

State of Alaska
FY2007 Governor's Operating Budget

Department of Fish and Game
Commercial Fisheries
Results Delivery Unit Budget Summary

Commercial Fisheries Results Delivery Unit

Contribution to Department's Mission

The mission of the Division of Commercial Fisheries is to manage, protect, rehabilitate, enhance, and develop fisheries and aquatic plant resources in the interest of the economy, consistent with the sustained yield principle and subject to allocations through public regulatory processes.

Core Services

- **Stock Assessment and Applied Research:** Maintain ongoing programs for the enumeration, assessment, and understanding of salmon, herring, groundfish, and shellfish stocks.
- **Harvest Management:** Control the harvest of fishery resources for subsistence, commercial, and personal uses according to plans and regulations.
- **Aquaculture Permitting:** Permit and provide regulatory, technical, and planning services to aquatic farmers and private nonprofit hatchery operators.
- **Information Services and Public Participation:** Develop, maintain and disseminate data, analyses, and published reports.

End Results	Strategies to Achieve Results
<p>A: Stable or increasing economic and social benefits derived from the harvest and use of fish, shellfish, and aquatic plants in Alaska.</p> <p><u>Target #1:</u> Maintain total annual value of commercial harvests and mariculture production at over \$1 billion annually.</p> <p><u>Measure #1:</u> Total value of commercial harvests and mariculture production of fish, shellfish, and aquatic plants.</p> <p><u>Target #2:</u> Achieve the amounts necessary for subsistence established by the Board of Fisheries in seventy percent of subsistence fisheries.</p> <p><u>Measure #2:</u> Percentage of subsistence fisheries in which the amounts necessary for subsistence established by the Alaska Board of Fisheries are met or exceeded.</p>	<p>A1: Ensure the conservation of natural stocks of fish, shellfish and aquatic plants based on scientifically sound assessments.</p> <p><u>Target #1:</u> Establish reproductive goals or other baseline biological reference points for all harvested stocks.</p> <p><u>Measure #1:</u> Percent of harvested stocks with established reproductive goals or other baseline biological reference points.</p> <p><u>Target #2:</u> Develop DNA identifiers for one hundred Alaskan sockeye, chum, and chinook salmon stocks.</p> <p><u>Measure #2:</u> Number of Alaskan sockeye, chum, and chinook salmon stocks represented in DNA databases.</p> <p><u>Target #3:</u> Achieve reproductive goals in 80% of monitored salmon, groundfish, and shellfish stocks.</p> <p><u>Measure #3:</u> Percent of reproductive goals achieved annually.</p> <p>A2: Sustain fisheries on stocks of fish, shellfish and aquatic plants based upon the control and regulation of harvests through responsive management systems.</p> <p><u>Target #1:</u> Meet 80 percent of user group allocation objectives established by the Board of Fisheries by region, plus or minus 10 percent.</p> <p><u>Measure #1:</u> Achievement of user group allocation objectives established in Board of Fisheries regulations</p>

	<p>and management plans.</p> <p><u>Target #2:</u> Provide data from coded wire tags and otolith marks within one week of receipt at Tag Lab.</p> <p><u>Measure #2:</u> Processing time of coded wire tag data and otolith data for managing salmon fisheries.</p> <p>A3: Expand production potential through mariculture and development of new commercial fishing opportunities on underutilized species.</p> <p><u>Target #1:</u> Ensure 100% of all active aquatic farms operate under the terms of a current aquatic farm permit.</p> <p><u>Measure #1:</u> Percent of aquatic farms operating under the terms of a current aquatic farm permit.</p> <p><u>Target #2:</u> Establish harvest guidelines for 80 percent of all underutilized species/stock groups proposed for new fishery development annually by the public.</p> <p><u>Measure #2:</u> Percent of public requests for new fisheries for which basic harvest guidelines are developed.</p> <p><u>Target #3:</u> Process 100% of samples submitted by salmon hatcheries, shellfish hatcheries, and aquatic farmers.</p> <p><u>Measure #3:</u> Proportion of fish disease analysis submitted to Pathology Lab that are processed annually.</p>
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Major Activities to Advance Strategies

