

# Pacific States Marine Fisheries Commission



57th Annual Report 2004

PUBLISHED FOR THE CONGRESS OF THE UNITED STATES AND THE GOVERNORS AND LEGISLATURES OF WASHINGTON, OREGON, CALIFORNIA, ALASKA AND IDAHO

### 57<sup>TH</sup> ANNUAL REPORT OF THE PACIFIC STATES MARINE FISHERIES COMMISSION

To the Congress of the United States and the Governors and Legislatures of the Five Compacting States of Washington, Oregon, California, Idaho, and Alaska, by the Commissioners of the Pacific States Marine Fisheries Commission in Compliance with the State Enabling Acts Creating the Commission and Public Laws 232; 766; and 315 of the 80th; 87th; and 91st Congresses of the United States Assenting Thereto.

> Respectfully submitted, PACIFIC STATES MARINE FISHERIES COMMISSION

Randy Fisher, Executive Director

Headquarters

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## COMMISSIONERS, ADVISORS AND COORDINATORS

State	Commissioners	Advisors	Coordinator
Alaska	Doug Mecum Dale Kelley Georgianna Lincoln	Liz Cabrera Terry Johnson Don Lane Matthew Moir Gabe Sam Stephanie Madsen	Herman Savikko (ADFG)
California	Loris Ryan Brodderick	Robert Fletcher Jim Caito Donald K. Hansen Kate Wing Roger Thomas Tony West Mike McCorkle	Patty Wolf (CDFG)
Idaho	Steve Huffaker George Eskridge Cameron Wheeler	Marcus Gibbs Alex Irby	Sharon Kiefer (IDFG)
Oregon	Paul Hekkila Wayne Krieger Ed Bowles	Joe Easley Ginny Goblirsch Frank Warrens Rod Moore Liz Hamilton Bob Jacobson Steve Fick	Patty Burke (ODFG)
Washington	Jeff Koenings Harriet A. Spanel Jim Buck	Mark Cedergreen Marion Larkin Jim Lone Bill Robinson Ron Shultz Terry Wright	Phil Anderson (WDFG)

### SUMMARY OF PSMFC BUSINESS MEETING

September 22, 2004

The 2004 Pacific States Marine Fisheries Commission 57th Annual Meeting was held September 20-22, 2004 in Seattle, Washington. Jeff Koenings, Director of the Washington Department of Fish and Wildlife served as Chairperson

During the Business Meeting held on September 22nd, the Commission made the following decisions for the respective issues:

**Aquaculture**— Supports NOAA Fisheries continuing its existing fisheries regulatory, research and management responsibilities, but urges the agency to re-evaluate its role regarding the promotion and subsidy of aquaculture. (Vote: 5-0)

- The Commission recommends a strong precautionary approach toward marine aquaculture to avoid premature incentives
  and investments that could result in serious environmental and economic consequences in communities that have traditionally relied on native stocks.
- Regardless of what direction the aquaculture initiative takes, local stakeholders, regional councils and state agencies should
  have significant and meaningful input into decisions related to the siting of aquaculture facilities and their operation and
  other significant issues associated with aquaculture.

**Magnuson/Stevens Act Reauthorization**—To reaffirm its 2003 position to support the work group approach for monitoring and recommending reauthorization language and draft legislation to the Magnuson/Stevens Act. (Vote: 5-0)

- Work group be restablished for monitoring and recommending reauthorization language and draft legislation to the Act.
- Work group will be representative of the states, will operate with the intent to support the current Council structure and will bring information back to the Commission.
- Any language or draft legislation recommended by the work group should be consistent with prior Commission's decisions and directions on the MSFCMA.

**Marine Mammal Protection Act (MMPA) Reauthorization**—To reaffirm the work group approach that would work closely with Washington D.C. lobbyists on MMPA issues as soon as legislation is introduced. The Commission wants to insure that the states' perspective on harassment, interactions between protected and/or ESA listed species, and export/import issues are dealt with under those activities. (Vote: 5-0)

**National Data Systems**—Directed the staff to advocate for adequate funding of the development and implementation of a regional data system that will feed into and support the core elements of a national data system. (Vote: 5-0)

**Mark Center**—Directed staff to send a letter to the Secretary of the Interior recommending that funding for the Coded Wire Tag-Regional Mark Center be included as a line-item in the Department of the Interior's budget. (Vote: 5-0)

- The letter should be copied to the Congressional delegation.
- Funding for other mass marking shortfalls should be addressed as well.

**Crab Jurisdiction**—Commission will continue to support interstate coordination of Dungeness crab management activities through the Tri-State process. (Vote: 5-0)

• Supports continuation of the authority provided to the States of California, Oregon and Washington to manage the Dungeness crab fishing activities in federal waters adjacent to their respective coast lines.

**Management Authority**—Opposed the President's Ocean Commission's recommendation that the Commission seek fishery management authority. (Vote: 5-0)

**SSC**—Agreed that the current structure of the SSC within the Council should not be changed. The Commission supports the existing system because independent science review and risk assessments are now a part of that system and the existing legislation/SSC parts of the Magnuson-Stevens Act. In addition the Commission supports the Council as the final decision making body. (Vote: 5-0)

Regional Funding of EIS, ESA, NEPA Processes—The Commission supports additional federal funding to the Regional Councils and States for the NEPA process and necessary ESA consultations. (Vote: 5-0)

Management of Highly Migratory Species—Supported adequate funding of Highly Migratory Species to implement FMPs. (Vote: 5-0)

**Hatchery Policy**—Supported a policy which ensures that ESA listing status is based on naturally produced fish as the reference population with listed hatchery and listed resident forms of the same species enhancing or detracting from that status. Also to ensure that ESA take exemptions are provided for hatchery and resident forms consistent with objectives and harvest provision outlined in Hatchery Genetic Management Plans (HGMPs) and Fishery Management Evaluation Plans (FMEPs). (Vote: 5-0)

PacFIN Funding—Directed staff to write a letter to NOAA Fisheries requesting an additional funding in the 2004 budget for PacFIN. The letter is to indicate why this additional money is necessary and specify where the funding should come from. (Vote: 5-0)

Mitchell Act Hatcheries Funding—Directed staff to continue lobbying efforts to restore the current level of funding for the Mitchell Act hatcheries in FY05. (Vote: 5-0)

· Monitor the direction of USFWS and NOAA so the Commission can provide direction to the OMB for funding.

