

49th Annual Report of the **PACIFIC STATES MARINE** FISHERIES COMMISSION FOR THE YEAR 1996

TO THE CONGRESS OF THE UNITED STATES AND TO THE **GOVERNORS AND LEGISLATURES OF WASHINGTON** OREGON, CALIFORNIA, IDAHO AND ALASKA

PSMFC COMMISSIONERS 1996 Rudolph Rosen, Chair

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Alaska State Senate Alaska Dept. Fish & Game Governor's Appointee

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BERN SHANKS

HARRIET SPANEL

Washington State Senate

Washington Dept. Fish & Wildlife

Governor's Appointee & Washingto State Senate

Our goal, as stated in the bylaws, is "to promote and support policies and actions directed at the conservation, development and management of fishery resources of mutual concern to member states through a coordinated regional approach to research, monitoring and utilization".

49th Annual Report
of the
PACIFIC STATES MARINE
FISHERIES COMMISSION
FOR THE YEAR 1996

To the Congress of the United States and the Governors and Legislatures of the Five Compacting States, 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 45 SE 82nd Drive, Suite 100 Gladstone, Oregon 97027-2522

Al J. Didier, Jr. EDITOR

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EXECUTIVE DIRECTOR'S REPORT

The Pacific States Marine Fisheries Commission helps the fishermen and resource agencies of our five compacting states address the management of Pacific ocean living marine resources. In 1996, PSMFC remained active as custodian and coordinator of coastwide fisheries data bases, maintained contract services for states and related agencies, and worked with fishermen on issues such as crab quality testing, marine debris, and habitat protection. The following are among the highlights of the year:

1996 proved to be a year of record precipitation in the Pacific Northwest, and PSMFC was not immune to its impacts. The nearby Clackamas River exceeded flood stage during February 1996, and sandbags were placed around the lower floor of PSMFC's Gladstone office as a precaution. Floodwaters crested just short of the building, and PSMFC buildings and equipment were undamaged.

- The value of external contracts administered by PSMFC increased 20% to \$16.8 million.
- PSMFC began its discussions with the National Marine Fisheries Service to develop recommendations to address impacts of California sea lions and Pacific harbor seals on the West coast. These discussions were required by the 1994 amendments to the Marine Mammal Protection Act (MMPA), and the results will be included in a report to Congress. A draft of these recommendations was nearing completion by the end of the year; it will then be distributed for public comment.
- The PSMFC Information Management Services (IMS) section is comprised of the following:
 - Pacific Fisheries Information Network (PacFIN)
 - Regional Mark Processing Center (RMPC)
 - Pit Tag Information System (PTAGIS)
 - StreamNet
 - Alaska Fisheries Information Network (AKFIN)
 - Fisheries Economics Database Project
 - PSMFC Computer Services Center (CSC)

Highlights of activities and accomplishments by each project or section are described separately.



Figure 1. Floodwaters threatened PSMFC's Gladstone office during February 1996.

Software development, testing, and checkout continued on the summarization portion of the **PacFIN** central processing system in the early part of 1996. This major aspect of the central processing system was completed in March and allows PacFIN clients to once again retrieve summarized fishery statistics that reflect the best estimates of catch area and rockfish species composition. With the completion of this major subsystem, the PacFIN central processing system was once again able to process all data source contributions and incorporate that data into the central database. The PacFIN operations office processed 127 datafeeds from the nine PacFIN data sources during 1996, and responded to 253 requests-for-information.

A subset of the standard PacFIN reports on Pacific and North Pacific Fishery Management Council (PFMC and NPFMC) fisheries was developed and made available to the PacFIN community during May via the PSMFC Internet home page. These reports are refreshed at least monthly. During the last six months of 1996 there were a total of 4,815 "visits" to the PacFIN part of the PSMFC home page, an average of 803 visits per month.

The conversion of the Build Vessel Summaries (bld_vsums) subsystem was completed in September. This subsystem is used extensively by fishery economists and other investigators needing historical data for various segments of the west coast commercial fleet. There are now 16 years (81-96) in this summarized data series, and fishery investigators once again have the full capabilities of this PacFIN subsystem available to them.

A general PacFIN seminar/workshop was conducted in February in Newport, Oregon for NMFS and Oregon Department of Fish and Wildlife staff, training sessions for Washington Department of Fish and Wildlife staff were held in March and April, and a specific workshop that focused on W-O-C rockfish was held in September. The most comprehensive document to date which describes the PacFIN system,: "A Description of the Pacific Fisheries Information Network (PacFIN) 1981-1996", was completed in July. In September, NMFS and PFMC staffs requested software development to aid in the analysis of the pending PFMC Sablefish Endorsement regulation; the resulting program develops a list of permits that would qualify for an endorsement based on criteria developed by the PFMC.