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| <ul style="list-style-type: none"> • Collect age, size, and sex data on harvested finfish and shellfish populations. • Operate aging/tag/otolith, genetics, and pathology laboratories. • Collect and analyze genetic markers from finfish and shellfish populations. • Survey and sample marine finfish and shellfish populations. • Calculate annual escapement goals for salmon. • Establish annual harvest objectives for marine species. • Prevent the introduction and spread of invasive and introduced species. • Permit aquatic farms for shellfish and aquatic plants. • Provide biological and technical assistance to existing and prospective aquatic farmers. • Open and close areas for commercial fishing to harvest surpluses. • Collect harvest information from commercial, personal use and subsistence fisheries. • Operate weirs, sonar projects, and counting towers to track salmon escapements. • Conduct aerial surveys during management of salmon and herring fisheries. • Place observers on fishing vessels to sample catches and collect data. • Conduct test fishing operations as part of stock | <ul style="list-style-type: none"> • Provide technical oversight in finfish and shellfish health for hatchery and farm operators. • Prevent or prescribe treatment for disease outbreaks at salmon hatcheries or shellfish farms. • Provide harvest and production data to Commercial Fisheries Entry Commission (CFEC) and North Pacific Fisheries Management Council (NPFMC). • Comment to NPFMC and CFEC on fishery management and biological issues associated with rationalization proposals. • Provide individual fishing history data to boat owners, captains, and federal and state agencies. • Open and close areas and species for subsistence and personal use harvest. • Issue permits for personal use and subsistence fisheries. • Tabulate subsistence and personal use catches. • Provide reports to the Board of Fisheries and other entities on subsistence and personal use fisheries. • Work with the Board of Fisheries and the public to craft management plans and regulations that meet subsistence and personal use needs. • Provide biological and fishery management information to the Board of Fisheries and state fish and game advisory committees. • Submit proposals to the Board of Fisheries. • Comment on both staff and public proposals before |
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Major Activities to Advance Strategies

- assessment efforts.
- Conduct life history and habitat utilization research.
- Conduct stock assessment and recruitment modeling.
- Investigate new and improved technologies for determining biological productivity and calculating yields.
- Conduct collaborative research with universities, federal agencies, and non-governmental organizations.
- Expand database of genetic markers to stocks not currently covered.
- Develop models for calculating Maximum Sustained Yield for stocks lacking them.
- Provide training and continuing education for staff from all job classes.
- Conduct life history and other biological research on underutilized fish stocks.
- Respond to industry requests for new fisheries on underutilized stocks.
- Work with Board of Fisheries to authorize fisheries on underutilized stocks.
- Permit and oversee private non-profit salmon hatchery program.
- Approve salmon and shellfish stocks with acceptable disease histories for mariculture and salmon aquaculture programs.
- the Board of Fisheries.
- Provide oral and written biological and fishery management advice to the Board of Fisheries.
- Draft regulations and management plans based on proposals approved by the Board of Fisheries.
- Provide staff support to the Alaska Board of Fisheries.
- Design and maintain electronic databases for catch and production data.
- License fish processors.
- Design, print, issue, collect, edit, and data enter fish tickets recording harvests.
- Collect, edit and data enter annual buying and production data from seafood processors.
- Provide summary information on harvests and production in electronic and print media.
- Maintain confidentiality of protected data.
- Publish catch and production information on web site.
- Provide internet access to searchable database of division publications.
- Publish news releases on department research and management activities.
- Publish articles on fisheries management and research in magazines and trade journals.
- Provide photos and video footage on the web site and to the media.

FY2007 Resources Allocated to Achieve Results

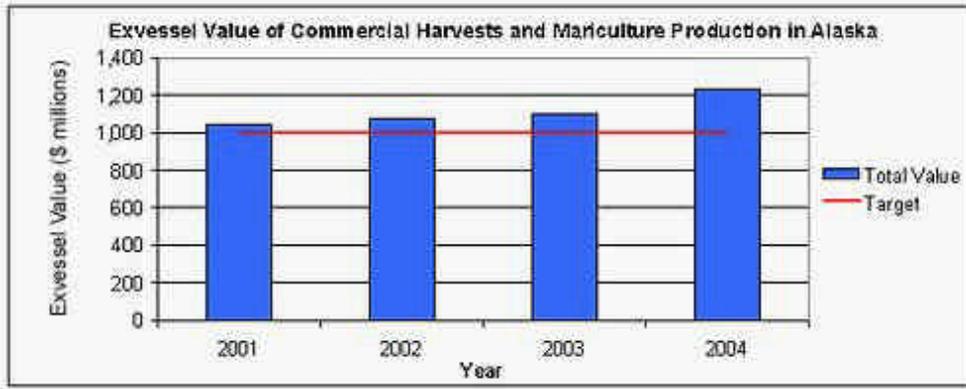
FY2007 Results Delivery Unit Budget: \$60,926,400	Personnel:	
	Full time	304
	Part time	506
	Total	810

Performance Measure Detail

A: Result - Stable or increasing economic and social benefits derived from the harvest and use of fish, shellfish, and aquatic plants in Alaska.