Capital Construction Fund Reform—Supported capital construction fund reform by expanding the list of qualified withdrawals as long as it will not increase capacity in the fishery. (Vote: 5-0)

### Columbia River Bi-Op Issues—

- A Directed staff to write a letter to NOAA Fisheries stating: 1) that the operating agencies must meet their obligations first and foremost and should not shift the conservation burden to the fisheries and watersheds; 2) full implementation of the flow and spill measures as needed, 3) that PSMFC supports habitat protection and enhancement based on existing state and federal law but not on the backs of failed federal hydro system improvements; and 4) requesting an extension to the comment period for the biological opinion so each state can make a statement individually. (Vote: 5-0)
- B Fish Passage Center—Directed staff to write a letter to the governors, Northwest Power and Conservation Council members, and to Bonneville Power Administration that strongly supports full funding for FPC to fulfill the need to maintain states' access to independent data collection, management and analysis of Tier 1 data. (Vote: 5-0)

**Cooperative Research**—Supported continued funding for cooperative research and directed staff to solicit additional funding for the application of research results to management. (Vote: 5-0)

**GIS Data**—Directed staff to form a workgroup to decide how best the Commission can insure the Council has the best available GIS data for management purposes and that it is available to the public and member States. (Vote: 5-0)

**Additional Commerce Budget Emphasis**—Tabled this issue deciding that states would lobby for their individual priorities and interests, allowing for PSMFC to lobby for the programs they administer. (Vote: 5-0)

**Groundfish Funding**—Directed staff to pursue a level of funding adequate and necessary to meet current and future science and management needs. (Vote: 5-0)

**Selective Stock Harvest**—Directed staff to send a letter to BPA and Congress in support of continued funding for the commercial selective gear research and evaluation of the use of commercial gill nets in the lower Columbia River. (Vote: 3-0, 2 Abstentions)

**Fisheries Information Networks (FINs) Presentations**—Requested a brief overview on the activities of the different FIN programs from their directors/program managers at all future PSMFC annual meetings. (Vote: 5-0)

**Vessel Monitoring System (VMS)**—Decided to not reaffirm direction to PSMFC lobbyists for full funding of the acquisition costs for VMS nor to request a report from NMFS on the operational and logistical difficulties associated with implementation of VMS. (Vote: 5-0)

Alaska is the host of the 58th Annual Meeting which will be held at the

Alyeska Resort Girdwood, Alaska August 21-24, 2005

### **ANNUAL AWARD RECIPIENT**

### 2004 PACIFIC STATES MARINE FISHERIES COMMISSION AWARD FOR CONTRIBUTIONS TO PACIFIC COAST FISHERIES

The Commission's 2004 Award for outstanding contributions in support of Pacific coastal marine fisheries resources was presented to:

### Jim Anderson

Executive Director, Northwest Indian Fisheries Commission

It gives the Pacific States Marine Fisheries Commission great pleasure to recognize the contributions of **Jim Anderson** through this award for 2004.

### ALASKA FISHERIES INFORMATION NETWORK

The Alaska Fisheries Information Network (AKFIN) provides a framework that consolidates and supports the collection, processing, analysis, and reporting of information important for management of North Pacific fisheries. Funding is provided by an annual grant from National Marine Fisheries Service (NMFS) to the Pacific States Marine Fisheries Commission. These funds support an AKFIN Support Center (AKFIN-SC) and an annual subcontract with the Alaska Department of Fish and Game (ADFG) for related tasks.

The AKFIN is a cooperative data program that maintains a fisheries information system composed of state and federal data for Alaska fisheries. Information is aggregated from the state of Alaska, Alaska Department of Fish and Game (ADFG), Commercial Fisheries Entry Commission, NMFS Alaska Region, Alaska Fisheries Science Center, North Pacific Fishery Management Council (NPFMC), and PSMFC.

### In 2004, AKFIN-SC provided datasets/reports to the following organizations:

- **Department of Labor:** A series of reports summarizing pounds, value, and permit information by fishery that was used to report Alaska fisheries labor statistics submitted in an annual report by the state.
- **Fisheries of the US:** Fifteen reports integrating several data sources that was used for reporting on national fisheries statistics categorized by state and federal waters, disposition, port of landing, and month.
- **NMFS Alaska Region requests:** Several datasets to support NMFS analyses for Stellar Sea Lion protection measures and the EA/IRFA for the Total Allowable Catch Specifications for 2005.
- North Pacific Anadromous Fish Commission: An annual report providing harvest numbers categorized by major groundfish groups, halibut, herring, shrimp, and crab by area.
- North Pacific Fishery Management Council (NPFMC): Several value-added datasets to support Council analyses.
- Pacific Coast Fisheries Information Network (PacFIN): A monthly summary of Alaska groundfish data.
- **PSMFC:** A series of reports detailing catch totals for groundfish species, crab, shrimp, and urchin organized by month, gear, and area.

