

State of Washington
Joint Legislative Audit and Review Committee (JLARC)



Fish Management Division:
Activity and Cost Analysis

Report 03-12
Volume I

December 3, 2003

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JLARC staff, under the direction of the Committee and the Legislative Auditor, conduct performance audits, program evaluations, sunset reviews, and other policy and fiscal studies. These studies assess the efficiency and effectiveness of agency operations, impacts and outcomes of state programs, and levels of compliance with legislative direction and intent. The Committee makes recommendations to improve state government performance and to correct problems it identifies. The Committee also follows up on these recommendations to determine how they have been implemented. JLARC has, in recent years, received national recognition for a number of its major studies.

**FISH MANAGEMENT
DIVISION: ACTIVITY AND
COST ANALYSIS**

REPORT 03-12

VOLUME I



REPORT DIGEST

DECEMBER 3, 2003

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JLARC Study Mandate

In the past, the Legislature and the Office of Financial Management (OFM) have faced challenges in obtaining clear, consistent information from the Department of Fish and Wildlife about its activities and other key management information. In its 2002 Supplemental Operating Budget, the Legislature directed JLARC to identify the Fish Management Division's activities, expenditures, and fund sources.¹ JLARC was also asked to look at how the Division measures performance of its activities and whether Division activities are required, e.g., by federal court order or state statute.

The Fish Management Division

The Fish Management Division within the Department of Fish and Wildlife helps provide the opportunity for recreational and commercial fishing to take place in Washington every year. The Division is one of four divisions within the Fish Program, the largest program in the agency. In the 2001-03 biennium, Fish Management Division expenditures totaled \$39.6 million, representing 14 percent of total Department expenditures for the biennium.

The Department of Fish and Wildlife's Activity-Based Costing Effort

This JLARC review takes place at the same time that the Department is implementing a new activity-based cost accounting system at the agency-wide level. This system will allow the Department to identify its activities and associated costs in a more detailed manner than provided by its current accounting and budgetary systems. **This JLARC study demonstrates how to apply the activity-based cost accounting system at the division level.** The tools developed in this JLARC study are compatible with the Department's new activity-based cost system.

Products of This Study: Two Tools to Explain the Work of the Fish Management Division

JLARC's study yielded a set of tools that can be used to explain the Fish Management Division's activities and expenditures. **The first tool is a pair of activity lists** that identify the various functions performed by Division staff. **The second tool is a database** that combines this activity information with 2001-03 expenditures, staff FTEs, fund sources, fish species groups, and the location of the activities (headquarters or a specific region). These tools will enable the Division to respond to internal management and external requests for information in a more comprehensive and detailed manner. **JLARC will provide this tool kit to the Department, to OFM, and to legislative staff.**

¹ ESSB 6387; C 371 L 02.

Using the Tools: Fish Management Division Major Activities and Fund Sources

The majority of the Division's time and resources are focused on the following major activities: **population data collection** for salmon and steelhead and for other fish and shellfish; **data analysis** for all types of fish and shellfish; **monitoring recreational and commercial harvests** during fishing seasons; and **participating in larger planning umbrellas** where the Department of Fish and Wildlife is one of many players involved with managing a fish species. In the 2001-03 biennium, state dollars funded approximately 60 percent of the Division's activities.

Measuring Performance of Fish Management Division Activities

Neither the agency nor the Division has developed performance measures that specifically relate to the major activities of the Fish Management Division. While the Division has an informal system for assessing performance of its major activities, this system does not allow Department managers outside of the Division or external reviewers to monitor the Division's performance.

The Department of Fish and Wildlife is currently instituting a new performance measurement system throughout the agency. The tools produced by this JLARC study can guide the development of performance measures for the Fish Management Division.

Do the Division's Activities Reflect Statutory and Legal Obligations, Legislative Intent, and Fish and Wildlife Commission Policies?

Some of the Division's activities can be clearly linked to laws and court orders. Additionally, for certain fish species, the Legislature and the Fish and Wildlife Commission have provided specific direction about how the species should be managed. However, for other species, neither the Legislature nor the Commission has weighed in with specific policy direction. In those instances, the Department relies on its very broad mandate to "preserve, protect, perpetuate, and manage" fish and shellfish.² This study identifies three cases where state statutes, Commission policies, and Division activities and expenditures are not aligned.

Recommendations

This JLARC study demonstrates how to apply the agency's new activity-based cost accounting system at the division level. Four recommendations to the Department of Fish and Wildlife should help the Department maximize the use of its new cost accounting and performance measurement systems. A fifth recommendation stems from the study's identification of three cases where state statutes, Fish and Wildlife Commission policies, and Division activities and expenditures are not aligned. In sum, the Department should:

- 1. Define or explain Department activities in terms that are understandable to a general audience;**
- 2. When reporting agency activities and expenditures externally, provide enough context so that a general audience can understand *why* the agency is performing these activities;**
- 3. Identify the distinguishing features the Department wants to track in its activity-based cost system and design its future chart of accounts accordingly;**
- 4. Use the results from its cost accounting system to prioritize and develop performance measures for its major activity expenditures; and**
- 5. Work with the Legislature and OFM to reconcile the three identified cases of differences in state statutes, Fish and Wildlife Commission policies, and Fish Management Division activities and expenditures.**

² RCW 77.04.012.

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CHAPTER ONE – THE TASK: JLARC’S REVIEW OF THE FISH MANAGEMENT DIVISION

This JLARC study identifies the activities and associated expenditures of the Fish Management Division within the state Department of Fish and Wildlife. The Fish Management Division helps provide the opportunity for commercial and recreational fishing to take place in Washington every year. The study describes how the Division carries out its major responsibilities and distributes resources among those activities.

This chapter provides a brief history of JLARC’s study mandate and discusses how this project relates to a new cost accounting effort underway at the Department of Fish and Wildlife.

JLARC’s Study Mandate

In the past, Office of Financial Management (OFM) and legislative staff have faced challenges in obtaining clear, consistent information from the Department of Fish and Wildlife about its activities, expenditures, and other management information. In 2001, OFM proposed and the Legislature eventually adopted a budget proviso directing the Department to evaluate its Fish Program to determine if the program’s activities were aligned with agency objectives and if specific activities supported the agency’s strategic plan.

The Department assembled some information in response to this directive, but this information did not adequately address the questions of OFM and legislative staff. During the 2002 legislative session, the original proviso was recast as a JLARC study. The proviso narrowed the focus of the study to the Fish Management Division within the larger Fish Program. The revised legislation directs JLARC to “identify those actual functions carried out by the Fish Management Division, including all expenditures by fund source linked to those functions.”³

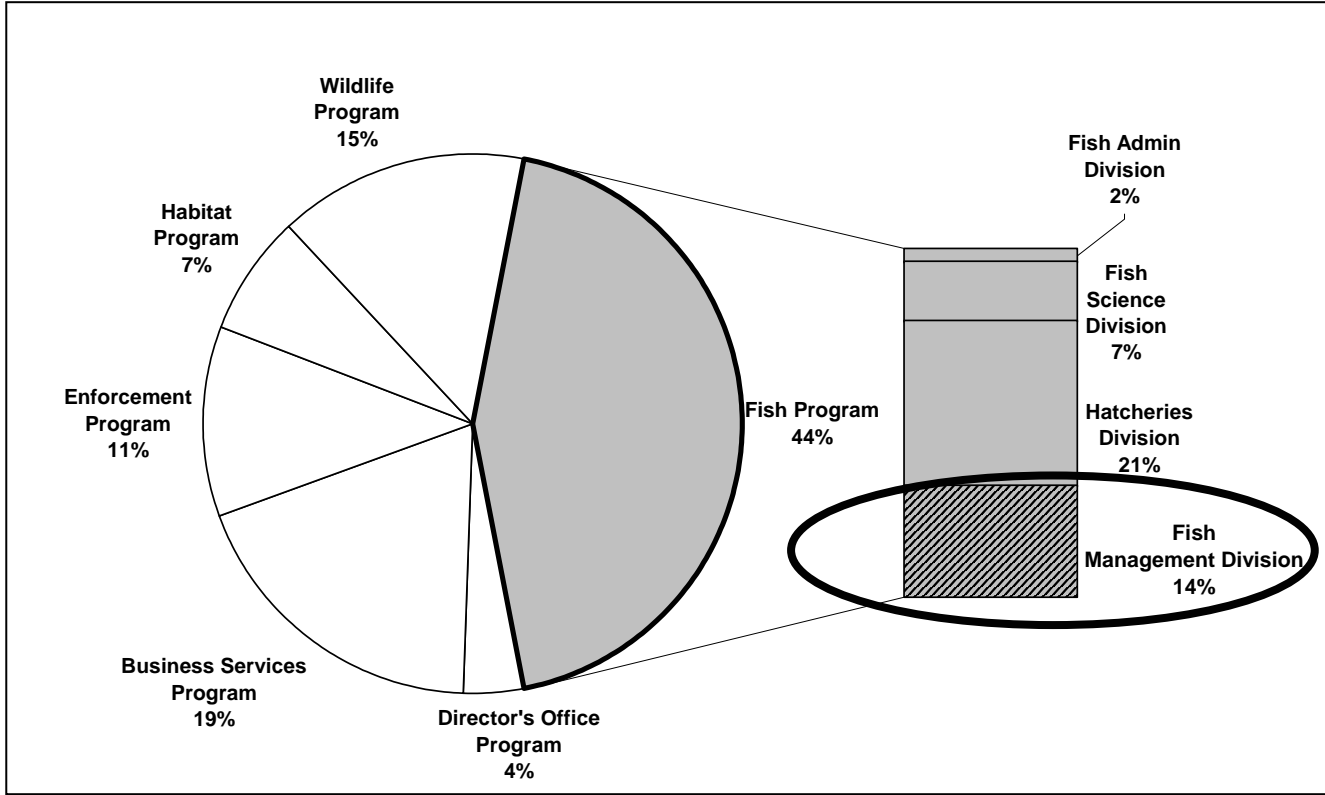
The Department of Fish and Wildlife and the Fish Management Division

Washington’s Department of Fish and Wildlife is governed by the Fish and Wildlife Commission, a nine-member board appointed by the Governor. The Commission appoints the Department’s director and sets the Department’s policies, goals, and objectives. The Department is organized around the Director’s Office and five major programs: Business Services, Enforcement, Habitat, Wildlife, and Fish. Operating budget expenditures for the agency as a whole totaled \$273.4 million in the 2001-03 biennium.

The Fish Program is the agency’s largest program, accounting for 44 percent of total Department expenditures from all fund sources in the 2001-03 biennium. The Fish Program is further divided into four divisions: Administration, Fish Science, Hatcheries, and **Fish Management**, the last of which is the subject of this study. The Fish Management Division accounted for 14 percent of total agency expenditures in 2001-03 (see Figure 1 on the following page).

³ ESSB 6387; C 371, L 02.

Figure 1 – Fish Management Division Activities Represent 14 Percent of Total Department of Fish and Wildlife Expenditures for 2001-03



Source: Department of Fish and Wildlife.

It is important to note here that, while “Fish Management” is the name of the unit that is the subject of this study, **this Division is not responsible for all aspects of fish management in the Department.** As discussed in the body of this report, Fish Management Division staff take the lead role in activities such as surveying the size of fish populations, and managing and monitoring commercial and recreational fishing. Other department staff contribute to overall fish management in the state, including the staff in the Fish Hatcheries Division, the Fish Science Division, the Department’s Habitat Program, and the Intergovernmental Resource Management group in the Director’s Office.⁴ **Therefore, the expenditures listed in this report for the Fish Management Division are not the only Department expenditures for managing fish.**

The Department of Fish and Wildlife’s Activity-Based Costing Effort

JLARC’s review should also be understood in the context of an agency-wide cost accounting effort currently underway at the Department of Fish and Wildlife. The Department underwent an outside review of its financial operations and business management practices in 1998.⁵ One key issue identified in that review was the Department’s need for an appropriate cost accounting system.

⁴ The Intergovernmental Resource Management group has lead responsibility for Department fishery negotiations with other governments, including the governments of other countries (primarily Canada), federally-recognized Indian tribes, and other states.

⁵ Talbot, Korvola, and Warwick, LLP, “Washington State Department of Fish and Wildlife’s Business Practices Assessment,” November 1998.

In late 2000, the Department began exploring implementation of an activity-based cost accounting system. Such a system can provide a more detailed accounting of the Department's activities and associated costs than current accounting and budget systems. The Governor, OFM, and the Legislature underscored the need for this transition with a budget proviso in the 2003 legislative session, directing the Department to have its new activity-based cost system in operation by January 2004.⁶

The Department has developed a list of 26 agency-wide activities for its new accounting system. Each activity is common to multiple programs. For example, activities include "manage fishing and hunting seasons," "manage fish and wildlife harvest," and "ensure compliance of WDFW [Department] regulations." Department staff have been using the agency's chart of accounts⁷ as the vehicle to allocate expenditures to these agency-wide activities. By September 2003, the Department had largely completed this stage of the process and was moving down to the next layer in the agency structure to identify activities at the program and division levels. These program and division-specific activities will then roll up into the broader agency-wide activities.