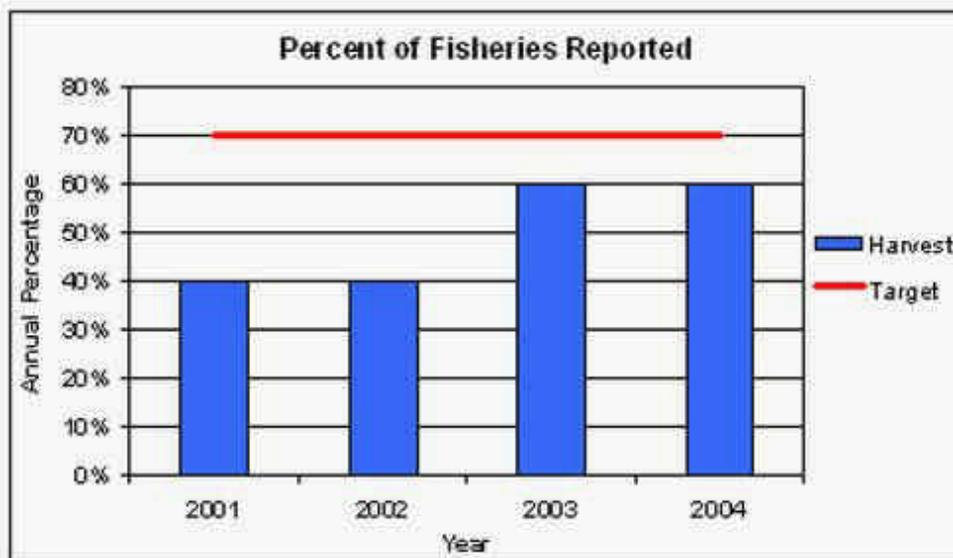
Target #1: Maintain total annual value of commercial harvests and mariculture production at over \$1 billion annually.

Measure #1: Total value of commercial harvests and mariculture production of fish, shellfish, and aquatic plants.



Target #2: Achieve the amounts necessary for subsistence established by the Board of Fisheries in seventy percent of subsistence fisheries.

Measure #2: Percentage of subsistence fisheries in which the amounts necessary for subsistence established by the Alaska Board of Fisheries are met or exceeded.

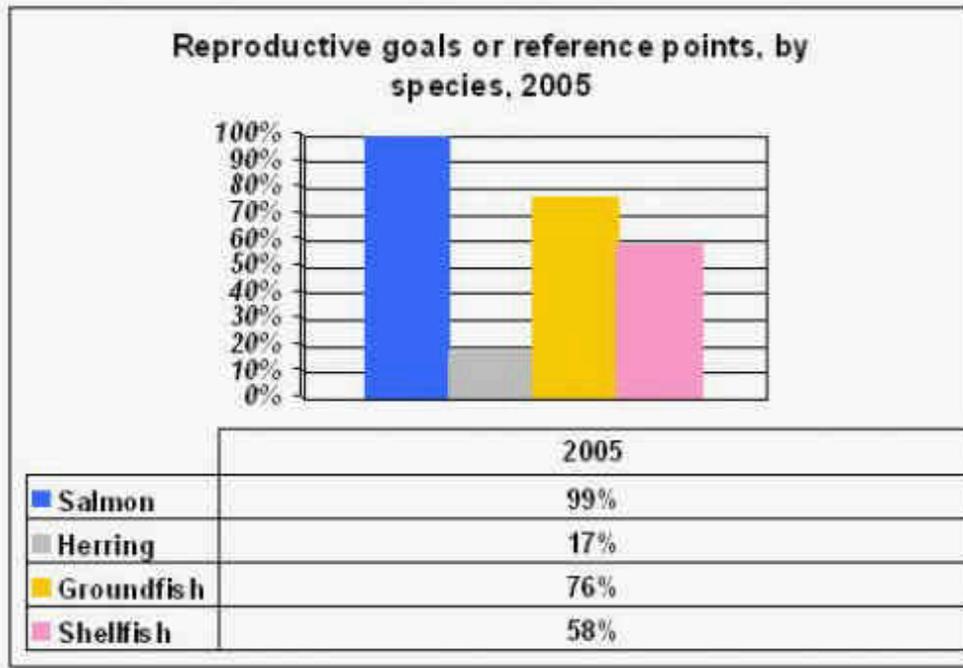


Analysis of results and challenges: Data provided by the Division of Subsistence for the following subsistence fisheries: Yukon and Kuskowim Rivers, Kuskokwim Bay, Bristol Bay, Kvichak River drainage, Alaska Peninsula, and Port Graham-Koyuktoik area.

A1: Strategy - Ensure the conservation of natural stocks of fish, shellfish and aquatic plants based on scientifically sound assessments.

