

May 1993

**COLUMBIA RIVER COORDINATED INFORMATION
SYSTEM
DATA CATALOG**



DOE/BP-94402-8



This report was funded by the Bonneville Power Administration (BPA), U.S. Department of Energy, as part of BPA's program to protect, mitigate, and enhance fish and wildlife affected by the development and operation of hydroelectric facilities on the Columbia River and its tributaries. The views of this report are the author's and do not necessarily represent the views of BPA.

This document should be cited as follows:

O'Connor, Dick Computer Information Consultant; Rich Tomsinski, Computer Information Consultant, Washington Department of Fisheries, Stan Allen, Fish and Wildlife Data Coordinator, Doug Reece, Systems Analyst, Idaho Department of Fish & Game, U.S. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife, Project Number 88- 108, Contract Number DE-FC79-89BP94402, 217 electronic pages (BPA Report DOE/BP-94402-8)

This report and other BPA Fish and Wildlife Publications are available on the Internet at:

<http://www.efw.bpa.gov/cgi-bin/efw/FW/publications.cgi>

For other information on electronic documents or other printed media, contact or write to:

Bonneville Power Administration
Environment, Fish and Wildlife Division
P.O. Box 3621
905 N.E. 11th Avenue
Portland, OR 97208-3621

Please include title, author, and DOE/BP number in the request.

**COLUMBIA RIVER
COORDINATED INFORMATION SYSTEM
DATA CATALOG**

Prepared by:

Dick O'Connor, Computer Information Consultant
Rich Tomsinski, Computer Information Consultant
Washington Department of Fisheries
Olympia WA

Stan Allen, Fish and Wildlife Data Coordinator
Doug Reece, Systems Analyst
Idaho Department of Fish & Game
Boise ID

Prepared for:

U.S. Department of Energy
Bonneville Power Administration
Division of Fish and Wildlife
P.O. Box 3621
Portland, OR 97283-362 1

Project Number 88- 108
Contract Number DE-FC79-89BP94402

MAY 1993

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
PREFACE	i
EXECUTIVE SUMMARY	v
INTRODUCTION	1
METHODS	3
RESULTS	5
Dataset Directory Contents	5
Using the Dataset Directory: An Example	6
Data Item Directory Contents	6
Using the Data Item Directory: An Example	6
CONCLUSIONS	9
Usefulness of the Data Catalog	9
Accessing and Updating the Data Catalog	9
Future Enhancements to the Data Catalog	10
RECOMMENDATIONS	11
ACKNOWLEDGEMENTS	12

LIST OF APPENDICES

APPENDIX A - SAMPLE DATASET DIRECTORY FORM	A.1
APPENDIX B - DATASET CONTACT INFORMATION	B-1
APPENDIX C - DATASET DIRECTORY (by Administering Agency)	C. 1
Bonneville Power Administration	C1
Chelan County Public Utility District	C.2
Idaho Department of Fish and Game	C-4
Oregon Department of Fish & Wildlife	C.11
Fish Passage Center	C.31
Portland General Electric Company	C.34
Pacific States Marine Fisheries Commission	C-35
Northwest Power Planning Council	C-38
Shoshone-Bannock Tribes	C-41
Confederated Tribes of the Umatilla Reservation	C-49
U.S. Forest Service	C.54
Washington Department of Fisheries	C-55
Confederated Tribes of the Warm Springs	C.77
Washington Department of Wildlife.	C.85
..	
APPENDIX D - AN INDEX TO THE DATASET DIRECTORY..	D-1
APPENDIX E - DATA ITEM DIRECTORY CONTACTS..	E.1
APPENDIX F - NEEDS SURVEY RESPONDENTS (by name)	F-1
APPENDIX G - NATURAL PRODUCTION DATA ITEM DIRECTORY	
(by species, run)	G-1
NATURAL PRODUCTION: Spring Chinook	G-1
NATURAL PRODUCTION: Summer Chinook	G-8
NATURAL PRODUCTION: Fall Chinook	G-15
NATURAL PRODUCTION: Coho	G-21
NATURAL PRODUCTION: Chum	G-28
NATURAL PRODUCTION: Sockeye	G-35
NATURAL PRODUCTION: Winter Steelhead	G-41
NATURAL PRODUCTION: Summer Steelhead	G-47
HABITAT	G.54
APPENDIX H - HATCHERY PRODUCTION Data Item Directory	H-1
APPENDIX I - SYSTEM MONITORING Data Item Directory	I.1

PREFACE

An essential component of the effort to rebuild the Columbia Basin's anadromous fish resources is that available information and experience be organized and shared between numerous organizations and individuals. Past experience and knowledge must form the basis for actions into the future. Much of this knowledge exists only in unpublished form in agency and individual files. Even that information which is published in the form of technical and contract reports receives only limited distribution and is often out of print and unavailable after a few years. Only a small fraction of the basin's collective knowledge is captured in permanent and readily available databases (such as the Northwest Environmental Database) or in recognized journals.

State, tribal, and federal fishery managers have recognized these information management problems and have committed to a program, the Coordinated Information System Project, to capture and share more easily the core data and other information upon which management decisions are based. That project has completed scoping and identification of key information needs and development of a project plan. Work performed under the CIS project will be coordinated with and extend information contained in the Northwest Environmental Database. Construction of prototype systems will begin in 1992.

This report incorporates comments received through July 15, 1992. The most frequent comment was that it was difficult to search and locate specific information in the catalog. Summary information (e.g. which existing datasets contain smolt length information) is also difficult to obtain. The authors recognize these problems, but can not adequately address them in a written document. The Data Catalog will be translated into a database format early in Phase 3 of this project. This electronic version will provide the search and reporting features asked for.

This report is one in a series of seven describing the results of the Coordinated Information System scoping and needs identification phase. A brief description of each of these reports follows.

CIS Phase II Products

Phase II Summary Report

This report summarizes and integrates the results of the next five reports and relates them to

deliverables identified in the Phase II cooperative agreement. Broader issues of organization and operation which are not appropriate for the more focused reports are also discussed. This report should be viewed as an executive summary for the CIS project to date. If one wants a quick overview of the CIS project, this report and the project plan will provide that perspective.

Report on Information Needs

This report identifies the core information needed to plan, implement, monitor, and **evaluate** projects to manage and restore anadromous fish. This information has been organized into various categories and missing items are identified. Prototype testing in 1992 will focus on this core information.

Data Catalog Report

This report might be thought of as a "yellow pages" directory describing relevant numeric data available throughout the basin. An easily searched electronic version will be developed during prototype development and the catalog will be maintained and expanded.

Technical and Administrative Options Report

This report describes a process for implementing the CIS and feasible hardware, software, and operational options. Recommendations are made for the prototype and implementation phases of the project.

Library Resource Options Report

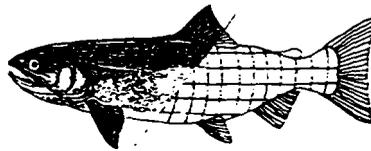
This report describes options for the size and operational features for the non-numeric portion of the CIS. Recommendations are made for the prototype and implementation phases.

Stock Summary Reports

These reports will be issued in separate volumes for Oregon, Washington, and Idaho at **various** times throughout summer, 1992. The reports contain basic biologic information on anadromous fish populations in the Columbia Basin. This information will be incorporated into computerized data bases during prototyping and implementation **and** will be updated annually.

Project Plan

The Project Plan is derived directly from recommendations from the above reports. It describes anticipated activities, staff needs, and cost of the project for the testing and implementation phases.



EXECUTIVE SUMMARY

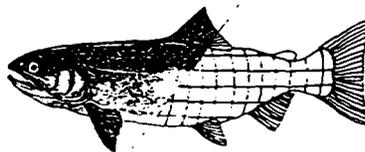
*"...The Council's system monitoring and evaluation program will include:
...Development of a coordinated information system & signed to facilitate effective exchange and dissemination of fisheries data. "*

(From the 1987 Columbia River Basin Fish and Wildlife Program report by the Northwest Power Planning Council: Section 200 (d)(2)(C))

The Columbia River Coordinated Information System (CIS) Project started in 1989 to address regional data sharing. Coordinated exchange and dissemination of any data must begin with dissemination of information about those data, such as: what is available; where the data are stored; what form they exist in; who to contact for further information or access to these data. In Phase II of this Project (1991), a Data Catalog describing the contents of regional datasets and less formal data collections useful for system monitoring and evaluation projects was built to improve awareness of their existence. Formal datasets are described in a 'Dataset Directory,' while collections of data are linked to those that collect such information in the 'Data Item Directory.'

The Data Catalog will serve regional workers as a useful reference which centralizes the institutional knowledge of many data contacts into a single source. Recommendations for improvement of the Catalog during Phase III of this Project include addressing gaps in coverage, establishing an annual maintenance schedule, and loading the contents into a PC-based electronic database for easier searching and cross-referencing.

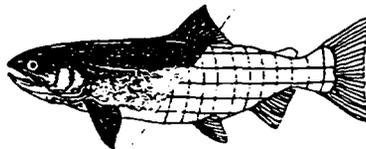
A comprehensive Data Catalog kept current by inter-agency agreements can save researchers valuable time by providing 'pointers' to sources of needed data. Commitment to keeping the Catalog current will ensure the continued usefulness of this regional data reference.



INTRODUCTION

A major objective of the Columbia River Coordinated Information System (CIS) Project is to promote effective sharing of information among regional agencies and workers involved in systemwide monitoring and evaluation work. One obstacle to workers making use of information is lack of knowledge about what data have been collected and compiled by others in the region. Without this knowledge, workers may feel their work is impeded by lack of data, when in fact the impediment is their own lack of awareness of existing data sources.

To address this need, Core Group members (staff from agencies participating in Phase II of the CIS Project) cooperated in building a Data Catalog to assemble and house information about regional data sources. The intention of this task was to provide regional workers with a "Yellow Pages"-style reference that summarizes information collected about data sources critical to their work. From this reference, the user can determine if helpful data are available, and can find the names and contact information of those who can provide such data. In this way, a useful tool can be built without the necessity of building a huge centralized database containing everyone's data about everything potentially pertinent to system monitoring and evaluation.

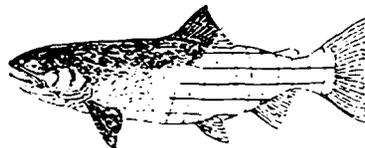


METHODS

Based on time schedules and the way regional workers are accustomed to using references, the CIS Core Group decided to construct a printed volume, leaving electronic options open for future work. During early discussions, data were categorized as types formally organized into some form of structured 'dataset' and those that were much more loosely organized. The concept of a 'Data Catalog' emerged, composed of a 'Dataset Directory' describing formal datasets, and a 'Data Item Directory' providing a pointer to individuals who collect and maintain informal collections. Washington Department of Fisheries (WDF) took the responsibility to locate and organize the contents of the Dataset Directory, while Idaho Department of Fish and Game (IDFG) agreed to generate the Data Item Directory using responses from the Needs Survey (another CIS work product covered in a separate report).

A Dataset Directory form (see Appendix A) was developed and distributed by CIS Core Group members in mid-August, 1991 to facilitate collection of information about the formal datasets. Each dataset contact identified by Group members (see Appendix B) was asked to provide a summary for each dataset they were aware of (or are responsible for), listing the dataset name, data items included, areas, species, and years covered, and the name of the primary dataset contact, or maintainer. Forms were collected by WDF and entered into a simple database structure to facilitate generation of the Directory.

In addition, CIS needs survey respondents who indicated they collected or maintained various kinds of information were noted by IDFG and compiled into a listing termed the Data Item Directory. Such responses were organized by data type (Hatchery, Natural Production, and System), sorted by data item, and coded by the unique interview number assigned to each respondent.



RESULTS

Dataset Directory Contents

By February, 1992, 93 directories had been submitted and entered into the Dataset Directory (see Appendix C). The breakdown of these by agency is:

WDF	Washington Department of Fisheries (22)
ODFW	Oregon Department of Fish and Wildlife (20)
WDW	Washington Department of Wildlife (9)
CIWS	Confederated Tribes of the Warm Springs (8)
SBT	S hoshone-Bannock Tribes (8)
IDFG	Idaho Department of Fish and Game (7)
CTUIR	Confederated Tribes of the Umatilla Indian Reservation (5)
FPC	Fish Passage Center (3)
NPPC	Northwest Power Planning Council (3)
PSMFC	Pacific State Marine Fisheries Commission (3)
CHELAN	Chelan PUD (2)
BPA	Bonneville Power Administration (1)
PGE	Portland General Electric (1)
USFS	U.S. Forest Service (1)

The initial intent was to collect information about hatchery, natural production, and *system* data sources. Other sources were identified as well, and some dataset contain information from more than one category. The current Directory identifies 28 natural production datasets, 15 hatchery datasets, 16 habitat-related datasets, 14 catch or sampling datasets, 12 recovery datasets, and 8 system-related datasets. An attempt was made to assign each dataset to a category based on predominant data type; the resulting index (Appendix D) will assist Catalog users in locating datasets by content rather than simply by agency. It is hoped that circulation of the Directory will prompt more submissions for some of these categories to extend their coverage. Interpretation of the original instructions may have emphasized "hatchery-oriented" datasets, for example, when regional workers really need data of all kinds related to hatchery stocks of fish.

Regional data sources are stored in a variety of formats. Not all directories specified the type of data files used, but among those that did, there were 24 PC databases, 20 ASCII data files, 13 PC spreadsheets, 11 minicomputer data base systems, 9 "paper" datasets, and one mainframe data source. The most common PC database used is dBase III (with R:Base and

Paradox represented as well), and nearly all spreadsheet datasets mentioned were stored in Lotus 1-2-3. This reflects the growing dependence of fisheries workers on desktop computers, particularly IBM-compatible models. Proposals for improving data access and data flow to these workers must keep in mind such findings to better target their solutions to available equipment.

Using the Dataset Directory: An Example

A worker needs to locate formal agency datasets that contain information concerning the life history of hatchery-reared fish; specifically their disease history. The second page of Appendix D indicates that the directories on pages III-10, III-76, and III-90 contain hatchery rearing information. In turn, these pages describe datasets maintained by IDFG, WDF, and Washington Department of Wildlife (WDW), all of which contain some information about fish disease history. Now the worker can phone the three data contacts listed, learn more detail regarding the data collected, and obtain copies of the precise information needed directly from the source.

Data Item Directory Contents

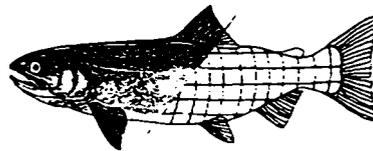
The data items included in the CIS needs survey were chosen by Core Group members and other agency contacts to represent information most needed to address system monitoring and evaluation tasks. According to the survey results, most of these items are collected or maintained in some manner by at least one respondent in the region. The name and interview number of all respondents who collect or maintain data is given in Appendix E, while full contact information for them (affiliation, address, phone) is listed in Appendix F. Data Item Directory information is organized by section: Natural Production (Appendix G), Hatchery Production (Appendix H), and System Monitoring (Appendix I).