Goals of This Study

Given this study's origins and the agency-wide cost accounting effort underway, JLARC has two primary goals for this review:

1. To produce a product that helps bridge the information gap between the Department, and OFM and legislative staff.
2. To produce a product that is compatible with the Department's activity-based cost accounting system. **This JLARC project is a demonstration of how to apply the activity-based cost accounting system at the division level.**

Outline of This Report

This report is organized as follows:

- Chapter Two introduces the two tools we created for this JLARC study. The tools are a pair of activity lists that identify the activities of the Fish Management Division and a database that combines activity information with 2001-03 expenditures, fund sources, full-time equivalent staff (FTEs), fish species groups, and the location of the activities;
- Chapter Three highlights the results from using the tools created for this study and discusses ways these tools can be used to answer a variety of different questions;
- Chapter Four summarizes how the agency and the Fish Management Division currently track and measure performance of Division activities. The chapter suggests ways to further develop and use a comprehensive performance measurement system for the Fish Management Division;
- Chapter Five discusses other study issues, including whether the Division's activities are required and the extent to which activities contribute to meeting legislative intent or agency goals and objectives; and

⁶ ESSB 5404; C 25 L 03 E1.

⁷ The agency's chart of accounts includes a list of budget codes used to identify the account or fund source that agency expenditures are charged against.

Fish Management Division: Activity and Cost Analysis

- Chapter Six details the lessons learned from this review and makes five recommendations to the Department of Fish and Wildlife.

In addition to this volume, JLARC has compiled detailed information on the legal framework, activities, and expenditures for each fish species group managed by the Fish Management Division. This more detailed information is in Volume II of this report.

CHAPTER TWO – THE TOOLS

This JLARC study has yielded two tools that can be used to explain the activities and expenditures of the Fish Management Division:

- The **first tool** is a pair of activity lists that identify what work the staff of the Fish Management Division perform;
- The **second tool** is a database that combines this activity information with information on 2001-03 expenditures, fund sources, fish species groups, full-time equivalent staff (FTEs), and the location of the activities (headquarters or a specific region). We constructed the database using the Department’s 2001-03 chart of accounts, so the JLARC database is compatible with the agency’s activity-based cost system. We have also worked with Fish Management Division staff to link our Division-level activities to the Department’s agency-wide activities, which are part of its new cost accounting system.

The remainder of this chapter describes the tools in more detail; Chapter Three provides samples of the kinds of analyses that the tools can generate. We intend to provide these tools to the Department, to OFM, and to legislative staff.

The First Tool: Identifying Fish Management Division Activities

“The Fish Management Cycle”

We constructed two lists of activities to describe the work of the Fish Management Division. These lists are the result of extensive interviews with the headquarters staff and interviews with Division staff in each of the agency’s six regions around the state. We translated scientific processes into terms that can be understood by people outside the Fish Management Division and the agency.

The “Fish Management Cycle”—the first of two activity lists—accounts for 77 percent of Fish Management Division expenditures. Figure 2 on pages 6 and 7 shows the Management Cycle activities, which Fish Management Division staff typically perform on an annual basis. The activities in the Fish Management Cycle may be simplified as follows:

1. Determining how many fish and shellfish there are and how many are available to catch while still maintaining fish and shellfish populations;
2. Developing or helping to develop commercial and recreational fishing regulations; and
3. As people go fishing, monitoring commercial and recreational harvests, and adjusting regulations during the fishing season as necessary.

The following section describes the elements of the Fish Management Cycle in more detail.⁸ **It is important to emphasize again that these are the activities of the Fish Management Division only. They do not reflect all Department activities involved in managing fish and shellfish.**

⁸ The elements of the Fish Management Cycle could be made more generic and could also be used within the Department’s activity-based cost system to capture some of the activities for the Wildlife and Habitat Programs.

Figure 2 – Fish Management Division Activities: The Management Cycle

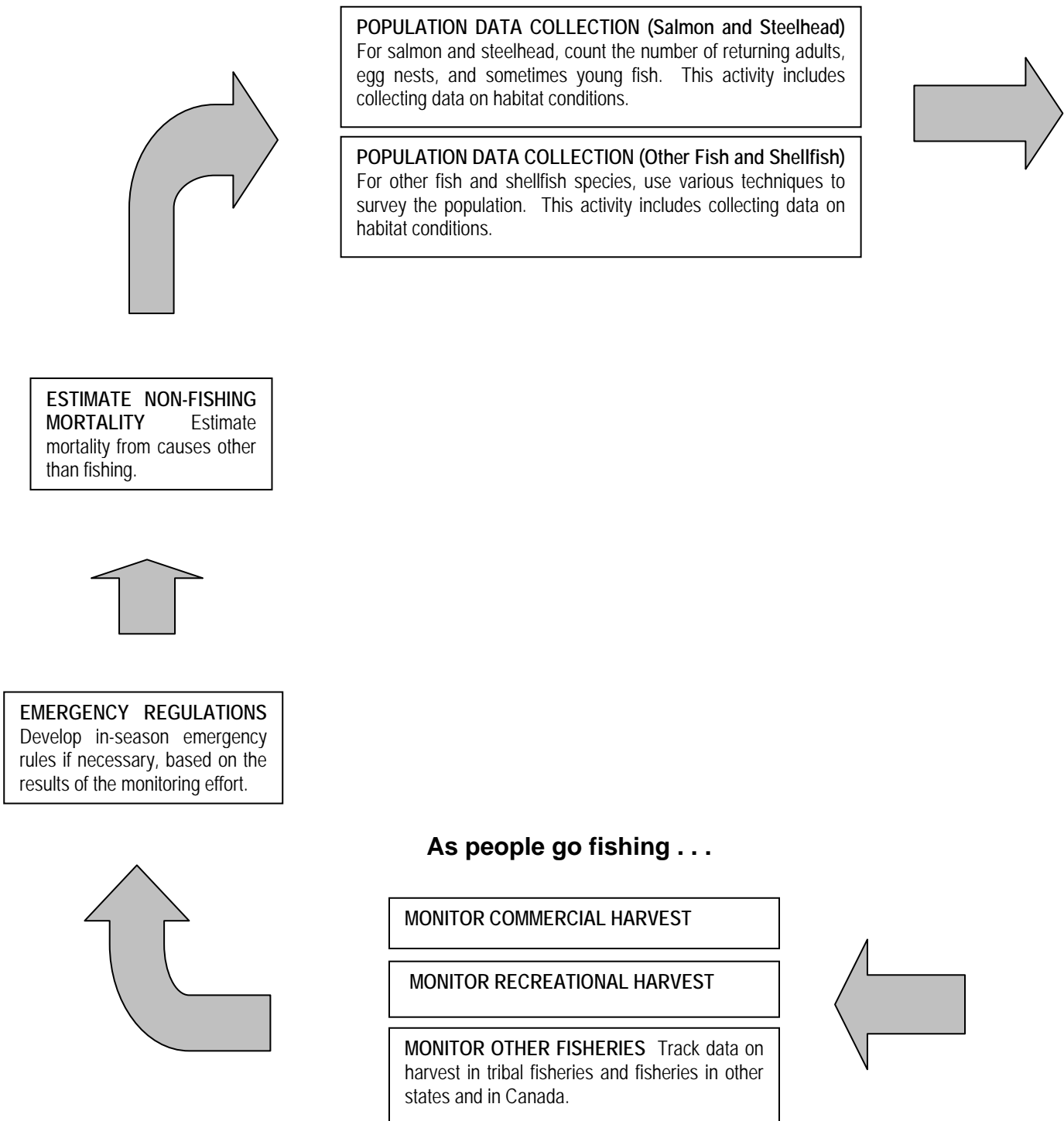
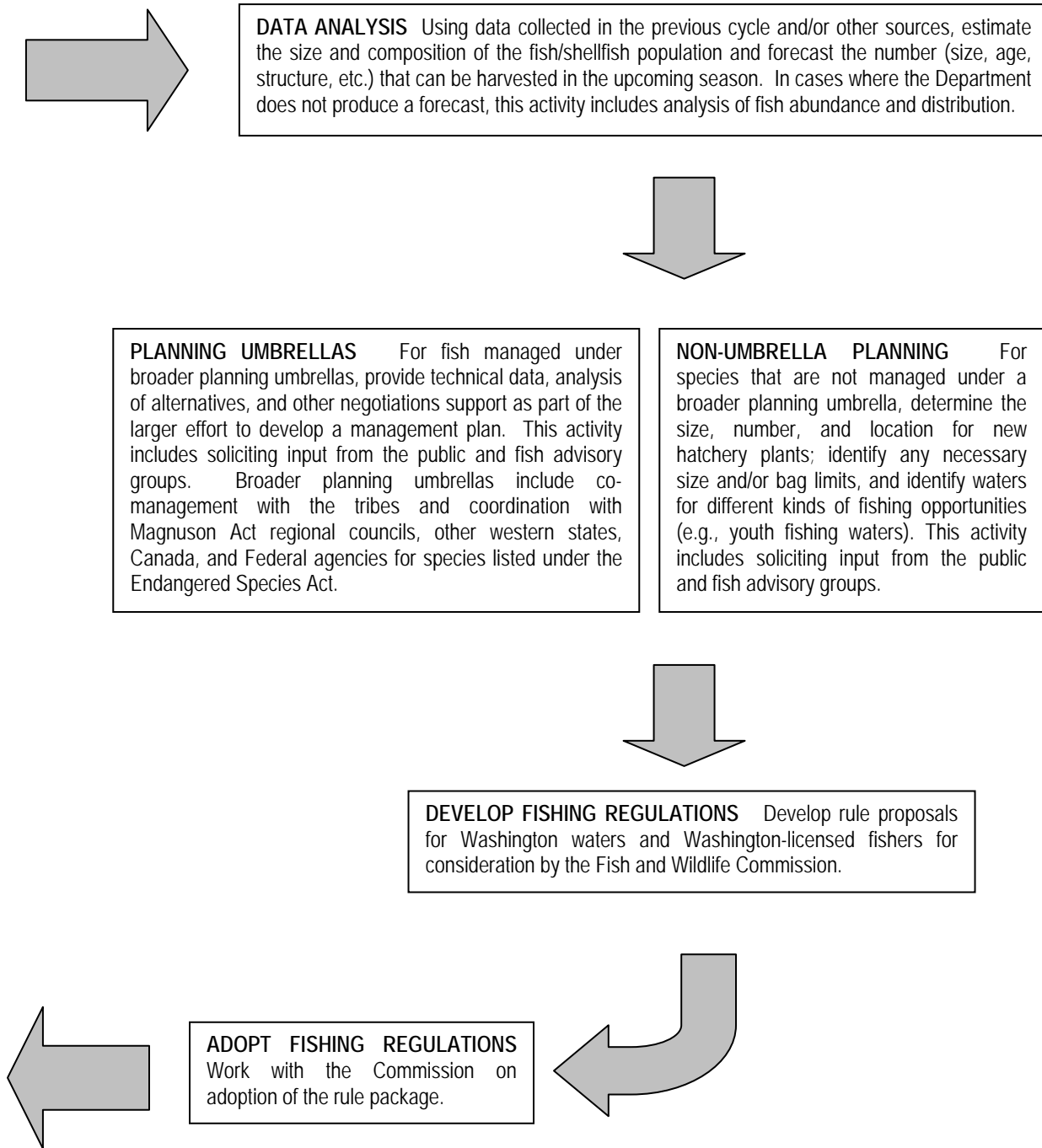


Figure 2 – Fish Management Division Activities: The Management Cycle



Elements of the Fish Management Cycle

- **Population Data Collection for Salmon and Steelhead/Population Data Collection for Other Fish and Shellfish** – Fish Management Division staff collect data in the field on fish and shellfish populations. For salmon and steelhead, this activity includes Division staff performing or supervising the counting of returning adult fish passing through the dams on the Columbia and Snake rivers and young fish passing downstream past the dams. This activity also includes Fish Management Division field work to count spawning adults and fish egg nests in selected streams.

Fish Management Division staff use a variety of methods to survey populations of other fish and shellfish, including underwater camera work to assess groundfish populations, electroshocking and netting in certain lakes for population compositions of warm water fish, and specific sampling procedures on public beaches to gather information on the status of clam and oyster populations.

All of these field data collection activities may also include collecting relevant data on habitat conditions.

- **Data Analysis** – Fish Management Division staff analyze data to estimate the size and composition of the various fish and shellfish populations. Staff use data collected from field work, from the other elements in the cycle such as harvest monitoring, and from other sources. For some species such as salmon, Division staff generate a forecast of the number of fish that will be returning to specific areas in the upcoming season. For other fish or shellfish where the Division does not make a specific forecast, staff work on providing an assessment of species abundance and distribution. The Fish Management Division staff may be assisted in the Data Analysis step by staff from other agencies in the larger planning umbrellas described below. Other staff in the Fish Program may also help with analyzing data. For example, staff in Fish Science conduct research to refine the models used to make the forecasts.

The work from Fish Management Division staff's data analysis is an important component in determining how many fish or shellfish can be harvested in the upcoming season while sustaining fish and shellfish populations. This analysis then feeds into one of two kinds of planning processes, as described in the next two activities.

- **Planning Umbrellas** – Many of the fish and shellfish species in Washington are managed under some kind of broad planning “umbrella” where the Washington Department of Fish and Wildlife is a key player – but not the only player – determining how a species will be managed.⁹ For example, the broader planning umbrellas for salmon include a treaty with Canada, ocean fishing regulations coordinated through the Pacific Fishery Management Council, co-management with federally recognized tribes in Oregon and Washington, shared jurisdiction with Oregon over the waters of the Columbia River, and compliance with the federal Endangered Species Act (ESA).

While the Intergovernmental Resource Management group in the Director's Office plays a leading role in the intergovernmental negotiations, Fish Management Division staff

⁹ These larger planning umbrellas vary by fish or shellfish species. More specific information by species group may be found in Appendices A through H in Volume II of this report.

play an important part within these planning forums to develop fish management plans. For example, Fish Management staff supply technical data, work towards agreement on that data with their counterparts, analyze alternatives, and provide technical negotiations support. As part of these larger planning umbrellas, the Intergovernmental Resource Management group and Fish Management Division staff solicit input from the public and from fish advisory groups.