Target #1: Establish reproductive goals or other baseline biological reference points for all harvested stocks.

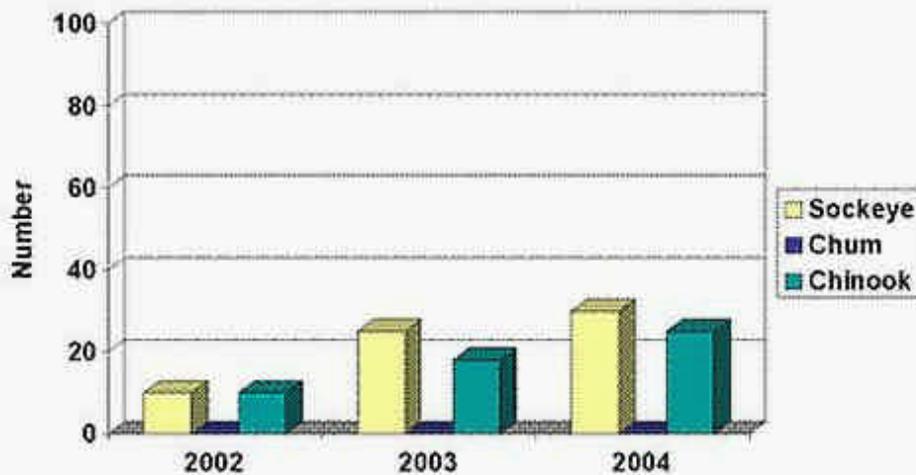
Measure #1: Percent of harvested stocks with established reproductive goals or other baseline biological reference points.



Analysis of results and challenges: The reproductive goals for salmon cover a diversity of types of goals and quality of data. Some goals are specific to a single species in a single river; others represent a goal for a group of closely related spawning populations that are managed as a unit. Some goals are based on a quantitative analysis, with good, consistently collected data on catches and escapements; and others are based on a qualitative assessment from more fragmentary data. The division is continually working to improve its data and the precision of its salmon escapement goals.

Target #2: Develop DNA identifiers for one hundred Alaskan sockeye, chum, and chinook salmon stocks.
Measure #2: Number of Alaskan sockeye, chum, and chinook salmon stocks represented in DNA databases.

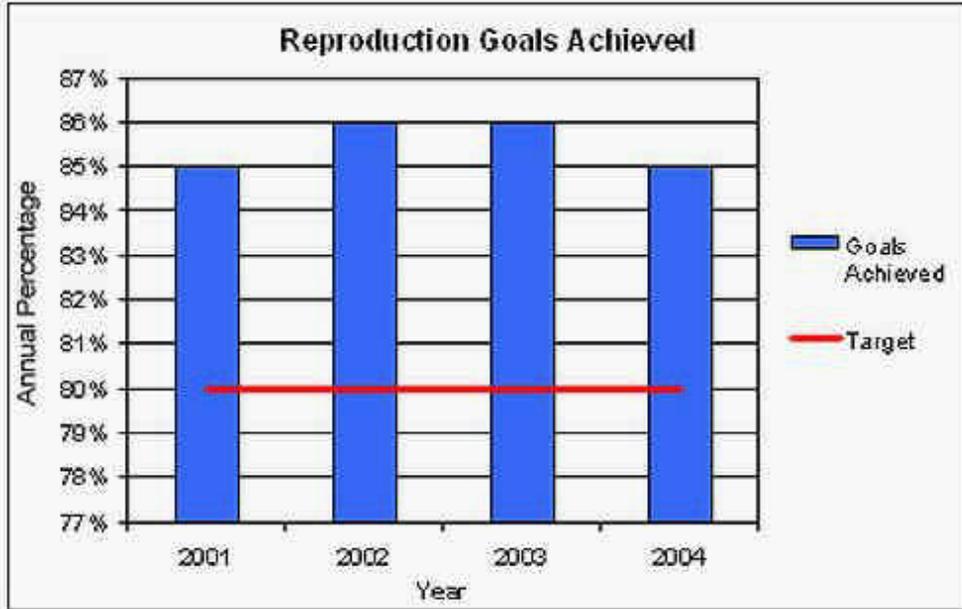
Completion of Baselines for Alaskan Stocks DNA Markers



Analysis of results and challenges: Data for 2005 will be available early in 2006.

Target #3: Achieve reproductive goals in 80% of monitored salmon, groundfish, and shellfish stocks.

Measure #3: Percent of reproductive goals achieved annually.