The **Regional Mark Processing Center** (RMPC) continued to provide regional services to all State, Federal, Tribal, and non-governmental agencies involved in marking anadromous salmonid fishes on the entire Pacific Coast, including Canada. These include coastwide coordination of tagging and fin marking programs, and maintenance of a regional database for releases and recoveries of coded wire tag (CWT)

marked salmonids. The CWT data are distributed to users via hardcopy reports, magnetic media, or on-line data retrievals through PSMFC's Regional Mark Information System (RMIS). Users are provided on-line access to the CWT data at no charge. In addition, the Mark Center serves as the single United States database to exchange CWT information with Canada for Pacific Salmon Treaty purposes.



Figure 2. Records of marks and tags appied to salmon by Pacific coast management agencies are kept by PSMFC's Regional Mark processing Center.

Regional coordination activities again focused on the issue of mass marking hatchery fish using the adipose-only clip for identification in selective fisheries, and the potential impact on the coastwide CWT system. After a break of several years, the Pacific Salmon Commission (PSC) Working Group on Data Standards was reconvened to address new data issues raised by the recent mass marking of hatchery coho in Oregon and Washington. Several new fields were added to accommodate mass-marked CWT groups of fish, including fields to document external mark(s) on CWT and non-CWT fish, and a field for the number of non-CWT fish released with external marks. In addition, two fields were added to provide linkage to companion CWT groups used for double and triple index marking, a new marking procedure necessary to compensate for non-random sampling of landings in selective fisheries. The expanded data exchange format is Format Version 3.2.

Users of the Mark Center's on-line "Regional Mark Information System" (RMIS) can now obtain CWT recoveries by 'run year' as well as the standard recovery year (Jan.1-Dec.31). Recoveries from returning fall and winter run stocks which overlap into the next year can now be tracked, and are not masked in the standard calendar year based annual reports. Major progress has been made mapping all freshwater PSC location codes to region codes, allowing data users to retrieve release and recovery information by specific site, region or tagcode.

RMPC's project page on PSMFC's WWW site is being modified to allow access to the CWT database via RMIS. The system currently offers a variety of ways to select tag release and CWT recovery data via queries, build reports from those queries, and electronically transfer the reports. In addition, a WWW based discussion forum was developed to facilitate work of the PSC Data Sharing Committee and working groups (Data Standards, Catch and Effort). The forum allows the posting of new agenda items for a meeting as well as on-going discussion and input on previously posted agenda items. The forum has proven helpful for pre-meeting preparations and evolving agendas. Based on that experience, several new features and improvements are planned for 1997.

The Columbia River **PIT Tag Information System** (PTAGIS) saw over 430,000 juvenile salmonids marked with passive integrated transponder (PIT) tags for the 1996 out-migration through the Columbia and Snake river systems. This number was comparable to that for the 1995 out-migration. These fish generated over 1,360,000 interrogation records at the major dams on the Lower Snake and Columbia rivers. One fish can generate many interrogation records, depending upon how many interrogation monitors 'saw' the fish. This number of interrogation records was about half that collected during the 1995 out-migration, probably due to the high river flows and spill conditions at the dams. These conditions tend to keep migrant fish in the river rather than diverting them into the juvenile fish bypass systems where interrogation monitors are located.

Work continued on a project management plan to implement the new International Standards Organization (ISO) tag frequency in the Columbia River basin. The Bonneville Power Administration asked for the participation of State and Tribal fish and wildlife agencies, with assistance from National Marine Fisheries Service, the US Army Corps of Engineers, US Fish and Wildlife Service and others, to work toward a successful transition to the new system. The new system should be on-line in time for the 1999 outmigration.

PTAGIS continued to provide near real time PIT Tag data for the Columbia River Technical Management Team. The project provides a file on daily basis to the PSMFC file server (ftp://ftp.psmfc.org). PSMFC is working with the US Army Corps of Engineers to connect PIT tag interrogation systems at the dams to the Internet by way of the Corps existing telecommunications infrastructure. We expect to have most of the dams connected to high speed telecommunications lines by the end of 1997. PTAGIS project enhancements in 1996 allowed users to send tagging, recapture and release information into the system via electronic mail. Standard reports were also generated on a regular basis and made available over the world-wide-web.