- **“Non-Umbrella” Planning** – For fish species such as rainbow trout, bass, and walleye that are not managed under a larger planning umbrella, Fish Management Division staff develop management proposals for the coming fishing season. They develop recommendations on the size, number, and location for the coming year’s planting of hatchery fish (working closely with their colleagues in the Hatcheries Division), and they propose size or bag limits or area restrictions to help perpetuate native fish populations or to distribute the catch. Division staff also propose waters to be designated for specific kinds of fishing, e.g., river stretches just for fly fishing or lakes reserved for youth fishing. Division staff solicit input from the public and from their advisory groups as part of this activity.
- **Develop Fishing Regulations** – Eventually the results of these two kinds of planning activities must be translated into regulations for freshwater and saltwater fishing. Every year, Fish Management Division staff work on the development of these regulations for consideration by the Fish and Wildlife Commission, or by the agency director if the Commission has delegated its rule-making authority. As part of this activity, Division staff also review proposals for fishing regulations submitted by the public, which the Department broadly solicits in odd-numbered years.
- **Adopt Fishing Regulations** – A small number of Fish Management Division staff work directly with the Fish and Wildlife Commission each year on the actual adoption of the fishing regulations.
- **Monitor Harvest** – Within the larger planning umbrellas, the intergovernmental groups allocate fish and shellfish among the various fisheries. In order to make these plans work every year, the various fishery managers have to keep track of who is catching what and where. The responsibility for monitoring Washington non-tribal fisheries falls to the Fish Management Division. We have divided harvest monitoring into three activities: **Monitor Commercial Harvest, Monitor Recreational Harvest, and Monitor Other Fisheries.** Examples of harvest monitoring activities include checking sport and commercial fishing boats as they land at the docks, on-board observers, and surveying the catch of anglers at lowland lakes on the opening day of fishing. The harvest monitoring activity also includes sampling for coded wire tags, and collecting data and tissue samples for more detailed analysis by the Fish Science Division.
- **Emergency Regulations** – While the Department adopts many fishery regulations annually as permanent regulations, some fisheries must be opened or closed using emergency regulations. This would occur, for example, if recreational anglers in a certain area had caught their quota of fish or dug their allocation of clams. In conjunction with other Department staff, Fish Management Division staff develop these emergency fishery regulations.

- **Estimate Non-Fishing Mortality** – Part of the job of knowing how many fish or shellfish will be available for harvest in the future is developing an awareness of how many are lost due to causes other than fishing. Fish Management Division staff spend a small amount of time on this activity. For example, Fish Management staff are involved in studies on the Hanford Reach that look at the impacts to young salmon that become stranded in isolated pools when dam operations result in rapid fluctuations in water levels.
- **Supervision** – While not depicted specifically in Figure 2, we are also including supervision as an element of the regular Management Cycle. This includes supervision of personnel, budgets, and contracts. For Fish Management Division staff, this activity includes the supervision of the field work on population data collection and harvest monitoring.

The “Other Activities” List

Fish Management Division staff also participate in some activities that fall outside of the regular Management Cycle. **These “Other Activities” account for the remaining 23 percent of Division expenditures in the 2001-03 biennium.** In some cases, these activities are ones that most Fish Management Division staff spend at least a little of their time doing, such as responding to information requests from the public.

In other cases, an “Other Activity” is one that crosses over regions and species groups. For example, the Fish Management Division has a unit in headquarters that works to secure and maintain ESA permits to allow fishing in waters with salmon, steelhead, or bull trout; absent this ESA permitting activity, it is unlikely that the Department could open these fisheries. In other cases, an “Other Activity” is unique to a species group. For example, the collection of shellfish samples for testing by the Department of Health is unique to shellfish management. Appendix 3 contains the full list of “Other Activities” for the Fish Management Division.

The Second Tool: JLARC’s Fish Management Division Database

The first tool resulting from this project is the set of two activity lists described above. The second tool is a database that combines this activity information for the Fish Management Division with key management information on FY 2002 and FY 2003 expenditures, FTEs, fund sources, fish species groups, and locations (headquarters or a specific region). There are seven major species groups represented in the database, which has allowed us to link Division activities to each of these species groups:

1. **Salmon and Steelhead** – includes chinook, coho, pink, chum, and sockeye salmon, and steelhead trout. These are all fish that hatch in freshwater, migrate to the ocean, and then return to their natal waters to spawn;
2. **Marine Fish** – includes halibut; groundfish such as rockfish; forage fish such as sardines, herring, and smelt; and highly migratory marine fish such as tuna;
3. **Shellfish** – includes Dungeness crab, shrimp, hardshell clams and oysters, razor clams, geoduck, sea urchins, and sea cucumbers;
4. **Resident Native Fish** – includes bull trout, other types of trout, kokanee, and freshwater crawfish;

5. **Warm Water Fish** – includes tiger musky, walleye, bass, and channel catfish;
6. **Sturgeon** – includes both white and green sturgeon; and
7. **Aquatic Nuisance Species** – includes invasive plant and animal species, such as Spartina, European green crab, and zebra mussels.

An eighth “**Multiple Species**” group includes activities that could not be attributed to a single species group. For example, the expenditures associated with the manager of the Fish Management Division fall under this category because he spends a portion of his time on all of the fish and shellfish species groups. Another activity in this category is the ESA permitting unit that works to secure and maintain ESA permits for several different fish species.

Where possible, the database provides information on a more specific species category within a species group, such as bull trout within resident native fish and razor clams within shellfish.

Chapter Three now shows the kind of results these two tools can produce.

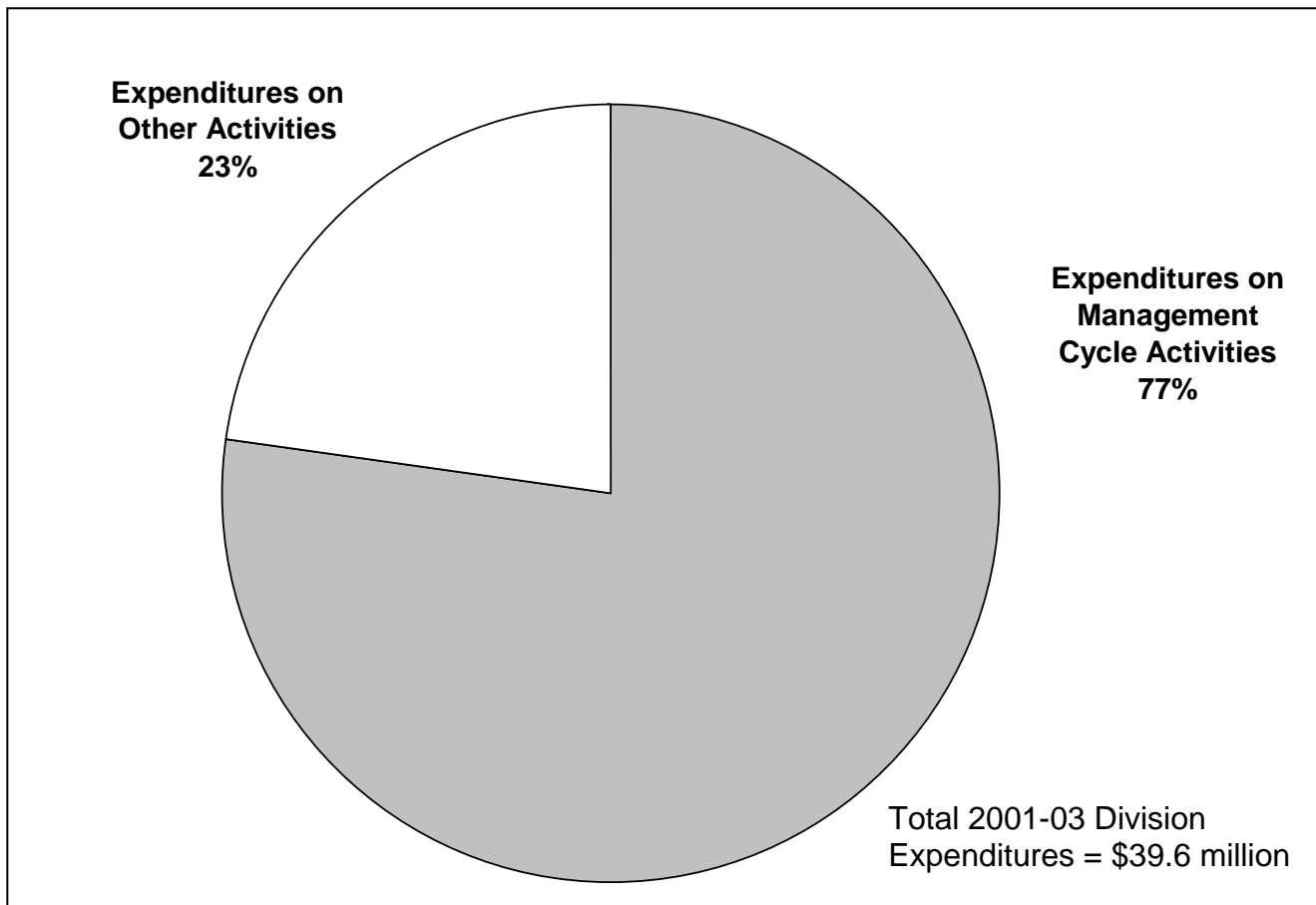
CHAPTER THREE – THE TABULATION: FISH MANAGEMENT DIVISION ACTIVITIES AND EXPENDITURES

Here we connect the results from the activity lists and the database created for this study. The database helps to explain the resources used by the Fish Management Division to perform its various responsibilities by linking the activities described in Chapter Two with 2001-03 expenditures, fund sources, and full-time equivalent staff (FTEs). This database can also be used to summarize the Division's activity information by fish species group and by the location where the activity is performed or managed (i.e., headquarters or a specific region).

The Fish Management Division's 2001-03 Activity Expenditures

In the 2001-03 biennium, the Fish Management Division spent approximately \$39.6 million from all fund sources on a variety of activities related to managing fish and shellfish populations and harvest seasons. As illustrated in Figure 3 below, the Fish Management Division spends

Figure 3 – The Fish Management Division Spends 77 Percent of its Budget on Activities Within the Fish Management Cycle



Source: JLARC's Fish Management Division Database.

approximately 77 percent (\$30.6 million) of its budget on activities that are part of the Fish Management Cycle. The Division spends the remaining 23 percent (\$9 million) of its budget on activities that fall within the “Other Activities” list (see Appendix 3).

Figure 4 on the following page, details the total expenditures and staff FTE levels for each of the activities described in Chapter Two.

As highlighted in gray in Figure 4, the Fish Management Division spends the majority of its time and resources on six major activities within the Fish Management Cycle. These six major activities reflect some of the primary responsibilities of the Division, including helping to determine the number of fish and shellfish available to catch each season and monitoring the number and type of fish caught by recreational and commercial anglers. These six major activities are:

1. **Collecting Population Data for Salmon and Steelhead**
2. **Collecting Population Data for Other Fish and Shellfish**
3. **Performing Data Analysis**
4. **Monitoring Recreational Harvest**
5. **Monitoring Commercial Harvest**
6. **Participation in Planning Umbrellas**

In addition to the Management Cycle activities, the Division also performs activities that fall outside the regular Management Cycle. In total, these “Other Activities” make up a smaller portion of the Division’s overall budget (23 percent). The top six of these activities, in terms of expenditures, include operating the Bonneville Power Administration-funded **Northern Pikeminnow Sport Reward Program**, which was established to encourage anglers to catch pikeminnows that often prey on young salmon; **educating the public and the Legislature** on various issues; administering the **ESA permitting unit** which works to secure ESA permits for several fish species; developing and coordinating **youth sport fishing events**;¹⁰ **maintaining equipment** such as boats and sampling gear; and **purchasing fish and shellfish** for planting in the state’s lakes, reservoirs, and public beaches.

Given the complex operating environment in which the Fish Management Division manages fish and shellfish in Washington State, we found that the allocation of Division activities and expenditures were in line with what one would expect. The Division’s distribution of expenditures highlights the major recurring activities that must take place each year in order for the Department to provide opportunities for people to go fishing throughout the state while at the same time meeting its statutory and other legal obligations.

Fish Management Division Staffing Levels

As Figure 4 illustrates, the distribution of staff FTEs closely mirrors the distribution of Fish Management Division expenditures. **On average, for the 2001-03 biennium, the Division employed 316 annual FTEs.** This includes permanent staff time as well as temporary and seasonal staff hired throughout the year. Two-thirds of the staffing resources were devoted to the six major activities within the Management Cycle highlighted above.

¹⁰ This total includes a 2001-03 capital budget appropriation of \$250,000 for Youth Sport Fishing.