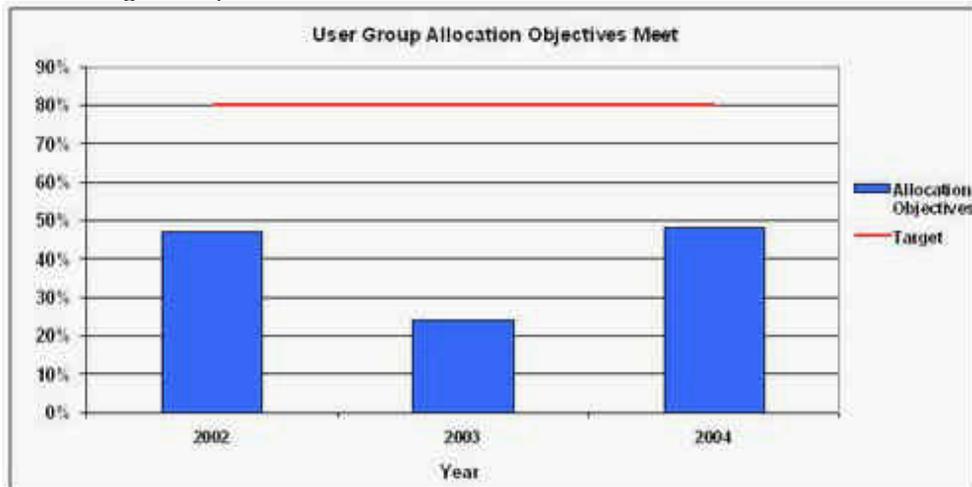


Analysis of results and challenges: Field data from the 2005 season is still being collected and analyzed and will not be available for posting until early 2006.

A2: Strategy - Sustain fisheries on stocks of fish, shellfish and aquatic plants based upon the control and regulation of harvests through responsive management systems.

Target #1: Meet 80 percent of user group allocation objectives established by the Board of Fisheries by region, plus or minus 10 percent.

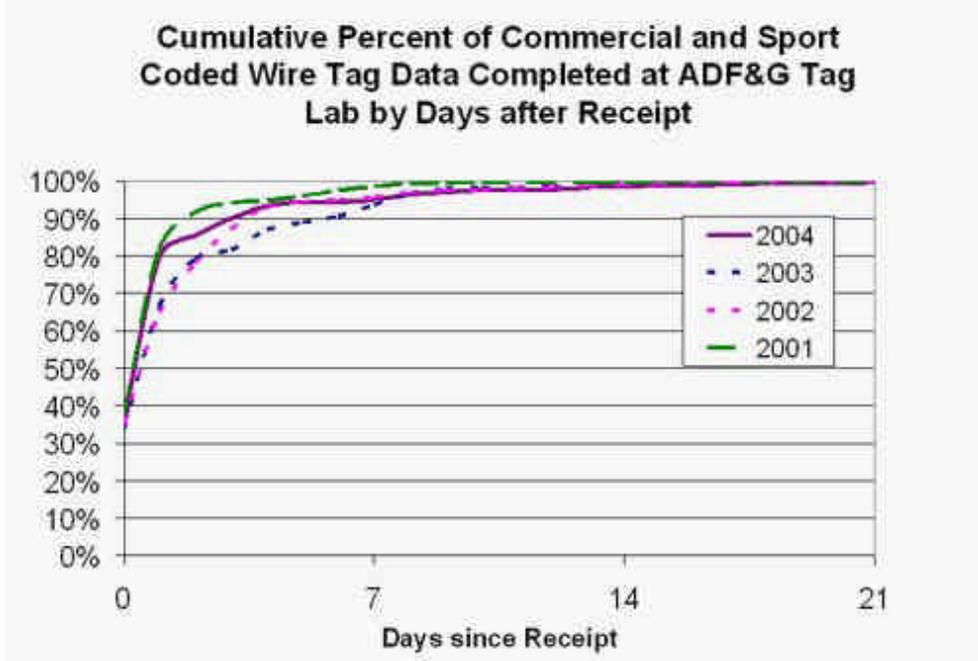
Measure #1: Achievement of user group allocation objectives established in Board of Fisheries regulations and management plans.



Analysis of results and challenges: Some 2005 fisheries are still ongoing and final data will not be available until early 2006.

Target #2: Provide data from coded wire tags and otolith marks within one week of receipt at Tag Lab.

Measure #2: Processing time of coded wire tag data and otolith data for managing salmon fisheries.



A3: Strategy - Expand production potential through mariculture and development of new commercial fishing opportunities on underutilized species.

Target #1: Ensure 100% of all active aquatic farms operate under the terms of a current aquatic farm permit.