The Data Item Directory is a good starting point for workers interested in data that is seldom organized into formal datasets. Often, these "data collections" that survey respondents reference are small files or piles of data forms that have not been organized further due to original study purpose, workload or competing priorities. In fact, the only available collections of some natural production or habitat data items may be in this Directory. Unfortunately, the current Directory does not include details about area, species or time period coverage, so workers interested in any of the listed data items will have to request those details from the data contacts listed.

Using the Data Item Directory: An Example

If that same worker wanted to find even more information about hatchery disease histories, Appendix H lists a category "H307, Disease history" with 17 codes following it (I003, I111,

1114, etc.). The names of these people (Kent Hauck, Christine *Moffitt*, Rodney Duke, etc.) can be easily found on the first page of Appendix E, and their contact information can be found in Appendix F, which is organized by last name. Now this worker has 17 additional contacts who can potentially provide the kind of disease history information needed to answer the original question.



CONCLUSIONS

Usefulness of the Data Catalog

To the extent that major regional datasets of interest have been covered, this reference will be extremely useful to those involved in systemwide monitoring and evaluation work. We assume that some useful datasets have been missed, but feel wide dissemination of this report will eventually bring word of such oversights to the CIS Project Office. We also seek agency feedback on the dataset descriptions attributed to them, in the hope that any ambiguities and misinterpretations on our part can be corrected. To this end, a copy of each of the dataset directories was mailed to the appropriate dataset contact in early February, 1992, to verify the accuracy and completeness of the information. We asked each contributor to respond within two weeks so this report could be finalized by the end of March.

Aside from improving the quality of existing information and inviting additional entries from the region, the usefulness of this Catalog is hampered only by the inconveniences associated with manual searches of a paper reference. Users familiar with computerized 'on-line' database searches have already asked when the 'electronic' version will be prepared!

Accessing and Updating the Data Catalog

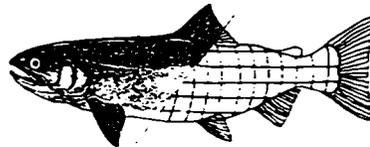
Although a recent copy of the Data Catalog components is attached to this report as appendices, the most current copy can be obtained from Dick O'Connor at WDF (206-586-2130) either in paper form or as a WordPerfect file. This file can also be downloaded from the CIS Project electronic bulletin board system (BBS) by calling 503-238-7044. If you would like to extend an existing entry or provide additional information to either component of the catalog during 1992, please contact Dick O'Connor.

The three-ring binder format for the printed form of this report was chosen for easy annual updating. Each year beginning February 1, 1993, all recipients of this report will receive a mailout summarizing additions and changes recorded during the past year. This mailout will include a form that can be returned to request copies of the updated pages (or the updated WordPerfect file). These new materials will be mailed out each year on March 1 only to those who request copies, in order to keep distribution costs reasonable. Since additions and changes will actually be recorded as they arrive, the WordPerfect file on the CIS Project BBS will be updated several times during the year. Such changes will be documented on the

BBS, and those who use this method of distribution can keep their Appendices updated as often as they like.

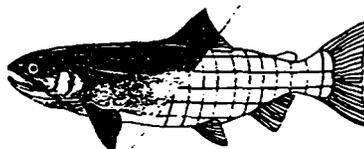
Future Enhancements to the Data Catalog

Future work on Data Catalog components will depend largely on user response to the usefulness of the contents. In the next Phase of the CIS Project, further emphasis could be placed on some of the Dataset Directory categories not adequately represented in this edition. There may be interest in adding details to the Data Item Directory entries to further define coverage of included items. Finally, the Catalog components could be loaded and distributed in an electronic database format to facilitate searching and retrieval of the reference material contained within. See the next section of this report for our specific recommendations for work to be performed during Phase III of this project. If you have any comments on future enhancements to this work, please contact Dick O'Connor (WDF).



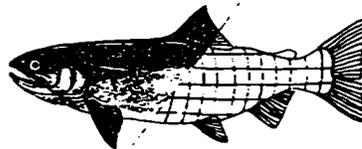
RECOMMENDATIONS

1. **Perform global standardization of item names used in Dataset Directory entries. List item names used in all datasets and adopt common terms to increase the efficiency of directory searches. (Estimated time: 2 months)**
2. **Develop an electronic version of the Data Catalog. Load Data Item Directory and Dataset Directory information into a PC-compatible relational database and build user interface to the contents. (Estimated time: 3 months)**
3. **Establish a permanent maintenance schedule for the Data Catalog. Assign annual maintenance responsibilities to one agency or group. Determine the annual funding required, procure funds, and allocate to maintainers and agencies providing information. Build a master list of regional dataset contacts and data item collectors; generate and deliver annual reminders to these staff to keep the CIS Project Office informed of any additions, changes, or other improvements to the information they manage. (Estimated time: 1 month)**
4. **Improve dataset and data item coverage in related areas. Many of the current responses dealt with hatchery production, natural production, habitat, or system monitoring data. We have incomplete representation of catch, mark sampling, tag recovery, and other related datasets. Encourage regional dataset contacts and data item collectors to propose additional datasets or data items for the Catalog. (Estimated time: 1 month)**
5. **Follow up on high priority data only found in Data Item Directory. If any high priority data (as determined by the Needs Survey results taken in conjunction with SMEP and Stock Assessment tables) are found only in the Data Item Directory, contact the data collectors and request further information on these 'informal* data collections. Seek their cooperation in filling out Dataset Directory forms as completely as possible for such collections in order to inform other regional workers. (Estimated time: 2 months)**



ACKNOWLEDGEMENTS

The authors would like to thank all dataset and data item contributors for their assistance in building this Catalog. The members of the CIS Core Group were especially helpful in locating these people and coordinating their submissions. We also appreciate the time and effort Core Group members contributed to review and improvement of this Report. Special mention must be made of the clear and concise comments made by Contract Officer Katherine Beale of Bonneville Power Administration, which helped us improve the “look-up” capabilities of this report. Finally, the authors and the entire Core Group would like to express our thanks to the Fish and Wildlife Division of Bonneville Power Administration for the funding support and oversight which made this work possible.



APPENDIX A - SAMPLE DATASET DIRECTORY FORM

Columbia River Coordinated Information System

DATASET DIRECTORY FORM

Agency: _____

Dataset Name: _____

Dataset Description: _____

Description of Areas/Sites Covered: _____

List Areas/Sites (with hydrologic unit if known): _____

_____ (continue on back)

Species Covered (**check** all that apply): Spring Chinook Summer Chinook
 Tule Fall Chinook Upriver Bright Fall Chinook Fall Chinook (unclassified)
 Coho **Chum** Sockeye Winter Steelhead A-Run Summer Steelhead
 B-Run Summer Steelhead Summer Steelhead (**unclassified**)
 Others (specify) _____

Time Periods Covered: _____

Update Schedule (check one): Yearly Monthly Other (specify) _____

Type of Storage (check one or more): Paper Magnetic Tape Electronic

Type of Computer (if electronic): _____

Location: _____

Type of File (**check** one): ASCII ("text") Other (specify) _____

Data Contact: Name : _____ Position: _____
Phone: _____

Number of Items: _____

Items (list name followed by CIS survey question number, if applicable):

_____ (continue on back)

Known Limitations: _____ (continue on back)

comments : _____ (continue on back)

_____ (continue on back)

Interview Date: _____

Columbia River Coordinated Information System

DATASET DIRECTORY FORM

ADDITIONAL ENTRIES (IF REQUIRED)

List Additional Areas/Sites (with hydrologic unit if known): _____

List Additional Items (list name followed by CIS survey question number, if applicable): _____

Known Limitations (continued): _____

Comments (continued): _____

APPENDIX B - DATASET CONTACT INFORMATION

<u>Agency</u>	<u>Contact Name/Position</u>	<u>Contact Phone</u>
BPA	Tom Pansky	503-230-3969
CHELAN	Steve Hays	509-663-8121
CTUIR	Gerry Rowan, Artificial Production Manager	503-276-4109
CTWS	Mark Fritsch, Fisheries Biologist	503-553-3233
FPC	Dave Marvin, Database Manager	503-230-4099
FPC	unspecified	
IDFG	Stan Allen, Fish and Wildlife Data Coordinator	208-334-3098
IDFG	Kent Hauck, Fish Pathologist Supervisor	208-939-2413
IDFG	Bruce Rich, Fishery Research Biologist	208-939-8863
IDFG	Tom McArthur, Staff Biologist	208-334-3791
NPPC	Duane Anderson, Data Manager	503-222-5161
ODFW	Jery Lukas, Commercial Fish Database Mgr.	503-229-5400
ODFW	Rhine Messmer, Fish & Wildlife Biologist	503-962-3777
ODFW	Michael Flesher Fish Biologist	503-962-3777
ODFW	Kim Jones, Biologist	503-737-7623
ODFW	Charlie Corrarino , Fisheries Info Mark Processor	503-229-5410
ODFW	Erik Olsen, Fisheries Biologist	503-657-2036
ODFW	Brent Forsbery, Habitat Database Manager	503-229-5410
ODFW	Brian Jonasson, Fish Biologist	503-962-3777
PGE	Don Ratliff, Environmental Specialist	503-575-2100
PGE	Doug Cramer, Environmental Specialist	503-630-6831
PGE	Terry Worrell, Environmental Specialist	503-464-8519
PSMFC	Ken Johnson, DB Manager	503-326-7474
SBT	Mike Rowe, Project Manager	208-238-3748
USFS	Roger L Nelson, Data Manager	208-334-1457
WDF	Cindy LeFleur, Fish Biologist	2866966261
WDF	Susan Markey, Computer Information Consultant	206-586-8600
WDF	Tony Ziicola, Jr., Research Analyst	206-753-6581
WDF	Brad James, Fish Biologist	206-696-6261
WDF	Wolf Dammers, Fish Biologist	206-696-6261
WDF	wiiam Kinney, computer Information consult.	206-586-2132
WDF	Dave Pratt, Computer Information consultant	206-753-6093
WDF	Shane Hawkins, Fish Biologist	206-696-6261
WDF	Hugh Fiscus, Fish Biologist	206-696-6261
WDF	Larrie LaVoy, Fish Biologist	509-662-0481
WDF	Bob Foster, Computer Information Consultant	206-753-1852
WDF	Dick O'Connor, Computer Information Consultant	206-586-2130
WDF	John DeVore, Fish Biologist	206-696-6261
WDF	Dick Geist, Recreational Fisheries Planner	206-753-6628
WDF	Joe Hymer, Scientific Tech	2066966261
WDF	Glen Mendel, Biologist	509-3824755
WDW	Bob Leland, Steelhead Program Manager	m 753- 5713
WDW	Lea Knutson, WARIS Coordiir	206-586-1449
WDW	Steve Roberts, Fish Pathologist	5096639711
WDW	Terry Lovgren, Biologist	206-586-9025
WDW	Pete Hahn, Fish Research & Manager	206-753-5713

APPENDIX C - DATASET DIRECTORY (by Administering Agency)

**Bonneville Power Administration
Chelan County Public Utility District
Idaho Department of Fish and Game
Oregon Department of Fish & Wildlife
Fish Passage Center
Portland General Electric Company
Pacific States Marine Fisheries Commission
Northwest Power Planning Council
Shoshone-Bannock Tribes
Confederated Tribes of the Umatilla Reservation
U.S. Forest Service
Washington Department of Fisheries
Confederated Tribes of the Warm Springs
Washington Department of Wildlife**

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: BPA

INTERVIEW DATE:

8/30/91

DATASET

Code: BP01

Name: Northwest Environmental Data Base

Description: Pointer to state rivers information systems for the Northwest

AREA/SITE

Description: Statewide WA, OR, ID, MT

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright	
	Y	Fall	Unclass	Y	Summer	N	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
Y	chum	Y	Sockeye	

Steelhead: yes	Y	Winter	Y	A-run	Summer
			Y	B-run	Summer
			N	Summer-Unclassified	

Other: resident fish, wildlife

STORAGE

Begins Year: 1984

Ends Year: 1991 Update Schedule: Variable

Media: Electronic File ~~Type~~: variable

Computer

Description: PC compatible, VAX, DEC, PRIME

Location: BPA, Council, state agencies

CONTACT

Name/Position: Tan Pansky

Phone Number: 503-230-3969

LISTED DATA ITEMS:

natural features	cultural resources	recreation
instit. constraints	hydropower site	NWHS

KNOWN LIMITATIONS:

none

COMMENTS:

Jointly supported by BPA, Northwest Power Planning Council and the states.
Available with a menu-driven user access system.

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CHELAN

INTERVIEWDATE:

8/26/91

DATASET

Code: CH01

Name: Methow/Okanogan Chinook Redd Counts

Description: Spring and summer chinook redd counts-Methow and Okanogan Rivers

AREA/SITE

Description: Methow and Okanogan rivers

List:

none listed

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	N Upriver Bright
	N Fall Unclass	Y Summer	N Tule Fall

Other: N Coho	N Pink	Other: N
N Chum	N Sockeye	

Steelhead: no	N Winter	N A-run Summer
		N B-run Summer
		N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1960

Ends Year: 1990 Update Schedule: Yearly

Media: Paper File Type: paper

Canputer

Description: not applicable

Location: Wenatchee

CONTACT

Name/Position: Steve Hays

Phone Number: 509-663-8121

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

c - s :

none

Columbia River **Coordinated Information System**
DATASET DIRECTORY

AGENCY: CHELAN

INTERVIEWDATE:

8/26/91

DATASET

Code: Cii02

Name : Wenatchee Chinook Redd Counts

Description: Redd counts and age composition from surveys

AREA/SITE

Description: Wenatchee R basin

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright	
	N	Fall	Unclass	Y	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: no	N	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Sumner	Unclassified

Other: no

STORAGE

Begins Year: 1954

Ends Year: 1990 Update Schedule: Yearly

Media: Paper

File Type: paper

Computer

Description: not **applicable**

Location: Wenatchee

CONTACT

Name/Position: Steve Hays

Phone Number: 509-663-8121

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

C - S :

none

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: IDFG

INTERVIEW DATE:

8/15/91

DATASET

Code: ID01

Name: Anadromous Stream Habitat

Description: Physical habitat data for anadromous fish parr density monitoring section

AREA/SITE

Description: Salmon, Clearwater and Snake River subbasins, Idaho

List:

Snake R tribs 17060110
Clearwater R 17060301-303

Salmon R tribs 17060201-210
Clearwater R 17060305-306

SPBCIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright
		N Fall Unclass	Y	Summer	N	Tule Fall

	Other: N	Coho	N	Pink	Other: misc resid
		N Chum	N	Sockeye	

Steelhead: yes	N	Winter	Y	A-run Summer
			Y	B-run Summer
			Y	Summer-Unclassified

Other: resident salmonids

STORAGE

Begins Year: 1985

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Cauputer

Description: PC compatible

Location: Boise

CONTACT

Name/Position: Stan Allen, Fish and Wildlife Data Coordin'r

Phone Number: 208-334-3098

LISTED DATA ITEMS:

strm	idaepa	strata
sub strata	section	date
tear	ch type	streaml
collector	epa	prgm
tr length	mean width	gradient
mean depth	per pool	per run
poolnln	per pocket	per riffle
per backw	per sand	per gravel
per rubble	per boulder	perbedrck
mean veloc	per embedd	mean cover
other data		

KNOWN LIMITATIONS:

none

COMMENTS :

all monitoring sections were surveyed completely at least once since 1985;
Cross referenced to EPA reach numbers

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: IDFG

INTERVIEWDATE: 8/15/91

DATASET

Code: ID02

Name: BPA Habitat Mitigation Accounting

Description: Estimated annual BPA habitat project benefits - parr & smolt production

AREA/SITE

Description: Salmon & Clearwater River subbasins, Idaho

List:

Salmon R 17060201,205,208,210

Clearwater R 17060303,305,306

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright		
		N	Fall	Unclass	Y	Sumner	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
	N	Chum	N	Sockeye

Steelhead: yes	N	Winter	Y	A-run	Summer
			Y	B-run	Summer
			y	Sununer	Unclassified

Other: no

STORAGE

Begins Year: 1984

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: Lotus

Computer

Description: PC compatible

Location: IDFG Eagle Research Station

CONTACT

Name/Position: Bruce Rich, Fishery Research Biologist

Phone Number: 208-939-8863

LISTED DATA ITEMS:

quantity of habitat	pre-project	post-project & change
parr density & abund	fish product change	

KNOWN LIMITATIONS:

none

COMMENTS:

Consists of 25 spreadsheets, one per BPA habitat project monitored and species affected. Cross referenced to EPA reach numbers.