Fish Management Division: Activity and Cost Analysis

Figure 4 – 2001-03 Fish Management Division Activity Expenditures and FTEs

Type of Activity	Activity Description ¹¹	2001-03 Expenditures	% of Total Expenditures	Average Annual FTEs	% of Total FTEs
Management Cycle	Data Analysis	\$5,457,192	14%	42	13%
	Planning Umbrellas	\$2,831,967	7%	21	7%
	Non-Umbrella Planning	\$421,566	1%	3	1%
	Rule Development	\$825,112	2%	6	2%
	Rule Adoption	\$296,296	<1%	2	<1%
	Monitor Commercial Harvest	\$2,271,442	6%	20	6%
	Monitor Recreational Harvest	\$3,712,187	9%	37	12%
	Monitor Other Fisheries	\$257,946	<1%	2	<1%
	Emergency Rules	\$673,747	2%	5	2%
	Estimate Non-Fishing Mortality	\$393,842	1%	3	<1%
	Population Data Collection-Salmon and Steelhead	\$5,849,923	15%	57	18%
	Population Data Collection-Other Fish and Shellfish	\$4,838,389	12%	35	11%
	Supervise Programs, Budgets, Personnel	\$2,719,048	7%	19	6%
Management Cycle Total		\$30,548,658	77%	251	79%
Other Activities	Youth Sport Fishing	\$637,415	2%	2	<1%
	Public Outreach	\$510,687	1%	4	1%
	Educate Commission	\$122,002	<1%	1	<1%
	Educate Others	\$982,215	2%	8	2%
	Purchase Fish and Shellfish For Planting	\$518,795	1%	2	<1%
	Produce Fish and Shellfish	\$481,761	1%	3	<1%
	Fish Contaminant Analysis	\$496,966	1%	3	<1%
	Sample for DOH, DOE	\$173,014	<1%	1	<1%
	Lake Rehabilitation	\$261,462	<1%	1	<1%
	Survey Anglers	\$67,266	<1%	<1	<1%
	ESA Permitting	\$742,911	2%	6	2%
	Pikeminnow Predator Control	\$1,733,716	4%	19	6%
	Identify and Develop Public Access Sites	\$222,817	<1%	2	<1%
	Shellfish Pest Management	\$19,544	<1%	<1	<1%
	Marine Protected Areas	\$213,002	<1%	1	<1%
	Puget Sound/Georgia Basin Taskforce	\$38,400	<1%	<1	<1%
	Assemble Geographic Information Systems Data	\$239,645	<1%	2	<1%
	Investigate Water Quality Problems	\$19,218	<1%	<1	<1%
	Provide Info on Derelict Fishing Gear	\$30,000	<1%	<1	<1%
	Offsite Mitigation	\$44,445	<1%	<1	<1%
	Subbasin Planning	\$210,119	<1%	1	<1%
	FERC Relicensing	\$202,498	<1%	1	<1%
	Olympic Regional Harmful Algae Bloom Study	\$190,994	<1%	1	<1%
	Screen Shellfish Imports/Transfers	\$120,300	<1%	1	<1%
	Maintain Equipment	\$545,581	1%	4	1%
Admin/Office Support	\$218,392	<1%	1	<1%	
Other Activities Total		\$9,043,163	23%	65	21%
Grand Total		\$39,591,821	100%	316	100%

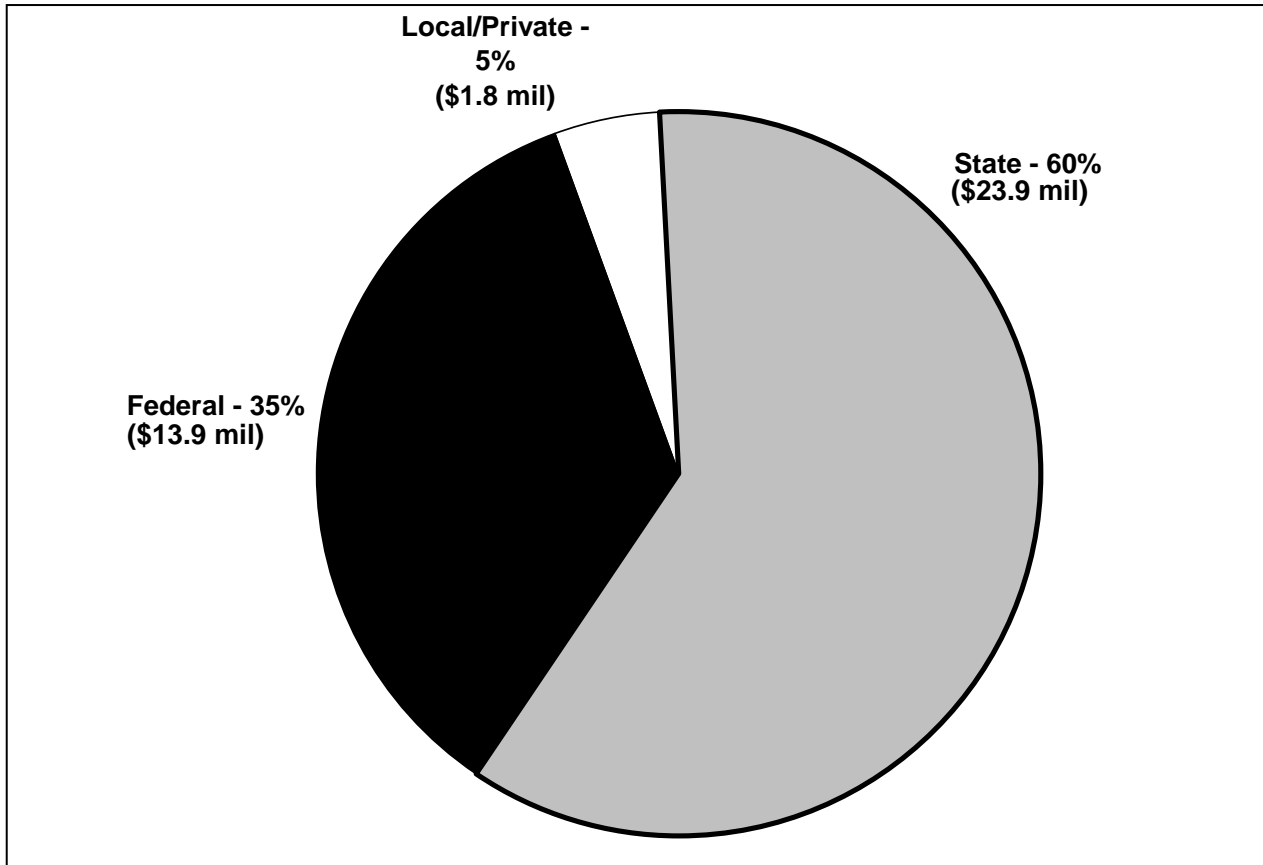
¹¹ The six major activity expenditures for the Division are highlighted in gray.

How Does the Fish Management Division Pay for Its Activities?

JLARC's database identifies the fund sources used to pay for Fish Management Division activities. Figure 5 below depicts fund sources for the Division as a whole.¹² The Division relies on a mix of state, federal, local, and private fund sources to pay for its activities. While the types of fund sources vary by fish species group, the largest share of Division expenditures are paid for with state dollars. As illustrated in Figure 5, **state dollars covered 60 percent of Fish Management Division expenditures in the 2001-03 biennium** (\$23.9 million). State sources included General Fund-State dollars (\$15.6 million), State Wildlife funds (\$3.6 million), and a mix of other state sources, such as the Warm Water Game Fish Account, Aquatic Lands Enhancement Account, and funding from other state agencies, including the Department of Natural Resources (\$4.7 million).¹³

The federal government paid for slightly more than a third of Fish Management Division activities. These federal funds came from Federal General Fund and Federal Wildlife Fund dollars as well as a variety of other federal entities, including the Bonneville Power

Figure 5 – State Dollars Pay for 60 Percent of Fish Management Division Activities



Source: JLARC's Fish Management Division Database.

¹² Fund sources vary by fish species group. See Appendices A through H in Volume II of this report for fund source detail by species group.

¹³ A portion of the revenue generated by the Department of Fish and Wildlife from the sale of commercial and recreational fishing licenses is included in the total amount of state funds contributed to the Fish Management Division. License revenue is also applied to other Divisions within the Fish Program and other programs within the agency.

Fish Management Division: Activity and Cost Analysis

Administration, the National Oceanic and Atmospheric Administration, the Pacific States Marine Fisheries Commission, the Army Corps of Engineers, and the U.S. Fish and Wildlife Service.

Local government and private sources paid for the balance of Fish Management Division activity expenditures. Together these sources made up 5 percent of the total Fish Management Division budget for the 2001-03 biennium. Local and private sources included public and private utilities, tribal and local governments, and private non-profit organizations.

Fund sources for the Fish Management Division's six major activities within the Fish Management Cycle varied by activity. As shown in Figure 6 below, federal funds paid for a majority of salmon and steelhead data collection efforts, while state funds paid for a majority of data collection conducted for other fish and shellfish. Similarly, federal funds paid for over half

Figure 6 – 2001-03 Fund Sources for the Fish Management Division's Six Major Activities

Activity	Fund Source	Total 2001-03 Expenditures	% of Total Activity
Population Data Collection–Salmon and Steelhead	State	\$1,605,668	27%
	Federal	3,725,514	64%
	Local/Private	518,741	9%
	Total	\$5,849,923	100%
Population Data Collection–Other Fish and Shellfish	State	\$3,313,854	68%
	Federal	1,098,640	23%
	Local/Private	425,894	9%
	Total	\$4,838,389	100%
Data Analysis	State	\$3,115,251	57%
	Federal	2,074,584	38%
	Local/Private	267,357	5%
	Total	\$5,457,192	100%
Monitor Recreational Harvest	State	\$2,168,547	58%
	Federal	1,466,361	40%
	Local/Private	77,278	2%
	Total	\$3,712,187	100%
Monitor Commercial Harvest	State	\$950,628	42%
	Federal	1,217,797	54%
	Local/Private	103,018	4%
	Total	\$2,271,442	100%
Planning Umbrellas	State	\$2,169,828	77%
	Federal	641,610	23%
	Local/Private	20,528	<1%
	Total	\$2,831,967	100%

Source: JLARC's Fish Management Division Database.

Fish Management Division: Activity and Cost Analysis

of commercial harvest monitoring activities, while state funds paid for more than half of recreational harvest monitoring. Of the six activities, participation in planning umbrellas had the highest proportion of state funding, with over three quarters of the costs paid for by state sources.

The mix of fund sources used to pay for Fish Management Division activities is somewhat fluid. For example, the Department shifted federal matching funds used by the Fish Management Division in FY 2002 to the Hatcheries Division in FY 2003. There was also a significant difference in the use of Aquatic Lands Enhancement Account funds between the two fiscal years. These adjustments indicate that the fund source allocations for Fish Management Division activities are not permanent and may change again in the future. This variability may be the result of legislative direction and/or agency decisions.

A LOOK AT EXPENDITURES AND STAFFING LEVELS BY FISH SPECIES GROUP

In addition to summarizing activities on a Division-wide basis, the database developed for this study also allows a look at Fish Management Division expenditures and staffing levels for individual fish species groups. As mentioned earlier, JLARC identified seven broad fish species groups that Fish Management Division staff are involved in managing. A “Multiple Species” group captures activities and/or budget codes that could not be assigned to a single species group. When possible, we also linked activities to a particular species within a species group, such as razor clams within shellfish.

Figures 7 and 8 below illustrate the distribution of 2001-03 expenditures and FTEs across the seven species groups as well as the Multiple Species category. Approximately **42 percent of total Division expenditures are focused on salmon and steelhead activities (\$16.6 million in the 2001-03 biennium)**. Marine Fish and Shellfish activities make up the next largest share of Division expenditures, representing 14 percent and 13 percent of the overall Division budget, respectively (\$5.6 million and \$5.4 million in the 2001-03 biennium). The balance of

Figure 7 – Expenditures Distributed Across Fish Species Groups

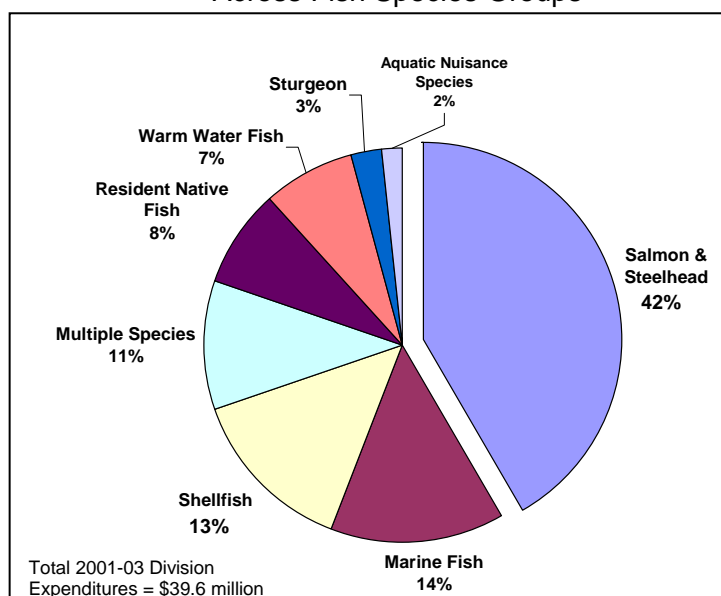
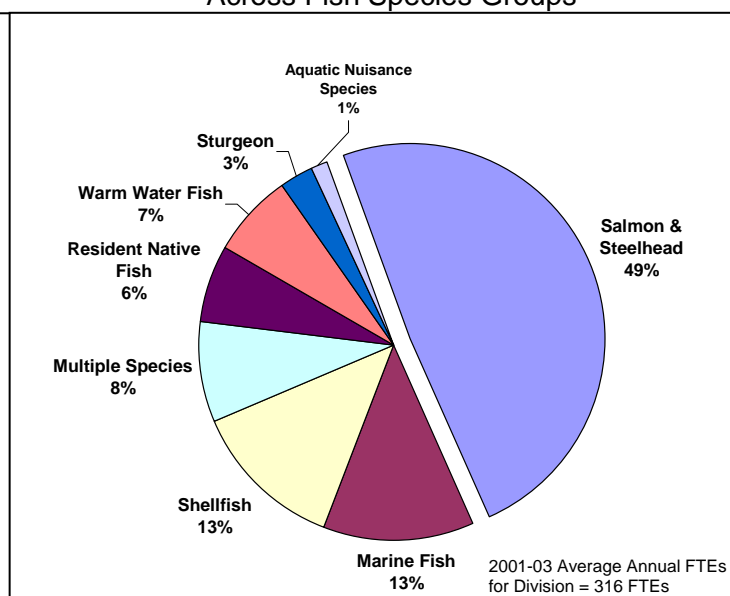


Figure 8 – Staffing Resources Distributed Across Fish Species Groups



Source: JLARC's Fish Management Division Database.