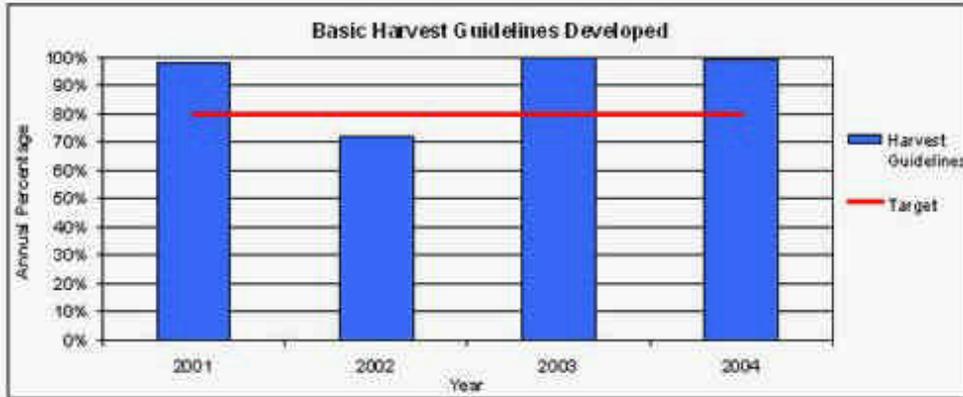
Measure #1: Percent of aquatic farms operating under the terms of a current aquatic farm permit.

CURRENT AQUATIC FARM PERMITS	
Year	Existing Operations Approved
2003	47%
2004	54%

Target #2: Establish harvest guidelines for 80 percent of all underutilized species/stock groups proposed for new fishery development annually by the public.

Measure #2: Percent of public requests for new fisheries for which basic harvest guidelines are developed.

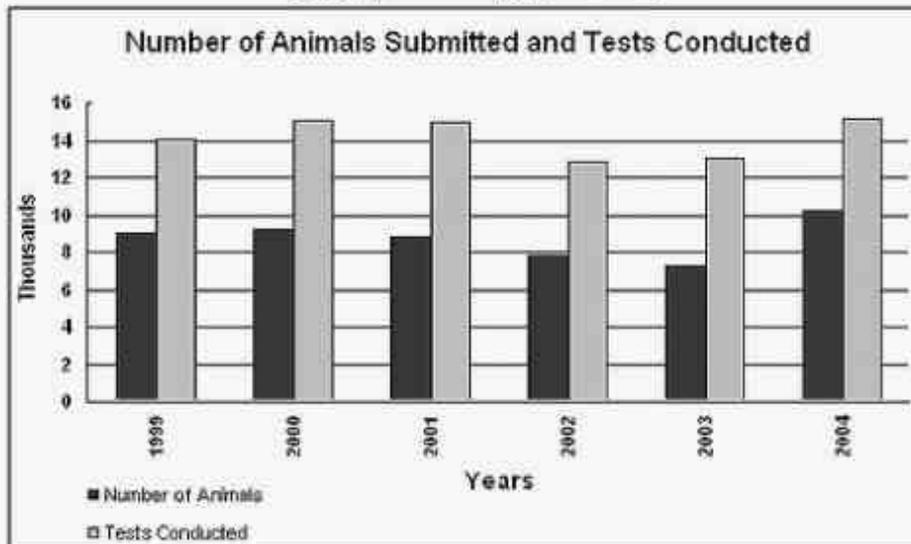
Total annual number of public requests granted for new fisheries for which basic harvest guidelines are developed.								
Fishery	2001		2002		2003		2004	
	Requested	Granted	Requested	Granted	Requested	Granted	Requested	Granted
Groundfish	2	2	4	2	8	7	1	1
Shellfish	14	13	31	28	53	52	144	143



Target #3: Process 100% of samples submitted by salmon hatcheries, shellfish hatcheries, and aquatic farmers.

Measure #3: Proportion of fish disease analysis submitted to Pathology Lab that are processed annually.

Fish Disease Samples Processed Annually	
Year	Annual Percentage
1999	100%
2000	100%
2001	100%
2002	100%
2003	100%
2004	100%



Key RDU Challenges

Salmon Prices

Salmon prices remain at relatively low levels although some improvement in prices has occurred in 2004 and 2005. However, continued large volumes of farmed salmon keep prices for Alaskan salmon low compared to the levels they were at before farmed salmon production reached current levels.

Susitna and Cook Inlet Sockeye Salmon Stocks

Low numbers of sockeye salmon returned to the Susitna River and other northern Cook Inlet systems. Increased funding will be required for research to determine the cause of the poor returns to northern Cook Inlet and to determine if effective management measures can be deployed to reduce the harvest in the central district commercial fisheries of northern Cook Inlet stocks while still allowing the harvest of abundant Kenai and Kasilof river sockeye stocks.