Plans for 1997 include additional software development aimed at improving how tagging and release information is added to the database. We are will continue to utilize world wide web (WWW) browser technology to provide improved maintenance tools for our field maintenance staff and improved data query and reporting tools for our customers in the research community. The project is also working hard to accommodate a hatchery / transportation study that is being coordinated by the Fish Passage Center for the states of Idaho, Oregon and Washington. This study requires that a set percentage of fish from eight different hatcheries be directed to specific locations at the juvenile fish bypass facility, based upon the unique PIT tag code carried by these fish. This "separation by code" capability has been researched and developed by NMFS, and will be transferred to PTAGIS for operations and maintenance by the end of 1998.

StreamNet consolidates the data compilation and management activities that were previously conducted through the PSMFC's Coordinated Information System (CIS) and the Northwest Environmental Data Base (NED) projects. Administered by PSMFC, StreamNet is cooperatively implemented by the States of Oregon, Washington, Idaho, Montana, as well as the Columbia River Inter-Tribal Fish Commission, the Shoshone-Bannock Tribes, the U. S. Fish and Wildlife Service, the Northwest Power Planning Council (Council), and Bonneville Power Administration (BPA). Other cooperators include the National Marine Fisheries Service, the U.S. Geological Survey, and the Environmental Protection Agency. The project is funded by the BPA under the Council's Fish and Wildlife Program, and participating agencies contribute significant in-kind services. Other entities provide funding for select project components.

Some of the many data categories contained within StreamNet are: anadromous fish escapement, harvest, hatchery and distribution information; measures of aquatic habitat quality; stream flow records and other measures of river system management; information on dams and diversions; mitigation project tracking; and an electronic bibliography with over 12,000 peer reviewed and unpublished "gray" literature bibliographic citations. Data from the Northwest Power Planning Council's Protected Areas rule are also available. All data are geographically referenced to the EPA River reach system, which allows common

search access to the data and makes the information available for mapping through the use of Geographic Information Systems. Data are all electronically referenced as well, and copies of the citations for the data are available through the StreamNet library. The StreamNet library is managed by the Columbia River Inter-Tribal Fish Commission and contains over 20,000 books, journals, technical reports, and newsletters focusing on anadromous fisheries in the Columbia Basin and the region, with emphasis on "gray" literature.

Completion of *StreamNet Online* marked a major milestone for access to StreamNet information in 1996. This World Wide Web page (www.streamnet.org) provides on-line, ad-hoc query and retrieval capabilities to all StreamNet data. StreamNet also published its first annual salmon and steelhead status report for the Columbia Basin that summarizes data compiled through StreamNet.

The Alaska Fisheries Information Network (AKFIN) and the Fisheries Economics Database Project were initiated in the late Fall of 1996. Funded by the National Marine Fisheries Service, both of these projects are cooperative data efforts focused at the needs of fishery managers and fishery economists. Additional information about these projects is available by contacting the Commission.

The IMS Computer Services Center (CSC) provides technical support to all Commission projects and staff, as well as technical assistance to others. A few of the major accomplishments and activities of the CSC in 1996 include:

Personal Computers / Local Area Network:

- Enhancing the speed and usability, or replacing, nearly all Commission personal computers to Pentium level machines. This has been a long-term process which is nearing completion.
- Starting an office-wide upgrade of Commission personal computers to the NT 4.0 Workstation operating system.
- Upgrading the Commission LAN by adding a 100 based switch and 100 hub; purchasing and starting a network monitor program to aid in traffic control and troubleshooting; upgrading the SMTP gateway software to enhance throughput of both inbound and outbound messages; upgrading the Personnel Server software; and adding additional memory to the office NT server.
- Continuing to purchase and set-up new computers as necessary. The CSC also assisted in the purchase of new systems for other agencies.
- Purchasing and loading anti-virus software on all end user computers.
- Starting a Remote Access Server process to increase the speed of users dialing into the Commission system.
- Upgrading our LAN/Intranet by adding a network switch which allowed segmenting of the internal network and has helped decrease network congestion.

Unix Database Servers / Wide Area Network (including Internet)

- Adding a fast Ethernet hub into the network switch to further increase network capacity.
- Upgrading the Commission web server to a dual processor SPARC 20. The previous SPARC 5 web server was becoming overloaded and degrading web performance.
- Reconfiguring and upgrading the Commission UNIX administration machine.

- <u>Implementing password aging, for security reasons, on all UNIX database</u> accounts.
- Assisting the PTAGIS project to configure integration of remote dam sites with the Commission network using PPP and T1 links. This required a mail-enabled application which allows tagging data to be uploaded via e-mail, and an application which reformats data collected from the dam sites to a format which can be uploaded.
- Upgrading and enhancing the Commission web site through development of software that allows interactive discussions to take place on the web site (a feature actively being used by the Regional Mark Processing Center and the For Sake of the Salmon project), advising and hosting several other sites from the Commission web server, adding tools to monitor the web site and query for requested statistics, and training staff in the development and use of the Commission web site.