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: IDFG

INTERVIEWDATE:

8/15/91

DATASET

Code: ID03

Name : Chinook Redd Count Reach Data

Description: Annual chinook redd count transect data (count, length, and EPA reach code)

AREA/SITE

Description: Salmon & Clearwater River subbasins, Idaho

List:

Salmon R tribs 17060201-08

Clearwater R 17060301-03,05,06

SPECIES

Salmon: yes Chinook: N Unclassified Y Spring N Upriver Bright
N Fall Unclass Y Summer N Tule Fall

Other: N Coho N Pink Other: N
N Chum N Sockeye

Steelhead: no N Winter N A-run Summer
N B-run Summer
N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1957

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: PC compatible

Location: Boise

CONTACT

Name/Position: Stan Allen, Fish and Wildlife Data Coordin'r

Phone Number: 208-334-3098

LISTED DATA ITEMS:

year	transect	class
method	date	redds qty
EPA reach no.	reach begin mile	reach end mile
surveyed distance	section	canments

KNOWN LIMITATIONS:

being developed, not ready for use

COMMENTS:

individual transect redd counts and transect lengths; cross-referenced to EPA reach numbers

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: IDFG

INTERVIEW DATE: 8/15/91

DATASET

Code: ID04

Name: Anadromous Fish Parr Density Monitor

Description: Anadromous and resident monitoring counts and densities; anadromous parr densities

AREA/SITE

Description: Salmon, Clearwater and Snake River subbasins, Idaho

List:

Snake R tribs 17060110

Salmon R tribs 17060201-210

Clearwater R 17060301-03,05,06

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright
		N Fall Unclass	Y	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: misc resid
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	Y	A-run	Summer
			Y	B-run	summer
			y	Summer-	Unclassified

Other: resident salmonids

STORAGE

Begins Year: 1985

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: PC compatible

Location: Boise

CONTACT

Name/Position: Stan Allen, Fish and Wildlife Data Coordin'r

Phone Number: 208-334-3098

LISTED DATA ITEMS:

stream	strata	section
channel type	monitor	substrata
program1	date	wnab
chclass	chinmon	stcell
chcell	drain	collectors
idaepa	epa reach	method
sec area	chinook density	steelhead density
chin carry capacity	steel carry capacity	shad density
rainbow density	cutthroat density	brook trout density
bull trout density	whitefish density	spring chin density
summer chin density		

KNOWN LIMITATIONS:

none

COMMENTS:

cross-referenced to EPA reach numbers and anadromous module of IRIS

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: IDFG

INTERVIEW DATE:

8/15/91

DATASET

Code: ID05

Name: Idaho Rivers Information System

Description: Dataset providing reach codes and attribute information - IRIS

AREA/SITE

Description: Statewide

List:

all hydrological units/reaches

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver Bright
	N	Fall Unclass	Y	Summer	N	Tule Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	Y	Sockeye	

Steelhead: yes	N	Winter	Y	A-run Summer
			Y	B-run Summer
			Y	Summer-Unclassified

Other: all

STORAGE

Begins Year: 1986

Ends Year: 1991 Update Schedule: Variable

Media: Electronic File Type: dBase III+

Computer

Description: PC compatible

Location: Boise

CONTACT

Name/Position: Stan Allen, Fish and Wildlife Data Coordin'r

Phone Number: 208-334-3098

LISTED DATA ~~ITEMS:~~

RIS GENERAL MODULE	RIS ANADROMOUS MODUL	RIS HYDROSITE MODULE
PROTECTED AREAS MODU	RESIDENT FISH MODULE	W-SLOPE CUTT. MODULE

KNOWN LIMITATIONS:

reach length inaccuracies; IRIS system modules have data for varying periods

COMMENTS :

being upgraded to 1:100,000 scale hydrography, which will alleviate reach length accuracy problems. Available with a menu-driven user access system.

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: IDFG

INTERVIEW DATE:

8/15/91

DATASET

Code: ID06

Name: Hatchery Planting Records

Description: Resident & anadromous hatchery reared fish plantings

AREA/SITE

Description: Statewide

List:

all hydrological units/reaches

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright		
		N	Fall	Unclass	Y	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	Y	A-run	Summer
			Y	B-run	Summer
			Y	Summer-Unclassified	

Other: resident fish

STORAGE

Begins Year: 1967

Ends Year: 1991 Update Schedule: *Monthly*

Media: Electronic File Type: dBase

Computer

Description: PC compatible

Location: Boise

CONTACT

Name/Position: Tan McArthur, Staff Biologist

Phone Number: 208-334-3791

LISTED DATA ITEMS:

code	catalog no.	date plant
hatch plan	hatch rear	county
region	species	pounds fish
no. planted	size	method
license	stream	epa
water		

KNOWN LIMITATIONS:

planting catalog number for individual body of water changed over the dataset lifetime; this has been corrected

COMMENTS :

planting catalog numbers have been cross-referenced to EPA river reach numbers; this will be an information module to the IRIS system

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: IDFG

INTERVIEW DATE:

8/15/91

DATASET

Code: ID07

Name: Fish Disease

Description: Fish sampling and lab result data; hatchery management information

AREA/SITE

Description: Statewide IDFG-operated hatcheries

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright	
	Y	Fall	Unclass	Y	Summer	N	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
N	Chum	Y	Sockeye	

Steelhead: yes	N	Winter	Y	A-run	Summer
			Y	B-run	Summer
			Y	Sununer	Unclassified

Other: resident fish

STORAGE

Ends Year: Update Schedule: Monthly

Media: Electronic File Type: dBase III+

Canputer

Description: PC compatible

Location: Eagle Lab, Eagle ID

CONTACT

Name/Position: Kent Hauck, Fish Pathologist Supervisor

Phone Number: 208-939-2413

LISTED DATA ITEMS:

access no.	location	sample dat
stock	lot no.	containers
exam type	fish blood chemistry	fish bacteriology
fish parasitology	fish histopathology	fish mycology
fish virology	fish hematology	

KNOWN LIMITATIONS:

being developed, not ready for use

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE:

9/01/91

DATASET

Code: OR01

Name: Quantitative Habitat Inventory

Description: quantitative description of stream habitat

AREA/SITE

Description: all Columbia basin tributaries

List:

all basins

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright	
	Y	Fall	Unclass	N	Summer	Y	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
Y	chum	N	Sockeye	

Steelhead: yes	Y	Winter	Y	A-run	Summer
			Y	B-run	Summer
			Y	Summer-Unclassified	

Other: bull, resident rainbow, cutthroat, brook trout

STORAGE

Begins Year: 1990

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: dBase

Computer

Description: AST 386 PC-compatible

Location: Corvallis, OR

CONTACT

Name/Position: Rim Jones, Project Leader

Phone Number: 503-737-7623

LISTED DATA ITEMS:

stream	date	crew
basin	township	range
section	EPA code	road access
reach no.	unit no.	chan const
const freq	adj fea if	adj fea rt
vwi	veg	land use
water temp	str flow	ownership
channel type	flow	length
width	depth	area
slope	shade	terrain
bank	wood cover	sand
gravel	cobble	undercut

KNOWN LIMITATIONS:

Need methods manual to interpret codes.

COMMENTS :

Contact Project Leader for up-to-date list of streams surveyed and a list of other data items that are included.

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: ODFW

INTERVIEW DATE:

9/01/91

DATASET

Code: OR02

Name: Quantitative Fish Inventory

Description: Quantitative inventory of fish population

AREA/SITE

Description: Statewide OR all Columbia basin tributaries

List:

all basins

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright
	Y	Fall	Unclass	N	Summer	Y	Tule
	Other: Y	Coho	N	Pink	Other: N		
	Y	chum	N	Sockeye			

Steelhead: yes	Y	Winter	Y	A-M	Summer		
			Y	B-M	Summer		
			Y	Summer	Unclassified		

Other: bull, resident rainbow, cutthroat, brook trout

STORAGE

Begins Year: 1990

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic

File Type: dBase IV

Computer

Description: AST 386 MSDOS

Location: Corvallis

CONTACT

Name/Position: Kim Jones, Biologist

Phone Number: 503-737-7623

LISTED DATA ITEMS:

basin	crew	USGS map
stream	sampldate	map code
fish page	chan const	const freq
adj fea lf	adj fea rt	vwi
veg	land use	str flow
slope	shade left	shade rt
open sky	aspect	ac width
ac height	comm code	sand
gravel	cobble	boulder
bedrock	road access	photo number, time
air temperature	water temperature	unit length
unit width	unit depth	EPA code

KNOWN LIMITATIONS:

Need methods manual to interpret codes.

COMMENTS :

Contact Project Leader for up-to-date list of streams surveyed and a list of other data items that are included.

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE: 8/15/91

DATASET

Code: OR03
Name: Oregon Rivers Information System
Description: Resource values for OR rivers

AREA/SITE

Description: Statewide

List:

all hydrological units

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright	
	Y	Fall	Unclass	Y	Summer	N	Tule	Fall
	Other: Y	Coho	N	Pink	Other: all			
	Y	chum	Y	Sockeye				
Steelhead: yes	Y	Winter	N	A - M	Summer			
			N	B - M	Summer			
			Y	Summer	Unclassified			

Other: all major fish species

STORAGE

Begins Year: 1985
Ends Year: 1991 Update Schedule: Other

Media: Electronic File Type: dBase III+

Computer

Description: PC compatible
Location: Portland, Habitat Cons Div

CONTACT

Name/Position: Brent Forsberg, Habitat Database Manager
Phone Number: 503-229-5410

LISTED DATA ITEMS:

flow	anadromous fish	resident fish
wildlife	recreation	legal constraints
natural features	cultural	barriers(fishways)
FERC sites		

KNOWN LIMITATIONS:

the system is river oriented, therefore wildlife species are limited; the values are based on resources present and are broad and general . ..good for planners - not scientists

C - s :

this is part of an ongoing project and more datasets. are planned to provide a more complete picture of habitat and species, and projects which affect them. Available with a menu-driven user access system.

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE:

8/22/91

DATASET

Code: OR04
Name: Sherars Falls Trap Counts
Description: Summer steelhead returning to Sherar Falls

AREA/SITE

Description: Sherars Falls (Deschutes River), OR

List:

Deschutes River @ Sherars Fall

SPECIES

Salmon: no	Chinook: N Unclassified	N Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall
	Other: N Coho	N Pink	Other: N
	N Chum	N Sockeye	
Steelhead: yes	N Winter	Y A - M Summer	
		N B - M Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1977
Ends Year: 1989 Update Schedule: Other

Media: Electronic File Type: ASCII

Computer
Description: PC compatible
Location: Clackamas

CONTACT

Name/Position: Erik Olsen, Fisheries Biologist
Phone Number: 503-657-2036

LISTED DATA ITEMS:

year	month	day
julian day	fin mark	length
time of recovery		

KNOWN LIMITATIONS:

none

COMMENTS :

data is used to summarize age specific mean length of adult Round Butte Hatchery fish and mean length of wild fish (no age)

**Columbia River Coordinated Information System
dataset DIRECTORY**

AGENCY: ODFW **interview DATE:** 8/15/91

dataset

Code: OR05
Name: CWT Columbia River Commercial and Sport/Williamette Sport catch
Description: CWT rel/rec; Col R commercial & Wil R / Col R sport sampling

AREA/SITE

Description: Statewide

List:

OR hatcheries	OR ocean ports
Columbia River	Wilamette River Below falls

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	Y Upriver Bright
	Y Fall Unclass	Y Summer	Y Tule Fall
	Other: Y Coho	N Pink	Other: N
	Y chum	Y Sockeye	
Steelhead: yes	Y Winter	Y A - M Summer	
		Y B-run Summer	
		Y Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1977
Ends Year: 1991 Update Schedule: Variable

Media: Electronic File Type: ASCII

Computer

Description: Unisys A-6
Location: Portland

CONTACT

Name/Position: Charlie Corrarino, Fisheries Info Mark Process
Phone Number: 503-229-5410

LISTED DATA ITEMS:

fishery	area	date
species	length	weight
fin mark	tag code	hatchery of release
release weight	release date	

KNOWN LIMITATIONS:

data prior to 1989 not readily available except at PSMFC; data is reported to PSMFC once or twice a year

COMMENTS:

this is a large and complex database that has numerous lookup tables and files that are interrelated

**Columbia River Coordinated Information System
dataset DIRECTORY**

AGENCY: ODFW

interview date:

8/15/91

DATASET

Code: OR06

Name : Salmon/Steelhead/Sturgeon Punchcards

Description: Itemized collection of fish caught & recorded on ODFW p-card

AREA/SITE

Description: Statewide

List:

all inland waters

OR ocean ports

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright	
	Y	Fall	Unclass	Y	Summer	Y	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
Y	chum	N	Sockeye	