### In 2004, AKFIN-SC performed the following analyses:

• **ADFG fish ticket analyses:** Identifies the differences between versions of incoming ADFG fish ticket data and identifies the targeted species.

### In 2004, AKFIN-SC developed or enhanced the following software:

- Extraction Translation Load System: Used to automate the collection and different versions of data from participating fisheries agencies.
- Analytical Domain Builder: Used to populate an analytical database that contains consolidated fisheries data with built-in code translations, standardized code descriptions, and complex reporting rules. The domain builder was developed to facilitate monthly reporting to PacFIN.

### **AQUATIC NUISANCE SPECIES**

The Aquatic Nuisance Species (ANS) project is an effort to prevent the spread of nuisance species through education, monitoring and research related to targeted nuisance species. Through a wide range of projects conducted during 2004, ANS targeted several nuisance species including zebra mussels, mitten crab, green crab and Atlantic salmon.

ANS conducted education and outreach work focused on zebra mussels and mitten crab in the Missouri and Columbia River basins and California. Activities included distributing educational materials at sportsmen's shows in Washington, Oregon, Montana, Colorado and Utah and through print and electronic media, at boat ramps, marinas and schools.

ANS distributed a 60-second audio Zebra Mussel public service announcement developed in 2003. The message used Horizon Airline's "Clark and Lewis" characters and was distributed to hundreds of radio stations nationwide.

### ANS continued to provide support for several nuisance species monitoring programs including:

- · Zebra mussels (Portland State University)
- Chinese mitten crab (Portland State University)
- Green crab (Oregon State University and University of California, Davis)
- Atlantic salmon (Washington Department of Fish and Wildlife)
- The ANS zebra mussel substrate volunteer monitoring program grew to 193 substrates in the states of Arizona, Colorado, Idaho, Montana, Nebraska, Nevada, North Dakota, Oregon, South Dakota, Utah and Washington. No zebra mussel sightings were reported on the substrates in 2004.

ANS worked with the Smithsonian Environmental Research Center and Portland State University to develop a regional ballast water reporting database.

ANS provided administrative support and staffing for numerous interjurisdictional efforts including the Columbia and Missouri River Basin 100th Meridian Initiative Groups and the Pacific Ballast Water Group. ANS also continued to provide program support for the states of Idaho, Oregon and Montana.

### FISHERIES ECONOMICS DATA PROGRAM

The Fisheries Economics Data Program (EFIN) is a cooperative data collection effort formed to address the needs of industry and fisheries managers for economic data and information. EFIN is a cooperative project by PSFMC and NMFS with the help of the Pacific and North Pacific Fishery Management Councils. EFIN's goal is to provide reliable and timely data to assist with monitoring and measuring of the economic performance of the harvest and processing components of West Coast and Alaska fisheries.

### In 2004, EFIN staff worked on a wide range of projects:

- 2003 Fuel Report: Continued collection and maintenance of the West Coast and Alaska monthly fuel price survey. Produced an annual summary that was distributed to survey participants and other interested parties.
- Website maintenance: Continued to collect data and update the EFIN website. Reworked several of the data update Statistical Package for Social Sciences (SPSS) programs to make them more efficient. These included Gross Domestic Product (GDP), Consumer Price Index (CPI), Producer Price Index (PPI) and Employment Cost Index (ECI).
- **Tri-State Crab Website:** Created a webpage to house Dungeness Crab information and reports from California, Washington and Oregon.
- 2001 Alaska Sportfishing Charter Operator Survey: The summary for the 2001 Alaska Halibut charter survey draft was completed and submitted to NOAA Fisheries for internal review.
- West Coast Charter Boat Survey: PSMFC completed a survey generating cost and earnings information for the year 2000 from the West Coast charter and head boat fleet.
- Commercial Passenger Fishing Vessel (CPFV)/Marine Recreational Fisheries Statistics Survey (MRFSS): Attempted to compare CPFV logbook data to charter boat MRFSS data in the previous year. A written summary was completed and sent to the Principal Investigator of this project.
- Fish ticket table addition: Added PPP (price per pound) flag to the Fish Ticket (FT)\_Fish Ticket Line (FTL) table to allow selection of catch with price per pound greater or less than zero. This is useful in including or not including confiscated overage or illegal catch. The downloading and creating of the new tables will continue to be updated each month.
- **AKFIN fish ticket project:** Data sets were acquired and an SPSS program was written that created a list of vessel identifiers for fishing vessels that landed catch both in Alaska and on the West Coast. Work began to identify the owner's homeport with landed weights and revenue on both the West Coast and in Alaska.
- Port project: Assisted with project design, supporting materials and data storage. Solicited feedback from West Coast social scientists and economists. Field work was conducted to gain a more complete understanding of Astoria and Newport's fishing communities.

### PACIFIC FISHERIES INFORMATION NETWORK

The Pacific Fisheries Information Network (PacFIN) is the nation's first regional fisheries data network. Funded by a grant from the NMFS, PacFIN is a joint federal and state project focused on fisheries data collection and information management. PacFIN provides timely and accurate data to aid effective management of fisheries and fishery resources.

