities conducted by our partners.

The Youth Outdoor Recreation Education Donation Program was created in 2003 to provide Coalition member organizations with grant funding to support youth-oriented activities. During 2003-2004, seven grants totaling more than \$17,000 were awarded to fund equipment acquisitions, youth fishing events, youth archery events, target shooting and firearm safety training, and an outdoor jamboree. Plans are already being made for a 2005 regional event at the Sun Dome in Yakima for schools in the Yakima/Ellensburg area. Two school field days have been presented, in Renton and Hood Canal, and another is being coordinated for the Spokane area next year. Contributions may be made on the internet or through any license dealer.



For 2005-2007, GPO partner organizations plan to actively seek appropriate corporate and business sponsorships to enable the Coalition to further expand the number of sponsored events and increase youth participation.

Ecoregional Conservation Assessments - The Washington Department of Fish and Wildlife is working in partnership with The Nature Conservancy and the State Department of Natural Resources on assessments of nine ecoregions that cover the entire landscape of Washington. These ecoregional assessments identify sites and landscape features that are important for conserving the full range of the state's biodiversity.

They do not replace individual species recovery plans or management plans for harvested species, but are designed to ensure that the highest priority biodiversity sites are identified and protected first.

The ecoregional assessments compile existing biodiversity information, conduct a spatial analysis, and design alternative conservation portfolios for sites and landscapes of high priority. Data are compiled and analyzed for species and habitat types, as well as land ownership and other geographic features. Species and locations are rated for their habitat quality and suitability for conservation. These data are then analyzed with a computer algorithm that allows scientists to optimize the selection of preferred conservation areas. Terrestrial, aquatic and marine conservation portfolios will be developed and reviewed by scientists from agencies, tribes, academic institutions, and nongovernmental organizations. Nine ecoregional conservation assessments covering Washington State will be completed by 2006.

The Department will use ecological assessments to guide habitat protection, influence management of public lands, assist counties in land use planning and guide priorities for grant programs.





STRATEGY AND CAPACITY ASSESSMENT

The Department of Fish and Wildlife is governed by the Fish and Wildlife Commission. In addition to its headquarters operation in the Natural Resources Building in Olympia, the agency maintains six (6) regional offices strategically located around the state. It operates 90 hatchery facilities and 604 fishing and boating access sites, and manages and maintains 827,000 acres of wildlife habitat. Statewide staff number +/-1,800, including temporary and seasonal employees, the majority of which operate either from home offices or hatchery/wildlife area facilities.

Operational Strategies – Four (4) operational strategies are foremost on the immediate horizon for Fish and Wildlife. These strategies include:

- Hydraulic permit application (HPA) regulatory rules reform, resulting in more efficient and effective service delivery to the public;
- Hatchery reform, allowing for the twin goals of production of fish for recreational and commercial purposes and protection of wild fish stocks;
- Establishing milestones and implementing recommendations from agency sustainability planning committees in the areas of purchasing, transportation, facilities, education, toxics, and policy; and
- Achieving satisfaction feedback loops via customer surveys designed to assist the Department in developing new ways of doing business.

Overarching these initiatives is the agency's refinement of its strategic plan. Goals and objectives have been directly linked to agency cost accounting activities and the priorities of government (POG), with quantifiable performance measures and results identified to assess achievement. Further development of these measures will continue as the agency evaluates performance, based on authorized resources and expected outcomes.

Technology Strategies – The agency's electronic licensing sales system (WILD) has already resulted in staffing efficiencies. Further customer service efforts will focus on pursuing increased self-service (for example, Internet sales with the ability to "home print" a license).

Most all agency employees now have, or soon will have, direct personal computer access. This connectivity initiative, while not an issue for many organizations, has been a significant breakthrough for Fish & Wildlife. It addresses the need for improved communications and

efficiencies for staff dispersed throughout the state. This electronic connectiveness effort will continue as the agency joins others in the modern communications era.

The department's new contracts system initiative continues its development and refinement. The ability to better account for an average of more than 1,300 annual agency contracts, and the indirect funds (overhead) associated with receivables contracts, will provide both improved contract and revenue processing management.

The agency's time accounting system, particularly in light of its support of many federal and local government contracts, has served the agency well. It has afforded the agency the ability to efficiently ensure accountability for hours worked, for leave taken, for proper cost center distribution, and to achieve positive audit review. With the advent of a new state personnel and payroll system, efficiencies in the current time accounting system are anticipated once all releases related to time evaluation in the new system are implemented.

Workforce Strategies – Reductions in service levels during the past two biennia due to strained state resources has allowed the agency to identify low priority activities and evaluate its "best results" for service delivery. While affected activities may be important to some individuals, doing less with less is a reality in today's environment.

The department continues to look for the best, brightest, and most diverse employees from the available workforce pool. Within that search, and with respect to its current employees, the agency is cognizant of both prospective and existing staff concerns related to personnel system reform. The agency is actively engaged in informing staff of these impending changes.

The department recognizes the single-most workforce challenge it is currently faced with is implementation of Washington Works. The state's initiative to shape a new and more effective workforce has been embraced by Fish and Wildlife. It is currently devoting the equivalent of four to five full-time staff to address the various aspects of this transition. The focus is development of criteria to best determine likely activity candidates for competitive contracting, participation in negotiating three (3) of the master collective bargaining agreements, consistent engagement and counsel in civil service personnel reform, direct staff assistance in testing and evaluating the new personnel/payroll system, and making necessary internal business system adjustments. The Department of Fish and Wildlife is fully prepared to successfully manage these forthcoming changes.

Capital Facility Strategies – Capital Programs and Engineering uses both in-house engineer construction crews and contracts with the private sector for engineering and public works construction. Because of the need to make critical repairs on short notice, it is important the Department retain this ability. Currently, the program is adequately staffed with permanent and temporary employees. Staff size fluctuates depending on the time of year, e.g., the staff increases during the summer months when most construction occurs. The use of capital funds integrated with operating funds allows for this workforce flexibility.



GOALS

Goal I Healthy and diverse fish and wildlife populations and habitats

Goal II Sustainable fish and wildlife-related opportunities

Goal III Operational excellence and professional service



OBJECTIVES

(What we do)

Objective 1: Develop, integrate and disseminate sound fish, wildlife and habitat

science.

Objective 2: Protect, restore and enhance fish and wildlife populations and their

habitats.

Objective 3: Ensure WDFW activities, programs, facilities and lands are consistent

with local, state and federal regulations that protect and recover fish,

wildlife and their habitats.

Objective 4: Influence the decisions of others that affect fish, wildlife and their

habitats.

Objective 5: Minimize adverse interactions between humans and wildlife.

Objective 6: Provide sustainable high quality fish and wildlife-related recreational

and commercial opportunities while improving the economic well-being of Washington, compatible with maintaining healthy fish and wildlife

populations and habitats.

Objective 7: Work with Tribal governments to ensure fish and wildlife management

objectives are achieved.

Objective 8: Provide excellent professional service.

Objective 9: Develop Information Systems infrastructure and coordinate data

systems to provide access to services and information.

Objective 10: Connect with those interested in Washington's fish and wildlife.

Objective 11: Provide sound sustainable operational management of WDFW lands,

facilities and access sites.

Objective 12: Improve the effectiveness and efficiency of WDFW through sustainable

operational and support activities.



Goal I Healthy and diverse fish and wildlife populations and habitats

WDFW will maintain healthy, diverse and self-sustaining fish and wildlife populations and their habitats.