Steelhead: yes	Y	Winter	Y	A-M	Summer
			Y	B - M	Summer
			N	Summer-	Unclassified

Other: sturgeon

STORAGE

Begins Year: 1986

Ends Year: 1990

Update Schedule: Yearly

Media: Electronic

File Type: ASCII

Computer

Description: Unisys A-6

Location: Portland

CONTACT

Name/Position: Charlie Corrarino, Fisheries Info Mark Process

Phone Number: 503-229-5410

LISTED DATA ITEMS:

angler name

location

species

length

month

day

year

KNOWN LIMITATIONS:

1986-1990 computerized; prior data on paper only; plan to add historical data to computer

COMMENTS:

a variety of reports are generated from this data; files are updated each fall for the previous year

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE:

8/22/91

DATASET

Code: OR07

Name : Temperature Data

Description: Thermograph data for the John Day and White rivers

AREA/SITE

Description: John Day and White (Deschutes) River, OR

List:

John Day R mainstem

John Day R north fork

Deschutes River

John Day R middle fork

Granite Creek System

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver Bright
		N	Fall	Unclass	N	Tule Fall

Other: N	Coho
N	Chum

N	Pink
N	Sockeye

Other: N

Steelhead: no

N Winter

N A-M Summer

N B-M Summer

N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1978

Ends Year: 1984

Update Schedule: Other

Media: Electronic

File Type: ASCII

Computer

Description: PC compatible

Location: Clackamas

CONTACT

Name/Position: Erik Olsen, Fisheries Biologist

Phone Number: 503-657-2036

LISTED DATA ITEMS:

form

river mile

day

formnumber

year

temp @ 0000 hrs

river/stream code

month

temp @ 2400 hrs

KNOWN LIMITATIONS:

White river data is for 1983-1984 only

COMMENTS:

data is used to estimate mean daily, weekly, monthly temperatures at selected sites

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE:

8/22/91

DATASET

Code: OR08

Name: Deschutes Creel

Description: Creel census of fish

AREA/SITE

Description: Deschutes River (mouth, ~~Kloan~~, Macks Canyon, Sherars Falls)

List:

Deschutes R below Sherars Fall

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright
	Y	Fall Unclass	N	Summer	N	Tule Fall

Other: Y	Coho	N	Pink	Other: N
Y	chum	Y	Sockeye	

Steelhead: yes	N	Winter	Y	A - M	Summer
			N	B - M	Summer
			N	Summer	Unclassified

Other: yes (unspecified)

STORAGE

Begins Year: 1970

Ends Year: 1990 Update Schedule: Yearly

Media: Electronic

File Type: ASCII

Computer

Description: PC compatible

Location: Clackamas

CONTACT

Name/Position: Erik Olsen, Fisheries Biologist

Phone Number: 503-657-2036

LISTED DATA ITEMS:

form	formnumber	fishery
area	year	month
day	weekend/weekday code	creel code
angler type	angler hours	species
kept fish	released fish	mark code

KNOWN Limitations:

none

C - S :

data is collected from statistical creels conducted in the subbasin; summaries provide statistically derived estimates of harvest

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: ODFW

INTERVIEW DATE:

8/23/91

DATASET

Code: OR09

Name: Columbia River Commercial Fish Landings

Description: Fish ticket records of Columbia River commercial fish landings

AREA/SITE

Description: Columbia River mouth to base of McNary Dam

List:

Columbia River mainstem

Youngs Bay

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright
		Y	Fall	Unclass	Y	Summer	Tule
							Fall

Other: Y	Coho
Y	Chum

Y	Pink
Y	Sockeye

Other: N

Steelhead: yes	Y	Winter	Y	A - M	Summer
			Y	B - M	Summer
			Y	Summer	Unclassified

Other: sturgeon(green/white), smelt, shad, walleye, starry flounder

STORAGE

Begins Year: 1974

Ends Year: 1991

Update Schedule: Yearly

Media: Electronic

File Type: DMS-2 Database

Computer

Description: Unisys A-6

Location: Portland

CONTACT

Name/Position: Jerry Lukas, COmmercial Fish Database Mgr.

Phone Number: 503-229-5400

LISTED DATA ITEMS:

record no.	date	dealer ID
fisherman/boat ID	gear	catch area
species landed	species lbs landed	no. of fish
price per pound		

KNOWN LIMITATIONS:

1974-1944 not converted to current code; questionable reliability and accuracy.
Updated daily in season.

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEWDATE:

10/03/91

DATASET

Code: OR10

Name : Plant Data for CWT Recoveries

Description: IBM plant data for adult CWT recoveries of STS & Chs releasd

AREA/SITE

Description: Grand Ronde basin, Imnaha basin

List:

Grand Ronde R basin

Imnaha Rbasin

SPECIES

Salmon: yes Chinook: N Unclassified Y Spring N Upriver Bright
N Fall Unclass N Summer N Tule Fall

Other: N Coho N Pink Other: N
N Chum N Sockeye

Steelhead: yes N Winter Y A-M Summer
N B-M Summer
N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1983

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: unspecified

Computer

Description: PC compatible

Location: LaGrande

CONTACT

Name/Position: M. Flesher, Fish Biologist

Phone Number: 503-962-3777

LISTED DATA ITEMS:

stock	brood year	tag code
rearing site	release site	release date
release size	total release	no. AD+CWT
percent AD+CWT	replicate tag code	freeze brand
no. freeze branded	no. brands+AD+CWT	location
year	age	catch
tribal/sport	treaty/nontreaty net	ceremonial
test	hatchery	stray

KNOWN LIMITATIONS:

none

C - S :

there have been problems running the spreadsheet program resulting in data not having been updated

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE: 10/03/91

DATASETQ

Code: OR11

Name: Creel Survey Data Angler Interviews

Description: Creel survey data in the Grand Ronde and Imnaha basins

AREA/SITE

Description: Grand Ronde basin, Imnaha basin

List:

Grand Ronde R rm 159-183,38-53 Imnaha R rm O-23
WSallowa R rm O-26

SPECIES

Salmon: no	Chinook: N Unclassified	N Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall
	Other: N Coho	N Pink	Other: N
	N Chum	N Sockeye	
Steelhead: yes	N Winter	Y A-M Sumner	
		N B-run Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1985
Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: dBase IV

Computer

Description: PC canpatible
Location: LaGrande

CONTACT

Name/Position: M. Flesher, Fish Biologist
Phone Number: 503-962-3777

LISTED DATA ITEMS:

julian date	month	weekend/weekday
angler no.	section	angler origin
status	hours	gear
species fished	no. kept	marked fish released
unmark fish released	sex	fin clips
snout ID no.	CWT code	scale card
weight		

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE: 10/03/91

DATASET

Code: OR12

Name: Creel Survey Data Angler Effort

Description: Creel survey data in the GR & Imnaha basins - angler effort

AREA/SITE

Description: Grand Ronde basin, Imnaha basin

List:

Grand Ronde R rm 159-183,38-53 Imnaha R RM O-23
Wallowa R rm O-26

SPECIES

Salmon: no	Chinook: N Unclassified	N Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall

Other: N Coho	N Pink	Other: N
N Chum	N Sockeye	

Steelhead: no	N Winter	N A - M Summer
		N B - M Summer
		N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1985

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: dBase IV

Computer

Description: PC compatible

Location: Lagrande

CONTACT

Name/Position: M. Flesher, Fish Biologist

Phone Number: 503-962-3777

LISTED DATA ITEMS:

julian date	month	weekend/week&y
angling start time	angling end time	time of counts
section	angler count	

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE: 10/03/91

DATASET

Code: OR13

Name : Freezebrand Releases

Description: Data on freezebrand releases of STS & Chs since 1985

AREA/SITE

Description: Grand Ronde basin, Imnaha basin

List:

Grand Ronde R basin

Imnaha R basin

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright	
	N	Fall	Unclass	N	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	Y	A - M	S - r
			N	B - M	Summer
			N	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1985

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: dBase IV

Computer

Description: PC compatible

Location: LaGrande

CONTACT

Name/Position: M. Flesher, Fish Biologist

Phone Number: 503-962-3777

LISTED DATA ITEMS:

brood year	brand	stock
hatchery @ reared	location released	river mile released
release date	fish per lb	CWT code 1 & 2
no with CWT & brand	replicate brand	

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE:

10/03/91

DATASET

Code: OR14

Name: CWT Releases in Grand Ronde and Imnaha Rivers

Description: CWT release data for STS & Chs in the GR & Imnaha basins

AREA/SITE

Description: Grand Ronde basin, Imnaha basin

List:

Grand Ronde R basin

Imnaha R basin

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright
	N	Fall Unclass	N	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	Y	A-M	Summer
			N	B-run	Summer
			N	Summer-	Unclassified

Other: no

STORAGE

Ends Year: Update Schedule: Yearly

Media: Electronic File Type: dBase IV

Computer

Description: PC compatible

Location: LaGrande

CONTACT

Name/Position: M. Flesher, Fish Biologist

Phone Number: 503-962-3777

LISTED DATA ITEMS:

brood year	no. CWT no AD clip	stock
hatchery @ reared	location released	river mile released
release date	no. CWT & AD clip	no. released
fish per pound	percent tag loss	condition factor
freeze brand	pons no.	

KNOWN LIMITATIONS:

none

COMMENTS:

none

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: ODFW

INTERVIEW DATE:

9/03/91

DATASET

Code: OR15

Name: Spring Chinook Spawning Ground Surveys

Description: Biological and mark recovery info from Chs carcasses

AREA/SITE

Description: Grand Ronde basin, Imnaha basin

List:

Grand Ronde R	Imnaha R
Big Sheep Cr	Lick Cr
Bear Cr	Hurricane Cr
Wallowa R	Lostine R
Catherine Cr	Lookingglass Cr
Wenaha R	Sheep Cr
Minam R	

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall
	Other: N Coho	N Pink	Other: N
	N Chum	N Sockeye	
Steelhead: no	N Winter	N A - M Summer	
		N B-run Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1986

Ends Year: 1991

Update Schedule: Yearly

Media: Electronic

File Type: IBM Data Editio

Computer

Description: PC compatible

Location: LaGrande

CONTACT

Name/Position: Rhine Messmer, Fish & Wildlife Biologist

Phone Number: 503-962-3777

LISTED DATA ~~TIMS:~~

scale sample	sample date	fork length
sex	river	origin
fin mark	snout ID no.	CWT no.
external tags	freshwater annuli no	salt water annuli no
age	brood year	

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE:

9/03/91

DATASET

Code: OR16

Name: Adult Return Sampling

Description: Biological and mark recovery info from Chs & STS returning

AREA/SITE

Description: Grand Ronde basin, Imnaha basin

List:

Lookingglass Hatchery

Imnaha R facility

Big Canyon facility

Little Sheep Cr facility

Wallowa Hatchery

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright
	N	Fall Unclass	N	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
----------	------	---	------	----------

N	Chum	N	Sockeye
---	------	---	---------

Steelhead: yes	N	Winter	Y	A-run	Summer
----------------	---	--------	---	-------	--------

N	B-run	Summer
---	-------	--------

N	Summer-Unclassified
---	---------------------

Other: no

STORAGE

Begins Year: 1982

Ends Year: 1991

Update Schedule: Other

Media: Electronic

File Type: IBM Data Editio

Canputer

Description: PC compatible

Location: LaGrande

CONTACT

Name/Position: Rhine Messmer, Fish & Wildlife Biologist

Phone Number: 503-962-3777

LISTED DATA ITEMS:

scale sample

sample date

fork length

sex

weight

origin

fin mark

snout ID no.

CWT no.

external tags

freshwater annuli no

salt water annuli no

age

brood year

disposition

family group

KNOWN LIMITATIONS:

none

COMMENTS:

the 1982-90 files are in IBM Data Edition - 1991 files are dBase IV; all files are planned to be converted to dBase IV

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE: 9/03/91

DATASET

Code: OR17
Name : Juvenile Release Sampling
Description: Pre-release sampling of juvenile STS & Chs

AREA/SITE

Description: LSRIP facilities

List:

Lookingglass Hatchery	Imnaha R facility
Big Canyon facility	Little Sheep Cr facility
Wallowa Hatchery	Irrigon Hatchery

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall
	Other: N Coho	N Pink	Other: N
	N Chum	N Sockeye	
Steelhead: yes	N Winter	Y A-run Summer	
		N B-run Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1985
Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: IBM Data Editio

Computer

Description: PC canpatible
Location: LaGrande

CONTACT

Name/Position: Rhine Messmer, Fish & Wildlife Biologist
Phone Number: 503-962-3777

LISTED DATA ITEMS:

length	fin mark	brand mark
degree of smolting	fin condition	weight
descaling	condition factor	CWT no.
scale sample		

KNOWN LIMITATIONS:

none

c - s :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE:

10/03/91

DATASET

Code: OR18

Name: GR/Imnaha Steelhead Spawning Ground Counts

Description: Steelhead redd counts in GR & Imnaha basins

AREA/SITE

Description: Grand Ronde basin, Imnaha basin

List:

Grand Ronde R tributaries

Imnaha R tributaries

SPECIES

Salmon: no Chinook: N Unclassified N Spring N Upriver Bright
 N Fall Unclass N Summer N Tule Fall

 Other: N Coho N Pink Other: N
 N Chum N Sockeye

Steelhead: yes N Winter Y A-run Summer
 N B-run Summer
 N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1963

Ends Year: 1990 Update Schedule: Yearly

Media: Electronic

File Type: ASCII

Computer

Description: PC compatible

Location: LaGrande

CONTACT

Name/Position: Brian Jonasson, Fish Biologist

Phone Number: 503-962-3777

LISTED DATA ITEMS:

stream	drainage	subbasin
date	temp f	miles in count area
fish	total redds	redds per mile .