### In 2004, PacFIN initiated several process improvements and provided significant information to interested parties:

- · The Quota Species Monitoring Subsystem was enhanced and improved with the addition of tribal catches, catch for many additional species, catch for the at-sea fishery, and initial work to include discard estimates.
- · Data elements including removal-type, legal-removal, product-use, product-form, overage, and assignment were added to the Fish Ticket (FT) and Fish Ticket Line (FTL) tables. Data transformations back to 1981 were required.
- · The Washington, Oregon, California (WOC) Permit transaction specification was reworked in order to accommodate data originating with Oregon Department of Fish and Wildlife.
- Retrievals and background info provided to the Northwest Fisheries Science Center (NWFSC)-Alaska Fisheries Science Center (AFSC) Community Profile Project staff.
- The Vessel Summary Month Rockfish Distributed (VSMRFD) and Vessel and Fish Ticket Categories Rockfish Distributed (VFCMRFD) production tables were developed in the context of applications developed for the Groundfish Management Team (GMT) and Trawl Individual Quota (IQ) A-Team.
- WOC Trawl Logbook (LBK) enhancements included incorporation of "up" position data elements, tow-level summary data elements, and software to compute adjusted-pounds for the Washington Department of Fish and Wildlife (WDFW) contribution. WOC Trawl LBK retrievals developed for the Pacific Fishery Management Council (PFMC) Essential Fish Habitat EIS.
- The corrected-gear-group data element was fully integrated into the central processing system. This was a prerequisite to processing the recomputed California Department of Fish and Game (CDFG) species-composition proportions.
- The Biological Data System (BDS) subsystem was enhanced with new website reports and improved methods for selecting all samples with or without ages or maturity codes.
- · Data tables holding U.S. Coast Guard (USCG) vessel-attribute data were consolidated, changes made to accommodate delivery method, and the update frequency for this data changed from biannual to monthly.
- · Projects developed specifically for NMFS included a non-confidential table for Atlantic Coastal Cooperative Statistics Program (ACCSP) staff, expansion of table sum\_fous2 to include lowest level gear and month, and processing for the Office of Management and Information Buyback Fee (OMIBBFEE) table was developed and incorporated into production.
- Improved Species Composition (SC) table re-summarization software was developed and summary points for all Species ID (SPID) codes were incorporated into table SC.
- The PacFIN office processed 272 data feeds from seven data sources and responded to 123 requests for information. There were 204,249 visits to the PacFIN website for an average of 17,021 visits per month. This compares to 14,283 per month in 2003 and 9,719 per month in 2002.

### PIT TAG INFORMATION SYSTEM

The Columbia River PIT Tag Information System (PTAGIS) is a data collection, distribution and coordination project. The project evaluated 2,017,000 juvenile salmonids marked with passive integrated transponder (PIT) tags for the 2004 out-migration through the Columbia and Snake River systems. In 2004, over 659,000 tagged fish were detected (Table 3). These fish generated over 7,609,000 interrogation records (Table 4). One fish can generate many interrogation records, depending upon how many interrogation sites or monitors 'detected' the fish.

In 2004, the PTAGIS project, in cooperation with the US Army Corps of Engineers, began work on installation of vertical slot PIT-tag detection systems within the Washington shore fish ladders at Bonneville Dam. In addition, work was started on the installation of a PIT-Tag detection system for downstream passage of smolts at Ice Harbor Dam. Both of these systems will be online for the 2005 fish migration season.

PTAGIS continues to support a number of agencies utilizing the Separation by Code (SbyC) system capability. This system has the capability to divert PIT-tagged fish in various directions based upon distinct tag code. The PTAGIS project implemented support for 10 separate Separation by Code projects for various agencies in 2004.

The PTAGIS project initiated system testing of a new online interface to PTAGIS project data and resources. The new system is planned for full implementation in Spring 2005.

TABLE 1

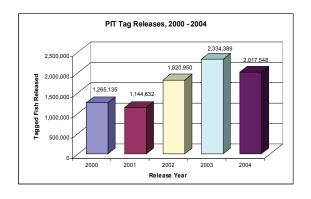


TABLE 2

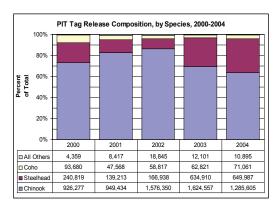


TABLE 3

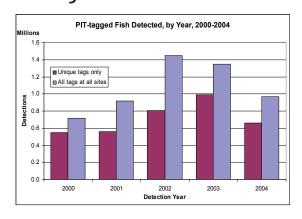
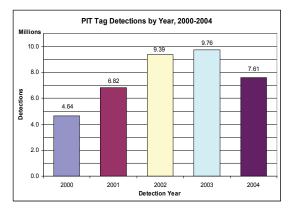


TABLE 4



### RECREATIONAL FISHERIES INFORMATION NETWORK

The Recreational Fisheries Information Network (RecFIN) is a cooperative effort between the state fishery agencies in Washington, Oregon and California, PSMFC and NMFS; RecFIN strives to meet four primary goals:

- Develop and implement a state/federal cooperative program for a coast-wide marine recreational fisheries data system.
- Coordinate collection, management and dissemination of Pacific Coast marine recreational fishery data.
- · Provide the data in a central location on a timely basis in the format needed to support state and federal work on Pacific marine recreational fisheries.
- Reduce and avoid duplication of data collection efforts between RecFIN members.

The database contains recreational fishery data for the years 1980-1989 and 1993 to the present. The primary source of data in the RecFIN database is the following five state sampling programs:

- Oregon Recreational Boat Survey (ORBS)
- Oregon Shore and Estuary Boats Survey (SEB)
- Washington Ocean Sampling Program (OSP)
- Washington Puget Sound Boat Survey
- California Recreational Fisheries Survey (CRFS)

In all three states, programs are funded by NMFS and the state. The coast-wide survey is spread over approximately 800 fishing sites in the three states: 57% of the sites are in California, 10% are in Oregon and 33% are in Washington.