Objective 1: Develop, integrate and disseminate sound fish, wildlife and habitat science.

Strategies:

WDFW will provide leadership in developing, integrating and disseminating the best applied science for use in policy and management decisions affecting fish and wildlife and their habitats.

WDFW will continue to improve access to priority scientific data and information for key partners and the public.

Objective 2: Protect, restore and enhance fish and wildlife populations and their habitats.

Strategies:

WDFW will utilize multi-species, habitat-based approaches to resource management and conservation to improve the effectiveness in maintaining healthy populations and recovering those that are not.

WDFW will manage its wildlife areas to protect and provide habitat to achieve healthy and diverse fish and wildlife populations, and provide for compatible fish and wildlife recreational opportunities.

WDFW will protect fish, wildlife and their habitats by both increasing voluntary compliance and enforcement of state statutes.

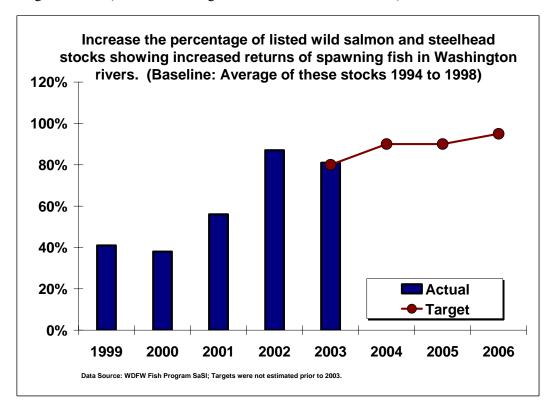
WDFW management and enforcement programs will review and improve regulations to ensure they are understandable to the public and are accomplishing the desired objectives.



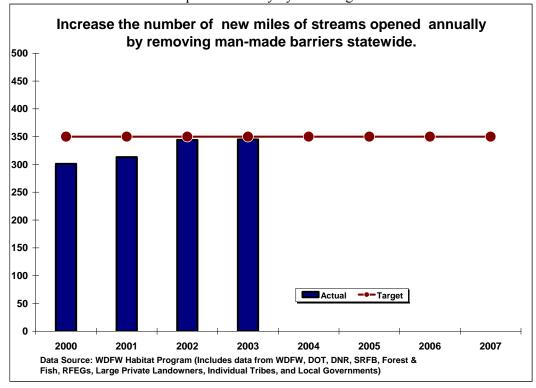


Examples of performance measures:

Percentage of listed wild salmon and steelhead stocks showing increased returns of spawning fish in Washington rivers. (Baseline: Average of these stocks 1994 to 1998.)



Number of new miles of streams opened annually by removing man-made barriers statewide each year.





Objective 3: Ensure WDFW activities, programs, facilities and lands are consistent with local, state and federal regulations that protect and recover fish, wildlife and their habitats.

Strategies:

WDFW will ensure that Department actions, lands and facilities meet local, state and federal regulations that protect and recover fish, wildlife and their habitats. Impairments to fish and wildlife recovery on WDFW lands and facilities will be identified and addressed.

Objective 4: Influence the decisions of others that affect fish, wildlife and their habitats.

Strategies:

WDFW will collaborate with landowners, local governments, land management agencies and tribal, state and federal governments that influence decisions important to fish, wildlife and habitat.

WDFW will work with other land management entities to identify where habitat protection can occur most effectively and efficiently. WDFW will work with these entities to protect priority habitats through numerous strategies including incentives, easements, agreements, and acquisitions.

WDFW will provide technical review and technical assistance as well as provide access to information and management recommendations to assist others in protecting and restoring fish, wildlife and their habitats. WDFW will actively seek feedback on the value of the information and technical assistance it provides in order to improve service.

Objective 5: Minimize adverse interactions between humans and wildlife.

Strategies:

WDFW will ensure public safety by minimizing adverse impacts of wildlife to agricultural, horticultural and rangeland crops, while maintaining healthy, self-sustaining wildlife populations.

WDFW will support education and outreach to reduce negative human interactions with wildlife.

WDFW will reduce public exposure to health risks through increased shellfish monitoring, while enforcing shellfish regulations and developing fish-health advisories.



Goal II Sustainable fish and wildlife-related opportunities

WDFW will provide sustainable recreational and commercial opportunities that are compatible with healthy, diverse fish and wildlife populations and their habitats. WDFW recognizes that management of both native and desirable non-native species are valuable components in providing sustainable opportunities.

Objective 6: Pro

Provide sustainable high quality fish and wildlife-related recreational and commercial opportunities while improving the economic well-being of Washington, compatible with maintaining healthy fish and wildlife populations and habitats.

Strategies:

WDFW will provide sustainable fish and wildlife opportunities through effective management decisions while improving the economic well-being of the state.

WDFW will learn more about what fish and wildlife opportunities the public is interested in to develop ways to meet this interest while maintaining healthy fish and wildlife populations.

WDFW will manage and enhance both native and desirable non-native species to provide sustainable opportunities compatible with healthy fish and wildlife populations and habitats, and existing and emerging public values.

WDFW will increase the watchable fish and wildlife opportunities and information it provides to the public.

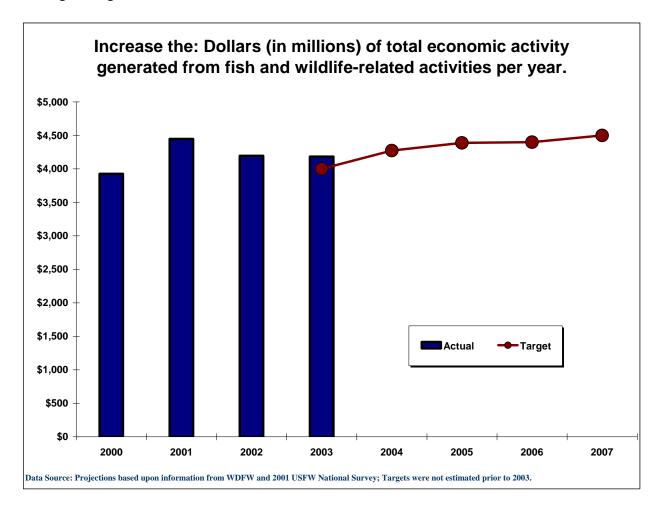
WDFW will provide access to areas where fish and wildlife can be enjoyed as a vital component in providing opportunities. WDFW will develop strategies to maintain and improve access for the public to take part in fish and wildlife opportunities.





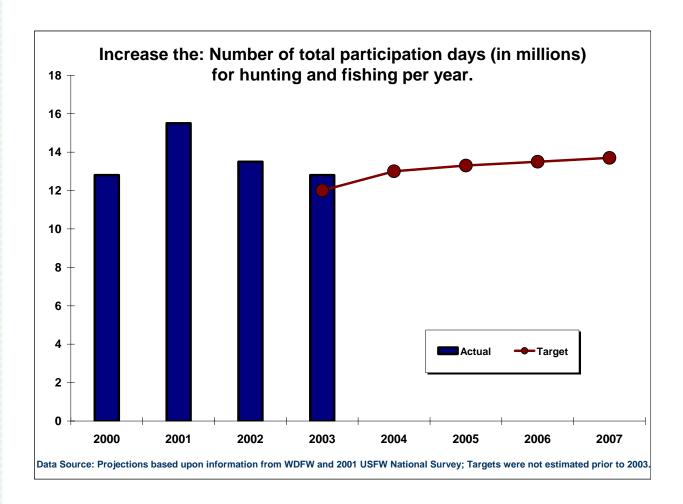


Examples of performance measures:









Objective 7: Work with Tribal governments to ensure fish and wildlife management objectives are achieved.