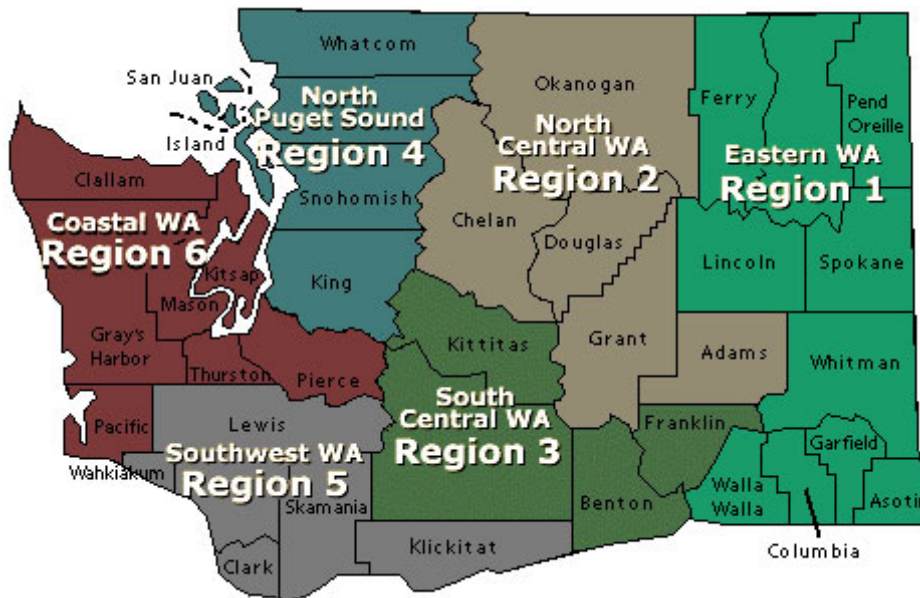
expenditures is distributed across the remaining species groups. The distribution of FTEs across the various species groups closely resembles the distribution of expenditures. Almost one-half of the Fish Management Division staff effort (155 FTEs) is focused on the management of salmon and steelhead.

While the Department of Fish and Wildlife hopes eventually to include species information in its cost accounting system, it does not currently do so. JLARC’s tying together of species information with activity and expenditure information provides a more complete picture of the Division’s activities. This analysis demonstrates how expenditures and staffing levels are distributed among various species groups, and also allows for a more detailed look at the functions performed for each individual species group.

Where are Fish Management Division Activities Performed?

In addition to summarizing activity information by species groups, the JLARC database also includes information on where the Division’s activities are managed or take place. The Department of Fish and Wildlife is organized around six regional offices as well as a headquarters office in Olympia (see Figure 9 below for a map of the regions). When possible, we have identified the office that is primarily responsible for specific Fish Management Division activity expenditures. Assignments to the headquarters office in Olympia include Division staff who have statewide management responsibilities. Headquarters also houses programs and services that are managed out of headquarters but delivered statewide, e.g., the youth sport fishing program, the ESA permitting office, and the purchase of triploid trout¹⁴ and warm water fish for planting in lakes around the state.

Figure 9 – Washington Department of Fish and Wildlife Regional Map



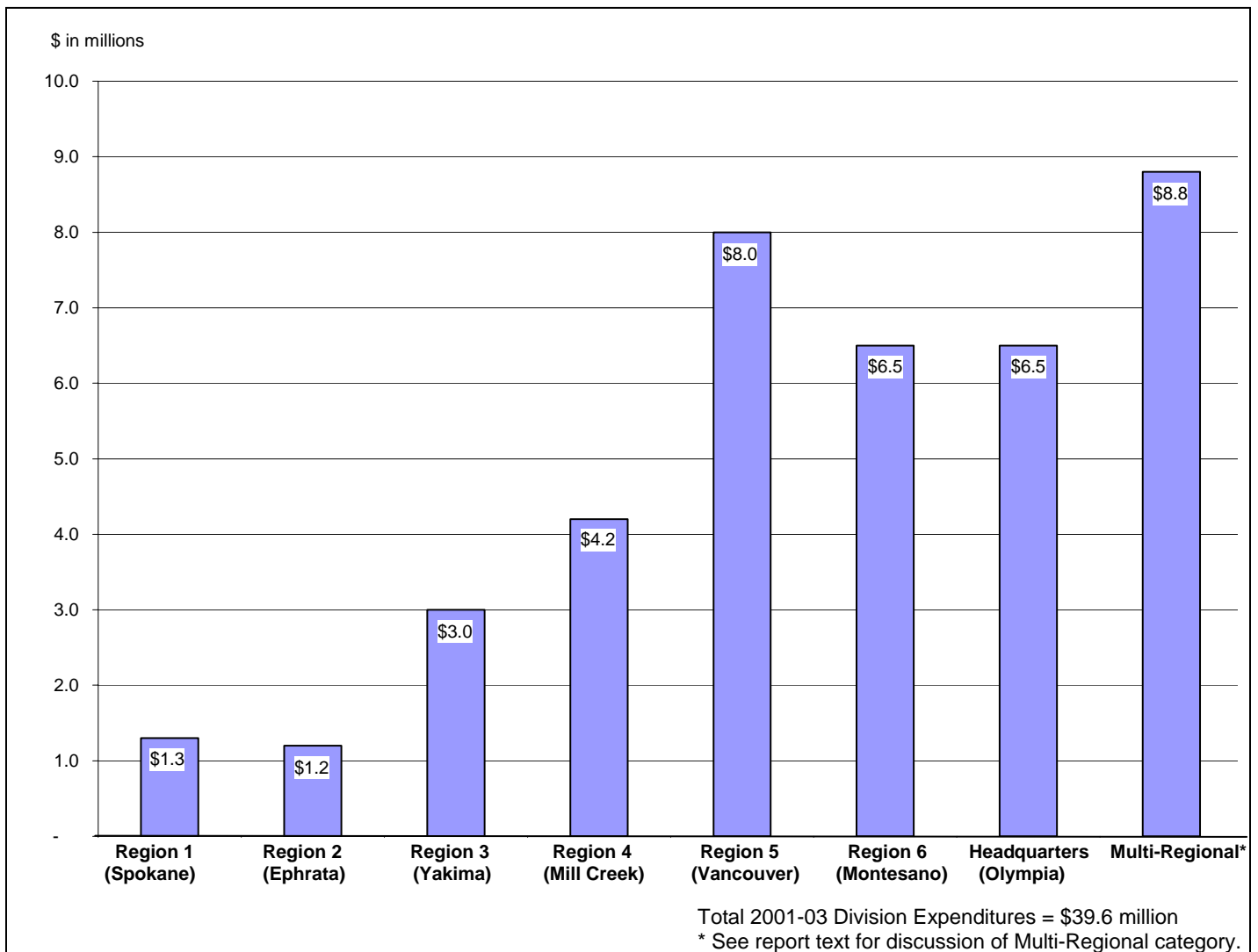
¹⁴ Triploid trout are trout that have an additional set of chromosomes and are sterile. As a result, the fish put their energy into eating and growing, and may reach trophy size.

Fish Management Division: Activity and Cost Analysis

JLARC also assigned some activity expenditures to a “Multi-Regional” category to capture Division work that is managed out of headquarters, with the work itself taking place in more than one region. The majority of the expenditures in this category are for the monitoring of commercial and recreational fish harvests in Puget Sound and off the Washington coast. While this monitoring effort is not conducted statewide, it was not accurate to assign it to just one region. Another example of expenditures in this category is the work of the Division’s dive teams in marine waters to assess groundfish recovery in marine protected areas and geoduck populations in different parts of Puget Sound.

As Figure 10 below illustrates, several of the regions have much smaller activity expenditures than other regions. This is, in part, a reflection of how the various fish species groups are naturally distributed across the state. For example, Regions 1, 2, and 3 have no marine fish and shellfish management activities because they are not located near marine waters. In contrast, Regions 4, 5, and 6 along with Headquarters and the Multi-Regional category include activities related to most if not all of the species groups. **JLARC’s database includes information on how much is spent within a given region for each of the species groups managed in that region.**

Figure 10 –Distribution of Fish Management Division's Expenditures Across the State



Source: JLARC's Fish Management Division Database.

In Summary: These Tools Explain Fish Management Division Activities and Expenditures

This chapter provides examples of the type of information that can be generated from the activity lists and database tools JLARC created for this study. As highlighted in the tables and graphs, the information now available on Fish Management Division activities and expenditures can be isolated to a specific species or region of the state or it can be summarized at the Division level. The Division can update the tools with budget allotment information for 2003-05 and future biennia. The tools can be used to answer questions from a variety of different perspectives and interests, such as:

- Determining how much the Division spends on fieldwork and analysis in order to set annual salmon and steelhead fishing regulations;
- Illustrating what the Division does to manage razor clams;
- Comparing the management of a fish species like warm water fish in different parts of the state; and
- Showing how much of the Division's budget is devoted to planting triploid trout in lakes all around the state.

By pulling together this information in one database, the Fish Management Division will be able to respond to internal management and external requests for information in a more comprehensive and detailed manner than current systems allow.

CHAPTER FOUR – PERFORMANCE MEASURES

JLARC’s tools can identify the major activities of the Fish Management Division and where the Division spends the majority of its resources. The legislative proviso for this study also directed JLARC to examine how the Division and the Department of Fish and Wildlife track the performance of those activities for internal management and external reporting purposes. This chapter reviews what currently exists at the agency and Division level regarding performance measures and suggests some areas for improvement regarding tracking performance of the Fish Management Division’s activities.

State Requirements for Performance Measurement

Since 1996, all state agencies in Washington have been required to engage in strategic planning and performance assessment activities. RCW 43.88.090 requires state agencies to establish program objectives for each major program in their budget and to integrate, within their budget proposals, performance measures that objectively determine whether a program has achieved its goals.

Additionally, Governor Locke’s 1997 Executive Order 97-03 requires state agencies to “utilize the tools of strategic business planning and performance measures to establish their priorities and measure their progress toward their stated goals.” State agencies have discretion in the number and types of performance measures they use and the manner in which they are implemented throughout the agency.

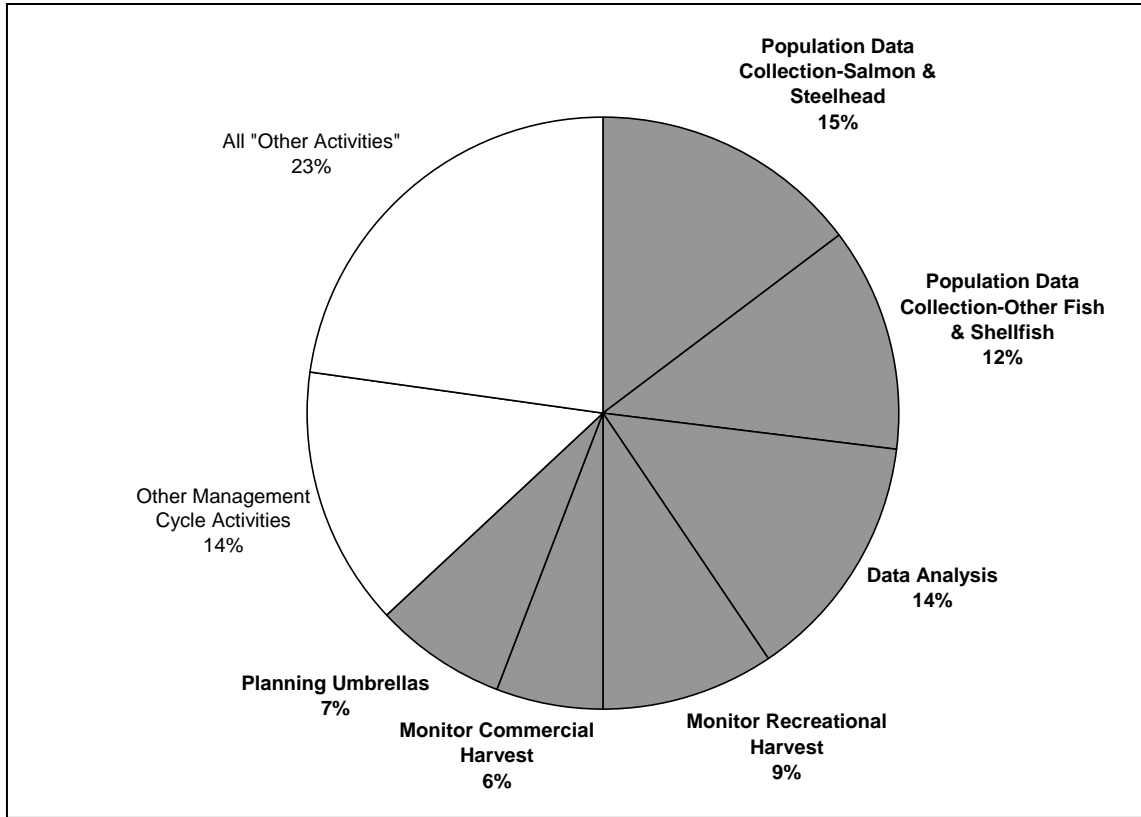
Measuring Fish Management Division Performance at the Agency Level

The majority of the Fish Management Division’s time and resources are spent on six major activities within the Fish Management Cycle. These six activities, highlighted in Figure 11 on the following page, include determining the number of fish and shellfish available to catch each season and monitoring the recreational and commercial harvests. Since these activities reflect the major responsibilities and expenditures of the Division, the Division should be able to show agency management, the Governor’s Office, OFM, and the Legislature how well the Division is performing these major activities.