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEWDATE:

10/03/91

DATASET

Code: OR19

Name: Imnaha Steelhead Fecundity

Description: Fecundity of individual steelhead spawned

AREA/SITE

Description: Little Sheep Creek facility, Imnaha R basin, wild & hat fish

List:

Little Sheep Cr

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver Bright
		N Fall Unclass	N	Summer	N	Tule Fall

Other: N	Coho	N	Pink	Other: N
	N Chum	N	Sockeye	

Steelhead: yes	N	Winter	Y	A-runSummer
			N	B-run Summer
			N	Summer-Unclassified

Other: no

STORAGE

Begins Year: 1989

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: PC compatible

Location: LaGrande

CONTACT

Name/Position: Brian Jonasson, Fish Biologist

Phone Number: 503-962-3777

LISTED DATA ITEMS:

location	species	sample date
fam no.(fish ID)	hatchery/wild	finmark
fork length	wieght	age
eff sp wt	sample no.	sample weight
egg not sp	eff spawn	total eggs
average egg size	total egg weight	

KNOWN LIMITATIONS:

none

c - s :
none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: ODFW

INTERVIEW DATE: 10/03/91

DATASET

Code: OR20

Name : Imnaha Habitat Inventory

Description: Habitat Inventory data for Imnaha R basin - Stlhd Supp R Pro

AREA/SITE

Description: Imnaha R tributaries

List:

Little Sheep Cr
Lick Cr

Camp Cr
Grouse Cr

SPECIES

Salmon: no	Chinook: N Unclassified N Fall Unclass	N Spring N Summer	N Upriver Bright N Tule Fall
	Other: N Coho N Chum	N Pink N Sockeye	Other: N
Steelhead: yes	N Winter	Y A-run Summer N B-run Summer N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1990

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic

File Type: ASCII

Computer

Description: PC compatible

Location: LaGrande

CONTACT

Name/Position: Brian Jonasson, Fish Biologist

Phone Number: 503-962-3777

LISTED DATA ITEMS:

stream	sample date	reach
channel constraint	frequency of constra	left bank feature
right bank feature	valley width index	vegetation
land use	water temp	stream flow descript
unit type	channel type	percent flow
length of unit	width of unit	area of unit
max unit depth	slope of unit	percent open sky
active chanl dimens	terrace dimensions	substrate compositin
boulders no. in unit	bank classification	wood classification
percent wood cover		

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: FPC

INTERVIEWDATE:

8/30/91

DATASET

Code: PC01
Name : Hardcopy
Description: Data and graphs in hardcopy

AREA/SITE

Description: Columbia R mainstem

List:
none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright	
	N	Fall	Unclass	Y	Summer	Y	Tule	Fall
	Other: Y	Coho	N	Pink	Other: N			
	N	Chum	Y	Sockeye				
Steelhead: yes	Y	Winter	Y	A-M	Summer			
			Y	B-M	Summer			
			N	Suauner	Unclassified			

Other: no

STORAGE

Ends Year: Update Schedule: Variable

Media: Paper File Type: paper

Computer
Description: not applicable
Location: Portland

CONTACT

Name/Position: Dave Marvin, Database Manager
Phone Number: 503-230-4099

LISTED DATA ITEMS:

ATPASE graphs	Cumulative	Passage	DIEL reports
PIT tag recapture	reservoir	elevation	water temperatures

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: FPC

INTERVIEW DATE

8/30/91

DATASET

Code: PC02
Name: PC Database
Description: DOS based datasets

AREA/SITE

Description: Columbia R mainstem

List:
none listed

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	Y Upriver Bright
	N Fall Unclass	Y Summer	Y Tule Fall
	Other: Y Coho	N Pink	Other: N
	N Chum	Y Sockeye	
Steelhead: yes	N Winter	Y A-m Summer	
		Y B-run Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Ends Year: Update Schedule: Variable
Media: Electronic File Type: Rbase,Quattro
Computer
Description: PC compatible
Location: Portland

CONTACT

Name/Position: Dave Marvin, Database Manager
Phone Number: 503-230-4099

LISTED DATA ITEMS:

Adult DB daily passa	Adult DB cur yr rtn	Catch DB
Flow DB	Mailing list	PIT tag DB
Temperature DB		

KNOWN LIMITATIONS:

none

Comments:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: FPC

INTERVIEW DATE:

8/30/91

DATASET

Code: PC03

Name: System 36 Data base

Description: Datasets on System 36

AREA/SITE

Description: Columbia R mainstem

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright	
	N	Fall	Unclass	Y	Summer	Y	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
N	Chum	Y	Sockeye	

Steelhead: yes	Y	Winter	Y	A-M	Summer
			Y	B-run	Summer
			N	Summer	Unclassified

Other: no

STORAGE

Ends Year: Update Schedule: Yearly

Media: Electronic File Type: unspecified

Computer

Description: IBM System 36

Location: Portland

CONTACT

Name/Position: unspecified

LISTED DATA ITEMS:

Adult Returns DB

Brand Release DB

Daily Catch DB

Flow & Spill DB

Hatchery Release DB

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: PGE

INTERVIEW DATE

8/30/91

DATASET

Code: PG01

Name: SPEAR Fisheries

Description: Adult salmon/steelhd upstream & downstream smolt counts

AREA/SITE

Description: Deschutes, Clackamas, and Sandy rivers

List:

Deschutes R Pelton fish trap	Clackamas R River Mill ladder
Clackamas R NF trap & ladder	Sandy R Marmot Dam ladder
Deschutes R flow	Clackamas R flow
Sandy R flow	

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright
		Y	Fall	Unclass	N	Tule Fall
	Other: Y	Coho	N	Pink	Other: N	
		N	Chum	Y	Sockeye	
Steelhead: yes	Y	Winter	Y	A-M	Summer	
			N	B-run	Summer	
			N	Summer	Unclassified	

Other: no

STORAGE

Begins Year: 1954

Ends Year: 1991 Update Schedule: Monthly

Media: Electronic

File Type: Model 204

Computer

Description: IBM 3600

Location: Portland

CONTACT

Name/Position: location specific - see comments section

LISTED DATA ITEMS:

date	migration direction	facility name
species code	fish mark	age (jacks & adults)
live count	dead count	disposition code
max temp	min	ladder temp
dam discharge (flow)	rainfall amount	location code
tag no.	stocking/marking	brood year
lot no.	stocking size	no. released
stocking locations		

KNOWN LIMITATIONS:

none

COMMENTS:

plan to separate data sets to PC's (Paradox) at each location; Contacts -
Deschutes-Don Ratliff (503)475-2100 Clackamas-Doug Cramer (503)630-6831
Portland-Terry Worrell (503)464-8519

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: PSMFC

INTERVIEW DATE:

8/30/91

DATASET

Code: PMF01

Name : Coded-Wire Tag Release Data base

Description: Coastwide release data for coded-wire tag (CWT) groups

AREA/SITE

Description: Pacific coast, Columbia River basin

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver Bright
		Y Fall Unclass	Y	Summer	Y	Tule Fall

Other: Y	Coho	N	Pink	Other: N
Y	chum	Y	Sockeye	

Steelhead: yes	Y	Winter	Y	A-run Summer
			Y	B-run Summer
			Y	Summer-Unclassified

Other: no

STORAGE

Begins Year: 1969

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: UNIX-Sequent

Location: Portland, OR

CONTACT

Name/Position: Ken Johnson, DB Manager

Phone Number: 503-326-7474

LISTED DATA ITEMS:

tag code	number of replicates	tag type
species	M	brood year
release agency	release site code	release dates
release stage	rearing type	type of release
tagged released	no-tag released	unmarked released
counting method	tag loss days	weight of fish
length of fish	tag coordinator code	expected survival
rearing facility	stock code	format version
comments	tag loss sample size	lower-sequential #
upper-sequential #		

KNOWN LIMITATIONS:

Coverage of tagged groups is complete. Incomplete release records for groups of fish unassociated with a CWT group.

COMMENTS :

Format of data for exchange complies with Pacific Salmon Commission CWT release format.

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: PSMFC

INTERVIEW DATE:

8/30/91

DATASET

Code : PMF02

Name: Coded-Wire Tag Recovery Data Base

Description: Coastwide recovery data for coded-wire tag groups

AREA/SITE

Description: Pacific Coast, Columbia River basin

List:

SPECIES

Salmon: yes	Chinook: N	Unclassified	y	Spring	Y	Upriver	Bright
	Y	Fall	Unclass	Y	Summer	Y	Tule
	Other: Y	Coho	Y	Pink		Other: N	
	Y	chum	Y	Sockeye			
Steelhead: yes	Y	Winter	Y	A - M	Summer		
			Y	B-run	Summer		
			y	Summer	Unclassified		

Other: no

STORAGE

Begins Year: 1969

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic

File Type: ASCII

Computer

Description: UNIX-Sequent

Location: Portland, OR

CONTACT

Name/Position: Ken Johnson, DB Manager

Phone Number: 503-326-7474

LISTED DATA ITEMS:

reporting agency	item ID	recovery date
type of date	sampling period type	sampling period #
species	samp. maturity class	sex
weight	weight code	weight type
length	length code	length type
tag code	replicate number	tag type
tag status	sampling site	estimation level
recovery site code	fishery code	estimated number
sample type	record type	gear code
format version #	M	sample length class
sample sex class	sampling agency	sequential column #
sequential row #		

KNOWN LIWITATIONS:

Recovery data are final through 1989 for all agencies. 1990 data are final in some cases. Contact DB manager for current status. Preliminary data from most recent catch year are usually available.

COMMENTS :

Format of data for exchange complies with Pacific Salmon Commission CWT recovery format. Online retrieval of summary tables is available; contact DB manager for details.

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: PSMFC

INTERVIEWDATE:

8/31/91

DATASET

Code: PMF03

Name: Coded-Wire Tag Catch:Sample Data base

Description: Coastwide catch and sample data for coded-wire tag recoveries

AREA/SITE

Description: Pacific coast, Columbia River basin

List:

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright
	Y	Fall Unclass	Y	Sumner	Y	Tule	Fall

Other: Y	Coho	Y	Pink	Other: N
Y	chum	Y	Sockeye	

Steelhead: yes	Y	Winter	Y	A-m	Summer
			Y	B-run	Summer
			Y	Summer	Unclassified

Other: no

STORAGE

Begins Year: 1976

Ends Year: 1991 Update Schedule: Yearly

-- Media: Electronic File Type: ASCII

Computer

Description: UNIX-Sequent

Location: Portland, OR

CONTACT

Name/Position: Ken Johnson, DB Manager

Phone Number: 503-326-7474

LISTED DATA ITEMS:

reporting agency	record type	catch year
record status	file creation date	species
samp. maturity class	sampling period type	sampling period #
samp. period range	fishery code	catch area code
sample type	number caught	number sampled
awareness factor	tags decoded	estimated number
number of no-tags	number of lost tags	number of unreadable
unresolved discrep.	number of lost heads	samp. size mark inc.
marks in mark inc. s	format version #	estimation level
M	sample length class	sample sex class
sampling agency		

KNOWN LIMITATIONS:

Catch:sample data are final through 1989 for all agencies. 1990 data are final in some cases. Contact DB manager for details. Preliminary data from most recent catch year are usually available.

COMMENTS :

Format of data for exchange complies with Pacific Salmon Commission CWT catch:sample format.

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: NPPC

INTERVIEW DATE:

8/30/91

DATASET

Code: PP01

Name: System Planning Database

Description: Parameters for stocks/subbasins analyzed w SPM for planning

AREA/SITE

Description: Columbia R basin

List:

all hydrological units

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright	
	Y	Fall	Unclass	Y	Summer	Y	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	Y	Winter	Y	A-run	Summer
			Y	B-run	Summer
			Y	Summer-Unclassified	

Other: no

STORAGE

Ends Year: Update Schedule: Other

Media: Electronic File Type: dBase,QP, ASCII

Computer

Description: PC compatible

Location: Portland

CONTACT

Name/Position: Duane Anderson, Data Manager

Phone Number: 503-222-5161

LISTED DATA ITEMS:

passage survival	egg survival	smolt survival
ocean harvest rates	inriver harvest rate	smolt carry capacity

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: NPPC

INTERVIEW DATE:

2/26/92

DATASET

Code: PP02

Name : Protected Areas

Description: Dataset containing the Northwest Power Planning Council's Protected Areas categories.

AREA/SITE

Description: All Columbia River basin river reaches in Oregon, Idaho, Washington, and Eastern Montana (all hydrological units beginning with 17)

List:

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver	Bright
		N	Fall	Unclass	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
	N	Chum	N	Sockeye

Steelhead: no	N	Winter	N	A - M	Summer
			N	B-run	Summer
			N	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1990

Ends Year: 1990 Update Schedule: Variable

Media: Electronic File Type: dBase,WP,ASCII

Computer

Description: PC compatible

Location: Portland, OR

CONTACT

Name/Position: Duane Anderson, Data Manager

Phone Number: 503-222-5161

LISTED DATA ITEMS:

area name	river reach ID	lower boundary
upper boundary	tributary to	length
protected area desig		

KNOWN` LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: NPPC

INTERVIEWDATE:

2/26/92

DATASET

Code: PP03

Name: Escapement Dataset

Description: Contains various annual indices of anadromous fish escapement for Oregon, Idaho and Washington, coded to EPA river reach

AREA/SITE

Description: All hydrologic units beginning with 17 (where anadromous fish are present)

List:

SPECIES

Salmon: yes	Chinook: Y	Unclassified	Y	Spring	Y	Upriver Bright
		Y Fall Unclass	Y	Summer	Y	Tule Fall

Other: Y	Coho	Y	Pink	Other: N
Y	chum	Y	Sockeye	

Steelhead: yes	Y	Winter	Y	A-run Summer
			Y	B-run Summer
			y	Summer-Unclassified

Other: no

STORAGE

Begins Year: 1990

Ends Year: 1990 Update Schedule: Variable

Media: Electronic File Type: dBase, ASCII

Computer

Description: PC caupatible

Location: Portland, OR

CONTACT

Name/Position: Duane Anderson, Data Manager

Phone Number: 503-222-5161

LISTED DATA ITEMS:

river reach ID	year	escapement index
escapement method	escapement count	species
race		

KNOWN LIMITATIONS:

records are indexed to the reach number where count was made, rather than indexed by stock

C - S :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: SBT

INTERVIEW DATE: 8/30/91

DATASET

Code: SB01
Name: Redd Count Files
Description: On-the-ground redd counts for spring chinook

AREA/SITE

Description: Mainstem Bear Valley Cr, Yankee Fork inc. W Fork & Herd Cr

List:

Bear Valley Cr	Yankee Fork
Herd Cr	West Fork

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall
	Other: N Coho	N Pink	Other: N
	N Chum	N Sockeye	
Steelhead: no	N Winter	N A-run Summer	
		N B-run Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1985
Ends Year: 1991 Update Schedule: Yearly

Media: Paper File Type: paper

Computer
Description: not applicable
Location: Ft Hall, ID

CONTACT

Name/Position: Mike Rowe, Project Manager
Phone Number: 208-238-3748

LISTED DATA ITEMS:

location count

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: SBT

INTERVIEW DATE:

8/30/91

DATASET

Code: SB02

Name : Parr Density Files

Description: Parr density information from Shoshone-Bannock habitat enhancement project

AREA/SITE

Description: Bear Valley Cr, Yankee Fork, West Fork, Yankee Fork ponds, East Fork, Herd Cr and Boulder Cr

List:

Bear Valley Cr

Yankee Fork

East Fork

West Fork

Herd Cr

Boulder Cr

Yankee Fork ponds

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright		
		N	Fall	Unclass	Y	Sumner	N	Tule Fall

Other: N	Coho	N	Pink	Other: N
	N	Chum	N	Sockeye

Steelhead: yes

N Winter

Y A-M Summer

N B-M Summer

Y Summer-Unclassified

Other: no

STORAGE

Begins Year: 1984

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic

File Type: Lotus

Computer

Description: PC compatible

Location: Ft Hall, ID

CONTACT

Name/Position: Mike Rowe, Project Manager

Phone Number: 208-238-3748

LISTED DATA ITEMS:

parr density chinook parr density steelhead strata
location

KNOWN LIMITATIONS:

starts in 1984 for Bear Valley, 1986 for other systems

C o m m e n t s :

none

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: SBT

INTERVIEW DATE:

8/30/91

DATASET

Code: SB03

Name: Abundance Files

Description: Abundance information from Shoshone-Bannock habitat enhancement project

AREA/SITE

Description: Bear Valley Cr, Yankee Fork, West Fork, Yankee Fork ponds, East Fork, Herd Cr & Big Boulder Cr

List:

Bear Valley Cr
East Fork
West Fork
Big Boulder Cr

Yankee Fork
Yankee Fork Ponds
Herd Cr

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	N Upriver Bright
	N Fall Unclass	Y Sumner	N Tule Fall
	Other: N Coho	N Pink	Other: N
	N Chum	N Sockeye	
Steelhead: yes	N Winter	Y A - M S - r	
		N B - M Sumner	
		Y Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1984

Ends Year: 1991 Update Schedule: Yearly

Media: Paper

File Type: Paper

Computer

Description: PC compatible

Location: Ft Hall, ID

CONTACT

Name/Position: Mike Rowe, Project Manager

Phone Number: 208-238-3748

LISTED DATA ITEMS:

abundance chinook	abundance steelhead	strata
location		

KNOWN LIMITATIONS:

Yankee Fork, West Fork, East Fork, Herd Cr, Big Boulder Cr data starts in 1987; Yankee Fork ponds in 1988. East Fork data are limited in that sample sites have been inconsistent over time.