### In 2004:

- · California and PSMFC conducted a fisheries survey, sampling approximately 100,000 angler trips during a 12-month period.
- In Oregon, 40% of all ocean boat angler trips were sampled during the March to October sampling period.
- · Washington conducted its Ocean Boat Survey and the Puget Sound Boat Survey. Sampling occurred throughout the year in Puget Sound and from April to early October on the coast. Approximately 40% of all ocean boat trips were sampled.

All catch and effort information for each sampling month from the various surveys are loaded into the RecFIN database maintained at PSMFC. Access to the catch and effort information for all three states is available on the PSMFC website (www.psmfc.org) and the RecFIN website (www.recfin.org).

### REGIONAL MARK PROCESSING CENTER

The Regional Mark Processing Center (RMPC) provides services to State, federal, tribal and non-governmental agencies involved in marking anadromous salmonid fishes on the West Coast, including Canada. Services include coast-wide coordination of tagging and fin marking programs and maintenance of a regional database for releases and recoveries of coded wire tag (CWT) marked salmonids. RMPC also serves as the sole U.S. database to exchange CWT information with Canada for Pacific Salmon Treaty purposes. The CWT data can be accessed online through PSMFC's Regional Mark Information System (RMIS) at www.rmpc.org or www.psmfc.org.

### **Regional Coordination:**

- · Annual Mark Meeting: Idaho Department of Fish and Game hosted the 2004 Annual Mark Meeting held in Lewiston, Idaho. Key issues included coast-wide mass marking and selective fisheries activities. Discussions also focused on the dynamics of marking and identifying salmonids returning to the Snake River system. The role of blank CWT wire as a mark was also explored at some length.
- **CWT Training Seminars:** RMPC and Northwest Marine Technology, Inc. co-sponsored three CWT training workshops. They were held over six months in Portland, OR, Lewiston, ID and Chelan, WA to accommodate as many agency programs as possible. The primary focus was on issues surrounding tag application equipment and quality control methods.
- 1989 CWT Overview Paper: A highly focused Pacific Salmon Commission (PSC) workshop, "Future of the CWT Program - Challenges and Options," was held in June 2004. Ken Johnson updated his 1989 paper "Regional Overview of Coded Wire Tagging of Anadromous Salmon and Steelhead in Northwest America" as background material. The revision was extensive given the broad changes during the past 15 years, most of which resulted from the introduction of mass marking (i.e. use of Ad clip), mark selective fisheries, and the switch to electronic sampling to recover CWTs.
- Mark Selective Fisheries Issues: The Mark Center hosted a three-day meeting of the PSC Selective Fishery Evaluation Committee and Data Standards Working Group. The primary issues centered on obtaining indirect estimates of unmarked mortalities of Double Index Tag (DIT) marked fish in mark selective fisheries. A new data file, "Estimates of Unmarked DITs," will be added to Format Version 4.1 to provide the data necessary to estimate the unmarked DIT mortality in mark selective fisheries.

### **Data Management:**

- Data Validation Issues: The CWT data load programs were upgraded to do more rigorous cross-table checks of tag releases in format version 4.0 when validating newly submitted tag recovery datasets.
- Upgraded Login Procedures for Data Providers: A new login methodology was implemented to make it easier for data providers using File Transfer Protocol (FTP) to upload new CWT datasets to the Mark Center.
- Implementation of "Users Lists": A popular "User List" feature was implemented on RMIS. It now allows users to save their own specific order of data elements selected in a data retrieval using the Comma Separated Value (CSV) format. That list or ordering of data elements can then be saved to the user's local computer.
- **New RMIS based Discussion Forum:** After extensive testing of various forums, the Mark Center installed Discus-Pro/ version 6 software for the RMIS users forum. The software is more highly developed than the previous forum software, easier to use and manage and will have more flexibility than the older forum.
- **Data Integrity Issues:** We worked with data reporting agencies to resolve inconsistencies found in the CWT data sets. While the number of errors was small (less than 500 records), it took considerable effort to resolve the reasons for the errors and make certain the corrections were reported.

### **STREAMNET**

StreamNet is a cooperative venture among the Northwest Power and Conservation Council's Fish and Wildlife Program and the region's state, tribal and federal fisheries management agencies. StreamNet is funded by the Bonneville Power Administration and administered by PSMFC. StreamNet supports staff at management agencies to obtain, georeference and standardize primary data used in fisheries management. The standardized data is available to the public at www.streamnet.org. StreamNet also provides data related services, including custom data development, data tool development, and assistance with data management.

### In 2004, StreamNet successfully focused on improving its database, increasing involvement in regional programs and improving the technology. Accomplishments include:

- · Use of the StreamNet website remained high during the year (Fig. 1). Updates to the records in the StreamNet database are presented in Table 1.
- Data system reliability was excellent (>99.5%) and online data queries increased.
- StreamNet partners collaborated to obtain updated data on bull trout distribution. Work included tool development, database design, and data management and analysis, and conducting workshops.
- Continued to do routine updates of data sets, management of the StreamNet database system, management of the StreamNet website and data query system.
- · The U.S. District Court in Seattle cited StreamNet as the source for "salmon supporting waters" in Oregon and Washington. In response, staff answered many requests for information and developed added materials for the StreamNet website.
- The ability to house data sets in native format on the StreamNet web page was added. This publicly available archive provides a searchable repository for any data sets that do not fit within the StreamNet data exchange format.
- · The StreamNet Library completed a significant expansion of space, expanded its collection, and continued to provide full library services, including interlibrary loans.
- · StreamNet participated in a number of new regional coordination efforts that represent important potential for improving regional scale fish and data management. Efforts included the Northwest Environmental Data Network, the Pacific Northwest Aquatic Monitoring Partnership, and the Collaborative Systemwide Monitoring and Evaluation Project.
- StreamNet continued to support the basin's Subbasin Planning effort, focusing on work to locate, obtain, and post data used for subbasin planning in Oregon. StreamNet staff worked with NOAA Fisheries to develop a new Internet Mapping Service (IMS) application for presentation and review of critical habitat designations for 13 anadromous fish listed under the Endangered Species Act.