In the 2001-03 biennium, the Department of Fish and Wildlife had not yet established performance measures that specifically relate to the Fish Management Division’s major activities. The Department had several sets of performance measures in place,¹⁵ but none showed clearly how well the Fish Management Division was performing its major activities. A few measures relating to the larger Fish Program overlapped with some Fish Management Division responsibilities. These measures included such things as the “percentage of marine fish stocks that have been studied sufficiently to determine their productivity and genetic

¹⁵ To fulfill external reporting requirements, the Department of Fish and Wildlife submitted 2001-03 performance measures to the Office of Financial Management, to the Governor’s Office as part of the Director’s Performance Agreement with the Governor, and as part of the agency’s annual budget request.

Figure 11 – The Fish Management Division's Six Major Activities
(Percent of 2001-03 Expenditures)



Source: JLARC's Fish Management Division Database.

diversity” and “total combined catch value of treaty and nontreaty commercial shellfish, marine fish, salmon and aquaculture.”¹⁶ However, these measures cover more than just Fish Management Division responsibilities (i.e., they also include the Fish Science and Hatcheries Divisions, the Intergovernmental Resource Management group in the Director’s Office, and tribal co-managers) and they do not directly measure how effectively the Fish Management Division is carrying out its major activities.

The Department of Fish and Wildlife is currently in the process of developing a new set of performance measures and a new performance tracking system. The Department acknowledges that its past performance measures were primarily developed to fulfill external reporting requirements and were not used widely for internal management purposes. The Department also reports that each of its major programs will develop a new set of performance measures related to their major responsibilities, with an increased emphasis placed on establishing measures that can be regularly monitored and used for internal management. These new sets of measures also will be tied to the agency’s activity-based cost accounting system to ensure that performance measures exist for each of the Department’s 26 agency-wide activities, and its strategic goals and objectives.

¹⁶ These measures were included in the Office of Financial Management’s published list of Department of Fish and Wildlife performance measures for 2001-03.

Measuring Fish Management Division Performance at the Division-Level

Currently, the Fish Management Division relies on an informal system of assessing performance of its major activities. **The Division does not formally track a set of performance measures for internal management purposes, nor does it maintain a written record of how well it performed from year to year.** Rather, Division managers rely on feedback loops, external deadlines, and required deliverables established under the larger planning umbrellas as a way of tracking how well the Division is meeting its targets and carrying out its responsibilities.

For example, the Division assesses performance on population data collection efforts for salmon and steelhead by identifying the number of streams that staff in each region must inspect for returning adults and egg nests and later reviewing whether each region met its requirements. Similarly, the Division assesses how well it conducts its data analysis for salmon and steelhead, by examining whether it produced pre-season forecasts in time for the annual negotiation processes. The Division also considers whether other parties involved in the negotiations accepted the Division's forecasts as methodologically-sound and reliable.

These informal methods of tracking performance provide some internal oversight within the Division. However, this system does not allow managers outside the Division or external reviewers to monitor the Division's performance on its major activities. **The Fish Management Division can use the tools created for this JLARC study to assist in its development of a performance measurement system for its major activities.** The tools highlight which activities consume the most financial resources and staff time. The tools also identify which regions are carrying out the major activities and for which species groups they are being performed.

The Division could begin by formulating performance measures for the six major activities within the Fish Management Cycle that represent the majority of the Division's total expenditures and FTEs. The Division should record and maintain the measures in a formal tracking system. For its harvest monitoring activities, the Fish Management Division could begin by tracking the following, by fish species group or by species and location (e.g., chinook salmon in Puget Sound):

1. What level of monitoring the Division would like to do, thus establishing a ceiling on the level of activity. In our interviews, Fish Management Division staff frequently indicated that they would like to be doing additional harvest monitoring, but were unable to do so due to resource constraints. Including this element as part of the tracking system would provide a place for the Division to report the levels of these activities that it would choose to do if resource limitations were not an issue or if resources could be reallocated from other lower-priority activities;
2. What level of harvest monitoring the Division is required to do and under what planning umbrella, thus establishing a legal floor on the activity level;
3. What level of monitoring the Fish Management Division is, in fact, doing; and
4. What level of harvest monitoring the Division's counterparts are obligated to do or are otherwise doing, e.g., Washington's tribal co-managers, the other western states, and other entities involved in the larger planning umbrellas such as the Pacific States Marine Fisheries Commission.

The Fish Management Division could create a similar tracking system for its population field data collection efforts. The Division also could measure over time and report on its accuracy in making pre-season forecasts and in estimating the number of adult fish that return to spawn in a given area. The supplemental information from (4) above could paint a more complete performance picture for others outside the Fish Management Division and the Department by showing how the Division's responsibilities fit within the larger management environment for fish.

A number of purposes would be served if the Fish Management Division began to formally track performance measures for its key activities. First, the Division could use these measures to communicate goals and expectations to Division staff and evaluate managers' performance against these targets. A formal performance measurement system could also help to ensure that Division responsibilities are monitored and carried out even when there are changes in staff and Division management.¹⁷

Beyond the Division, the Department of Fish and Wildlife could use some or all of the Division's measures to assess how well the Fish Management Division is doing in relation to other divisions and programs, and how well the agency as a whole is doing in meeting its statutory and other legal responsibilities. The Fish Management Division also could use its performance measures to demonstrate areas of success and areas that may need improvement to external parties, such as the Legislature, the Governor's Office, the Office of Financial Management, and stakeholder groups. Given the state's current budget climate and a new emphasis on identifying and evaluating priorities of government, the Fish Management Division should have a formal system in place to track how well it is meeting its targets and performing its major responsibilities on a quarterly and/or annual basis.

¹⁷ Many senior managers in the Fish Management Division are already or soon will be eligible for retirement.

CHAPTER FIVE – OTHER STUDY ISSUES

JLARC’s study mandate also asks for information on whether Fish Management Division activities are required or discretionary, and on the extent to which activities contribute to meeting legislative intent or agency goals and objectives.

Activities such as commercial and recreational harvest monitoring are clearly required under one or more of the broad planning umbrellas for managing fish. However, the Fish Management Division does not record in a public forum *what level* of the activity is required. The Division’s adoption of the performance measurement system discussed in Chapter Four would help make the level of required activity more transparent and also would show the Division’s level of effort in comparison with its counterparts.

In terms of legislative intent and statutory requirements, we found that in some cases the Legislature has been very specific about the management of certain species groups. The statutes on the management of warm water fish and aquatic nuisance species provide examples where the Legislature has spelled out policies in considerable detail. There are also situations where the Legislature has acted to regulate some aspect of fish management, for example, by limiting entry into a fishery. In other cases, the Legislature has not weighed in with specific policy direction, and the Department relies on its very broad mandate to “preserve, protect, perpetuate, and manage” fish and shellfish.¹⁸

Similarly, the Fish and Wildlife Commission has provided some very specific direction about the management of some species, such as the allocation of shrimp and crab among commercial and recreational harvesters in different parts of Puget Sound. The Commission has not adopted such specific management policies for other species.

To address this part of the study mandate, we have organized information by species group to describe the larger planning umbrellas, general or specific state laws, and Fish and Wildlife Commission policies. We have combined this with information from the JLARC database on Fish Management Division activities and expenditures for each fish species group. This allows readers to see where one or more of the larger planning umbrellas are driving a Fish Management Division activity, where the Legislature has or has not weighed in with specific management direction that affects Division activities, and where the Fish and Wildlife Commission has adopted policies for a species group. This information is consolidated in the appendices of Volume II of this report.

These summaries do not include all laws and policies related to a fish species. Instead, we highlight the planning umbrellas, laws, and Commission policies that have an impact on Fish Management Division activities. Figure 12 on the following page provides a snapshot of the information covered in more detail in the Volume II appendices.

¹⁸ RCW 77.04.012.

Fish Management Division: Activity and Cost Analysis

Figure 12 – Legal and Policy Framework for Fish Management Division Activities

Fish Species Group	Are There Larger Planning Umbrellas?	Specific State Statutes	Specific Fish and Wildlife Commission Policies
Salmon and Steelhead	Yes	<ul style="list-style-type: none"> • Department mandate to “preserve, protect, perpetuate, and manage” • Consistency with broader planning umbrellas • Steelhead-Recreational harvest only • Commercial salmon fishing requirements (gear, timing, place) • License limitation programs (commercial salmon; charter boats) • Recreational Fish Enhancement Program/Doubling of game fish production • Fish marking/selective fisheries • Monitoring watershed health and salmon recovery • Wanapum Band salmon fishing 	<ul style="list-style-type: none"> • Steelhead Management Plan • Wild Salmonid Policy • “North of Falcon”¹⁹ guidance • Catch record cards
Marine Fish	Yes	<ul style="list-style-type: none"> • Department mandate to “preserve, protect, perpetuate, and manage” • Consistency with broader planning umbrellas • License limitation programs (herring, herring-spawn-on-kelp, Puget Sound whiting) • Restriction on commercial bottom trawling in Puget Sound • Recreational Fish Enhancement Program • Emerging commercial fisheries (sardines) • Puget Sound Action Team work plan • Derelict fishing gear 	<ul style="list-style-type: none"> • Puget Sound Groundfish Mgt Plan • Forage Fish Management Plan • Columbia River Smelt Joint Management Plan (with Oregon) • Halibut management policy and harvest allocation • Marine fish culture policy
Shellfish	Yes	<ul style="list-style-type: none"> • Department mandate to “preserve, protect, perpetuate, and manage” • License limitation programs (Dungeness crab, ocean pink shrimp, Puget Sound shrimp, sea urchin, sea cucumber) • Emerging commercial fisheries (spot shrimp) • Coastal crab even-flow harvest management • Geoducks as “valuable materials” • State oyster reserves • Dungeness crab catch record cards for recreational fishers • Department of Health testing for shellfish toxins • Permits for shellfish imports and transfers 	<ul style="list-style-type: none"> • Memorandum of Understanding with DNR about geoducks • Even-flow harvest policy for coastal Dungeness crab • Allocation of Puget Sound crab • Allocation of Puget Sound shrimp
Resident Native Fish	Yes	<ul style="list-style-type: none"> • Department mandate to “preserve, protect, perpetuate, and manage” • Triploid trout program¹⁹ • Lake rehabilitation • Doubling of game fish production • Lake Whatcom kokanee 	<ul style="list-style-type: none"> • Bull trout and Dolly Varden Management Plan • Lake rehabilitation policy
Warm Water Fish	No	<ul style="list-style-type: none"> • Department mandate to “preserve, protect, perpetuate, and manage” • Warm Water Game Fish Enhancement Program • Annual survey to allocate \$\$ to Warm Water Game Fish Account 	None
Sturgeon	Yes	<ul style="list-style-type: none"> • Department mandate to “preserve, protect, perpetuate, and manage” 	<ul style="list-style-type: none"> • Lower Columbia River Sturgeon Mgt policy (joint with Oregon) • “North of Falcon”¹⁹/Willapa Bay • Catch record cards
Aquatic Nuisance Species (ANS)	Yes	<ul style="list-style-type: none"> • Task force on European green crab and zebra mussels • ANS budget provisos and memorial to request federal funding • Ballast water discharge management and monitoring/Ballast Water Work Group • Creation of Aquatic Nuisance Species Committee (multi-agency) • Regulation of marine fin fish aquaculture (Atlantic salmon) • 2002 ANS Management legislation • Puget Sound Action Team work plan 	<ul style="list-style-type: none"> • No specific policies; rule-making on ballast water discharge, classification and regulation of nonnative aquatic animal species, and identification of infested waters

¹⁹ See Appendix A for more detail on the annual “North of Falcon” salmon allocation process and Appendix D for more information on triploid trout. These appendices are in Volume II of this report.

Additionally, in the course of our review we found three cases where state statutes, Commission policies, and Fish Management Division activities and expenditures are not aligned:

- In **marine fish management**, the Legislature is sending some conflicting management signals to the Department. On the one hand, a statute promotes the artificial production and release of marine fish to enhance recreational fishing. On the other hand, the Legislature has funded efforts for marine fish recovery and establishment of marine protected areas. The Fish and Wildlife Commission has adopted policies on the conservation side of these two policies;
- With regard to the **purchase of special trophy trout**, state law requires that the trout may only be purchased if the revenue generated from additional fishing license sales pays for the fish. The Department's analysis shows that new revenues pay only about seven percent of that cost, though the Department continues to buy the fish; and
- In 2001-03, the Fish Management Division used **Warm Water Game Fish Account** funds for the general management of the aquatic nuisance species program. This is a dedicated account solely for the promotion and management of warm water fish.

These three cases are discussed in more detail in Appendix 4.