In 1996, the **F.I.S.H. Habitat Education Program** was involved in education, outreach, and policy work dedicated to improving habitat for salmon and other marine fish. Some of its accomplishments:

- <u>Salmon Educational Materials</u>: A salmon media packet (ten articles, 5 charts, and camera ready graphics) was distributed to the region's general press and fishing oriented media and watershed groups. We provided input into the development of "The Road to Recovery: Transportation Related Activities and Impacts on Salmon" produced by Oregon Department of Transportation and helped distribute it to city road departments. We also distributed "The Return of the Salmon" produced by Oregon Sea Grant to the region's watershed groups.
- The Flying For Fish Habitat Program. With the help of LightHawk, 'the environmental airline', this program provided 10 watershed over-flights to 55 fishermen, policy makers, and agency personal in two Washington watersheds. Forty fishermen, environmentalists, and watershed restoration participants were invited to maintain contact through an evening 'Fish Chat' event, sponsored with the help of the Washington Wilderness Coalition and Save Our Wild Salmon.
- <u>Fish habitat information</u> was provided to visitors at the Portland Sport Fish Exposition, San Mateo Sport Fish Exposition, Seattle Sport Fish Exposition, Fish Expo (Seattle), Fishermen's Festival (Seattle), The NW Salmon Restoration and Protection Conference (Tacoma), and the Salmon Festival (Portland).
- Vessel Pollution Prevention Education aided efforts of federal, provincial, state, and private groups throughout the region to develop and refine educational materials and messages regarding issues like prevention of small oil spills from vessels and environmentally safe bilge cleaning methods. In collaboration with the Atlantic States Marine Fisheries Commission, we helped develop and distribute a new brochure entitled 'Protecting Fish Habitat-- A Guide for Fishermen and Boaters'. We conducted a "Boating Clean and Green Campaign" in California to make sure that a valuable fishermen/boater education program developed in Marin County would be applied in other counties in the San Francisco Bay and Delta area. Government groups, nongovernment groups, and marina operators in the Northern California area were trained how to conduct demonstration and tabling events, and were made familiar with the educational materials available for copying and use.

Training classes were held at the: The Northern California Marine Association Boat Show (Oakland), Tower Park Marina Hazardous Waste Collection Event (Stockton), Pillar Point Marina 'Harbor Days' Festival (Half Moon Bay), Richmond Municipal Marina "Boat Fair", California Striped Bass Association Meeting (Bethel Island), and the Rio Vista Chamber of Commerce Meeting.

- Watershed Group Support: We facilitated efforts of the Central Coast
 Watersheds Council in 1996 to finalize bylaws, refine its workplan, secure
 grant funding for restoration projects, and assist the watershed coordinator's
 efforts. Information gained from hands-on work with this group (e.g.
 regarding useful restoration guidance manuals, drafting of a watershed
 coordinator work description and contract) was provided to other watershed
 groups in the region through collaboration with For The Sake of the Salmon.
- Gill Net Recycling Program: Used gillnet collection continues in Washington and Alaskan ports. Over 100,000 pounds a year are turned into molded consumer goods such as electronic parts, auto parts, and kitchen utensil handles.

PSMFC's **Habitat Hotline** is a newsletter which informs fishermen and fisheries conservationists, conservation groups, state and federal agencies, and PSMFC Commissioners and advisors about important habitat issues in the five PSMFC member states. Information on national legislation and rule-makings is also included. It is hoped that as habitat issues arise, commercial and recreational fishermen, as well as fish conservationists, will use the Habitat Hotline to inform others about issues of regional importance. In 1996, six issues of the Habitat Hotline were printed. Two issues had special sections focusing on coho salmon and the salvage logging rider.

The Recreational Fisheries Information Network (RecFIN) coordinated marine recreational fisheries sampling during 1996 in California, Oregon and Washington using the nationwide Marine Recreational Fisheries Statistics Survey (MRFSS) methodology and NMFS and State funds. The MRFSS data set is the largest and most continuous recreational data set on the Pacific coast. It resides at PSMFC as the foundation of RecFIN. It can be accessed on the PSMFC web page at http://www.psmfc.org/recfin/. The MRFSS data includes year-round catch and effort estimates in all modes of fishing from 1980-1989 for California, Oregon, and Washington, 1993 to 1996 for California and Oregon, and 1996 for Washington. Data are maintained in the format used by NMFS and can be readily converted to other formats as needed by managers and the public. State data resident at PSMFC includes: (1) Washington state marine recreational data summaries; (2) some of the Northern California Commercial Passenger Fishing Vessel(CPFV) survey data; and (3) Oregon ocean boat survey catch and effort for July through August of each year. The MRFSS presents estimates of total catch, effort, and the number of participants in four modes of fishing (beach/bank anglers, man-made structure anglers, charterboat anglers, and private and rental boat anglers). The MRFSS sampling complemented some seasonal fishery-targeted state sampling programs to provide a complete general overview of all modes of marine recreational fishing for calendar year 1996.



