## Progress Report:

# Expansion of StreamNet Database to all Anadromous Salmonid Populations in the States of California, Oregon, and Washington 

For Period:
April 1, 1998 - September 30, 1998
October 1, 1998 - March 31, 1999

Submitted by:
Pacific States Marine Fisheries Commission

Submitted to:
U.S. Department of Commerce, NOAA National Marine Fisheries Service

Grant \#: NA66FN0361
June 1999

# Progress Report: Expansion of StreamNet Database to all Anadromous Salmonid Populations in the States of California, Oregon, and Washington 

## I. Tasks/Objectives

Refer to Attachment 1 for original task description.

## II. Personnel

Contained in fiscal/administrative reports and billings.

## III. Accomplishments

During the reporting period the following tasks were worked on and the described accomplishments made. Figures in this report come from a comparison of the StreamNet database version 99.1 of April 1999 to version 98.3 or March 1998. The numbers from this comparison do not reflect exactly the work done during the period, due to the lag times inherent in data submittal and management.

NMFS Anadromous Fish Trend Data Development. Expand the StreamNet database to all anadromous salmonid populations in the states of California, Oregon, and Washington.

Task 7.1 Abundance Data: Update natural adult abundance data, focusing on anadromous populations outside of the Columbia River Basin.

Significant progress was realized for this task. Eight hundred thirty two new trends and 1469 records for spawning population estimates were added to the database for Puget Sound and coastal Washington and Oregon. A total of 57 trends were updated for California, with 1226 records added. The range of years added was generally small, but significant historic additions were made for the northern Oregon coast area and recent years were added. For peak spawners counts, 1045 new trends and 3953 records were added outside California; changes in the range of years covered consisted of adding recent years' results. California updated 10 trends and 67 records. For redd counts, 207 new trends and 618 records were added outside California, mainly from Puget Sound and coastal Washington; recent years' data was added for the state of Washington. California updated 12 trends and added 68 records. For dam and weir counts, one trend was added for coastal Washington, while several were deleted for Oregon coastal areas after discovering errors; the number of records increased by 12. For California, 31 trends were updated and 649 records added; historic data were added back to 1922 .

Task 7.2 Hatchery Data: Update hatchery release and return data, focusing on anadromous populations outside of the Columbia River Basin.

Significant progress was realized for hatchery release data. A total of 5051 new trends and 36280 records were added to the StreamNet database. Also, the years covered were greatly expanded: Washington data were expanded from 1960-1997 to 1952-1999; Oregon data were expanded from 1970-1995 to 1901-1998; California data were expanded from 1977-1996 to 1947-1998.

Hatchery return data were not updated during the period outside of California. For California, 18 trends and 570 records were added, covering the years 1940-1998.

Task 7.3 Harvest Data: Update freshwater and marine harvest data, focusing on anadromous populations outside of the Columbia River Basin.

Progress was generally slow for these data types during the period, except for California. Eight trends and 20 records were added for coastal Washington marine harvest, covering the years 1975 through 1994. In California, 4 trends and 104 records were added.

Status: See attached table - "Anadromous Fish Data Status Outside of the Columbia Basin." Note that this table only depicts data compilation outside of the Columbia River Basin. All NMFS contract funds allocated to ODFW and WDFW are used for outside of the Columbia Basin. IDFG is also funded through this contract (though at a much lower amount). IDFG funding is primarily being used to compile IDFG-generated general parr monitoring data and make these data available through the StreamNet system.

## IV. Travel

Contained in fiscal/administrative reports and billings.

## V. Costs

Contained in fiscal/administrative reports and billings.

## VI. Consultations

None during reporting period. Update meeting held 4/12/99.

## VII. Major Problems Encountered or Anticipated

The major problems encountered over the past year revolved around significant staff turnover, in particular the Regional Data Manager position. StreamNet is now fully staffed and key contacts at PSMFC for this project are:

Mike Banach, Fisheries Biologist<br>Doug Burch, Regional Data Manager

## Pacific States Marine Fisheries Commission

 (503) 650-5400As a result of key staff changes, progress reporting has been delayed. This delay will not occur in the future.

An update meeting for NMFS-NWFSC staff was held on April 12, 1999 in Seattle. Stan Allen and Matt Freid (PSMFC) provided an update on StreamNet and progress to date.

An anticipated problem is funding. NMFS-NWFSC has indicated that the funding source that has been used in the past for these tasks will not be available after September 30, 1999. The concern is that this is the primary funding for any work done by the StreamNet project outside of the Columbia River Basin (coastal WA and OR, CA). It is the only funding source for work and compilation of data in California.