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: SBT

INTERVIEWDATE:

8/30/91

DATASET

Code: SB04

Name: Chinook Length / Weight Data

Description: Length, weight, and condition measurements

AREA/SITE

Description: Bear Valley Cr, Yankee Fork, West Fork, Yankee Fork ponds, East Fork, Herd Cr, Boulder Cr

List:

Bear Valley Cr	Yankee Fork
East Fork	West Fork
Yankee Fork ponds	Herd Cr
Boulder Cr	

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	N Upriver Bright
	N Fall Unclass	Y Summer	N Tule Fall

Other: N Coho	N Pink	Other: N
N Chum	N Sockeye	

Steelhead: no	N Winter	N A - m Summer
		N B - m Summer
		N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1984

Ends Year: 1991 Update Schedule: Yearly

Media: Paper

File Type: paper

Computer

Description: not applicable

Location: Ft Hall, ID

CONTACT

Name/Position: Mike Rowe, Project Manager

Phone Number: 208-238-3748

LISTED DATA ITEMS:

length	weight	condition
--------	--------	-----------

KNOWN LIMITATIONS:

1987 data available for all except Bear Valley Creek. From 1988 on, data are in Lotus for all creeks.

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: SBT

INTERVIEW DATE:

8/30/91

DATASET

Code: SB05

Name : Physical Habitat Files

Description: Includes depth, width, length, riffle ratios, gradients, etc.

AREA/SITE

Description: Bear Valley Cr, Yankee Fork, West Fork, Yankee Fork ponds, East Fork, Herd Cr, Boulder Cr

List:

Bear Valley Cr	Yankee Fork
East Fork	West Fork
Yankee Fork ponds	Herd Cr
Boulder Cr	

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright
		N Fall Unclass	Y	Summer	N	Tule Fall
	Other: N	Coho	N	Pink	Other: N	
		N Chum	N	Sockeye		
Steelhead: yes	N	Winter	Y	A-M Summer		
			N	B-M SUMMER		
			Y	Summer-Unclassified		

Other: no

STORAGE

Begins Year: 1984

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: unspecified

Computer

Description: PC compatible

Location: Ft Hall, ID

CONTACT

Name/Position: Mike Rowe, Project Manager

Phone Number: 208-238-3748

LISTED DATA ITEMS:

location	depth	width
length	gradient	pool size
flow	pool from riffle rat	

KNOWN LIMITATIONS:

sampling for any given parameter was not necessarily continuous from year-to-year; all parameters were not measured in each area. Bear Valley Creek measurements began in 1984; Yankee Fork, East Fork in 1987; East Fork not continuous through 1991.

COMMENTS:

none

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: SBT

INTERVIEW DATE:

8/30/91

DATASET

Code: SB06

Name: Sediment Sampling Files

Description: Includes riffle substrate particle sizes, fines, etc.

AREA/SITE

Description: Mainstem Bear Valley Cr, Yankee Fork, including West Fork and Herd Cr

List:

Bear Valley Cr
Herd Creek
West Fork

Big Boulder Creek
Yankee Fork

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright
	N	Fall Unclass	N	Summer	N	Tule Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	Y	A-M	Summer
			N	B-M	Summer
			Y	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1984

Ends Year: 1991 Update Schedule: Yearly

Media: Paper

File Type: Paper

Canputer

Description: PC compatible

Location: Ft Hall, ID

CONTACT

Name/Position: **Mike** Howe, Project Manager

Phone Number: 208-238-3748

LISTED DATA ITEMS:

location	particle size	fines estimate
interst. space index	part size distribut.	

KNOWN LIMITATIONS:

Methodology has been inconsistent. Bear Valley Creek measurements began in 1984; Yankee Fork, East Fork in 1987; East Fork not continuous through 1991. Electronic media from 1988 on.

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: SBT

INTERVIEW DATE: 8/30/91

DATASET

Code: SB07

Name : Water Characteristics Files

Description: Includes dissolved oxygen, conductivity, and temperature

AREA/SIT%

List:

Yankee Fork ponds

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright		
		N	Fall	Unclass	Y	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
	N	Chum	N	Sockeye

Steelhead: yes	N	Winter	Y	A-M	Summer
			N	B-M	Summer
			Y	Summer	Unclassified

Other: no

STORAGE

Begins Year: 1984

Ends Year: 1991 Update Schedule: Yearly

Media: Paper File Type: paper

Computer

Description: not applicable

Location: Ft Hall, ID

CONTACT

Name/Position: Mike Rowe, Project Manager

Phone Number: 208-238-3748

LISTED DATA ITEMS:

dissolved oxygen	temperature	conductivity
------------------	-------------	--------------

KNOWN LIMITATIONS:

sampling for any given parameter was not necessarily continuous from year-to-year; all parameters were mp measured in each area

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: SBT

INTERVIEW DATE:

8/30/91

DATASET

Code: SB08

Name: Macro Invertebrate Study

Description: Densities and relative abundance of macroinvertebrates

AREA/SITE

Description: Yankee Fork pond series

List:

Yankee Fork

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright
	N	Fall	N	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	Y	A-M	Summer
			N	B-M	Summer
			N		Summer-Unclassified

Other: no

STORAGE

Begins Year: 1989

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: Lotus

Computer

Description: PC compatible

Location: Ft Hall, ID

CONTACT

Name/Position: Mike Rowe, Project Manager

Phone Number: 208-238-3748

LISTED DATA ITEMS:

density

location

abundance

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTUIR

INTERVIEW DATE:

8/27/91

DATASET

Code: UM01

Name: Umatilla River Returns

Description: Umat R recoveries at Three Mile Dam by age/class/marks/disp

AREA/SITE

Description: Umatilla River at Three Wile Dam

List:

Umatilla R Three Wile Dam

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright
	N	Fall Unclass	N	Sumner	N	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	N	A - M	Summer
			N	B - M	Summer
			Y	Summer	Unclassified

Other: no

STORAGE

Begins Year: 1987

Ends Year: 1991 Update Schedule: Variable

Media: Electronic File Type: Lotus

Computer

Description: PC compatible

Location: Pendleton

CONTACT

Name/Position: Gerry Rowan, Artificial Production Manager

Phone Number: 503-276-4109

LISTED DATA ITEMS:

ageclass	mark	no. trapped
no. mortalities	no. sacrificed	no. brood
no. released @ dam	no. hauled for relea	

KNOWN LIMITATIONS:

electronic database files are not complete as compared with paper files

COMMENTS:

electronic data files will be expanded in fall 1991 to include additional information such as sex composition

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTUIR

INTERVIEWDATE:

8/27/91

DATASET

Code: UM02

Name : Biological Data

Description: Biological data from recoveries of salmon/steelhead

AREA/SITE

Description: Umatilla River and tributaries

List:

Umatilla R basin

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright
	N	Fall Unclass	N	Summer	N	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	N	A - M	Summer
			N	B - M	Summer
			Y	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1987

Ends Year: 1991 Update Schedule: Variable

Media: Electronic

File Type: Lotus

Computer

Description: PC canpatible

Location: Pendleton

CONTACT

Name/Position: Gerry Rowan, Artificial Production Manager

Phone Number: 503-276-4109

LISTED DATA ITEMS:

fish no.	snout no.	location
date	species	fork length
meps length	marks	sex
was snout taken	disposition	were scales taken
scale no.	comments	

KNOWN LIMITATIONS:

some data is incomplete

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTUIR

INTERVIEW DATE:

8/27/91

DATASET

Code: tJM03

Name: Umatilla River Spawning Ground Surveys

Description: Spawning ground survey information - areas/redds/live/dead

AREA/SITE

Description: Umatilla River and tributaries

List:

Umatilla R basin

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright	
	N	Fall	Unclass	N	Summer	N	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	N	A-M	Summer
			N	B-M	Summer
			Y	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1987

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: Lotus

Computer

Description: PC compatible

Location: Pendleton

CONTACT

Name/Position: Gerry Rowan, Artificial Production Manager

Phone Number: 503-276-4109

LISTED DATA ITEMS:

area covered	miles covered	redds counted
live fish observed	dead fish recovered	redds per mile
date		

KNOWN LIMITATIONS:

the data is spotty and incomplete

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTUIR

INTERVIEW DATE:

8/27/91

DATASET

Code: UM04

Name: Umatilla River Releases

Description: Release reports for Umatilla River and tributaries

AREA/SITE

Description: Umatilla River and tributaries

List:

Umatilla R basin

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver Bright
	N	Fall Unclass	N	Sumner	N	Tule Fall

Other: Y	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	N	A-M Summer
			N	B-run Summer
			Y	Sumner-Unclassified

Other: no

STORAGE

Begins Year: 1967

Ends Year: 1991 Update Schedule: Variable

Media: Electronic

File Type: Lotus

Computer

Description: PC compatible

Location: Pendleton

CONTACT

Name/Position: Gerry Rowna, Artificial Production Manager

Phone Number: 503-276-4109

LISTED DATA ITEMS:

brood year	stock	release date
release location	number released	release size
no. CWT marks	hatchery code	release type
CWT codes		

KNOWN LIMITATIONS:

none

c - s :

different files exist for different sets of information

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: CTUIR

INTERVIEW DATE: 8/27/91

DATASET

Code: UM05
 Name: Umatilla River Recoveries
 Description: CWT recovery information from Umatilla River releases

AREA/SITS

Description: ocean and freshwater

List:

Alaska	Canada
Washington	Oregon
Idaho	California
Columbia River	Umatilla River

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver Bright
	N	Fall Unclass	N	SUMMER	N	Tule Fall
	Other: Y	Coho	N	Pink	Other: N	
	N	Chum	N	Sockeye		
Steelhead: yes	N	Winter	N	A - M Summer		
			N	B - M Summer		
			Y	summer-Unclassified		

Other: no

STORAGE

Begins Year: 1983
 Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: Lotus

Computer
 Description: PC compatible
 Location: Pendleton

CONTACT

Name/Position: Gerry Rowan, Artificial Production **Manager**
 Phone Number: 503-276-4109

LISTED DATA ITEMS:

brood year	stock	release date
release location	number released	release size
CWT releases	hatchery code	no. recovered
CWT codes	recovery location	recovery date
age @ recovery	percent recovered	

KNOWN LIMITATIONS:

data is incomplete - the files need to be updated continuously

COMMENTS:

data is obtained from PMPC, ODFW, WDF

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: USFS

INTERVIEW DATE:

8/15/91

DATASET

Code: US01

Name : Region 4 USFS Monitoring

Description: Stream habitat and fish population; instream, riparian, basin characteristics

AREA/SITE

Description: Portions of Salmon River subbasin, Idaho

List:

Salmon R 17060201,03-06,08

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright
	N	Fall Unclass	Y	Summer	N	Tule Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	N	Winter	Y	A-M	Summer
			Y	B-M	Summer
			y		Summer-Unclassified

Other: resident salmonids

STORAGE

Begins Year: 1991

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII/dBase IV

Computer

Description: PC Compatible

Location: FSL Boise, Idaho

CONTACT

Name/Position: Roger L. Nelson, Data Manager

Phone Dumber: 208-334-1457

LISTED DATA ITEMS:

parr density	geology	channel type
habitat	class by area	class by volume
residual pool depth	cover	substrate caupositio
pebble count	woddy debris	temperature
riparian vegetation	woody species regen	

KNOWN LIMITATIONS:

developmental

c - s :

consists of six related files; cross-referenced to EPA reach

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: WDF

INTERVIEW DATE:

9/05/91

DATASET

Code: WF01

Name : Auxiliary Fish Catch Record System

Description: Summarized fish tickets by dealer, commercial in-season realtime

AREA/SITE

Description: Ocean, Puget Sound, & Columbia River - all WA. landings only

List:

ocean

Puget Sound

Columbia River

SPECIES

Salmon: yes	Chinook: Y	Unclassified	N	Spring	Y	Upriver	Bright
	N	Fall Unclass	N	Summer	Y	Tule	Fall

Other: Y	Coho	Y	Pink	Other: Masu
Y	chum	y	Sockeye	

Steelhead: no	N	Winter	N	A - M	Summer
			N	B-run	Summer
			N	Summer-	Unclassified

Other: no

STORAGE

Begins Year: 1990

Ends Year: 1991 update Schedule: Variable

Media: Electronic

File Type: ASCII

Computer

Description: WDF Prime (MIDAS), UW DEC 5820

Location: Olympia, Seattle

CONTACT

Name/Position: Dave Pratt, Computer Information Consultant

Phone Number: 206-753-6093

LISTED DATA ITEMS:

area code	begin date	end date
tribe/non-treaty	disposition	gear code
species code	fishery code	reporter code
buyer code	port code	type delivery
no. of fish	lbs. of fish	landings

KNOWN LIMITATIONS:

none

C o m m e n t s

archived for one year only

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

9/05/91

DATASET

Code: WF02

Name : Escapement Reports

Description: Twice weekly summary of adult arrivals at facilities

AREA/SITE

Description: Statewide WDF facilities

List:

none listed

SPECIES

Salmon: yes	Chinook: Y	Unclassified	N	Spring	N	Upriver	Bright
	Y	Fall Unclass	N	Summer	N	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
Y	chum	N	Sockeye	

Steelhead: no	N	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1990

Ends Year: 1991 Update Schedule: Other

Media: Electronic File Type: ASCII, Lotus

Computer

Description: WDF Prime, NWIFC Sun, PC

Location: Olympia

CONTACT

Name/Position: Bob Foster, Computer Information Consultant

Phone Number: 206-753-1852

LISTED DATA ITEMS:

species	station	stock
spawned/dead	adults rel upstream	on-hand
total	jacks total	eggtake goal
eggtake total	eggs on hand	canments