Figure 3. PSMFC's Habitat Education program teaches boaters the proper way to deal with fuel spills.

Ocean boat trip salmon sampling programs in Oregon (July and August), Washington (April to October), and northern California are funded by the states and will soon be integrated with the MRFSS sampling. In 1997, PSMFC will conduct a coastwide economic study of marine recreational fishing under the RecFIN program.

RecFIN Programmer/Analyst Wade VanBuskirk is available at PSMFC to assist users with data needs. He may be reached by phone at PSMFC headquarters [(503) 650-5400] or by email at wade@psmfc.org.

PSMFC is the primary contractor for the Northern Squawfish Predator Control Program funded by Bonneville Power Administration (BPA). PSMFC subcontracts parts of the program to state and tribal entities. During 1996 the components of the Program included: the Sport Reward Fishery, Site-Specific Fisheries; Dam Angling, Project Evaluation, Fish Handling, Technical Administration, and Fiscal Administration. PSMFC handled payments to anglers for the Sport Reward Fishery and Washington Department of Fish and Wildlife ran the Sport Reward Fishery field registration and check stations for anglers. PSMFC subcontracted with the Columbia River Intertribal Fish Commission, Yakama Indian Nation, Nez Perce Tribe, Confederated Tribes of the Warm Springs Indian Reservation and the Confederated Tribes of the Umatilla Indian Reservation to conduct dam angling and site-specific fisheries (gill netting Northern Squawfish at tributary mouths). Program biological work and evaluation were subcontracted to Oregon Department of Fish and Wildlife. Fish handling was provided by Washington Department of Fish and Wildlife. Technical administration was provided by the Columbia Basin Fish and Wildlife Authority, and fiscal administration was provided by PSMFC.

The 1996 Sport Reward Fishery harvested 157,000 fish, which was short of our yearly goal of 200,000. Poor weather and high flows reduced the harvest. Special promotion activities during 1996 included biweekly tournaments at each check station for the three biggest fish turned in. A tiered reward structure encouraged successful anglers to fish hard to help reach the harvest goal. A basic reward of \$3 was paid for the first 100 fish harvested, increasing to \$4 for fish 101-400, and to \$5 for all fish caught above 400. The Program seems to be reaching its goal of reducing northern squawfish predation on salmonid smolts with no adjustment in fecundity or growth rate by the remaining northern squawfish population. The goal of reducing the percentage of larger fish in the population is also being achieved. A detailed impact analysis of the removal of 11-inch and larger fish by the Sport Reward Fishery will be published in fall 1997. Reports detailing the components of the program are available from either BPA or PSMFC.

PSMFC continued to administer the Data Collection Jobs Program of the Northwest Emergency Assistance Program (NEAP) for salmon disaster relief in 1996. Research projects were begun in 1995 employing qualifying salmon fishers for field work. California projects during 1996 sampled the sport fishery in Mendocino county, continued a second year of rockfish tagging work, and conducted a salmon troll gear selectivity study. Most of the work conducted in Oregon was with sport and troll salmon fisheries, where studies measured hooking mortality, coho and chinook salmon encounter rates, and gear selectivity. Additional studies in Oregon included salmon genetic stock identification work on Chetco and Rogue River stocks, sturgeon tagging, sea lion tagging, and terminal fishery development and test fishing on the Columbia River. Work in Washington state included a study on coho straying rates in Puget Sound, and escapement studies in Strait of Juan de Fuca tributaries and the Sol Duc River. Reports on these studies were delivered to the Pacific Fishery Management Council and the State agencies. Most of the Oregon studies and the rockfish tagging in California will continue into 1997. A troll gear selectivity study will be conducted in Washington during 1998.

IN MEMORIA - JOHN C. THOMAS

PSMFC and all recreational fishermen lost a valued friend in August 1996 with the death of PSMFC's Washington state advisor John C. Thomas. Directly or indirectly, Mr. Thomas had an impact on many who fish for bass, salmon, steelhead, walleye, or (Washington state) tiger muskie; read a Luhr Jensen Tech Report; or used a Jensen lure.