Strategies:

WDFW will work to maximize the effectiveness of State and Tribal strategies and processes to ensure there are healthy and harvestable fish and wildlife populations.

WDFW and Tribal managers will identify State-Tribal agreements and plans to address, imple7ment and evaluate each year.





Goal III Operational Excellence and Professional Service

Operational and service excellence is critical to building and maintaining credibility.

Objective 8: Provide excellent professional service.

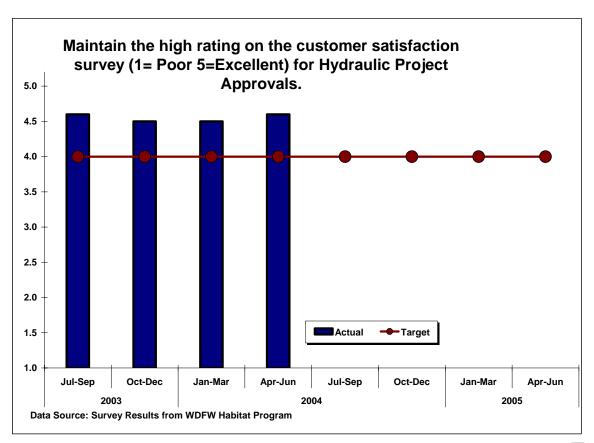
Strategies:

Every WDFW employee will provide excellent service to the public as well as internally to WDFW employees. Excellent service includes respectful, professional and timely responses to those requesting service or information from the Department.

WDFW will provide employees with the training and tools for them to be effective and efficient in their jobs.

Each program will identify key services and implement strategies to obtain feedback as to the quality and usefulness of the services provided. This information will be used to improve service and identify the most useful services provided.

Examples of performance measures:

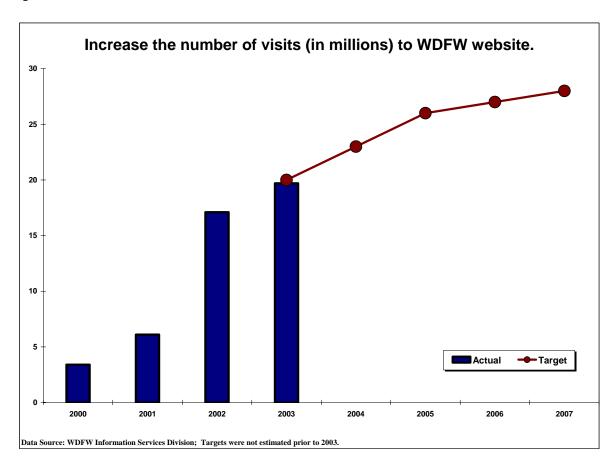




Objective 9: Develop Information Systems infrastructure and coordinate data systems to provide access to services and information.

Strategy: WDFW will implement an Information Systems strategic plan.

Example of Performance Measure:



Objective 10: Connect with those interested in Washington's fish and wildlife.

Strategies:

WDFW will facilitate effective communication strategies to increase the public understanding of the health of Washington fish, wildlife and habitats, and the opportunities to enjoy, protect and recover them.



WDFW will continue to foster and improve volunteer activities and partnerships that assist in achieving mutual goals of protecting and enhancing fish and wildlife and their habitats.

WDFW will learn more about the public, their interests and their priorities regarding fish, wildlife and habitats as well as the methods best used to share information and opportunities.

WDFW will use this information to prioritize and develop programs and to provide to the public.

Objective 11: Provide sound sustainable operational management of WDFW lands, facilities and access sites.

Strategies:

WDFW recognizes the value of managing its lands and facilities in a manner that allows us to be good neighbors in the community. WDFW facilities, lands and access sites will meet basic operational standards, which include maintenance, access, signs, fences, toilets, weed control and condition of facilities.

WDFW will complete a pilot study for self-generation of power at WDFW facilities.

Strategies will be developed to ensure sound sustainable operational management is based on solid, reliable, easily accessible information and scientific data.

WDFW will pursue "good neighbor" approval to manage its lands.

Objective 12: Improve the effectiveness and efficiency of WDFW through sustainable operational and support activities.

Strategies:

WDFW will continue to implement Department-wide business practices that improve the effectiveness, efficiency, and sustainability of both operational and support activities.

Contracts management, licensing, cost code accounting system, and budget tracking system practices will be continually improved.

WDFW will develop a workforce plan to ensure that the right number of people with the right set of competencies are in the right jobs at the right time to carry out our future functional requirements and mission.

Every employee shall work with their supervisor to understand how they fit into the Department's strategic plan. Individual performance measures will be established so that



each employee will know how their success will be measured, and individual competencies will be set to guide their training plan for the next year.

WDFW will continue to work towards its goal of reducing employee injuries. WDFW will identify the frequency and severity of workplace injuries, and develop an indicator of Department safety performance called the recordable incident rate





PRIORITIES OF GOVERNMENT

In August 2002, Washington State and Governor Gary Locke initiated a "Priorities Of Government" (POG) budget approach that based budget decisions on identified results. The goal was to establish a clear set of results citizens could expect from state government, and then prioritize state spending to achieve those results.

Eleven statewide results were identified as part of the POG process. Of those eleven, the Department of Fish and Wildlife's activities fall within six result areas. Those include:

Improve the quality of Washington's natural resources.

Improve cultural and recreational opportunities throughout the state.

Improve the health of Washington's citizens.

Improve the economic vitality of businesses and individuals.

Improve the safety of people and property.

Improve the ability of state government to produce results efficiently and effectively.

The following nine pages show how fish and wildlife activities support six of the major result areas. For each result area, major strategies, initiatives and areas of focus for the 2005-07 biennium have been identified and integrated into the strategic plan.



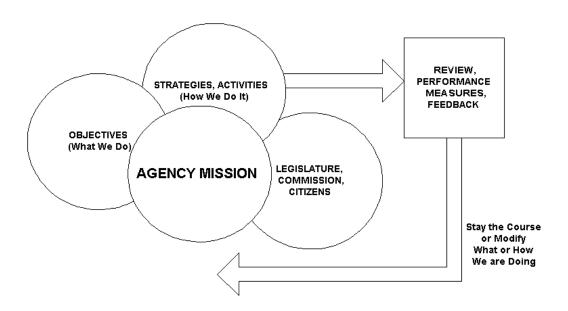
PERFORMANCE MEASURES / ASSESSMENT

The Department is tracking 94 performance measures at the agency level. Of these 48 are included in the budget submittal for the 2005-07 biennium. Each performance measure was developed to track core agency activities that are directly linked to the agency's goals and objectives identified in the Strategic Plan.

Many of the performance measures are new to the department and will require refinements to implement this new management measurement system. Dependant on the activity, results will be reported on either a quarterly or annual basis. The agency has been measuring some activities for an extended time, while other measurements are being developed and will be in place for the first time in the 05-07 biennium.

WDFW's strategic performance management system was designed and developed to reflect and measure key agency activities that give definition to WDFW's Strategic Plan.

The graphic below was designed to depict WDFW's performance assessment system and demonstrate the link of activities to the agency's mission.