CHAPTER SIX – LESSONS AND RECOMMENDATIONS

JLARC has created a set of tools to explain the activities and expenditures of the Fish Management Division within the Department of Fish and Wildlife. The first tool is a set of two lists that identify Division activities. The second tool is a database that links these activities to expenditures, FTEs, fund sources, fish species groups, and locations. These tools allow us to meet JLARC’s two goals of (1) producing a product that helps bridge the information gap between the Department, and OFM and legislative staff, and (2) producing a product that is compatible with the Department’s new activity-based cost accounting system. JLARC’s Fish Management Division database has been designed specifically to be compatible with the Department’s new system. **JLARC will provide these tools to the Department, to OFM, and to legislative staff.**

This report also discusses the Department of Fish and Wildlife’s effort to establish an activity-based cost accounting system for the agency and a renewed effort to develop and use performance measures. This JLARC project should be seen as a demonstration of how to apply the activity-based cost accounting system at the division level, as the Department is working to do now. We learned some valuable lessons as part of that demonstration, and, as a result, we have recommendations for the Department intended to help maximize the use of its new systems.

Lesson 1: It is possible to take the activity-based cost accounting system down to the program and Division levels.

This JLARC study demonstrates that the Department can use this approach to explain activities and expenditures within the Department at the Division level. The tools from this study provide much greater clarity on what staff in the Fish Management Division do and how the Department pays for these activities. The Department should be able to replicate this effort to explain all Department activities in its other program areas.

Lesson 2: Activities have to be explained or defined in terms that are understandable to a general audience.

The Department of Fish and Wildlife’s new activity-based cost accounting system should be useful for internal management purposes. That system also can be especially useful for making agency activity and expenditure information more accessible to people outside the agency. However, the activities have to be explained or defined so that a non-scientist can understand the agency’s work. One Fish Management Division staffer explained our early work on the development of the Division’s activity lists as acting as translators between the terminology of the biologists and a more general or legislative audience. The Department must act as its own translator as it moves to implement its activity-based cost system at the program and Division levels.

The Fish Management Division can continue to use the Fish Management Cycle and “Other Activity” lists developed for this project, modifying them over time as the Division’s activities change. The Department could also generalize elements from the Fish Management Cycle to describe similar activities in the Department’s Wildlife and Habitat programs.²⁰

Recommendation 1

The Department should define or explain its activities in terms that are understandable to a general audience.

Legislation Required:	None
Fiscal Impact:	None
Reporting Date:	September 2004 (See Page 35)

Lesson 3: Context helps.

Much of the Department’s work takes place within larger planning or management umbrellas that help define what the Department does and why it does so. For the Fish Management Division, examples of larger planning umbrellas include the Pacific Salmon Treaty, tribal co-management, and the Endangered Species Act. It was easier for us to understand the Division’s activities when we had an understanding of the larger management environment that the Division operates under and whether the Division was legally required to perform certain activities as a result of these larger planning and management umbrellas.

This JLARC study provides two examples of how to provide context in order to better explain why the Division performs certain activities and why these activities are carried out at current levels. Volume II shows how to provide a legal and policy context for reporting all of the Division’s activities for a certain fish species group like marine fish or shellfish. Alternatively, Chapter Four shows how a performance measurement system can provide contextual information about a single activity. The example in Chapter Four is for the Division to develop a performance measurement system for its harvest monitoring activity that shows not only how much harvest monitoring the Division is doing, but also how much harvest monitoring Washington’s tribal co-managers are doing, as well as the Division’s counterparts in California, Oregon, British Columbia, and Alaska. This would help an external audience understand *why* the Division is doing a certain amount of harvest monitoring.

²⁰ There are also four activities on the “Other Activities” list that could be used to explain work being done in other programs and Divisions. These four activities are: (1) Participate in public outreach and education events (county fairs, sports shows, school functions, etc.); (2) Educate Fish and Wildlife Commission members on program activities through presentations and responding to information requests; (3) Educate the Legislature and the public on program activities through presentations and responding to information requests; and (4) Supervise programs, budgets, and personnel.

Recommendation 2

When reporting on agency activities and expenditures to an external audience, the Department should provide enough additional information to give the external audience a context in which to understand *why* the agency is performing these activities.

Legislation Required:	None
Fiscal Impact:	None
Reporting Date:	September 2004 (See Page 35)

Lesson 4: Linking program data to budget information can be difficult in some cases.

As explained earlier, the Department is using its chart of accounts/budget codes as the vehicle for linking activities and expenditures. We did the same for this project. For each budget code in the chart of accounts, a manager assigned percentages of the expenditures in that code to the appropriate activities. For this project, we needed to link the codes to other attributes such as fish species groups, which the Department hopes to do in the future as well.

While this was a relatively straightforward exercise in most cases, sometimes it was a challenge to assign all the attributes we were collecting to a particular budget code. For example, one budget code may represent work done on behalf of several different species groups or regions. Some of our interviewees noted that, had they known they would be asked to do this kind of exercise, they might have designed their portion of the chart of accounts differently.

It may not be possible or practical for all budget codes in the Department's chart of accounts to have a specific attribute like a species group assigned to them. However, on its next iteration of its chart of accounts, the Department should keep in mind the distinguishing features that it plans to track and design the chart of accounts to pick up as many of those features as possible. This will help maximize the Department's opportunities to use its new reporting capabilities.

Recommendation 3

The Department should identify the distinguishing features that it wants to track in its activity-based cost system and should keep these features in mind when designing its chart of accounts in the future.

Legislation Required:	None
Fiscal Impact:	None
Reporting Date:	September 2004 (See Page 35)

Lesson 5: Linking an activity-based cost system to performance measures is important.

The Department acknowledges shortcomings with its current performance measurement system and is working to create a new one. Staff indicate an intention to make a connection between the new cost accounting system and the new performance measurement system by ensuring that performance measures exist for each of the 26 activities identified for the agency as a whole in the first iteration of the new cost accounting system.

This connection is laudable. However, there is an opportunity to link the two systems even further by using the results from the activity-based cost system to (1) identify the higher expenditure activities or programs, and then (2) prioritize the development and use of performance measures based on this information. JLARC's analysis of activities and expenditures in the Fish Management Division shows clearly that the Division spends most of its time and money on population field data collection, data analysis, and harvest monitoring. Thus, the first priority for the Fish Management Division with regard to developing performance measures should be to identify performance measures for population field data collection, data analysis, and harvest monitoring. This is discussed in more detail in Chapter Four.

JLARC's report comes out at the same time that the Fish Program is attempting to develop performance measures for the program and its divisions. Results from this study should be used in the development of the Division's new performance measures.

Recommendation 4

The Department should link its new activity-based cost system to its new effort to develop a performance measurement system. More specifically, the Department should use the results from the cost accounting system to identify the higher expenditure activities and then prioritize the development and use of performance measures for those major activities.

Legislation Required:	None
Fiscal Impact:	None
Reporting Date:	September 2004 (See Page 35)

The four recommendations above relate to lessons learned in the course of conducting this project. Additionally, in the course of this review, JLARC identified three cases where state statutes, Fish and Wildlife Commission policies, and Fish Management Division activities and expenditures do not appear to be aligned. The three cases are in the areas of marine fish management, the funding criteria for the purchase of triploid trout, and the use of funds in the Warm Water Game Fish Account. The last recommendation is to resolve these apparent inconsistencies. The three cases are discussed in more detail in Appendix 4.

Recommendation 5

The Department, OFM, and the Legislature should work to reconcile the three cases of differences in state statutes, Fish and Wildlife Commission policies, and Fish Management Division activities and expenditures identified in this study.

Legislation Required:	Yes
Fiscal Impact:	Determined by legislation
Reporting Date:	September 2004 (See below)

Reporting Back to JLARC

Statute requires the Department to have its activity-based cost accounting system operating by January 2004. The agency hopes to have its first iteration of its new performance measure system in place by the end of 2003, followed by successive improvements.

The Department should report back to JLARC in September 2004, after it has submitted its 2005-07 operating budget request to OFM. In its report to JLARC, the Department should explain:

- How it used its new activity-based cost accounting system to prepare its 2005-07 budget request;
- The status of implementation of JLARC's recommendations;
- How JLARC's lessons and recommendations have been applied to other divisions of the Fish Program and to other parts of the Department; and
- The development and use of its new performance measurement system.

Agency Responses

We have shared the report with the Department of Fish and Wildlife and the Office of Financial Management and provided them an opportunity to submit written comments. Their written responses are included as Appendix 2.

Acknowledgements

Fish Management Division staff in the headquarters office in Olympia and in each of the agency's six regions around the state spent numerous hours with JLARC staff discussing their activities and completing the expenditure/activity allocation exercises. We acknowledge and appreciate their time and efforts. We would also like to thank the staff of the Department's Business Services' program for providing agency-wide fiscal information as well as the Intergovernmental Resource Management group and staff members with the Northwest Indian Fisheries Commission and the Columbia River Inter-Tribal Fish Commission for their help with understanding the larger planning and management umbrellas that surround fish management in Washington. Finally, we would like to express our appreciation to Michael Mann with the Legislative Evaluation and Accountability Program Committee staff, and to our consultant, Tom Jensen, for his assistance with the design and use of this project's database.

Thomas M. Sykes
Legislative Auditor

On December 3, 2003, this report was approved for distribution by the Joint Legislative Audit and Review Committee.

Senator Jim Horn
Chair

APPENDIX 1 – SCOPE AND OBJECTIVES

Fish Management Division: Activity And Cost Analysis

SCOPE AND OBJECTIVES

APRIL 2003



STATE OF WASHINGTON
JOINT LEGISLATIVE AUDIT
AND REVIEW COMMITTEE

STUDY TEAM

Linda Byers
Stephanie Hoffman

LEGISLATIVE AUDITOR

TOM SYKES

Joint Legislative Audit & Review
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Background

The mission of the state Department of Fish and Wildlife is to protect, restore, and enhance fish and wildlife and their habitats, while providing sustainable fish- and wildlife-related recreational and commercial opportunities. In addition to the Fish and Wildlife Commission and the Director's Office, the Department is organized around five major program areas: Fish, Wildlife, Habitat, Enforcement, and Business Services. Of these, the Fish Program is the largest in terms of operating expenditures and number of employees. The Fish Program itself is made up of four divisions: Administrative Operations, Science, Hatcheries, and the focus of this particular study, **Fish Management**.

The **Fish Management Division** is involved in Washington's complex management system for salmon and steelhead. The Division also has responsibilities related to inland fish species such as trout and bass, marine species such as rockfish and halibut, and shellfish such as crab and clams. In 2001-03, the Fish Management Division's operating budget is approximately \$36.3 million, with the largest portion of funds coming from General Fund-State (45 percent), and the remaining dollars coming from multiple sources, including federal and local funds. The Division employs just under 300 FTEs, with 94 percent of these FTEs operating in the field.

JLARC Study Mandate: Identifying the Activities and Associated Costs of the Fish Management Division

In recent years, the Office of Financial Management and the Legislature have faced challenges in obtaining clear information about the activities undertaken by the Fish Management Division in meeting its various responsibilities. In the 2002 Supplemental Operating Budget (ESSB 6387; C 371 L 02), the Legislature directed JLARC to "identify those actual functions carried out by the Fish Management Division, including all expenditures by fund source linked to those functions." JLARC was further directed to provide additional information about the Division's activities, such as distinguishing those activities that are mandated by court decisions from those that are discretionary, and evaluating how performance in meeting department goals and objectives is measured and reported.

Activity-Based Costing

The Department of Fish and Wildlife underwent an independent review of its financial operations and business management practices in 1998. One key issue identified in this review was the Department's need for an appropriate cost accounting system. In late 2000, the Department of Fish and Wildlife began exploring the implementation of an activity-based costing system. Such a system will allow the Department to identify its activities and associated costs in a more detailed manner than provided by current accounting and budgetary systems.

Activity-based costing assists organizations in determining the actual cost of a service or function and the extent to which an increase or decrease in available resources may impact the level of services or functions provided. Additionally, an activity-based costing system can illustrate how well an agency's activities align with its strategic goals and objectives.

Over the next few months, the Department of Fish and Wildlife will be moving forward with its efforts to implement an activity-based costing system. The Department's program managers will be identifying major activities performed by staff and verifying how resources are allocated among those activities. For example, the Fish Management Division will be reviewing the number of staff and the costs involved in monitoring the harvest of fish and shellfish by Washington's commercial and recreational fishers.

Proposed Study Scope

This JLARC study will illuminate the activities of the Department of Fish and Wildlife's Fish Management Division, including the staffing and expenditures associated with these activities. The study will then link these identified activities to the other topics of interest identified in the JLARC study mandate (see Objective #2 below).

Proposed Study Objectives

1. **Identify the activities of the Fish Management Division.** It is our intent to construct a list of activities performed by the Division that is compatible with the agency's overall activity-based costing effort so that the more detailed information collected by the JLARC study can be incorporated into the Department's new system.
2. **Link the identified activities to the issues of interest in the JLARC study mandate:**
 - Identify activity expenditures by fund source;
 - Determine the agency's rationale for its current staffing and expenditure levels;
 - Distinguish whether the activity is required (e.g., by court order, state law, etc.) versus discretionary;
 - Review the extent to which the activity contributes to meeting legislative intent or agency goals and objectives; and
 - Evaluate how activity performance is measured and reported.

Study Timeframe

This study will be completed by December 2003.

JLARC Staff Contacts

Linda Byers	360.786.5183	byers_li@leg.wa.gov
Stephanie Hoffman	360.786.5176	hoffman_st@leg.wa.gov

APPENDIX 2 – AGENCY RESPONSES

- Department of Fish and Wildlife
- Office of Financial Management



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JLARC

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

November 4, 2003

Joint Legislative Audit and Review Committee (JLARC)
Thomas M. Sykes, Legislative Auditor
P.O. Box 40910
506 16th Avenue SE
Olympia, WA 98501-2323

Dear Mr. Sykes:


On October 23, I received the Joint Legislative Audit and Review Committee (JLARC) **Fish Management Division: Activity and Cost Analysis Preliminary Report**. The Washington Department of Fish and Wildlife (WDFW) has reviewed the preliminary report and is submitting our formal response to the JLARC recommendations as requested in your memo dated October 23, 2003.

