

Proposal for 1997/98 Continuation of
EXPANSION OF StreamNet DATABASE TO ALL ANADROMOUS
SALMONID POPULATIONS IN THE STATES OF CALIFORNIA,
IDAHO, OREGON, AND WASHINGTON

submitted by:

Pacific States Marine Fisheries Commission

I. Introduction

This proposal seeks to extend the term and conditions of Agreement NA66FN0361 currently in place between the National Marine Fisheries Service (NMFS) and the Pacific States Marine Fisheries Commission (PSMFC). The original agreement provided funds to allow PSMFC staff to compile select datasets provided by NMFS into the StreamNet data system. This extension aims to:

- 1) Update data compiled under the original contract with more current data,
- 2) Incorporate additional data from electronic files and documents provided by NMFS but not included in the original contract,
- 3) Incorporate historic data from British Columbia, and
- 4) Establish procedures for future update of these data.

This proposal outlines only the new tasks proposed under the extension; tasks in the original agreement either have been completed or are ongoing.

II. Task List - Project Narrative

Task 1. Expand StreamNet abundance, hatchery, and harvest databases

Objective: This task expands the scope of review and incorporation of the NMFS contract databases into the StreamNet system. This includes reviewing and, as appropriate, incorporating electronic files not included in the first year of this agreement. Documents provided as part of the bibliography of the NMFS contract databases would also be reviewed in detail in order to identify data not previously incorporated. Any appropriate and applicable data from these documents would be added to the system. Additionally, we would seek to incorporate data from the NMFS contract databases for British Columbia.

Results and Benefits Expected: The result would be a more complete dataset for the four state area and, in addition, the expansion of the StreamNet data system to

include British Columbia. The principal benefit of the addition of B.C. data would be the ability to compare and contrast B.C. data with data from the states.

Sub-Task A: Expand StreamNet Abundance Database

Objective: This task would expand the content and geographic scope of the current StreamNet natural adult abundance data holdings to include additional historical information for all anadromous populations in Washington, Oregon, Idaho, and California and to include historical information for all anadromous populations in British Columbia by incorporating data from NMFS contract databases to the greatest extent feasible into the StreamNet database system.

Results and Benefits Expected: By expanding the geographic scope and historical contents of this data component, the database will provide a more comprehensive information set of natural spawning ground returns and other adult abundance indices. This information is vital in the assessment of stock status and population trends of Pacific Northwest anadromous salmonids.

Sub-Task B: Expand StreamNet Hatchery Database

Objective: This task would expand the content and geographic scope of the current StreamNet hatchery release and return holdings to include historical information for all anadromous populations in British Columbia by incorporating data from NMFS contract databases to the greatest extent feasible into the StreamNet database system.

Results and Benefits Expected: By expanding the geographic scope and historical contents of this data component, the database will provide a more comprehensive information set of hatchery influences in the Pacific Northwest. This information is useful in the determination of wild stock status, as well as in the assessment of the health and status of Pacific Northwest populations of anadromous salmonids.

Sub-Task C: Expand StreamNet Harvest Database

Objective: This task would expand the content and geographic scope of the current StreamNet freshwater and marine harvest data holdings to include historical information for all anadromous populations in British Columbia by incorporating data from NMFS contract databases to the greatest extent feasible into the StreamNet database system.

Results and Benefits Expected: By expanding the geographic scope and historical contents of this data component the database will provide a more comprehensive information set of freshwater and marine harvest. This information is used to monitor harvest trends and assess the health and status of Pacific Northwest populations of anadromous salmonids.

Task 2. Update abundance, hatchery, and harvest data through 1996 for the States of California, Idaho, Oregon, and Washington.

Objective: This task would update the abundance, hatchery, and harvest datasets currently in the StreamNet system through the 1996 run year where feasible for the States of California, Idaho, Oregon, and Washington.

Results and Benefits Expected: The completion of this task would result in a comprehensive information source with the most up to date information available.

Sub-Task A: Acquire and incorporate 1996 Abundance Data

Objective: This task would add 1996 run year data to the datasets resulting from task 1A for the States of California, Idaho, Oregon, and Washington.