Big Six Point Elk



APPENDIX A

PERFORMANCE MEASURES
BY AGENCY GOAL, OBJECTIVE AND ACTIVITY



Agency Goal	Agency Objective	Activity Title	Activity Description		Performance Measure
Goal 1: Healthy and Diverse Fish and Wildlife Populations and Habitats	Objective 1: Develop, integrate and disseminate sound fish, wildlife and habitat science	(1) Conduct Surveys of Fish, Wildlife and Habitat	This activity encompasses routine or on-going data collection to monitor the status and trend of known species population and habitats. It also includes the inventory of fish, wildlife, and habitats. It does not include harvest monitoring such as creel sampling, check stations, and so on.	В	Increase the: Percentage of elk herds that meet population objectives. Increase the: Percentage of listed wild salmon and steelhead stocks showing increased returns of spawning fish in Washington rivers. (Baseline: Average of these stocks 1994 to 1998) Increase the: Percentage of threatened and endangered wildlife species with increasing populations.
		(2) Conduct Research of Fish, Wildlife, and Habitat	Department of Fish and Wildlife research activities are related to the development of new scientific understanding of ecological needs, including the development of new methods and studies to determine population parameters of species and ecological relationships with their habitats.		Address the increasing complexity of resource management by increasing the: Number of research projects being conducted by WDFW.
		(3) Conduct Fish and Wildlife Laboratory Activities	This activity includes such functions as conducting biological and/or pathological samples and genetics research.		Limit risks and improve survivability by maintaining the: Percentage of hatchery fish stocks monitored for pathogens. Increase the: Number of species with genetic baseline information.
		(4) Produce Scientific Reports and Publications	This activity consists of the writing and publishing of all internal and external science based reports. The activity includes participation in multi-agency expert panels that produce scientific reports and the oral presentation of these results.	A	Help WDFW managers and others have access to current fish and wildlife science by maintaining the: Number of peer-reviewed publications completed by WDFW.
	Objective 2: Protect, restore, and enhance fish and wildlife	(5) Develop Habitat Conservation and Species Management and Recovery Plans	Internal Department of Fish and Wildlife conservation and recovery plans for fish, wildlife and habitats are developed.	A	Increase the: Number of wildlife species recovery and management plans completed.
	populations and their habitats	(6) Manage Populations of Species of Concern	This activity includes propagation and population manipulation, for conservation purposes, of wild stocks, endangered and threatened species, and game species populations of concern. It also includes captive breeding, rearing and translocations activities. Species examples include Pygmy Rabbits, White River Spring Chinook, Big Horn Sheep, and Upper Columbia River Steelhead.		Increase the: Number of western pond turtles that were hatched in captivity and released into the wild. Increase the: Percentage for salmon and steelhead stocks where hatchery supplementation is implemented, that would benefit from it.
		(7) Conduct Habitat Management and Enhancement	This item consists of Department of Fish and Wildlife activities relating to directly enhancing and restoring habitat; e.g. duck stamp projects, habitat plantings and fish barrier removal. It includes those activities where the Department is actively enhancing habitat functions on Department of Fish and Wildlife lands.	В	Increase the: Number of new miles of streams opened annually by removing man-made barriers statewide. Maintain the: Number of hatchery salmon and steelhead carcasses (in thousands) distributed for watershed nutrient enhancement. Increase the: Number of corrective action projects completed for road maintenance and abandonment plans. Increase the: Number of screens installed to meet state fish protection standards statewide.

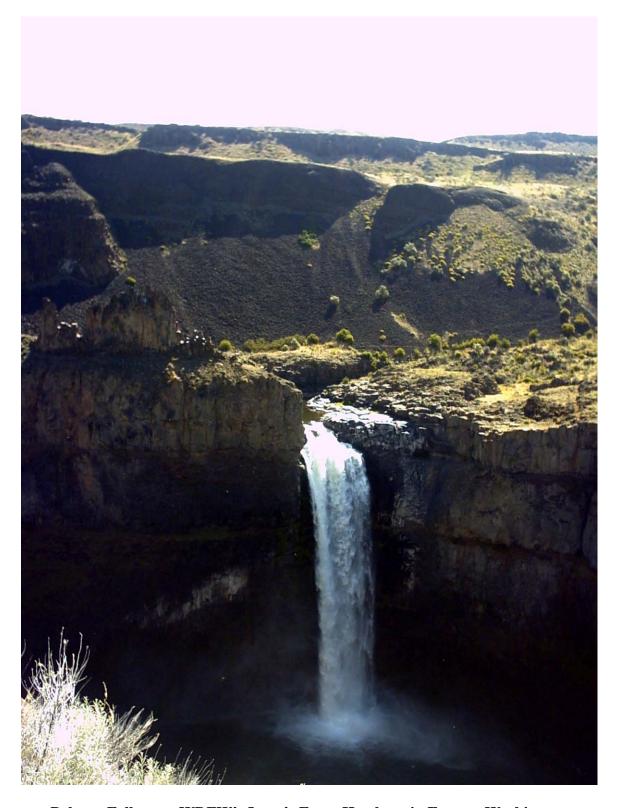
Agency Goal	Agency Objective	Activity Title	Activity Description		Performance Measure
Goal 1: Healthy and Diverse Fish and Wildlife Populations and Habitats - Continued	Objective 2: Protect, restore, and enhance fish and wildlife populations and their habitat - Continued	(8) Protect Fish, Wildlife, and Habitat	This item includes agency acquisition and agency screening projects. It also includes the issuance or denial of an Hydraulic Project Approval (HPA) as well as oil spill response and assessment.	В	Increase the: Number of acres of important habitat for all species protected through conservation easements or land acquisitions by the agency. Increase the: Number of screens installed by the agency to meet state fish protection standards. Reduce the: Average number of days to issue or deny an HPA after receipt of a complete application. Maintain the: Percentage of oil spills responded to in accordance with the Washington State spill response plan.
		(9) Ensure Compliance with Fish and Wildlife Regulations	This item includes activities relating to compliance with Department of Fish and Wildlife fish, wildlife, and habitat rules and regulations. It includes all activities related to the enforcement of time, place and manner of fishing and hunting regulations. Examples are Hydraulic Project Approval (HPA) violations, investigations, reports and trials.	A B	Provide for fish, wildlife, and habitat protection by increasing the: Percentage of enforcement contacts in compliance with state statutes and regulations. Help protect fish habitat by increasing the: Percentage of Priority 1 HPAs checked by WDFW enforcement officers.
			This item consists of activities related to the Fish and Wildlife Commission and the development of rules and policies. It does not include activities related to the setting of fishing and hunting seasons.		Streamline and update agency regulations by increasing the: Number of HPA rules updated. Increase the: Number of native species status reviews that have been completed and submitted to the Commission for consideration.
	Objective 3: Ensure WDFW's Activities are in compliance with regulations	(11) Ensure Department Compliance with ESA and Other Government Regulations	This item includes actions related to ensuring that the Department's activities are in compliance with the Endangered Species Act and other government regulations. Examples include take permits, Hatchery & Genetic Mgmt. Plans, National Pollution Discharge Elimination System permits, and State Environmental Policy Act for Department conducted activities.	В	Increase the: Percentage of WDFW's non-tribal fisheries in compliance with NOAA established harvest protection goals for listed stocks. Increase the: Percentage of hatchery programs operated in a manner consistent with federal ESA requirements. Increase the: Percentage of Bald Eagle Management Plans completed within 30 days of application.
	Objective 4: Influence decisions of others that affect fish, wildlife, and their habitats	(12) Provide Technical and Policy Assistance	Department knowledge and expertise is used to provide guidelines and recommendations internally and to outside sources. This item includes policy development and negotiation to improve opportunities for fish, wildlife, and habitat protection, including participation and leadership in multi-party negotiations and the review of state and federal laws. It also includes technical and policy review and comment on other agency activities, permits and documents; interactions with local governments, private consultants, industry and others. This activity does not encompass technical assistance to tribes.	B C D	Maintain the: Number of hydropower project licenses reviewed and negotiated for fish and wildlife protection and mitigation. Increase the: Number of technical assistance requests that were met for salmon recovery projects from watershed groups, Lead Entities, RFEGs, and other project sponsors. Increase the: Number of visits to SalmonScape website. Maintain the: Number of Ecoregional Assessments completed per year. Maintain the: Number of key environmental and engineering documents reviewed.