Bering Sea Crab Research

The division is working on new methodologies, with federal funds, for stock assessments of Bering Sea snow crab, a stock that until recently provided the largest crab harvests in Alaska. Improved stock assessments will allow the department to maximize harvests, which is especially important to industry during periods of low stock productivity.

Employee Recruitment and Retention Difficulties

The division is continuing to lose experienced biologists, fishery scientists, and biometricians to federal agencies and other employers as well as retirements. Replacing these specialized and experienced staff has proven difficult because the division cannot offer competitive salaries. Insufficient applicants from within the state are requiring supervisors to recruit from out of state for almost all positions and even then many of our vacancies attract a poor applicant pool.

Federal/State Subsistence

In order to minimize disruption to state residents; to protect state fish resources; and minimize federal intrusion into state management, significant staff time is spent interacting with the federal system of regional councils, representing federal subsistence users, and the federal bureaucracy.

Federal Fishery Rationalization

The North Pacific Fishery Management Council (NPFMC) has a number of initiatives underway that affect state managed fisheries. These include proposals for rationalization of the Bering Sea crab fisheries and the groundfish fisheries in the Gulf of Alaska. State managers and researchers must work with the NPFMC to avoid deleterious impacts to state fisheries and coastal communities as federal rationalization occurs. The first season under the Bering Sea/Aleutian Island (BSAI) crab rationalization has begun. Fine tuning of state regulations through the Board of Fisheries process is expected.

Fishery Allocations

The allocation of fisheries resources among users continues to place significant demands on policy makers and managers. In many cases, the division does not have adequate funding to gather and analyze the data needed by the policy makers to address these complex issues. Nor does it have the funds necessary to carry out allocative management decisions that depend on the collection and analysis of additional data. The result is that allocative disputes often continue to worsen and become increasingly acrimonious.

Vessels and Aircraft Maintenance

The division has several research and support vessels and four small aircraft, which require regular maintenance and periodic overhaul. They are integral to a variety of stock assessment programs and also provide platforms for inseason management. Maintenance must be provided to protect this capital investment, assure efficient operations, and meet safety requirements.

Support for Aquaculture

Both private non-profit salmon hatchery operators and aquatic shellfish farmers depend on the division for planning, permitting, disease prevention, and other technical services. The division is frequently unable to provide the level of support desired, because of limited funding and staffing.

Test Fish Revenue Concerns

In recent years, some members of the legislature and the commercial fishing industry have raised concerns over the division's test fish program, including: 1) fish taken by department test fishing operations are removed from the common property fisheries and, therefore, not available to be harvested in the commercial fishery; 2) some object to test fishing as an "indirect form of taxation" that excludes the users of the common property resource from the fiscal policy decision-making process; and 3) the department's costs for operating projects funded with test fishing have increased over the years due to inflation and higher labor costs. At the same time, there has been a downward spiral in fish prices, particularly for salmon but also for other fish and shellfish species. As fish prices or run sizes decline, the percentage of the resource needed to meet budget allocations increases.

Significant Changes in Results to be Delivered in FY2007

Various increments have been requested by the division to support a variety of stock assessment projects, restore general fund to some fishery management staff who are partly funded with federal funds, provide Receipt Supported Services authority to fund statewide shellfish and groundfish projects, a Bristol Bay Science and Education Initiative, and increased projects funded by the Southeast Alaska Dive Fishery Association, and to provide additional test fish authority necessary in the management of the Bering Sea/Aleutian Island crab rationalization program. Beginning in FY07, the Fishery Development Component will be combined with the Headquarters Fisheries Management Component and the CIP Position Costs Component will be combined with the Special Projects Component to facilitate fiscal and budget management.

Major RDU Accomplishments in 2005

The 2005 Alaska commercial salmon catch was over 206 million fish with a preliminary exvessel value of \$295 million. This was the third largest all species commercial salmon harvest, and the largest pink salmon harvest, since commercial salmon fishing began in Alaska in 1878. The preliminary exvessel value was up about one million dollars from the previous ten year average.

Chinook and chum salmon production in northwest Alaska has generally recovered from the disastrously low levels of 1996 to 2001. The 2005 fall chum salmon return to the Yukon River was the largest since 1975. Summer chum and Chinook salmon returns to the Kuskokwim and Yukon Rivers were healthy and no subsistence restrictions were required. Escapement goals were met or exceeded in nearly all systems.

Commercial fisheries targeting Chinook salmon returning to the Taku and Stikine Rivers were conducted in southeast Alaska for the first time in 30 years. The opening of fisheries on these stocks marked the culmination of a successful stock rebuilding program and difficult negotiations within the Pacific Salmon Commission.