Results and Benefits Expected: This task would provide and make accessible the most current data available in this category.

Sub-Task B: Acquire and incorporate 1996 Hatchery Data

Objective: This task would add 1996 run year data to the datasets resulting from task 1B for the States of California, Idaho, Oregon, and Washington.

Results and Benefits Expected: This task would provide and make accessible the most current data available in this category.

Sub-Task C: Acquire and incorporate 1996 Harvest Data

Objective: This task would add 1996 run year data to the datasets resulting from task 1C for the States of California, Idaho, Oregon, and Washington.

Results and Benefits Expected: This task would provide and make accessible the most current data available in this category.

IV. Task Details

Task 1: Expand StreamNet abundance, hatchery, and harvest databases

CONTRACTED TO: Pacific States Marine Fisheries Commission (PSMFC)

TIME FRAME: October 1, 1997 - September 30, 1998

Sub-Task 1A: Expand StreamNet Abundance Database

I. Work to be Accomplished

This sub-task would expand the scope of adult abundance data in the StreamNet database to include all of the populations in California, Idaho, Oregon, Washington, and British Columbia by incorporating existing information from the NMFS contract databases into the StreamNet database.

Specific tasks include:

- a. Examine additional NMFS electronic files and documents not included in the original agreement for the States of California, Idaho, Oregon, and Washington and incorporate any applicable data as appropriate.
- b. Examine and, as appropriate, incorporate into the StreamNet database adult abundance records from NMFS contract datasets for British Columbia. The process for accomplishing this will include: 1) reformatting and coding of data to meet StreamNet standards, 2) adding standardized geographic reference codes to all trends incorporated (new coding scheme will have to be developed as an analog to the US EPA reach numbers), and 3) adding reference information into the StreamNet reference system. The NMFS contract datasets to be processed are shown in table 1. Sources for these data include catch, escapement, and other historical data reports for chinook, chum, coho, pink, sockeye, steelhead, and coastal cutthroat; as well as reports prepared by Big Eagle & Associates and LGL Limited for the Northwest Fisheries Center. These reports in some cases contain records for areas other than British Columbia. This contract addresses only those records relating to British Columbia.

Data Table	# of Records	Data Type	Year Range	States Included
CHINOOK				
CN_TREND.DBF	0 ¹	Adult Return	Varies	BC
CN_DATA.DBF	0 ¹	Adult Return	Varies	BC
CHUM				
CM_TREND.DBF	61	Adult Return	Varies	BC
CM_DATA.DBF	2,403	Adult Return	Varies	BC

¹ The report entitled *Chinook Salmon Catch, Escapement, and Historical Abundance Data, 9 June 1995*, explains that only certain trends from the Canadian SEDS database were deemed reliable and included in the final data submission to NMFS. Table 42 in that report (page 21) details approximately 80 trends which were supposed to be provided in the tables CN_TREND.DBF and CN_DATA.DBF. The copies of these files received by PSMFC from NMFS did not contain these data. StreamNet staff will attempt to locate the missing data. If successful, these data will be incorporated. Otherwise, chinook escapement data for British Columbia will not be incorporated into StreamNet.

Data Table	# of Records	Data Type	Year Range	States Included
COHO				
CO_TREND.DBF	34	Adult Return	Varies	BC
CO_DATA.DBF	704	Adult Return	Varies	BC
CUTTHROAT				
No data available				
PINK				
PK_TREND.DBF	20	Adult Return	Varies	BC
PK_DATA.DBF	660	Adult Return	Varies	BC
SOCKEYE				
SO_TREND.DBF	26	Adult Return	Varies	BC
SO_DATA.DBF	1,154	Adult Return	Varies	BC
STEELHEAD				
No Data Available				

Table 1. NMFS contract abundance datasets to be processed.

Sub-Task 1B: Expand StreamNet Hatchery Database

I. Work to be Accomplished

This sub-task will expand the scope of hatchery data in the StreamNet database to include all of the populations in British Columbia by incorporating existing information from the NMFS contract databases into the StreamNet database.