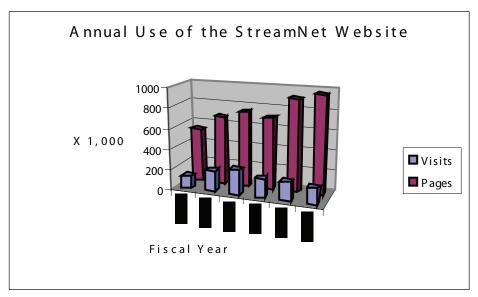


Figure 1. Annual use of the StreamNet website.

Data Category	Records
Age Data	631
Dam/Weir Counts	427
Estimated Spawning Pop'n	258
Freshwater Landings	234
Hatchery Returns	110,110
Peak Spawning Counts	876
Redd Counts	1,629

Table 1. Summary of significant records added to the Streamnet database in 2004.

More information and greater detail regarding StreamNet's work in 2004 are available on the StreamNet website:

http://www.streamnet.org/about-sn/project\_management.html.

### CALIFORNIA DATA AND TECHNICAL ASSISTANCE PROJECTS

The California Cooperative Fish and Aquatic Habitat Data Program (CalFish) website (www.calfish.org), a multi-agency cooperative fisheries information site, was opened to the public in 2004. CalFish provides access to a growing number of fish and aquatic habitat datasets. The data are available through both geographical and tabular queries. The data may be viewed and analyzed using an interactive ArcIMS platform, in conjunction with the other datasets available. Many of the following projects have data/information available through the CalFish site.

The Anadromous Fish Database currently contains 12,264 anadromous fish abundance and hatchery release records. This includes 682 new records. All of the data are organized into 1,262 datasets, 162 of which were added this year. Data are made available through the CalFish web site. In November of 2003, the California Department of Fish and Game (CDFG) and PSMFC completed and released 1:100,000 scale routed hydrography for the entire State of California.

The California Habitat Restoration Project Database (HRPD) effort continued to focus on maintaining and adding data for projects funded through the California Anadromous Fish Restoration Grants Program. A significant number of new records were added to the database from restoration projects funded through the National Fish and Wildlife Foundation (257 projects), California State Coastal Conservancy (600+ projects), NOAA Restoration Center (75 projects), Cantara Trustee Council (8 projects), and the California Conservation Corps (20+ projects). Work was also initiated with CALFED, a state/federal partnership conducting restoration efforts in the Central Valley. HRPD data is being made available via the CalFish web site.

PSMFC also assisted in the compilation of data for the NOAA Fisheries Pacific Coast Salmon Restoration Fund 2003 reporting requirements in California and the Pacific Northwest.

PSMFC continued to assist the California Coastal Watershed Planning and Assessment Program by providing field and technical staff and assistance to conduct stream habitat surveys and prepare watershed assessment plans.

PSMFC also continued work with the California Department of Fish and Game to assist them with the administrative aspects of conducting the Adaptive Watershed Program. In 2003, PSMFC administered contracts for 104 habitat restoration and watershed projects that were completed (or in progress) in coastal watersheds.

Continuing assistance was provided to the California Ocean Salmon Program by employing fisheries technicians at various coastal ports to sample commercial and recreational salmon fisheries, collect biological data and coded-wire tag information. Data collected are incorporated into the management and season setting for salmon fisheries coastwide.

The California Passage Assessment Database (PAD) was further developed to (over 10,000 sites have been identified) locate and document anadromous fish passage "sites" in all California coastal watersheds. Initiated and funded by the California State Coastal Conservancy, this multi-agency cooperative effort has led to better information on known (and suspected) fish passage issues, and ultimately the correction of them through prioritized restoration projects and funding. The PAD is available through the CalFish web site.

Part-time Fisheries Technician assistance was also provided to the Freshwater Slough Estuary Sampling Program for the spring/summer field season.

Coho Presence Surveys were continued in 2003, and further expanded to the central coast streams of California (the southernmost range of coho salmon). PSMFC provided technical assistance and field staff for collecting and compiling data and information on the presence of coho salmon in hundreds of streams (600+). This was the second year of a three year effort to document coho salmon presence.

In August 2003, PSMFC hired a Fisheries Biologist to assist in conducting the Coho Broodstock Program (located at the Warm Springs Hatchery facility). PSMFC is providing biological and technical support to hatchery staff for all spawning and rearing operations at the facility, and conducting biological monitoring of hatching, rearing, planting of fish, and adult returns from the program.

PSMFC Geographic Information System and Data Specialists were hired and assisted the CDFG Marine Region with Marine Nearshore Habitat Data and Technical Assistance. These positions are providing daily technical assistance to staff responsible for the management of California marine species, habitat, and fisheries.

With funding provided by the California Department of Water Resources (CDWR), PSMFC is assisting CDWR and CDFG with the Lower Central Valley Data and Technical Assistance project. Work includes data compilation and analysis for the Feather River Hatchery (and Central Valley), and seasonal Fisheries Technician assistance with carcass surveys on the American and Yuba Rivers.

Fisheries Technicians were hired on the Upper Sacramento Technical Assistance project (Battle, Deer, Mill Creeks) to help CDFG with running fish traps, conducting salmon carcass surveys, and collecting biological data.