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE: Y/05/91

DATASET

Code: WF03
Name : Hatplan
Description: Wash. statewide hatchery production planning data

AREA/SITE

Description: Statewide hatcheries

List:
none listed

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	Y Upriver Bright
	Y Fall Unclass	Y Summer	Y Tule Fall
	Other: Y Coho	Y Pink	Other: N
	Y chum	Y Sockeye	
Steelhead: no	N Winter	N A-run Summer	
		N B-run Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1985
Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: WDF Prime
Location: Olympia

CONTACT

Name/Position: Bob Foster, Computer Information Consultant
Phone Number: 206-753-1852

LISTED DATA ITEMS:

hatchery code	hatchery name	species code
brood	stock code	stockname
footnote no.	status	date activated
date deactivated	type info	eggtake
no. transferred	type transferred	transfer direction
size of fish	transfer size	transfer date
research fish planted	size	planting site
plant date		

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

9/05/91

DATASET

Code: WF04

Name : Plants & Transfers

Description: Salmon Culture planting and transfer data includes WDF, Coops, Federal and Tribal facilities

AREA/SITE

Description: Statewide

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright
	N	Fall UnCLASS	Y	Summer	Y	Tule Fall

Other: Y	Coho	N	Pink	Other: N
Y	chum	Y	Sockeye	

Steelhead: no	N	Winter	N	A-run Summer
			N	B-run Summer
			N	Summer-Unclassified

Other: no

STORAGE

Begins Year: 1952

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic

File Type: ASCII

Computer

Description: WDF Prime

Location: Olympia

CONTACT

Name/Position: Bob Foster, Computer Information Consultant

Phone Number: 206-753-1852

LISTED DATA ITEMS:

ticket no.	Year	month
day	agency code	hatchery code
stream code	species code	stock code
brood	plant type	days reared
class	fish per lb.	quantity released
lbs. released	lbs. transferred in	ID code
description of code	study purpose code	hatchery name
stream name	stock name	purpose name

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

9/05/91

DATASET

Code: WF05

Name: Spawn>Returns

Description: Weekly returns & egtakes at WDF hatcheries by species

AREA/SITE

Description: Statewide hatcheries

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright	
	Y	Fall	Unclass	Y	Summer	N	Tule	Fall

Other: Y	Coho	Y	Pink	Other: N
Y	chum	Y	Sockeye	

Steelhead: no	N	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Sumner	Unclassified

Other: no

STORAGE

Begins Year: 1960

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: WDF Prime, UW CDC

Location: Olympia, Seattle

CONTACT

Name/Position: Bob Foster, Computer Information Consultant

Phone Number: 206-753-1852

LISTED DATA ITEMS:

hatchery	species	week ending
return total	return adults	return jacks
eggtake		

KNOWN LIMITATIONS:

none

COMMENTS:

none

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: WDF

INTERVIEW DATE:

9/05/91

DATASET

Code: WF06

Name: Sport Catch Database

Description: Wash. sport catch by catch area

AREA/SITE

Description: Statewide

List:

Lower Columbia

Mid Columbia

Upper Columbia

Buoy 10

SPECIES

Salmon: yes	Chinook: Y	Unclassified	N	Spring	N	Upriver	Bright
		N Fall Unclass	N	Summer	N	Tule	Fall

Other: Y	Coho
Y	chum

Y	Pink
Y	Sockeye

Other: Jacks

Steelhead: no

N Winter

N A-run Summer

N B-run Summer

N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1975

Ends Year: 1989

Update Schedule: Variable

Media: Electronic

File Type: dBase IV

Computer

Description: Tandy 386sx

Location: Olympia

CONTACT

Name/Position: Dick Geist, Recreational Fisheries Planner

Phone Number: 206-753-6628

LISTED DATA ITEMS:

<u>year</u>	month(a)	month(n)
punchcard area(a)	punchcardarea code	region(a)
region description	chinook	coho
pink	sockeye	other
unknown	jack	king jack
silver jack	trophy chinook	total catch
status(final/prelim)	estimate method	

KNOWN LIMITATIONS:

inconsistent application of species identification

COMMENTS:

prior years have less species definition; Columbia River is small portion of database; source documents are WA sport catch reports

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

9/16/91

DATASET

Code: WF07

Name: Sport Catch Report

Description: Estimates of sport catch based on catch records and reminder letters

AREA/SITE

Description: Statewide

List:

none listed

SPECIES

Salmon: yes	Chinook: Y	Unclassified	N	Spring	N	Upriver	Bright	
	N	Fall	Unclass	N	Summer	N	Tule	Fall

Other: Y	Coho	N	Pink	Other: Jacks
Y	Chum	Y	Sockeye	

Steelhead: no	N	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Summer	Unclassified

Other: no

STORAGE

Begins Year: 1963

Ends Year: 1990 Update Schedule: Yearly

Media: Electronic File TypeP: ASCII

Computer

Description: Tandy 386sx

Location: Olympia

CONTACT

Name/Position: Tony Zinicola Jr., Research Analyst

Phone Number: 206-753-6581

LISTED DATA ITEMS:

data entry batch no.	catch day	marine catch area
catch month	catch no data indic.	number caught
catch record permit#	catch species code	response code
postcard indicator	residence code	

KNOWN LIMITATIONS:

report statistics cannot be directly used for federally mandated allocation

COMMENTS:

magnetic tape storage of 1973-1990 raw catch record data in ASCII files, 1989-1990 Paradox files are copies, summaries, estimates.

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

9/05/91

DATASET

Code: WF08

Name: Temperatures

Description: Summaries of WDF SalmonCulture Facilities water temperatures

ABEA/SITE

Description: Statewide

List:

none listed

SPECIES

Salmon: n/a	Chinook: N	Unclassified	N	Spring	N	Upriver	Bright
		N	Fall	Unclass	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
	N	Chum	N	Sockeye

Steelhead: n/a	N	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Summer-	Unclassified

Other: n/a

STORAGE

Begins Year: 1979

Ends Year: 1991 Update Schedule: Biennially

Media: Electronic

File Type: ASCII

Computer

Description: WDF Prime

Location: Olympia

CONTACT

Name/Position: Bob Foster, Computer Information Consultant

Phone Number: 206-753-1852

LISTED DATA ITEMS:

hatchery code

water source code

month

year

type of temperature

temperature

KNOWN LIMITATIONS.:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEWDATE:

9/05/91

DATASET

Code: WF09

Name: Tucannon Morphometric Data

Description: Morphometric data for juveniles exiting Tucannon River

AREA/SITE

Description: Tucannon River

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright
		N	Fall	Unclass	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
	N	Chum	N	Sockeye

Steelhead: no	N	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1984

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic

File Type: ASCII

Computer

Description: Micro

Location: Snake River Lab, Dayton WA

CONTACT

Name/Position: Glen Mendel, Biologist

Phone Number: 509-382-4755

LISTED DATA ITEMS:

fish no.	measures(qty 31)	date collected
brood year	fork length	group (hatchery/wild)

KNOWN LIMITATIONS:

none

COMMENTS :

data analysis performed on WSU and UI computers. Also have Tucannon River spring chinook adults collected in 1988-1991 (morphometrics) and fall chinook juveniles collected at Lyons Ferry Hatchery at release 1986-1990 (brood year)

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

8/19/91

DATASET

Code: WF10

Name : Washington CWT Releases

Description: Coded wire tagged salmonid releases in Wash.-PSC format V2.0

AREA/SITE

Description: Statewide

List:

17010214-17010216	17010303-17010308
17060103-17060110	17100101-17100106
17020001-17020016	17070101-17070106
17110001-17110021	17030001-17030003
17080001-17080006	

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright
		Y	Fall	Unclass	Y	Sumner	Fall
	Other: Y	Coho	N	Pink		Other: Cherry	
		Y	chum	Y	Sockeye		
Steelhead: yes	Y	Winter	N	A-run	Summer		
			N	B-run	Summer		
			Y	Summer	Unclassified		

Other: no

STORAGE

Begins Year: 1971

Ends Year: 1990 Update Schedule: Yearly

Media: Electronic

File Type: Relational DB

Computer

Description: Z386/33E

Location: Tumwater PRBM-BDS

CONTACT

Name/Position: William Kinney, Computer Information Consult.

Phone Number: 206-586-2132

LISTED DATA ITEMS:

tagcode	replicate no.	tag type
species c/n	run c/n	brood year
agency	release site c/n	first release date
last release date	release stage	rearing type
release category	no. tagged	no. adipose clp only
no. unmarked(assoc.)	counting method	tag loss days
grams/fish	length mm	tag coordinator
expected survival	hatchery c/n	stock c/n
fish/pound	tag loss sample size	comments
tag loss percentage		

KNOWN LIMITATIONS:

none

COMMENTS :

this info is periodically provided to PSMFC in Portland where it can be retrieved along with coastwide data.

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE: 8/18/91

DATASET

Code: WF11
Name : CWT Recoveries
Description: All WDF recoveries of coded-wire tagged fish, 1985-1989

AREA/SITE

Description: Statewide

List:

Grays River through Wells Dam Snake River (WA)
Wenatchee/Chiwawa Rivers

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver	Bright
		Y	Fall	Unclass	Y	Summer	Tule
							Fall
	Other: Y	Coho	N	Pink	Other: N		
		N	Chum	N	Sockeye		
Steelhead: no	N	Winter	N	A-run	Summer		
			N	B-run	Summer		
			N	Summer	Unclassified		

Other: no

STORAGE

Begins Year: 1985
Ends Year: 1989 Update Schedule: Yearly

Media: Electronic File Type: Prime MIDAS

Computer

Description: WDF Prime
Location: Olympia

CONTACT

Name/Position: Susan Markey, Computer Information Consultant
Phone Number: 206-586-8600

LISTED DATA ITEMS:

recovery ID	fishery	date
gear	boat type	area
species	race	sex
sample type	expansion period typ	expansion period no.
expansion category	fork length	alternate measure ty
alternate measure	tag code	replicate code
tag type	duplicate use flag	tag status
expansion factor	port	sampler code
age and subtype	reporting agency	

KNOWN LIMITATIONS:

prior years are not in system yet; lower Columbia mainstream recoveries upstream of buoy 10 are reported by Oregon; stream surveys and fresh water sport for selected streams only and aren't comprehensive for all species.

C - S :

these data are provided annually to the PSMFC Mark Center in Portland. 1990 available as preliminary data.

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

8/27/91

DATASET

Code: WF12

Name: Spring Chinook Accountability

Description: WA tributary accountability of Spring Chinook for forecast and allocation

AREA/SITE

Description: WA Columbia River tributaries

List:

Cowlitz R

Lewis R

Little White Salmon R

Klickitat R

Icicle Creek

Kalama R

Wind R

Big White Salmon R

Yakima R

Wenatchee R

SPECIES

Salmon: yes Chinook: N Unclassified Y Spring N Upriver Bright
N Fall Unclass N Summer N Tule Fall

Other: N Coho
N Chum

N Pink
N Sockeye

Other: N

Steelhead: no

N Winter

N A-run Summer

N B-run Summer

N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1970

Ends Year: 1990 Update Schedule: Yearly

Media: Electronic

File Type: Lotus

Cauputer

Description: PC compatible

Location: Battleground

CONTACT

Name/Position: Cindy **LeFleur**, Fish Biologist

Phone Number: 206-696-6261

LISTED DATA ITEMS:

sport catch

tribal catch

hatchery escapement

natural spawn escape

tributary run size

age

KNOWN LIMITATIONS:

not all trib data goes back to 1970; Klickitat age data is sparse; Big **White** Salmon dataset begins in 1989.

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

Interview DATE: 8/27/91

DATASET

Code: WF13
 Name: OPI Packet
 Description: Catch & escapement of OPI area coho; early and late; run forecasting

AREA/SITE

Description: Northern CA coast; OR coast; Columbia River

List:

Columbia R hatcheries	Columbia R dams
Oregon coastal hatcheries	Oregon coastal dams
N California coastal hatcherie	

SPECIES

Salmon: yes	Chinook: N	Unclassified	N	Spring	N	Upriver	Bright
	N	Fall Unclass	N	Summer	N	Tule	Fall
	Other: Y	Coho	N	Pink	Other: N		
	N	Chum	N	Sockeye			
Steelhead: no	N	Winter	N	A-run	Summer		
			N	B-run	Summer		
			N	Summer	Unclassified		

Other: no

STORAGE

Begins Year: 1970
 Ends Year: 1990 Update Schedule: Yearly

Media: Electronic File Type: Lotus

Computer
 Description: PC compatible
 Location: Battleground

CONTACT

Name/Position: Cindy LeFleur, Fish Biologist
 Phone Number: 206-696-6261

LISTED DATA ITEMS:

hatchery escapement	dam counts	ocean catch commerci
ocean catch sport	Col R catch commerci	Col R catch sport

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

8/21/91

DATASET

Code: WF14

Name: Caviar

Description: Columbia River sturgeon tag and recovery data

AREA/SITE

Description: WA;OR

List:

Lower Col R (below Bonn.)