Agency Goal	Agency Objective	Activity Title	Activity Description		Performance Measure	
Goal 1: Healthy and Diverse Fish and Wildlife Populations and Habitats - Continued	Objective 5: Minimize adverse interactions between humans and wildlife	Minimize Wildl adverse interactions between humans and	(13) Manage Problem Wildlife	This item relates to the management of dangerous wildlife, wildlife nuisances, and wildlife damage. For example, fencing, cougar landowner permits, hot spot permits, agricultural damage assessment, living with wildlife and negative human interactions.	ВС	Reduce undesirable contact with dangerous wildlife as measured by the: Number of verified complaints for bear and cougar per 100,000 citizens. Reduce wildlife damage to private land owners as measured by the: Total dollars (in thousands) paid for deer and elk damage claims per year. (Agency/Sundry) Enhance public safety by increasing the: Percentage of targeted animals taken under public safety cougar removal permits. Respond to land owners demand for addressing elk damage by increasing the: Percentage of elk harvested under Landowner Access Permits.
		(14) Protect Human, Fish and Wildlife Health	This activity relates to the assurance of fish and wildlife and human health. Examples include sanitary shellfish, fish health advisory, Chronic Wasting Disease, and West Nile virus.		Increase the: Number of deer and elk samples collected that are screened for chronic wasting disease. Reduce public exposure to health risks by increasing the: Number of sanitary shellfish patrols conducted.	
Goal 2: Sustainable Fish and Wildlife- related	Objective 6: Provide sustainable high quality fish and	(15) Manage Recreational Access Sites for Public Use	Public access sites are managed on land owned or managed by the Department. This activity does not include private access agreements.	A	Increase the: Number of WDFW maintained recreational access sites.	
Opportunities	wildlife- related recreational and commercial opportunities while improving the economic well- being of Washington, compatible with maintaining healthy fish and wildlife populations and habitats.	(16) Manage Fishing and Hunting Seasons	This item includes activities relating to the development of policies, recommendations, and season settings, including the public process and involvement and the development of fishing and hunting seasons through Commission action. It also includes the establishment of allocations between sectors and gears, such as recreational/commercial. Issuing special permits and the issuance of fishing and hunting licenses and management of the Washington Interactive License Data base (WILD) system are also part of this activity.	B C D F G	Consistent with allowable harvest rates, maximize the opportunity to increase the: Annual commercial catch value (in millions) of salmon, marine fish, and shellfish. Increase the: Number of total participation days (in millions) for hunting and fishing per year. Increase the: Dollars (in millions) of hunting and fishing license revenue per year. Increase the: Dollars (in millions) of hunting license revenue per quarter. Increase the: Dollars (in millions) of fishing license revenue per quarter. Increase the: Dollars (in millions) of sales tax generated from recreational fish and wildlife-related activities per year. Increase the: Dollars (in millions) of total economic activity generated from fish and wildlife-related activities per year. Consistent with allowable harvest rates, maximize the: Number of pounds (in millions) of ocean crab harvested by commercial coastal crab fishers. Consistent with allowable harvest rates, maximize the: Number of recreational fishing days (in thousands) for razor clams.	

Agency Goal	Agency Objective	Activity Title	Activity Description		Performance Measure
Goal 2: Sustainable Fish and Wildlife- related Opportunities - Continued	Objective 6: Provide sustainable high quality fish and wildlife-	(17) Manage Watchable Fish and Wildlife Recreation	All Department actions related to the promotion of fish and wildlife viewing and other appreciative/non-consumptive use recreation are included in this activity.	В	Increase the: Number of Internet WildWatchCam site visits. Increase the: Number of wildlife viewing sites. Increase the: Number of wildlife festivals actively supported by WDFW.
Continued	related recreational and commercial opportunities while improving the economic well- being of Washington, compatible with maintaining healthy fish and wildlife populations and habitats Continued		This activity consists of hatchery and/or game farm operations related to increasing commercial and recreational opportunities. It includes winter-feeding, barley for birds and other activities designed to supplement feed for hunted and fished species. Actions relating to harvest management such as Coded Wire Tagging, monitoring, scale sampling, creel sampling, check stations and harvest data analysis and questionnaires are included in this activity.	B C D C D E	Maintain the: Number of trout (in millions) planted in state waters annually. Consistent with maximizing fishing opportunities while meeting wild stock restoration goals, increase the: Number of salmon smolt (in millions) released annually. Maintain the: Number of pheasants (in thousands) released annually. Where appropriate, increase the: Number of beach acres enhanced by clam and oyster seed planting. Increase the: Percentage of license holders who return their sports catch record cards. Increase the: Number of selective salmon fisheries provided through mass marking. Increase the: Percentage of licensed hunters submitting mandatory harvest reports. Consistent with allowable harvest rates, maximize the: Number (in thousands) of recreationally caught salmon. Consistent with allowable harvest rates, maximize the: Number (in thousands) of recreationally caught steelhead. Manage for full harvest of recreational allocation of Puget Sound crab, as measured by the: Percentage of Puget Sound recreational allocation for crab taken by sport crab fishers.
		(20) Manage Landowner Access Agreements	The Department develops and maintains landowner access agreements such as feel free to hunt, hunt by permission and road management agreements.	A	Increase the: Number of acres (in thousands) made available for hunting, by WDFW agreements with private landowners
	Objective 7: Work with Tribal governments to ensure fish and wildlife management objectives are achieved.	(21) Coordinate Tribal Fish and Wildlife Policy and Management	This activity relates to interaction with tribal governments for fish, wildlife and habitat management projects, fishing and hunting agreements, and joint resource/recovery planning. It includes implementation of Federal Court Orders relative to treaty fishing and hunting rights and dispute resolution. It does not include general fishing and hunting season activities like North of Falcon or other joint multi-lateral efforts.	A B	Work with tribal governments to maintain the: Current number of state-tribal resources or species harvest agreements in place. Increase the: Percentage of hatchery programs in compliance with the Future Brood document.