### COOPERATIVE AGEING PROJECT

The Cooperative Ageing Project (CAP) was established to age marine groundfish structures. It is a collaboration between the Oregon Department of Fish and Wildlife (ODFW), Washington Department of Fish and Wildlife (WDFW), NMFS and PSMFC. Otoliths, the earbones of fish collected from federal surveys and commercial catch, are the primary structures aged by CAP and provide the basis for U.S West Coast stock assessments. Age data help determine the biological attributes of a population such as mortality rate, growth rate, age at maturity, among others. While CAP is primarily a production age reading lab, there are opportunities on an annual basis to conduct age-related research and assist in NMFS-directed at-sea surveys.

In 2004, CAP aged 38,475 otoliths from six species of U.S. West Coast groundfish, including Pacific hake, Dover sole, sablefish, darkblotched rockfish, Pacific Ocean perch and canary rockfish. This includes all types of ageing, such as production, double reads for quality control, recalibration, training and research reads.

CAP participated in the annual Dover sole workshop with age readers from California Department of Fish and Game (CDFG), ODFW and PSMFC. The goal of this workshop is to increase precision on ageing methodology.

CAP participated in the Committee of Age Reading Experts conference at the Alaska Fisheries Science Center (AFSC). The Committee is composed primarily of West Coast age readers (Canada and U.S.) whose focus is the primary concern of interagency calibration and the validation and standardization of age reading criteria.

Various CAP personnel were involved in a double-read exchange with Pacific hake age readers at the Canada Department of Fisheries and Oceans (DFO), completed sea survival and safety training, and assisted NOAA Northwest Fisheries Science Center personnel in conducting both the 2004 combined and Triennial surveys (4 legs total).

### CAP personnel conducted research and presented, or prepared for presentation, findings at the following professional conferences:

- Western Groundfish Conference poster session: Using marginal increment analysis to validate the periodicity of annulus formation in Dover sole, (*Microstomus pacificus*).
- Western Groundfish Conference poster session: Effects of environmental variations on the growth of Pacific hake, (Merluccius productus).
- Western Groundfish Conference poster session: Comparison and analysis of darkblotched (Sebastes crameri) and blackgill (Sebastes melanostomus) rockfish otoliths.
- Western Groundfish Conference oral presentation: Difficulty of age determination between Pacific hake (Merluccius productus), Pacific Ocean perch (Sebastes alutus) and sablefish (Anoplopoma fimbria).
- Western Groundfish Conference oral presentation: Age validation of canary rockfish (Sebastes pinniger) using bomb radiocarbon dating.

### FISH HABITAT EDUCATION PROGRAM

The **Fish Habitat Education Program** works to protect habitat for salmon and other marine fish species through education, protection, and restoration activities. The Commission's habitat efforts are funded primarily by the Wallop-Breaux Sport Fish Restoration program and NOAA Fisheries Northwest Regional Office.

In 2004, the Habitat Education program worked on the following projects:

### Oregon coast salmon habitat protection and restoration

- · Watershed Council Support—The program supported the salmon habitat restoration efforts of the MidCoast Watersheds Council (MCWC) by assisting the Council's general, administrative and technical committees. This group accomplishes about a half million dollars of work each year. The assistance of the Commission in this group's efforts was honored (see accompanying photograph).
- Field Tour: Sponsored a field tour for legislators, county commissioners, state and federal agency personnel of some of the salmon restoration and conservation projects.



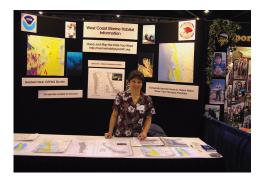
· Marsh Conservation Planning —The program coordinated efforts among landowners, private groups, county, state, and federal partners to assure landowner outreach and planning for protection and restoration of high priority marshes in the Yaquina, Alsea, and Beaver Creek watersheds. One project will result in the restoration of essential habitat for young coho in a 100-acre wetland.

### Salmon habitat and watershed education

- · Puget Sound Watershed Tours—The program's Flying for Fish Habitat program, working in conjunction with LightHawk, conducted six aerial watershed tours that provided federal congressional staff, a state senator, city councilors, and county commissioners with an orientation to the habitat issues facing the Green/Duwamish River watersheds in King County, Washington and the need for continuing support for restoration planning and project implementation. This watershed, one of the most populated and industrial areas of the State, is also a major salmon producing watershed in Puget Sound and provides one of the most important reaches for salmon in the area.
- Virtual tour website—Information allows people to plan and conduct their own watershed tours and offers hosting of virtual tours to groups throughout the region without websites of their own.

### Groundfish Essential Fish Habitat (EFH)—California, Oregon, Washington

• The program assisted the efforts of NOAA Fisheries and the Pacific Fishery Management Council to prepare a Groundfish EFH Environmental Impact Statement by helping to organize and support technical team meetings and by compiling information on fishing restrictions in marine protected areas on the west coast. It also worked to assure that the extensive GIS information compiled in this process is available to others through our website (see accompanying photograph).



### Interstate and federal/state/tribe coordination

· PSMFC's habitat program coordinates with the Pacific Fishery Management Council by serving as an active member of its Habitat Committee. The program also worked with the Council to improve communication within the Council process and between the Council and the public.

### NORTHERN PIKEMINNOW MANAGEMENT PROGRAM

The Northern Pikeminnow Management Program is a joint effort between State fishery agencies in Washington and Oregon and PSMFC to reduce predation by Northern pikeminnow on juvenile salmonoids during their emigration to the ocean.