## VIII. Other

None.

## IX. Contacts

Stan Allen, Chief - Information Management Services
Pacific States Marine Fisheries Commission
Gladstone, Oregon
(503) 650-5400

## $\underline{\text { StreamNet }}$

Mike Banach, Fisheries Biologist
Doug Burch, Regional Data Manager
Pacific States Marine Fisheries Commission
(503) 650-5400

## X. Documents/Reports/Manuscripts Prepared

None.

## Anadromous Fish Data Status Outside of the Columbia Basin

|  | Puget Sound |  | WA Coastal |  | N. OR Coastal |  | S. OR Coastal |  | N. CA Coastal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4-98 | 4-99 | 4-98 | 4-99 | 4-98 | 4-99 | 4-98 | 4-99 | 4-98 | 4-99 |
| Adult Return Spawning population estimates | $\begin{gathered} \hline 278^{2} \\ 1953-1995 \end{gathered}$ | $\begin{gathered} 361 \\ 1953-1997 \end{gathered}$ | $\begin{gathered} \hline 106 \\ 1967-1995 \end{gathered}$ | $\begin{gathered} 167 \\ 1996-1997 \end{gathered}$ | $\begin{gathered} 98 \\ 1960-1997 \end{gathered}$ | $\begin{gathered} 502 \\ 1960-1998 \end{gathered}$ | $\begin{gathered} \hline 70 \\ 1955-1997 \end{gathered}$ | $\begin{gathered} \hline 354 \\ 1955-1998 \end{gathered}$ | $\begin{gathered} \hline 12 \\ 1950-1996 \end{gathered}$ | $\begin{gathered} 62 \\ 1940-1998 \end{gathered}$ |
| Adult Return - <br> Peak spawning counts | $\begin{gathered} \hline 47 \\ 1951-1995 \end{gathered}$ | $\begin{gathered} \hline 55 \\ 1951-1996 \end{gathered}$ | $\begin{gathered} \hline 44 \\ 1952-1991 \end{gathered}$ | $\begin{gathered} \hline 48 \\ 1952-1995 \end{gathered}$ | $\begin{gathered} \hline 248 \\ 1947-1997 \end{gathered}$ | $\begin{gathered} 889 \\ 1947-1998 \end{gathered}$ | $\begin{gathered} \hline 145 \\ 1946-1997 \end{gathered}$ | $\begin{gathered} \hline 537 \\ 1946-1998 \end{gathered}$ | $\begin{gathered} \hline 19 \\ 1967-1994 \end{gathered}$ | $\begin{gathered} \hline 46 \\ 1962-1998 \end{gathered}$ |
| Adult Return Redd counts | $\begin{gathered} 9 \\ 1966-1992 \end{gathered}$ | $\begin{gathered} \hline 147 \\ 1996-1997 \end{gathered}$ | none | $\begin{gathered} \hline 62 \\ 1982-1983 \end{gathered}$ | $\begin{gathered} \hline 6 \\ 1970-1997 \end{gathered}$ | $\begin{gathered} \hline 10 \\ 1970-1997 \end{gathered}$ | $\begin{gathered} \hline 4 \\ 1976-1997 \end{gathered}$ | $\begin{gathered} \hline 7 \\ 1976-1997 \end{gathered}$ | $\begin{gathered} \hline 14 \\ 1980-1994 \end{gathered}$ | $\begin{gathered} \hline 24 \\ 1980-1998 \end{gathered}$ |
| Dam/Weir Counts (adult/juvenile) | $\begin{gathered} 13 \\ 1926-1992 \end{gathered}$ | $\begin{gathered} \hline 13 \\ 1926-1992 \end{gathered}$ | $\begin{gathered} \hline 10 \\ 1970-1992 \end{gathered}$ | $\begin{gathered} 11 \\ 1970-1992 \end{gathered}$ | $\begin{gathered} \hline 5 \\ 1962-1983 \end{gathered}$ | $\begin{gathered} \hline 2 \\ 1959-1990 \end{gathered}$ | $\begin{gathered} \hline 26 \\ 1942-1998 \end{gathered}$ | $\begin{gathered} \hline 20 \\ 1942-1998 \end{gathered}$ | $\begin{gathered} \hline 18 \\ 1925-1994 \end{gathered}$ | $\begin{gathered} \hline 45 \\ 1922-1999 \end{gathered}$ |