Agency Goal	Agency Objective	Activity Title	Activity Description		Performance Measure
Goal 3: Operational Excellence and Professional Service.	Objective 8: Provide	(22) Provide External Customer Service	Respond to general public requests for information and front desk reception duties. This activity includes all agency activities related to interacting with the media. For example, public disclosure and general law enforcement.	В	Maintain the: High rating on the customer satisfaction survey (1= Poor 5=Excellent) for Hydraulic Project Approvals. Increase the: Number of published WDFW recreation and hunting opportunity maps available to the public. Maintain the: Number of pounds (in thousands) of fish distributed to food banks. Reduce the: Average number of days to respond to written correspondence.
	Objective 9: Develop Information Systems infrastructure and coordinate data systems to provide access to services and information	(28) Develop and Maintain Agency Information Systems	Development and maintenance of both program and Business Services information system. For example, Fish, Wildlife and Habitat database development and management, corporate information systems infrastructure, hardware and software, personal computer support. This activity does not include Internet access to agency information.	В	Increase the: Percentage of employees connected to the WDFW network. Maintain the: Percentage of computers that meet WDFW's 42-month replacement schedule. Increase the: Percentage of agency databases reviewed and updated annually to ensure accuracy and completeness.
	Objective 10: Connect with those interested in Washington's fish and wildlife.	(30) Provide Internet Access to Agency Information and Data	This activity consists of functions related to ensuring public access to agency information and data via the Internet. For example, maintenance of inter/intranet website, and ARCIMS projects (software used to make maps on a website).		Increase the: Percentage of corporate databases available on the WDFW website. Increase the: Number of visits (in millions) to WDFW website.
		Provide Outreach and Education Services 31	This activity includes functions related to angler education, youth sports fishing, go play outside, hunter education, environmental education, service and professional associations, outreach to diverse groups, volunteer projects, regional fisheries enhancement groups (RFEG's), fish cooperative projects, Aquatic Land Enhancement Act volunteer, and citizen science activities. For example, Nature Serve, Cougars and Teaching Project and Project Mule Deer.	B C	Maintain the: Number of fairs / events in which WDFW participates. Increase the: Number of hours (in thousands) of WDFW volunteer activities. Meet public demand for Hunter Education Certification opportunities by increasing the: Number of people completing the WDFW Hunter Education course per year. Increase the: Number of youth (in thousands) participating in youth sport fishing events. Increase the: Number of schools using Nature Mapping or participating in other WDFW citizen science projects.

Agency Goal	Agency Objective	Activity Title	Activity Description	Performance Measure	
Goal 3: Operational Excellence and Professional Service - Continued	Objective 11: Provide sound sustainable operational management of WDFW lands, facilities, and access sites	Activity 32: Manage WDFW facilities	Activities relating to the management of wildlife areas, and hatcheries. Include activities relating to taxes and leases.	A B	Maintain the: Condition of WDFW facilities as measured by the Department's facility condition index (OFM Facility Inventory Condition standards:1=poor 5=excellent). Increase the: Number of WDFW facilities that are capable of self-generation of their power needs.
		(33) Manage Department of Fish and Wildlife Lands for Non-Resource Purposes	Department owned land management activities that are directed at objectives that are outside of resource management objectives, for example, fire and weed control. This activity includes functions that support recreational use not relating to hunting and fishing and viewing. For example, rock climbing or road rallies.	С	Increase the: Acres (in thousands) of noxious weeds controlled on WDFW owned/managed lands.
	Objective 12: Improve the effectiveness and efficiency of WDFW through sustainable operational and support activities. (Activities:23, 24,25,26,27,2 9)	Activity 23: Manage and support programs Activity 24: Provide financial services Activity 29: Maintain safe work environment	Program and Department administration, internal customer service, supervision, program budgeting, program contracting, program inventory, records mgmt, office support, policy development and legislative activities, print shop, mail room, agency newsletter, and internal communications, financial services support, implementation of sustainable process improvements, providing for professional development opportunities, human resources services, maintenance of a safe and sustainable work environment, and the management of administrative offices.	B C D E F G H I J K L M N	Demonstrate accountability and sound business controls through increased compliance with professional law enforcement standards as measured by the: Number of new standards with which Enforcement is in compliance each year. Decrease the: Number of miles (in millions) driven by employees in WDFW and personal vehicles per quarter. Decrease the: Number of gallons of gasoline (in thousands) purchased per quarter. Decrease the: Number of gallons of diesel (in thousands) purchased per quarter. Decrease the: Number of reams of paper purchased by WDFW per quarter. Increase the: Average miles per gallon by WDFW vehicles per quarter. Maintain the: High percentage of availability of the Automated Licensing System per quarter. Increase the: Percentage of performance evaluations completed on time, with individual performance measures focusing on both results and individual competencies and linked to WDFW's strategic plan. Increase the: Number of older/high-mileage vehicles surplused. Reduce the: Number of newer passenger-type vehicles with less than 3K miles per quarter (excluding vehicles assigned to facilities). Reduce the: Number of payment forms submitted late to the fiscal office. Reduce the: Number of individual monthly cell phone bills that are greater than \$200 per quarter. Reduce the: Number of delinquent inventory requests per quarter. Maintain the: Number of "Budget vs Actual" EMT briefings per quarter. Keep a safe working environment by reducing the: Number of recordable incidents per 100 employees.



Palouse Falls near WDFW's Lyon's Ferry Hatchery in Eastern Washington



APPENDIX B

PRIORITIES OF GOVERNMENT CHARTS



PRIORITIES OF GOVERNMENT

IMPROVE THE QUALITY OF WASHINGTON'S NATURAL RESOURCES

Protect, Restore, and Enhance Fish and Wildlife Populations and their Habitats

- Develop habitat conservation and species management and recovery plans
- Manage populations of species of concern
- Conduct habitat management and enhancement

Results

- Healthy and diverse fish and wildlife populations
- Protected and improved fish and wildlife habitats

Work with Tribal Governments to Ensure Fish and Wildlife Management Objectives are Achieved

 Coordinate Tribal fish and wildlife policy and management

Results

Fish and wildlife populations are managed to the benefit of all citizens

Preserve, Maintain, and Restore Natural Systems and Landscapes

Influence Decisions of Others that Affect Fish, Wildlife, and their Habitats

 Provide technical and policy assistance

Results

Decisions of others are based on sound scientific principles

Provide Sound Sustainable Operational Management of WDFW Lands, Facilities, and Access Sites

Manage WDFW facilities

Results

- Preserve and restore critical fish and wildlife habitats
- Noxious weeds on WDFW lands are controlled



IMPROVE THE QUALITY OF WASHINGTON'S NATURAL RESOURCES

Protect, Restore, and Enhance Fish Results and Wildlife Populations and their Habitats Protect fish, wildlife, and habitat Adverse impacts to fish, Ensure compliance with fish and wildlife, and habitat are wildlife regulations prevented Develop $\bar{\text{fish}}$, wildlife, and habitat rules Ensure WDFW's Activities are in Results Compliance with Regulations Safeguards and **Standards** Ensure Department compliance with State of Washington maintains ESA and other government management & regulatory regulations authority WDFW leads by example Influence Decisions of Others that Results Affect Fish, Wildlife, and their Habitats Provide technical and policy Decisions of others are based assistance on sound scientific principles

Develop, Integrate and Disseminate
Sound Fish, Wildlife and Habitat
Science

- Conduct surveys of fish, wildlife and habitat
- Conduct research of fish, wildlife, and habitat
- Conduct fish and wildlife laboratory activities
- Produce scientific reports and publications

Results

 Biological and policy decisions are based on quality scientific information

Work with Tribal Governments to Ensure Fish and Wildlife Management Objectives are Achieved

Coordinate Tribal fish and wildlife policy and management

Results

Integrated State and Tribal monitoring of fish, wildlife, and habitats

Data and Monitoring



IMPROVE THE QUALITY OF WASHINGTON'S NATURAL RESOURCES

Protect, Restore, and Enhance Fish and Wildlife Populations and their Habitats

- Protect fish, wildlife, and habitat
- Ensure compliance with fish and wildlife regulations