Specific tasks include:

- a. Examine and incorporate as appropriate into StreamNet database hatchery records from NMFS contract datasets. This process will involve: 1) reformatting and coding of data to meet StreamNet standards, 2) adding standardized geographic reference codes to all trends incorporated, and 3) adding reference information into StreamNet reference system. Table 2 identifies the NMFS contract datasets to be processed. Hatchery production data submitted to PSMFC by Greg Ruggerone of Natural Resources Consultants on 3/11/96 are the principal sources for these data. Note that the original databases contained additional records for areas outside of British Columbia. This contract addresses only those records relating to British Columbia.

Data Table	# of Records	Data Type	Species	Year Range	States Included
CHINREL.DBF	3,565	Releases	Ch	Varies	BC
CHUMREL.DBF	2,126	Releases	Cm	Varies	BC
COHOREL.DBF	5,939	Releases	Co	Varies	BC
CUTTREL.DBF	644	Releases	Ct	Varies	BC
PINKREL.DBF	401	Releases	Pk	Varies	BC
SOCKREL.DBF	848	Releases	So	Varies	BC
STEELREL.DBF	1,388	Releases	St	Varies	BC
CHINSPSU.DBF	632	Returns	Ch	Varies	BC
CHUMSPSU.DBF	165	Returns	Cm	Varies	BC
COHOSPSU.DBF	542	Returns	Co	Varies	BC
CUTTSPSU.DBF	75	Returns	Ct	Varies	BC
PINKSPSU.DBF	56	Returns	Pk	Varies	BC
SOCKSPSU.DBF	284	Returns	So	Varies	BC
STEELSPSU.DBF	390	Returns	St	Varies	BC

Table 2. NMFS contract hatchery datasets to be processed.

Sub-Task 1C: Expand StreamNet Harvest Database

I. Work to be Accomplished

This sub-task will expand the scope of harvest data in the StreamNet database to include all of the populations in British Columbia by incorporating existing information from the NMFS contract databases into the StreamNet database.

Specific tasks include:

- a. Examine and incorporate as appropriate into StreamNet database marine harvest records from NMFS contract datasets. This process will included: 1) reformatting and coding of data to meet StreamNet standards, 2) adding standardized geographic reference codes to all trends incorporated, and 3) adding reference information into StreamNet reference system. Table 3 identifies the NMFS contract datasets to be processed. Sources include Marine Commercial and Sport Catch Databases with Information on Salmon and Steelhead, and a report prepared by Big Eagle & Associates and LGL Limited for the Northwest Fisheries Center. Only British Columbia records in these datasets and reports will be processed.

Data Table	# of Records	Data Type	Species	Year Range	States Included
MACA6.DBF	70,034	Marine Troll	All	Varies	BC
MACA7.DBF	3,464	Marine Sport.	All	Varies	BC
MAEF7.DBF	1,510	Marine Sport.	All	Varies	BC

Table 3. NMFS contract marine harvest datasets to be processed.

- b. Examine and incorporate as appropriate into StreamNet database freshwater harvest records from NMFS contract datasets. This process will included: 1) reformatting and coding of data to meet StreamNet standards, 2) adding standardized geographic reference codes to all trends incorporated, and 3) adding reference information into StreamNet reference system. Table 4 identifies the NMFS contract datasets to be processed.

Data Table	# of Records	Data Type	Year Range	States Included
CHINOOK				
INDFRAS.XLS	40	FW Sport	Varies	BC
CHUM				
INDFRAS.XLS	40	FW Sport	Varies	BC
COHO				
INDFRAS.XLS	40	FW Sport	Varies	BC
CUTTHROAT				
No data available				
PINK				
INDFRAS.XLS	40	FW Sport	Varies	BC
SOCKEYE				
INDFRAS.XLS	40	FW Sport	Varies	BC
STEELHEAD				
BCSTTRND.DBF	244	FW Sport	Varies	BC
BCSTDATA.DBF	1,890	FW Sport	Varies	BC

Table 4. NMFS contract freshwater harvest datasets to be processed.