A graduate of the University of Washington majoring in communications, Mr. Thomas was the co founder, writer, and editor (1974 to 1982) of the magazine Western Washington Fishing Holes. He was a free-lance writer and columnist for The White Salmon Enterprise, Hood River News, and Goldendale Sentinel, and a monthly featured radio guest on Hood River's KIHR Mid-Columbia Today. Mr. Thomas has been director of marketing for Luhr Jensen & Sons since 1985, and wrote the first twenty issues of their Tech Report series. He maintained close relations with the University of Washington College of Fisheries, and in 1989 wrote a chapter on freshwater fishing for a textbook which is still in use.

John Thomas enjoyed all kinds of fishing and hiking into high mountain lakes, but he was also actively involved in fishery policy and management issues affecting anglers in the region. He was president and founder of the White Salmon River Steelheaders; a member of the Snowden Community Council, Jewett Creek Streamkeepers, and Hood River Watershed Group; and advisor to the Columbia River Gorge Commission and the Columbia River Advisory Committee for the Washington Department of Fisheries. He was instrumental in planting fish into many of Washington's high country lakes; organized survey, field sampling, creel census, and marking activities; attended meetings, wrote letters, and made countless telephone calls in support of a variety of fisheries issues; and was a major proponent of the tiger muskie program in Washington. In June 1996, Mr. Thomas received an award from the Washington Department of Fish and Wildlife recognizing his contributions to the fisheries resources of Washington through 32 years of outstanding volunteer service. John Thomas has been an advisor to PSMFC since 1993.

1996 PUBLICATIONS

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Habitat Hotline (published periodically) is a bulletin board of current events dealing with water quality, wetlands development, logging, and other habitat issues that affect fisheries.

Pacific States Marine Fisheries Commission (PSMFC) Passive Integrated Transponder (PIT) Tag Information System (PTAGIS) (no date) is a single-page flyer summarizing the history, hardware, data collection and retrieval aspects of PTAGIS.

PTAGIS3 User Manual (February 1996) is intended for users of the PSMFC Computer Services Center and documents operation of the PIT (Passive Integrated Transponder) Tag Information System (PTAGIS).

PTAGIS3 Technical Workshop Workbook (February 1996) is a training aid produced for a PSMFC-sponsored workshop.

Feasibility of Tagging Walleye Pollock, Theragra chalcogramma, With Coded Wire Tags (March 1996) is a report by Natural Resources Consultants, Inc. for the Marine Resources Management Center that documents a study to determine the feasibility of capturing, tagging with coded wire tags, and recovering walleye pollock off Alaska.

Summary of the Fifth Pacific Coast Steelhead Management Meeting (April 1996) is a summary of panel discussions at a March 1996 meeting of steelhead managers. Topics included: a Stock Status review; description of available Coastwide Databases; Hatchery Supplementation; Hatchery-Wild Interactions; and Ocean and Estuarine Influences.

Pacific Salmonid Coded Wire Tag Releases: 1989 - 1995 (June 1996) documents coded-wire tag (CWT) releases of Pacific coast salmon and steelhead during 1989 through 1995, plus some preliminary 1996 data.

Mark List: 1989 - 1996 (August 1996) documents both actual and projected fin mark releases of Pacific Coast salmon and steelhead from 1989 through 1996, plus some projected 1997 releases.

48th Annual Report of the Pacific States Marine Fisheries Commission for the Year 1995 (September 1996) contains a summary of PSMFC activities, funding, and expenditures, and reviews selected Pacific Coast fisheries statistics for 1995.

FINANCIAL, AUDIT, AND BUDGET REPORTS

The Commission receives its financial support from contributions from its member states, grants, contracts, and indirect cost charges on external contracts. Since 1977, the states' contributions have remained level funded at \$106,000 per year. These contributions are made available from the member states in accordance with Article X of the Interstate Compact which created the Commission. The formula calls for eighty percent of the total contributions to be shared equally by those states having as a boundary the Pacific Ocean and five percent from Idaho. The fifteen percent balance is divided by the states in proportion to the primary market value of the products of their commercial fisheries on the basis of the (then) latest 5-year catch records.

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

for Retirement of

We have audited the general purpose financial statements of Pacific States Marine Fisheries Commission, as of and for the year then ended June 30, 1996, as listed in the table of contents. These general purpose 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 generally accepted auditing standards and *Government Auditing Standards*, issued by the Comptroller General of the United States and the Office of Management and Budget Circular A-128, *Audits of State and Local Governments*. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the general purpose financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the general purpose financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the general purpose financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the financial position of Pacific States Marine Fisheries Commission, at June 30, 1996 and the results of its operations for the year then ended are in conformity with generally accepted accounting principles.