Results

Fish, wildlife, and habitats are protected through increased public knowledge and partnerships

Influence Decisions of Others that Affect Fish, Wildlife, and their Habitats

 Provide technical and policy assistance

Results

 Decisions of others are based on sound scientific principles

Change Individual Practices and Choices

Connect with Those Interested in Washington's Fish and Wildlife

- Provide Internet access to agency information and data
- Provide outreach and education services

Results

- Increased public awareness and access to agency information
- Increased public understanding of fish and wildlife issues

Minimize Adverse Interactions Between Humans and Wildlife

Manage problem wildlife

Results

- Increased public awareness and ability to co-exist with wildlife
- Decreased negative interactions between humans and wildlife



IMPROVE THE QUALITY OF WASHINGTON'S NATURAL RESOURCES

Provide Sustainable High Quality Fish and Wildlife-related Recreational and Commercial Opportunities While Improving the Economic Well-being of Washington, Compatible with Maintaining Healthy Fish and Wildlife **Populations and Habitats**

- Manage fishing and hunting seasons Manage watchable fish and wildlife recreation

Results

Fish and wildlife activities are provided consistent with healthy populations

Sustainable Use of Public Resources

Work with Tribal Governments to Ensure Fish and Wildlife **Management Objectives** are Achieved

Coordinate tribal fish and wildlife policy and management

Results

Fish and wildlife populations are managed on a sustainable basis to the benefit of all citizens

Provide Sound Sustainable Operational Management of WDFW Lands, Facilities, and Access Sites

Manage WDFW facilities

Results

Public investments are protected for both people and the resource



IMPROVE THE CULTURAL AND RECREATIONAL OPPORTUNITIES THROUGHOUT THE STATE

Provide Sustainable High Quality Fish and Wildlife-Related **Recreational and Commercial Opportunities While Improving** the Economic Well-Being of Washington, Compatible with Maintaining Healthy Fish and Wildlife Populations and Habitats

- Manage fishing and hunting seasons
- Manage watchable fish and wildlife recreation

Results

- Money and jobs are provided to local communities through fish and wildlife opportunities
- Washington's culture and quality of life is shaped by a unique selection of fish and wildlife opportunities

Support Private Organizations and **Local Government**

Connect with Those Interested in Washington's Fish and Wildlife

- Provide Internet access to agency information and data
- Provide outreach and education services

Results

- Increased public awareness and access to agency information
- Increased public involvement in fish and wildlife issues
- Increased youth programs and educational opportunities

Work with Tribal Governments to Ensure Fish and Wildlife **Management Objectives are** Achieved.

Coordinate Tribal fish and wildlife policy and management

Results

Fish and wildlife populations are managed to the benefit of all citizens

Commercial Opportunities while Improving the Economic Well-Being of Washington, Compatible with Maintaining Healthy Fish and Wildlife Populations and Habitats

Provide Sustainable High Quality Fish and Wildlife-Related Recreational and

- Manage fishing and hunting seasons Manage watchable fish and wildlife
- recreation

Results

- Washington provides a culturally unique and diverse selection of fish and wildlife opportunities
- Washington is a destination site

Ensure Quality Experience

Provide Sound Sustainable Operational Management of WDFW Lands, Facilities, and Access Sites

Manage WDFW facilities

Results

- Increased public access to State lands and
- Habitat is available for fish and wildlife species



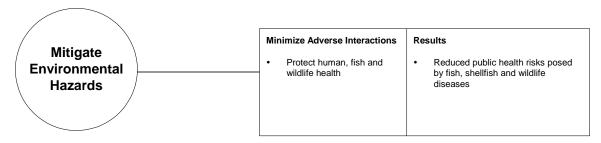
IMPROVE THE CULTURAL AND RECREATIONAL OPPORTUNITIES THROUGHOUT THE STATE

Provide Sustainable High Quality Fish and Results Wildlife-Related Recreational and Wildlife-Related Recreational and Commercial Opportunities while Improving the Economic Well-Being of Washington, Compatible with Maintaining Healthy Fish and Wildlife Populations and Habitats Manage recreational access sites for Enhanced public use of statepublic use owned recreational access sites Increased access to fish and Manage landowner access agreements wildlife opportunities on private **Providing Access** lands Provide Sound Sustainable Operational Results Management of WDFW Lands, Facilities, and Access Sites Manage WDFW facilities Increased public access to State facilities, lands, and waters

Connect with Those Interested in Washington's Fish and Wildlife	Results	
Provide Internet access to agency information and data	Increased public awareness and access to agency information	Enhance Awareness
Provide outreach and education services	Increased public understanding of fish and wildlife issues	



IMPROVE THE HEALTH OF WASHINGTON'S CITIZENS



IMPROVE THE ECONOMIC VITALITY OF BUSINESSES AND INDIVIDUALS



IMPROVE THE SAFETY OF PEOPLE AND PROPERTY

Minimize Adverse Interactions Between Humans and Wildlife	Results				
Manage problem wildlife	Public is protected from bear and cougar Decreased crop damage by wildlife on private property				



IMPROVE THE ABILITY OF STATE GOVERNMENT TO PRODUCE RESULTS EFFICIENTLY AND EFFECTIVELY

Maintain a Governing
Structure that Supports
Citizen Involvement, Efficient
Decision-Making, and
Accountability

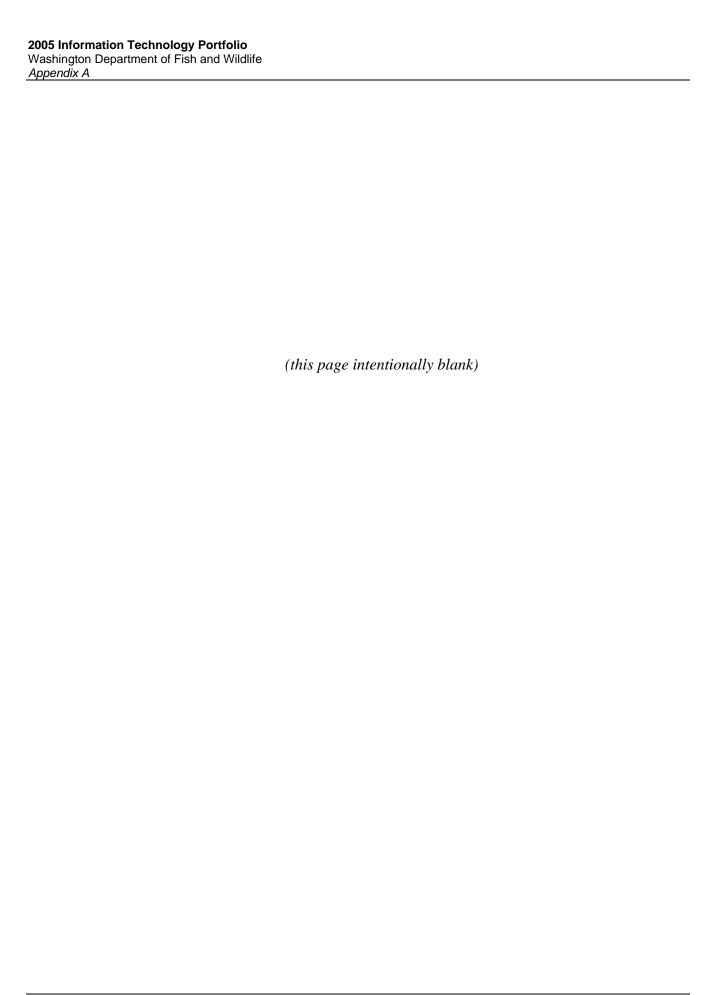
Connect with Those Interested in Washington's Fish and Wildlife

- Provide Internet access to agency information and data
- Provide outreach and education services

Results

 Increased public participation through Fish and Wildlife Commission process and citizen advisory groups





Appendix B

GIS Significant Geo-Datasets

The information on the pages that follow will provide the reader with detailed information on WDFW's significant geo-datasets. For information on GIS resources in use by WDFW, please refer to Section 3.D.