| Harvest - <br> Freshwater | $\begin{gathered} \hline 450 \\ 1961-1994 \end{gathered}$ | $\begin{gathered} \hline 450 \\ 1991-1994 \end{gathered}$ | $\begin{gathered} \hline 183 \\ 1961-1994 \end{gathered}$ | $\begin{gathered} \hline 183 \\ 1991-1994 \end{gathered}$ | $\begin{gathered} \hline 293 \\ 1956-1994 \end{gathered}$ | $\begin{gathered} \hline 293 \\ 1956-1994 \end{gathered}$ | $\begin{gathered} \hline 175 \\ 1956-1994 \end{gathered}$ | $\begin{gathered} \hline 175 \\ 1956-1994 \end{gathered}$ | none | $\begin{gathered} \hline 4 \\ 1967-1999 \end{gathered}$ |
| Harvest - <br> Marine | $\begin{gathered} \hline 6 \\ 1961-1994 \end{gathered}$ | $\begin{gathered} \hline 6 \\ 1961-1994 \end{gathered}$ | none | $\begin{gathered} \hline 8 \\ 1975-1994 \end{gathered}$ | none | none | none | none | none | $\begin{gathered} \hline 30 \\ 1952-1990 \end{gathered}$ |
| Hatchery Releases | $\begin{gathered} 3737 \\ 1960-1997 \end{gathered}$ | $\begin{gathered} 5437 \\ 1952-1999 \end{gathered}$ | $\begin{gathered} 2028 \\ 1960-1996 \end{gathered}$ | $\begin{gathered} \hline 2603 \\ 1952-1999 \end{gathered}$ | $\begin{gathered} \hline 325 \\ 1970-1995 \end{gathered}$ | $\begin{gathered} 1919 \\ 1902-1998 \end{gathered}$ | $\begin{gathered} 294 \\ 1975-1995 \end{gathered}$ | $\begin{gathered} 1476 \\ 1901-1998 \end{gathered}$ | $\begin{gathered} 78 \\ 1977-1996 \end{gathered}$ | $\begin{gathered} 388 \\ 1947-1998 \end{gathered}$ |
| Hatchery Returns | $\begin{gathered} \hline 48 \\ 1938-1991 \end{gathered}$ | $\begin{gathered} \hline 48 \\ 1938-1991 \end{gathered}$ | $\begin{gathered} \hline 18 \\ 1961-1991 \end{gathered}$ | $\begin{gathered} \hline 18 \\ 1961-1991 \end{gathered}$ | $\begin{gathered} \hline 51 \\ 1962-1994 \end{gathered}$ | $\begin{gathered} \hline 51 \\ \text { 1962-1994 -- } \\ \text { Major update } \\ \text { including } \\ \text { disposition } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 32 \\ 1968-1994 \end{gathered}$ | $\begin{gathered} \hline 32 \\ \text { 1968-1994 -- } \\ \text { Major update } \\ \text { including } \\ \text { disposition } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1 \\ 1958-1979 \end{gathered}$ | $\begin{gathered} \hline 18 \\ 1940-1998 \end{gathered}$ |
| Facilities - <br> Dams | 226 | 226 | 51 | 51 | 15 | 15 | 113 | 135 | 52 | 52 |
| Facilities Hatcheries | 84 | $\begin{gathered} 84 \text {-- Major } \\ \text { update } \\ \text { initiated } \\ \hline \end{gathered}$ | 37 | $\begin{gathered} 37 \text {-- Major } \\ \text { update } \\ \text { initiated } \\ \hline \end{gathered}$ | 9 | $\begin{aligned} & \hline 9 \text {-- Major } \\ & \text { update } \\ & \text { initiated } \end{aligned}$ | 6 | $\begin{aligned} & \hline 6 \text {-- Major } \\ & \text { update } \\ & \text { initiated } \end{aligned}$ | 3 | 3 |
| Distribution and use type |  |  |  |  |  |  |  |  |  |  |
| Enhancement/mitigation projects | none | Exchange format being modified | none | Exchange format being modified | none | Exchange format being modified | none | Exchange format being modified | none | Exchange format being modified |

${ }^{1}$ California data in StreamNet are not as extensive for other states. This should improve considerably in the next year as CDFG becomes more active and the project matures over the next year.
${ }^{2}$ Top numbers are the number of trends in the StreamNet database at that date. Bottom entry shows the range of years the data cover for that cell