In addition to our attached formal response to the preliminary report, I would like to submit the following comments:

WDFW wishes to thank the JLARC staff for their efforts in this study. They displayed exceptional professionalism in their approach and produced a superior product that will be of considerable value to the Fish Management Division and the Agency. WDFW is presently developing a cost accounting system and a performance measure system that is focused at the "Agency" and "Program" levels; the JLARC review will help us succeed in that endeavor. JLARC's work has not only assisted the Fish Management Division to develop information at the division level, but will also provide an excellent example for other divisions in the Agency's six major programs as well.

We look forward to a continued positive working relationship.

Sincerely,


Jeff Koenings, Ph.D.
Director

Attachments

cc: Will Roehl, Chair, WDFW Commission
Lew Atkins, Assistant Director, Fish Program, WDFW
Jo Wadsworth, Deputy Assistant Director, Fish Program, WDFW
Ross Fuller, Manager, Fish Management Division, WDFW
Jim Lux, Assistant Director, Business Services Program, WDFW
Mike Cheney, Internal Auditor, WDFW
Marty Brown, Director, OFM
Jim Cahill, Senior Budget Assistant, OFM
Jim Skalski, Budget Assistant, OFM

**STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
FORMAL RESPONSE TO JLARC PRELIMINARY REPORT RECOMMENDATIONS
November 4, 2003**

RECOMMENDATION	AGENCY POSITION	COMMENTS
Recommendation 1	Concur	WDFW will define and explain its activities in terms that are understandable to a general audience.
Recommendation 2	Concur	WDFW will incorporate this recommendation while developing our cost accounting system.
Recommendation 3	Concur	WDFW will ensure that the cost accounting system and chart of accounts are similarly based considering WDFWs major work categories.
Recommendation 4	Concur	WDFW will link it's new activity based cost system with the developing performance measure system to allow for evaluation and prioritization of activities in the future.
Recommendation 5	Concur	WDFW will work with OFM and the legislature to reconcile the three issues identified by JLARC that displayed inconsistencies in state statutes – Fish and Wildlife Commission Policies, and Fish Management Division activities and expenditures identified.



STATE OF WASHINGTON

OFFICE OF FINANCIAL MANAGEMENT

Insurance Building, PO Box 43113 • Olympia, Washington 98504-3113 • (360) 902-0555

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JLARC

November 5, 2003

Thomas M. Sykes, Legislative Auditor
Joint Legislative Audit and Review Committee
506 - 16th Avenue SE
Olympia, WA 98501-2323

Tom
Dear Mr. Sykes:

Thank you for the opportunity to comment on the Joint Legislative Audit and Review Committee's preliminary report on the "Fish Management Division: Activity and Cost Analysis Study." The response from the Office of Financial Management (OFM) is as follows.

RECOMMENDATION	AGENCY POSITION	COMMENTS
1	Concur	OFM is currently working with the Department to make the activity inventory more understandable.
2	Concur	
3	Concur	
4	Concur	
5	Concur	OFM looks forward to working with the Department and Legislature to reconcile the differences between state statute, commission policy, and division activities.

OFM encourages the department to continue implementing its activity-based cost accounting system throughout the agency and to utilize the tools offered in this report when developing and submitting its 2005-07 biennial budgets.

If you have any questions, please contact Jim Skalski at (360) 902-0654. Mr. Skalski also will be available at the meeting on December 3 to respond to any questions.

Sincerely,

Marty
Marty Brown
Director

cc: Dr. Jeff Koenings, Director, Washington Department of Fish and Wildlife
Will Roehl, Chair, Fish and Wildlife Commission
Jim Skalski, Office of Financial Management



APPENDIX 3 – FISH MANAGEMENT DIVISION’S “OTHER ACTIVITIES” OUTSIDE OF THE FISH MANAGEMENT CYCLE

- 1 – Organize and oversee Youth Fishing Days, fishing contests, and other special fishing events.
- 2 – Participate in public outreach and education events (such as county fairs, sports shows, and school functions).
- 3 – Educate Fish and Wildlife Commission members on program activities through presentations and responding to information requests.
- 4 – Educate the Legislature and the public on program activities through presentations and responding to information requests.
- 5 – Purchase shellfish (e.g., clams and oysters) for planting on public beaches; purchase fish (e.g., triploid trout) for planting in lakes and reservoirs.
- 6 – Produce warm water fish at the Meseberg hatchery/rearing facility in Eastern Washington; other Fish Management Division activities directly related to producing fish or shellfish.
- 7 – Conduct fish contaminant analysis for the Puget Sound Action Team.
- 8 – Sample crab, clams, and oysters for analysis of toxins by the Department of Health; sample fish from freshwater lakes and reservoirs for analysis of water quality by the Department of Ecology.
- 9 – Lake rehabilitation.
- 10 – Conduct surveys of anglers on their fishing preferences.
- 11 – Acquire and maintain ESA permits from the federal government for various fisheries and Fish Program activities.
- 12 – Operate the BPA-funded Northern Pikeminnow Sport Reward Program on the Columbia and Snake rivers.
- 13 – Identify and develop warm water public access sites and marine public access sites.
- 14 – Participate in shellfish integrated pest management, especially for burrowing shrimp.
- 15 – Supervise programs, budgets, and personnel (incorporated into the Management Cycle).
- 16 – Identify, work to establish, and study marine protected areas.
- 17 – Participate in Puget Sound/Georgia Basin Taskforce planning with Canada.
- 18 – Provide GIS information about marine resources to federal, state, local government, and other parties for use in fishery management and land use management.
- 19 – Investigate water quality problems in marine waters (e.g., low dissolved oxygen levels in Hood Canal).
- 20 – Develop a plan for and manage a database for tracking and removing derelict fishing gear.
- 21 – Identify and implement offsite mitigation for marine fish in construction areas (e.g., Tacoma Narrows Bridge, pipeline on Hood Canal).

Fish Management Division: Activity and Cost Analysis

- 22 – Participate in Bonneville Power Administration/Northwest Power & Conservation Council subbasin planning and related Columbia Basin Fish and Wildlife Authority functions.
- 23 – Participate in the Federal Energy Regulatory Commission hydropower relicensing process.
- 24 – Participate in the Olympic Regional Harmful Algae Bloom study.
- 25 – Screen shellfish imports and in-state transfers to minimize the importation and spread of shellfish predators and diseases.
- 26 – Maintain survey gear, boats, and other equipment.
- 27 – Provide general office/administration support.

APPENDIX 4 – RECONCILING STATE STATUTES, FISH AND WILDLIFE COMMISSION POLICIES, AND FISH MANAGEMENT DIVISION ACTIVITIES AND EXPENDITURES

In the course of this review, JLARC found three cases where state statutes, Fish and Wildlife Commission policies, and Fish Management Division activities and expenditures do not appear to be aligned: 1) marine fish management; 2) the funding criteria for the purchase of triploid trout; and 3) the use of funds in the Warm Water Game Fish Account. Each of these cases is discussed in more detail below. The Department and the Legislature may wish to adjust the statutes or agency conduct to reconcile these differences.

1. Marine Fish Management Policy

The Legislature is sending some conflicting management instructions to the Department of Fish and Wildlife with regard to the management of marine fish. **In 1993, the Legislature adopted a measure to promote recreational fishing for salmon and marine fish in Puget Sound.**²¹ For marine fish, the 1993 measure directs the Department to conduct research, develop methods, and implement programs for the artificial rearing and release of marine bottomfish species as part of the promotion of recreational fishing. Statute directs Department research to be “designed to give the best opportunity to provide information that can be applied to real-world recreational fishing needs.”

In 2000, the Fish and Wildlife Commission adopted a much more conservative policy towards marine fish culture. The Commission’s policy is to rely on natural production to meet marine fish conservation objectives unless a stock is designated as depleted. Fish Management Division staff drafted and the Commission has approved conservative management plans for Puget Sound groundfish and for forage fish.

The Legislature has supported this more conservative approach to marine fish management by funding specific elements of the Puget Sound Action Team work plan. For the 2001-03 biennium, the Legislature funded the Department’s proposal to develop management and recovery plans for groundfish and forage fish and to establish marine protected areas. Fish Management Division staff work on these projects.

Other conditions have changed since the 1993 legislation. For example, in 1998, as a result of Congress’ work on the Northwest Straits Marine Conservation Initiative, county Marine

²¹ See Chapter 77.105 RCW. In RCW 77.105.005, “the Legislature finds that recreational fishing opportunities for salmon and marine bottomfish have been dwindling in recent years. It is important to restore diminished recreational fisheries and to enhance the salmon and bottomfish resource to assure sustained productivity. Investments made in recreational fishing programs will repay the people of the state many times over in increased economic activity and in improved quality of life.”

Resources Committees formed to work on a variety of issues including establishing marine protected areas, assessing forage fish populations in nearshore areas, and groundfish recovery. For ocean fisheries, NOAA-Fisheries has designated nine groundfish species as “overfished.” In 2002, the Pacific Fishery Management Council adopted a new management regime for groundfish that includes a significant curtailment of fishing in the ocean fisheries. The Council is also working on a vessel buy-back program to reduce fishing capacity in the Pacific Coast groundfish fishery.²²

In order to clarify marine fish management policy, the Legislature may wish to reconcile the direction in Chapter 77.105 RCW with its Puget Sound Action Team funding decisions.²³ For the Fish Management Division, expenditures on marine fish activities totaled \$5.6 million for the 2001-03 biennium, with 60 percent of these funds from General Fund-State. Other staff in the Department work on marine fish management as well, particularly the Intergovernmental Resource Management group in the Director’s Office.

2. Triploid Trout Purchase Cost Recovery

In 1999, the Legislature authorized the Department of Fish and Wildlife to purchase privately-grown triploid trout for planting as catchable trout in lakes around the state. Triploid trout have an additional set of chromosomes and are sterile. As a result, the fish put their energy into eating and growing, and may reach trophy size. Fish Management Division staff are responsible for the trout purchase. They also develop proposals for the number and location of triploid trout fish plantings as part of the Division’s management of resident fish.

The 1999 legislation indicates that the Fish and Wildlife Commission may authorize the purchase of triploid trout **“only if the cost of the program will be recovered by the estimated increase in revenue from license sales and federal funds directly attributable to the planting of these privately produced fish.”**²⁴ The Legislature provided an appropriation of \$400,000 for the initial purchase of the trout and directed the Department to report on the implementation of the program by February 2001.

The Department reported to the Legislature in February 2001 that **new license sales attributable to the new triploid trout program generated about 7 percent of what was needed to cover the cost of the program.** The Department also noted that anglers who caught the triploid trout were generally pleased and that local economies benefited from the new program.

State statute continues to require that triploid trout may only be purchased if the additional revenue generated from the program covers the costs of the program. The Department’s analysis indicates that this is not the case, although the Department spent approximately \$250,000 to purchase triploid trout in the 2001-03 biennium. If the Legislature still wishes to support the triploid trout program, it may wish to revisit the requirements of RCW 77.18.070.

²² For additional information on the larger planning and management environment for marine fish, see Appendix B in Volume II of this report.

²³ The Department and the Legislature may also wish to review the salmon-related provisions of Chapter 77.105 in light of the current management environment. Many, but not all, of these provisions deal with salmon production and rearing rather than Fish Management Division activities.

²⁴ RCW 77.18.070.

3. Warm Water Game Fish Account

In 1996, the Legislature created a warm water game fish program within the Department to increase opportunities to fish for and catch warm water fish such as tiger musky, walleye, and bass.²⁵ Fish Management Division staff manage the warm water game fish program.

Funding for the warm water program comes from a portion of the revenues from the sale of fishing licenses, which are deposited in the Warm Water Game Fish Account. The legislation spells out how these funds may be used. RCW 77.44.050 specifies that:

Monies in the account . . . shall be used for the purpose of funding the warm water game fish enhancement program, including the development of warm water pond and lake habitat, culture of warm water game fish, improvement of warm water fish habitat, management of warm water fish populations, and other practical activities that will improve the fishing for warm water fish.

As part of the activity and expenditure analysis, JLARC traced the use of Warm Water Game Fish Account funds in the Fish Management Division. **While the majority of funds are used directly for the management of warm water fish, one use stood out as not having a clear connection to the uses of the fund specified in statute.** Warm Water Game Fish Account funds are being used to pay for staff directing the Aquatic Nuisance Species program (\$66,525 for the 2001-03 biennium). Fish Management Division staff explained that, several years ago, a person in the Division working in the warm water game fish program took an active interest in preventing zebra mussels and invasive plants from entering Washington. A concern was the potential transfer of these invasive species through warm water fishing events such as bass tournaments, which could draw anglers (and their boats) from other states.

This early effort on zebra mussels and invasive plants eventually evolved into the separate Aquatic Nuisance Species program, and the warm water program funding has followed. However, the funds are now used for the general management of the Aquatic Nuisance Species program and for participation in the array of larger planning umbrellas for that species group.

The Department, OFM, and the Legislature may wish to re-examine whether the general management of the Aquatic Nuisance Species program is an appropriate use of Warm Water Game Fish Account funds, given the requirements for the use of those funds spelled out in RCW 77.44.050.

²⁵ Chapter 77.44 RCW.