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	А	В	С	D	Е	F
1			Washin	gton Department	of Fish and Wildlife	
2				SIGNIFICANT GE	O-DATASETS	
3			T .		WDFW-GIS	
	Definitions:		1		1	
_					ormation System (GIS) software. Although	
5 6	some computer aided design (CAD) syste	ems have GIS I	ike functions, for	purposes of this definition, CAL	systems are not considered GIS.	
	Significant geo-datasets' must meet one	or more of the f	ollowing criteria:			
8	Geo-datasets must meet one of the control of t		-		es and/or	
9	Estimated or expected life cycle					
10	Geo-data is regularly distributed			· · · · · · · · · · · · · · · · · · ·		
11	4. Geo-data holding has been des	ignated signific	ant by Information	on Services Board.		
12						
		_		l <u>.</u>		
		Layer	WDFW	Individual Responsible		
	Dataset Description	Names	Program	For Metadata	Comments	Descriptions
	Priority Habitats and Species (PHS) polygon	phspoly	Habitat	Terry Johnson		This dataset consists of polygons that describe occurrences of habitats and
14	(FH3) polygon					species considered priority by WDFW.
	Habitat points	habpnts	Habitat	Terry Johnson		
	Tiabliat pointo	Πασριπο	labitat			This dataset consists of priority habitat sites that cannot be represented as
15						polygons in the PHS polygon database.
	National Wetlands Inventory	niwpoly	Habitat	Terry Johnson		This dataset identifies wetlands and deep
	Transfer Wonarias inventory	nwiarcs	labitat			water habitats as either polygons or linear
						features. The wetlands are classified
						within a hierarchical organization
						according to plants, soils, and frequency
16						of flooding.
	Barriers	fish ways	Habitat	Brian Benson		This dataset contains information on the
		culverts				location, physical characteristics and
17		dams				barrier status of man made fish ways, culverts and dams.
	Salmon and Steelhead Habitat	segments	Habitat	Tracy Trople		This dataset contains information on a
	Inventory and Assessment	edt	labitat	Trady Tropic		1:24,000 scale stream network broken
	Program(SSHIAP)	barriers				down into segments of like gradient;
	,					preservation/restoration rankings based
						on stream and habitat characteristics;
						and locations of barriers to fish passage.
18						
19	Klickitat County Ook	kliekoek	Wildlifo	Chally Caydor		Oak canopy classification for Klickitat
20	Klickitat County Oak	klickoak	Wildlife	Shelly Snyder		County.
20						County.

	А	В	С	D	E	F
13	Dataset Description	Layer Names	WDFW Program	Individual Responsible For Metadata	Comments	Descriptions
	Shrubsteppe	lc_east	Wildlife	Shelly Snyder	Comments	Shrubsteppe habitat for eastern
21						Washington.
22	Old Growth	og1988	Wildlife	Shelly Snyder		1986 mapping of forest stand type categories in western Washington
23	Game Management Units	gmu2003	Wildlife	Shelly Snyder		Boundaries used for game management purposes.
24	Deer Units		Wildlife	Shelly Snyder	This layer is currently in development - target completion before December 2003	Boundaries used for deer management purposes.
25	Elk Units		Wildlife	Shelly Snyder	This layer is currently in development - target completion before December 2003	Boundaries used for elk management purposes
	Goat Units		Wildlife	Shelly Snyder	This layer is currently in development - target completion before December 2003	Boundaries used for goat management purposes.
27	Sheep Units		Wildlife	Shelly Snyder	This layer is currently in development - target completion before December 2003	Boundaries used for sheep management purposes.
28	Moose Units		Wildlife	Shelly Snyder	This layer is currently in development - target completion before December 2003	Boundaries used for moose management purposes.
29	WDFW Ownership	owned controlled f_access	Wildlife	Shelly Snyder		This dataset contains general boundaries of lands that WDFW owns or manages and fishing access sites.
	Sage Grouse Distribution	sage	Wildlife	Shelly Snyder		Current and historic sage grouse distribution for western states.
31		sharptail	Wildlife	Shelly Snyder		Current and historic sharp-tailed grouse distribution for western states.
32	Road Inventory		Wildlife	Shelly Snyder	This layer is currently in development - target completion before December 2003	Inventory of road conditions on WDFW owned lands in compliance to the forest practices rules.

	A	В	С	D	Е	F
13	Dataset Description	Names	Program	Individual Responsible For Metadata	Comments	Descriptions
33	Marine Bathymetry	bsurface1 mfcan mfcol_a mfcol_b mfcol_c willapasand shorez10 netcovz10 mfcoast mfpuget	Wildlife	Shelly Snyder	This is a raster layer that is accompanied by 10 vector layers	This dataset contains information on measurements of the depth of large bodies of water in Puget Sound, Strait of Juan De Fuca and Washington marine coast.
34	Tribal Ceded Areas				This layer is currently in development - target completion before December 2003	WDFW interpretation of tribal ceded area boundaries.
35	GAP	land cover mammals reptiles/ amphibians birds	Wildlife	Shelly Snyder		This dataset contains land cover information and modeled species distribution.
36	Marbled Murrelets	mmbf8 mmsect mmstns mmdets mmst3bf	Wildlife	Raj Deol		This dataset contains information on marbled murrelet occupancy detection locations and areas.
37	Spotted Owls	owls bfhsterr bfnoterr bfterr	Wildlife	Raj Deol		This dataset contains information on spotted owl site center locations and various associated polygon buffers.
38	Seal/Sea Lion Haulout sites	haulouts	Wildlife	Raj Deol		Contains locations of seal and sea lion haulout sites in Washington waters.
39	Seabird Colonies	sbirdcat	Wildlife	Raj Deol		Contains locations surveyed for breeding seabirds.
40	Wildlife Heritage point	heritage	Wildlife	Raj Deol		This dataset contains information on documented site observations of state and federal listed species of concern.
41						

	Α	В	С	D	Е	F
13	Dataset Description			Individual Responsible For Metadata	Comments	Descriptions
42	StreamNet	anadfish anadpres anadrear anadspwn banks barriers bullchar facility phsfish resfish sasi str100 lakes	Fish	Martin Hudson		This dataset includes 1:100,000 scale streams with major lakes and double banked streams; fish presence with known spawning and rearing; locations of natural and artificial barriers to anadromous fish; and production facilities including hatcheries and off-site rearing and staging areas.
43	WLRIS	fishdist sasi str24 wby24		Martin Hudson		This dataset includes 1:24,000 scale streams and water bodies and fish presence with know spawning, rearing and stock status. It also includes presumed and potential presence based on habitat
	Marine Resources	abalone clamhard clamsubt crabline geoduck herrhold oyster razrclam rocksole shrmppan smelt urchin herrspwn	Fish	Dale Gombert		This dataset is a collection of information concerning marine fish and shellfish resources in the coastal and inland marine waters of Washington.
44		sandlanz				

Credits

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