In the waters of the Bering Sea and Aleutian Islands the division embarked on the implementation of an entirely new rationalized management system for the king and Tanner crab fisheries approved by the NPFMC.

New legislation and regulations were adopted in 2005 to encourage the development of aquatic farming of shellfish in Alaska. The department worked with the legislature and various stakeholder groups in the drafting and adoption of both the legislation and the regulations.

The department worked with stakeholders from the Alaska Peninsula, Bristol Bay, and northwest Alaska to develop a funding proposal for developing and deploying DNA genetic technology capable of identifying distinct chum and sockeye salmon stocks by stream of origin. This proposal appears likely to be funded by Congress in 2005.

Contact Information

Contact: Denby S. Lloyd, Division Director
Phone: (907) 465-4210
Fax: (907) 465-2604
E-mail: Denby_Lloyd@fishgame.state.ak.us

**Commercial Fisheries
RDU Financial Summary by Component**

All dollars shown in thousands

	FY2005 Actuals				FY2006 Management Plan				FY2007 Governor			
	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds
<u>Formula Expenditures</u>												
None.												
<u>Non-Formula Expenditures</u>												
SE Region Fisheries Mgmt.	4,010.6	410.2	820.9	5,241.7	4,257.7	482.1	917.5	5,657.3	5,098.0	482.1	917.5	6,497.6
Central Region Fisheries Mgmt.	5,328.4	0.0	997.4	6,325.8	6,184.6	0.0	748.0	6,932.6	6,791.4	0.0	748.0	7,539.4
AYK Region Fisheries Mgmt.	3,928.2	0.0	315.3	4,243.5	4,181.7	0.0	319.7	4,501.4	4,488.7	0.0	319.7	4,808.4
Westward Region Fisheries Mgmt.	5,079.4	0.0	1,185.0	6,264.4	5,413.9	0.0	1,903.5	7,317.4	6,116.6	0.0	3,403.5	9,520.1
Headquarters Fisheries Mgmt.	1,778.2	0.0	608.3	2,386.5	1,971.9	0.0	888.3	2,860.2	5,821.8	0.0	1,066.7	6,888.5
Fisheries Development	2,158.3	0.0	178.4	2,336.7	2,808.3	0.0	178.4	2,986.7	0.0	0.0	0.0	0.0
Comm Fish Special Projects	0.0	11,601.6	3,732.4	15,334.0	135.5	15,532.8	5,828.5	21,496.8	360.0	15,460.0	9,852.4	25,672.4
Comm Fish CIP Position Costs	0.0	0.0	3,531.3	3,531.3	0.0	0.0	3,080.7	3,080.7	0.0	0.0	0.0	0.0
Totals	22,283.1	12,011.8	11,369.0	45,663.9	24,953.6	16,014.9	13,864.6	54,833.1	28,676.5	15,942.1	16,307.8	60,926.4

Commercial Fisheries
Summary of RDU Budget Changes by Component
From FY2006 Management Plan to FY2007 Governor

All dollars shown in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2006 Management Plan	24,953.6	16,014.9	13,864.6	54,833.1
Adjustments which will continue current level of service:				
-SE Region Fisheries Mgmt.	221.5	0.0	0.0	221.5
-Central Region Fisheries Mgmt.	282.9	0.0	0.0	282.9
-AYK Region Fisheries Mgmt.	190.5	0.0	0.0	190.5
-Westward Region Fisheries Mgmt.	278.6	0.0	0.0	278.6
-Headquarters Fisheries Mgmt.	3,029.2	0.0	178.4	3,207.6
-Fisheries Development	-2,818.7	0.0	-178.4	-2,997.1
-Comm Fish Special Projects	219.8	-114.0	3,183.0	3,288.8
-Comm Fish CIP Position Costs	0.0	0.0	-3,095.1	-3,095.1
Proposed budget decreases:				
-Comm Fish Special Projects	0.0	0.0	-500.0	-500.0
Proposed budget increases:				
-SE Region Fisheries Mgmt.	618.8	0.0	0.0	618.8
-Central Region Fisheries Mgmt.	323.9	0.0	0.0	323.9
-AYK Region Fisheries Mgmt.	116.5	0.0	0.0	116.5
-Westward Region Fisheries Mgmt.	424.1	0.0	1,500.0	1,924.1
-Headquarters Fisheries Mgmt.	820.7	0.0	0.0	820.7
-Fisheries Development	10.4	0.0	0.0	10.4
-Comm Fish Special Projects	4.7	41.2	1,340.9	1,386.8
-Comm Fish CIP Position Costs	0.0	0.0	14.4	14.4
FY2007 Governor	28,676.5	15,942.1	16,307.8	60,926.4