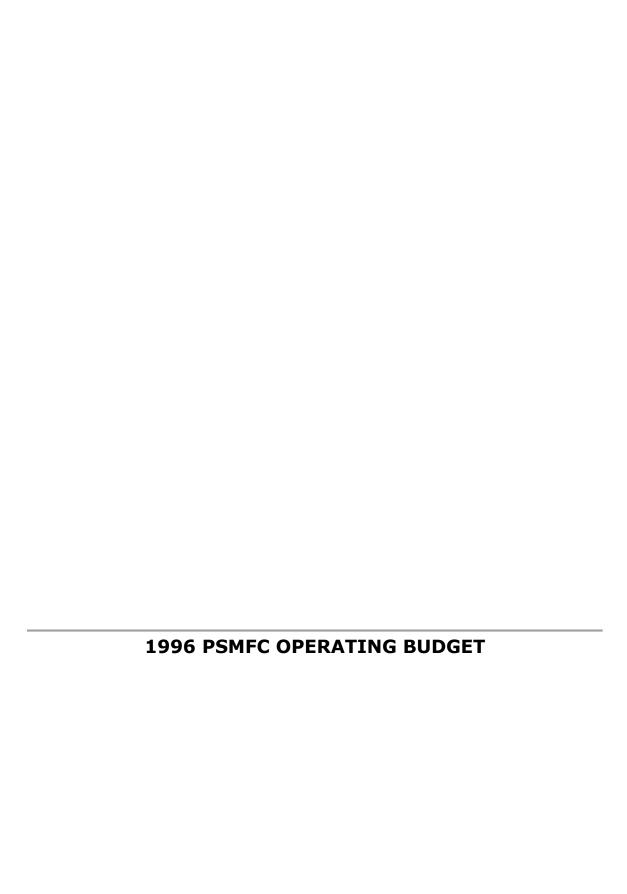
In accordance with *Government Auditing Standards*, we have also issued a report dated September 19, 1996 on our consideration of the Commission's internal control structure and a report dated September 19, 1996 on its compliance with laws and regulations.

COMBINED BALANCE SHEET - JUNE 30, 1996					
	General Fund	•	General Fixed Assets	General Long- Term Debt	Totals
ASSETS					
Cash and Investments	2,222,216				2,222,216
Due from other Funds	2,158,096	1,097,518			3,255,614
Receivables:					
Grants and Contracts		2,158,096			2,158,096
Other	21,088				21,088
Prepaids	13,165				13,165
Fixed Assets			3,883,338		3,883,338
Amount to be Provided					

777,701

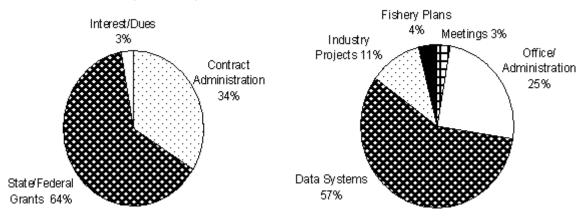
777,701

General Long-Term Debt					
Total Assets	4,414,565	3,255,614	3,883,338	777,701	12,331,218
LIABILITIES AND FUND EQUITY					
Liabilities					
Due to Other Funds	1,097,518	2,158,096			3,255,614
Accounts Payable	2,402,288				2,402,288
Payroll Liabilities	234,983				234,983
Accrued Compensated Absences	321,279				321,279
Tenant Deposits	2,452				2,452
Capital Lease Obligations				191,312	191,312
Real Estate Contracts				586,389	586,389
Deferred Revenues		1,097,518			1,097,518
Total Liabilities	4,058,520	3,255,614	0	777,701	8,091,835
Fund Equity					
Investment in General Fixed Assets			3,883,338		3,883,338
Fund Balance Reserved for Prepaid Insurance	13,165				13,165
Unreserved Fund Balance Designated for Subsequent Years' Expenditure	342,880				342,880
Total Fund Equity	356,045	0	3,883,338	0	4,239,383
Total Liabilities and Fund Equity	4,414,565	3,255,614	3,883,338	777,701	12,331,218



REVENUES (\$4,236,621)

EXPENDITURES (\$4,236,621)



Our audit was conducted for the purpose of forming an opinion on the general purpose financial statements taken as a whole. The supplementary data as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the general purpose financial statements. Such information has been subjected to the auditing procedures applied in the audit of the general purpose financial statements and, in our opinion, is fairly stated in all material respects in relation to the general purpose financial statements taken as a whole.