Each partner agency provides critical support to the Northern Pikeminnow program. In 2004, the Washington Department of Fish and Wildlife operated the sport-reward registration/creel check stations throughout the river and handled all fish checked into the program. The Oregon Department of Fish and Wildlife provided fish tagging services, population studies, food habit and reproductive studies, and exploitation rate estimates. PSMFC provided technical, fiscal, and contractual oversight for all segments of the program and processed all reward vouchers for the sport-reward anglers.

During the 2004 season (May 3, 2004 through September 26, 2004), a program record total of 267,414 fish was harvested in the sport-reward fishery.

- A total of 2,143 anglers who registered were successful in catching one or more fish.
- · A total of 140 tagged fish were caught.
- Vouchers for 265,186 fish out of the 267,414 total catch were submitted for payment with rewards totaling \$1,766,777 (an all-time record of reward payments).
- Rewards from the season opening through May 2004 were paid at the following levels:
- \$4 for the first 100 fish caught during the season
- \$5 for fish caught in the 101-400 range
- \$6 for all fish caught by an angler above 400 fish
- \$100 for any tagged fish
- In June 2004, the rewards were increased to \$5, \$6, and \$8 for the three payment tiers and the tagged fish reward was increased to \$500. These increases were in response to low Columbia River water flows in 2004 which increased the travel time for smolts migrating from the river, subjecting them to a longer period of predation. The goal of the increased rewards was to increase pikeminnow removals to help reduce predation effects caused by the increased travel time for salmon smolts to migrate from the river to the ocean. This tactic has proved to be successful.
- Anglers were issued a special tagged fish voucher for each tagged fish brought to the registration station. This tag voucher was then sent in with the tag for verification and payment was made on the special \$100 or \$500 tagged fish reward. This resulted in tag reward payments of \$70,000.

### WEST COAST GROUNDFISH OBSERVER PROGRAM

The West Coast Groundfish Observer Program (WCGOP) provides coast-wide estimates of discards across fisheries throughout the year. These estimates are important to stock assessments and the management of groundfish stocks on the West Coast. Observers collect scientific, management and other data through on-board interviews with vessel captains and crew, observations of fishing operations, measurements of selected portions of the catch and fishing gear and collection of samples.

2004 was the third year the WCGOP actively deployed observers in a variety of West Coast groundfish fisheries.

In February 2004, the program completed training of 19 seasonal observers that were assigned coast-wide on March 1, 2004 to assist the 23 year-round observers. Because of the seasonality of the fishing industry, some observers are seasonally employed during the heaviest fishing months of the year. This allows the program to match observer resources to the demands of the sampling plan created by the WCGOP with help from stock assessment authors and the Pacific Fishery Management Council. From March to October, the program operated with up to 42 active observers in the field collecting data.

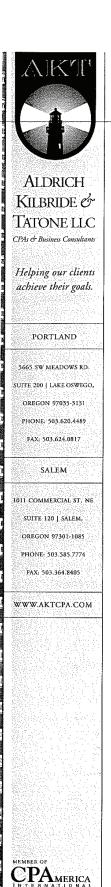
In November, WCGOP sent a representative observer to the 4th International Fisheries Observer Conference in Sydney, Australia. The conference is a forum for discussions of observer resource management and the collection of data effectively on commercial fishing vessels data. The WCGOP observer participated in a panel discussion titled "What is the Career Path for Observers" and gave a brief presentation titled "Appealing to a Career Observer."

In 2003, WCGOP had a total of 2,863 days at sea aboard commercial fishing vessels. In 2004, the number of observer sea days increased by 20% to 3,587. In 2004, WCGOP achieved better than 20% coverage level on limited entry trawl vessels. The table below shows the sea time during which observers were onboard for each type of gear by state from January 2004-December 2004.

State	Trawl	Longline	Pot	Shrimp	Open Access
California	787	147	120	79	572
Oregon	977	51	31	226	150
Washington	320	94	0	33	0
Total	2084	292	151	338	722

The WCGOP Data Reports and Summary Analyses for 2004 can be found at:

http://www.nwfsc.noaa.gov/research/divisions/fram/observer/datareport/index.cfm.



#### INDEPENDENT AUDITORS' REPORT

To the Board of Commissioners Pacific States Marine Fisheries Commission Gladstone, Oregon

We have audited the accompanying basic financial statements of the Pacific States Marine Fisheries Commission (the Commission) as of and for the year ended June 30, 2004 as listed in the table of contents. These financial statements are the responsibility of the Commission's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the basic financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the basic financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Pacific States Marine Fisheries Commission as of June 30, 2004, and the results of its operations for the year then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued a report dated April 5, 2005 on our consideration of the Commission's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

**3** 

Management's Discussion and Analysis are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by U.S. Office of Management and Budget Circular A-133, Audit of States, Local Governments, and Non-Profit Organizations, and is not a required part of the basic financial statements. The accompanying supplemental information listed in the table of contents is also presented for purposes of additional analysis and is not a required part of the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

aldrich Killride & Tatone LIC

Salem, Oregon April 5, 2005

### **HEADQUARTERS AND STAFF**

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**Stan Allen,** Program Manager Amy Millikin, Administrative Support Staff Specialist

**Stephen Phillips,** ANS Program Coordinator Susan Anderson, Administrative Support Staff Specialist

Fran Recht, Habitat Education Coordinator

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Don Warf, Field Systems Engineering Supervisor

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#### **Recreational Fisheries Information Network**

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### Northern Pikeminnow Management Program

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### West Coast Groundfish Observer Program

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### **Alaska Fisheries Information Network**

Bob Ryznar, AKFIN Program Manager Loreie Enos, Data Programmer/Analyst