Pauly, Rogers and Co., P.C. Tigard, Oregon September 19, 1996

External Contracts for the Period	
July 1, 1995 - June 30, 1996	
NMFS Albacore Logbook & Port Sampling	\$60,000
NMFS Smolt Monitoring/Transportation	630,919
NMFS Interjurisdictional Fisheries Program	166,667
NMFS Pacific Fisheries Information Network (PacFIN)	1,822,305
NMFS Recreational Fisheries Information Network (RecFIN)	985,158
NMFS Northwest Emergency Assistance Program	1,737,352
NMFS/USFWS Regional Mark Processing Center	306,407
PFMC/NPFMC Council Support	34,000
Investigational New Animal Drug	89,100
CA Yreka Fish Habitat	31,113
CA Grow Pen Coordinator	40,020

CA Sea Urchin Fishery	65,706
ODFW/PSMFC Whiting Observer Program	32,628
ODFW/WDFW Fish Bypass Transportation Program	73,920
BPA Analytical Method Coordination	31,908
BPA Columbia River Coded Wire Tag	1,295,100
BPA Coordinated Information System/NED	1,519,658
BPA Integrated Hatchery Operations	444,992
BPA PIT Tag Data Base	945,471
BPA Smolt Monitoring	995,101
BPA Smolt Coordination (FPC)	897,044
BPA Squawfish Sport Reward Program	3,892,090
BPA Regional Rivers Information System	265,354
Fish Marking Coordination Support	33,319
For the Sake of the Salmon	388,892
Total Contracts	\$16,784,224

Editor's Note: Copies of the complete auditor's report are available upon request.

PERSONNEL IN 1996

	COMMISSIONERS	ADVISORS	COORDINATORS
Alaska	Dale Kelley, Juneau Loren Leman, Anchorage David Benton, Juneau	Chris Blackburn, Kodiak Liz Cabrera, Petersburg Paul Gronholdt, Sand Point Don Lane, Homer Henry Mitchell, Anchorage Doug Ogden, Anchorage Bruce Wallace, Ketchikan	Phil Rigby, Alaska Dept. Fish & Game
California	Al Petrovich, Sacramento David Ptak, San Diego Nao Takasugi, Sacramento	Robert Fletcher, San Diego Zeke Grader, Sausalito Don Hansen, Dana Point Charles Platt, Fort	L.B. Boydstun, California Dept. Fish & Game

		Bragg Robert Ross, Sacramento Roger Thomas, Sausalito Tony West, San Pedro	
Idaho	Jerry Conley, Boise Richard Meiers, Eagle Bruce Sweeney, Lewiston	Jack Brown, Soda Springs Keith Carlson, Lewiston Wesley Rose, Jerome	Ed Bowles, Idaho Dept. Fish & Game
Oregon	Paul Heikkila, Coquille Bob Montgomery, Cascade Locks Rudolph Rosen, Portland	Joe Easley, Astoria Herb Goblirsch, Otter Rock John Marincovich, Astoria Ron Sparks, Monmouth Frank Warrens, Portland	Kay Brown, Oregon Dept. Fish & Wildlife
Washington	Bern Shanks, Olympia Harriet Spanel, Bellingham Dean Sutherland, Vancouver	Fred Felleman, Seattle Rudy Peterson, Seattle John Thomas, White Salmon Terry Wright, Olympia Robert Zuanich, Seattle	Deborah Belcher, Washington Dept. Fish & Wildlife

PSMFC EXECUTIVE STAFF

Willy Kelly, PC/LAN Systems
Administrator
Todd Kaehler, UNIX Systems
Administrator
J. Kenneth Johnson, RMPC Manager
James Longwill, RMPC Computer
Specialist
Will Daspit, PacFIN Data Manager
Ed Heyman, PacFIN Computer
Programmer
Mana Hung, PacFIN Analyst/Programmer
Brad Stenberg, PacFIN Data Systems
Operator
Carter Stein, PTAGIS Database
Administrator
Jennifer Mead, PTAGIS Computer
Programmer

Rick Masters, Accounting Supervisor Renee Barrett, Accounting Assistant Sharon Hittle, Executive Assistant Liza Bauman, Clerical Specialist Teresa Fairchild, Clerical Specialist Don Warf, PTAGIS Field Systems
Engineer
Scott Livingston, PTAGIS Engineering
Technician
Drew Parkin, StreamNet Project Manager
Duane Anderson, StreamNet Data
Manager
Gary Christofferson, StreamNet Data
Technician
Craig Miller, Field Programs Data
Technician
Wade Van Buskirk, RecFIN

Programmer/Analyst