Pacific NW

SPECIES

Salmon: no Chinook: N Unclassified N Spring N Upriver Bright
N Fall Unclass N Summer N Tule Fall

Other: N Coho N Pink Other: N
N Chum N Sockeye

Steelhead: no N Winter N A-run Summer
N B-runSummer
N Summer-Unclassified

Other: sturgeon (white & green)

STORAGE

Begins Year: 1965

Ends Year: 1991 Update Schedule: Weekly

Media: Electronic

File Type: Rbase

Computer

Description: PC compatible

Location: Battleground

CONTACT

Name/Position: John DeVore, Fish Biologist

Phone Number: 206-696-6261

LISTED DATA ITEMS:

fish no.	record no.	record type
no. of tags	tag agency	tag type
tag color	tag code	tag method
tag month	tag day	tag year
tag fork length	tag total length	tag weight
tag location	species	recovery type
recovery date	recovery fork length	recovery total lngth
recovery weight	sex	recovery location
recovery method	maturity	tag disposition
last flag		

KNOWN LIMITATIONS:

none

COMMENTS :

useful to laymen only for migration and distribution data; pro staff use the data for modeling ie. abundance, exploitation, and other population dynamics parameters that are used in population/simulations

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: WDF

INTERVIEW DATE:

8/21/91

DATASET

Code: WF15

Name: Commercial sturgeon sampling

Description: Columbia River sturgeon commercial sampling data

AREA/SITE

Description: Columbia River commercial fishing areas; treaty & non-treaty

List:

none listed

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver Bright
		N Fall Unclass	N	Summer	N	Tule Fall

Other: N	Coho	N	Pink	Other: N
	N Chum	N	Sockeye	

Steelhead: no	N	Winter	N	A-run Summer
			N	B-run Summer
			N	Summer-Unclassified

Other: white sturgeon, green sturgeon

STORAGE

Begins Year: 1983

Ends Year: 1991 Update Schedule: Variable

Media: Electronic

File Type: Rbase

Computer

Description: PC compatible

Location: Battleground

CONTACT

Name/Position: John Devote, Fish Biologist

Phone Number: 206-696-6261

LISTED DATA ITEMS:

species	gear	zone pool
zone	agency	buyer
date	statistical week	sample rate
plus (residual fish)	page no.	line no.
sample category	weight	total length
fork length	sex	maturity
age	gonad taken	fin taken
pectoral girth	pelvic girth	recovery tag nos.
old tag scars	fresh tag scar	tag counter
scar counter	brood year	mark sample no.
total gonad weight	sample gonad weight	sample egg no.
egg diameter	fecundity	comments

KNOWN LIMITATIONS:

none

COMMENTS:

output from this database is subject to further refinement & modeling via customized software

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: WDF

INTERVIEW DATE:

8/22/91

DATASET

Code: WF16

Name: Columbia River Buoy 10, Chinook, Hammond Recreational Catch/Effort

Description: Recreational catch and effort by &y/week/year, effort type
(private charter, bank) and by State (WA,OR) for Columbia River
mouth to Astoria

AREA/SITE

Description: Megler-Astoria bridge to Columbia River mouth at buoy 10

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	N	Spring	N	Upriver	Bright	
	Y	Fall	Unclass	N	Summer	N	Tule	Fall

Other: Y	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: no	N	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1982

Ends Year: 1990 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: PC compatible

Location: Battleground

CONTACT

Name/Position: Shane Hawkins, Fish Biologist

Phone Number: 206-696-6261

LISTED DATA ITEMS:

effort	effort	type	day
week	year		state
catch	species		area

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

8/22/91

DATASET

Code: WF17

Name: Columbia River Fall Chinook Hatchery and Natural Spawning

Description: Fall chinook age and stock composition; hatchery and natural escapement and spawning data

AREA/SITE

Description: Columbia River mainstem & tributaries downstream from Priest Rapids Dam

List:

SPECIES

Salmon: yes	Chinook: N	Unclassified	N	Spring	Y	Upriver	Bright	
	N	Fall	Unclass	N	Summer	Y	Tule	Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: no	N	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1986

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: PC compatible

Location: Battleground

CONTACT

Name/Position: Joe Hymer, Scientific Tech

Phone Number: 206-696-6261

LISTED DATA ITEMS:

species	week no.	date
gear	area	scale card no.
sample rate	mark sample size	scar position no.
fork length	sex	actual age-CWT,scale
mark code	snout status	sample category
snout label no.	tag code	tag code status
physical damage	spawning success	skin color
mortality	brand/other tag	scale age(read:CWT)

KNOWN LIMITATIONS:

1980-1985 data

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

8/22/91

DATASET

Code: WF18

Name: Columbia River Upriver Spring Chinook Forecast

Description: Annual estimates of runsize, age composition, and forecast method

AREA/SITE

Description: Columbia River upstream from Bonneville Dam, including Snake River

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright
		N	Fall	Unclass	N	Tule Fall

Other: N	Coho	N	Pink	Other: N
	N	Chum	N	Sockeye

Steelhead: no	N	Winter	N	A-run Summer
			N	B-run Summer
			N	Summer-Unclassified

Other: no

STORAGE

Begins Year: 1974

Ends Year: 1990 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: PC compatible

Location: Battleground

CONTACT

Name/Position: Wolf **Dammers**, Fish Biologist

Phone Number: 206-696-6261

LISTED DATA ITEMS:

run size	age canposition	species
area	forecast method	

KNOWN LIMITATIONS:

none

COMMENTS :

none

Columbia River Coordinated Information System

DATASET DIRECTORY

AGENCY: WDF

INTERVIEW DATE: 8/22/91

DATASET

Code: WF19

Name: Columbia River Area Chum Escapement

Description: Natural escapement stream survey index counts and age composition

AREA/SITE

Description: Grays River; Hardy Creek; Hamilton Creek

List:

Grays R

Hamilton Creek

Hardy Creek

SPECIES

Salmon: yes Chinook: N Unclassified N Spring N Upriver Bright
 N Fall Unclass N Summer N Tule Fall

Other: N Coho N Pink Other: N
 Y chum N Sockeye

Steelhead: no N Winter N A-run Summer
 N B-run Summer
 N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1970

Ends Year: 1990 Update Schedule: Yearly

Media: Paper

File Type: paper

Computer

Description: not applicable

Location: Battleground

CONTACT

Name/Position: Hugh Fiscus, Fish Biologist

Phone Number: 206-696-6261

Listed DATA ITEMS:

<u>year</u>	area	Grays R count
Hardy Cr count	Hamilton Cr count	

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

8/21/91

DATASET

Code: WF20

Name : BPA Sport

Description: Sport sampling data used in BPA research

AREA/SITE

Description: Columbia River - Bonneville to McNary dams

List:

none listed

SPECIES

Salmon: yes	Chinook: N	Unclassified	N	Spring	N	Upriver Bright
	Y	Fall Unclass	N	Summer	N	Tule Fall

Other: Y	Coho	N	Pink	Other: N
N	Chum	Y	Sockeye	

Steelhead: yes	N	Winter	N	A-run Summer
			N	B-run Summer
			Y	Summer-Unclassified

Other: sturgeon(white), bass, walleye, squawfish

STORAGE

Begins Year: 1987

Ends Year: 1991 Update Schedule: Monthly

Media: Electronic

File Type: Rbase

Computer

Description: PC compatible

Location: Battleground

CONTACT

Name/Position: Brad James, Fish Biologist

Phone Number: 206-696-6261

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

sampling limited to March-October; partial coverage of area in any given year

C - S :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDF

INTERVIEW DATE:

8/26/91

DATASET

Code: WF21

Name: Columbia River Sockeye Catch and Escapement

Description: Columbia River sockeye catch and escapement to Wenatchee and Okanogan basins

AREA/SITE

Description: Wenatchee R Basin, Okanogan R basin

List:

none listed

SPECIES

Salmon: yes	Chinook: N Unclassified	N Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall

Other: N Coho	N Pink	Other: N
N Chum	Y Sockeye	

Steelhead: no	N Winter	N A-run Summer
		N B-run Summer
		N Sununer-Unclassified

Other: no

STORAGE

Begins Year: 1980

Ends Year: 1991 Update Schedule: Yearly

Media: Paper

File Type: paper

Computer

Description: not applicable

Location: Wenatchee/Battleground

CONTACT

Name/Position: Larrie LaVoy, Fish Biologist

Phone Number: 509-662-0481

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

COMMENTS:

none

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: WDF

INTERVIEW DATE:

8/18/91

DATASET

Code: WF22

Name : CWT Documentary Data

Description: Details concerning the stock characteristics for CWT **groups**

AREA/SITE

Description: Statewide release sites - hatchery and wild

List:

Grays R	Elokamin R
Cowlitz R	Toutle R
Lower Kalama R	Kalama Falls
Speelyai	Lewis R
Washougal R	Klickitat R
Ringold Pond	Priest Rapids Dam
Rocky Reach & Wells Dams	Lyons Ferry

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	Y	Upriver Bright
	Y	Fall Unclass	Y	Summer	Y	Tule Fall
	Other: Y	Coho	N	Pink	Other: N	
	N	Chum	N	Sockeye		
Steelhead: no	N	Winter	N	A-run Summer		
			N	B-run Summer		
			N	Summer-Unclassified		

Other: no

STORAGE

Begins Year: 1975

Ends Year: 1990 Update Schedule: Yearly

Media: Electronic

File Type: ASCII

Computer

Description: PC compatible, WDF Prime

Location: Olympia

CONTACT

Name/Position: Dick O'Connor, Cauputer Information Consultan

Phone Number: 206-586-2130

LISTED DATA ITEMS:

tag code	duplicate code	tag type
duplicate use flag	card type	card sequence no.
use of data	stock characteristic	rearing
release timing	release location	transfer history
disease history	tagging history	prerelease sampling
related groups	bibliography	misc. information

KNOWN LIMITATIONS:

wild stock releases not documented to date; gaps in hatchery tag group coverage have been identified and will be addressed beginning with most recent data

COMMENTS :

valuable for analysis of tag groups for representation; anecdotal notes and bibliographic data and adult sampling notes are useful for analysis; some data applies to hatchery fish only; 5 additional categories of data exist for post-release addenda;

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTWS

INTERVIEW DATE:

9/24/91

DATASET

Code: WS01
Name : Wild Spring Chinook **Harvest**
Description: Harvest data

AREA/SITE

Description: Deschutes River

List:

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright	
	N	Fall	Unclass	N	Sumner	N	Tule	Fall
	Other: N	Coho	.N	Pink	Other: N			
	N	Chum	N	Sockeye				
Steelhead: no	N	Winter	N	A-M	Sumner			
			N	B-run	Sumner			
			N	Summer	Unclassified			

Other: no

STORAGE

Begins Year: 1971
Ends Year: 1991 Update Schedule: Yearly

Media: Paper File Type: paper

Canputer

Description: PC compatible
Location: Warm Springs

CONTACT

Name/Position: Mark **Fritsch**, Fisheries Biologist
Phone Number: 503-553-3233

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

C - S :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CIWSS

INTERVIEW DATE:

9/24/91

DATASET

Code: WS02

Name : Wild Spring Chinook Weir Count

Description: Weir count data

AREA/SITE

Description: Warm Springs River

List:

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall

Other: N Coho	N Pink	Other: N
N Chum	N Sockeye	

Steelhead: no	N Winter	N A-m Summer
		N B-run Summer
		N Summer-Unclassified

Other: no

STORAGE

Begins Year: 1978

Ends Year: 1991 Update Schedule: Yearly

Media: Paper

File Type: paper

Computer

Description: PC compatible

Location: Warm Springs

CONTACT

Name/Position: Mark Fritsch, Fisheries Biologist

Phone Number: 503-553-3233

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTWS

INTERVIEW DATE:

9/24/91

DATASET

Code: WS03
Name : Wild Spring Chinook Redd Count
Description: Redd count data

AREA/SITE

Description: Deschutes and Warm Springs Rivers area

List:

Warm Springs River	Beaver Creek
Mill Creek	Shitike Creek

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver Bright
		N	Fall	Unclass	N	Tule Fall
	Other: N	Coho	N	Pink		Other: N
		N	Chum	N	Sockeye	
Steelhead: no	N	Winter	N	A-M	Summer	
			N	B-M	Summer	
			N	Summer	Unclassified	

Other: no

STORAGE

Begins Year: 1969
Ends Year: 1991 Update Schedule: Yearly

Media: Paper File Type: paper

Cauputer

Description: PC compatible
Location: Warm Springs

CONTACT

Name/Position: Mark Fritsch, Fisheries Biologist
Phone Number: 503-553-3233

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated information System
DATASET DIRECTORY**

AGENCY: CTWS

INTERVIEW DATE:

9/24/91

DATASET

Code: WS04

Name : Wild Spring Chinook Outmigrants

Description: Outmigrant data from wild spring chinook stocks

AREA/SITE

Description: Warm Springs River

List:

SPECIES

Salmon: yes	Chinook: N	Unclassified	Y	Spring	N	Upriver	Bright	
	N	Fall	Unclass	N	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: no	N	Winter	N	A - M	Summer
			N	B-run	Summer
			N	Summer-	Unclassified

Other: no

STORAGE

Begins Year: 1975

Ends Year: 1991 Update Schedule: Yearly

Media: Paper

File Type: paper

Computer

Description: PC compatible

Location: Warm Springs

CONTACT

Name/Position: Mark Fritsch, Fisheries Biologist

Phone Number: 503-553-3233

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

C o m m e n t s

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTWS

INTERVIEWDATE: 9/24/91

DATASET

Code: WS05
Name : Fall Chinook Harvest
Description: Harvest data

AREA/SITE

Description: Deschutes River

List:

Deschutes-R

SPECIES

Salmon: yes	Chinook: N Unclassified	N Spring	N Upriver Bright
	Y Fall Unclass	N Summer	N Tule Fall
	Other: N Coho	N Pink	Other: N
	N Chum	N Sockeye	
Steelhead: no	N Winter	N A-M Summer	
		N B-M Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1973
Ends Year: 1991 Update Schedule: Yearly

Media: Paper File Type: paper

Computer

Description: PC compatible
Location: Warm Springs

CONTACT

Name/Position: Mark Fritsch, Fisheries Biologist
Phone Number: 503-553-3233

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTWS

INTERVIEW DATE:

9/24/91

DATASET

Code: WS06
Name : Fall Chinook Redd Counts
Description: Redd Count data

AREA/SITE

Description: Deschutes River

List:

Deschutes R

SPECIES

Salmon: yes	Chinook: N Unclassified	N Spring	N Upriver Bright
	Y Fall Unclass	N Summer	N Tule Fall
	Other: N Coho	N Pink	Other: N
	N Chum	N Sockeye	
Steelhead: no	N Winter	N A-m Summer	
		N B-run Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1972
Ends Year: 1991 Update Schedule: Yearly
Media: Paper File Type: paper
Computer
Description: PC compatible
Location: Warm Springs

CONTACT

Name/Position: Mark Fritsch, Fisheries Biologist
Phone Number: 503-553-3233

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS

none

C - S :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTWS

INTERVIEW DATE:

9/24/91

DATASET

Code: WS07
Name: Fall Chinook Escapement
Description: Escapement data

AREA/SITE

Description: Deschutes River

List:

Deschutes R

SPECIES

Salmon: yes	Chinook: N Unclassified	N Spring	N Upriver Bright
	Y Fall Unclass	N Summer	N Tule Fall
	Other: N Coho	N Pink	Other: N
	N Chum	N Sockeye	
Steelhead: no	N Winter	N A-M Summer	
		N B-M Summer	
		N Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1977
Ends Year: 1991 Update Schedule: Yearly

Media: Paper File Type: paper

Computer

Description: PC compatible
Location: Warm Springs

CONTACT

Name/Position: Mark Fritsch, Fisheries Biologist
Phone Number: 503-553-3233

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

COMMENTS:

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: CTWS

INTERVIEW DATE:

9/24/91

DATASET

Code: WS08

Name : Summer Steelhead Weir Counts

Description: Weir count data

AREA/SITE

Description: Warm Springs River

List:

Warm Springs R

SPECIES

Salmon: no	Chinook: N Unclassified	N Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall

Other: N Coho	N Pink	Other: N
N Chum	N Sockeye	

Steelhead: yes	N Winter	N A-M Summer
		N B-M Summer
		y Summer-Unclassified

Other: no

STORAGE

Begins Year: 1978

Ends Year: 1991 Update Schedule: Yearly

Media: Paper

File Type: paper

Computer

Description: PC compatible

Location: Warm Springs

CONTACT

Name/Position: Mark Fritsch, Fisheries Biologist

Phone Number: 503-553-3233

LISTED DATA ITEMS:

none listed

KNOWN LIMITATIONS:

none

COMMENTS :

none

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDW

INTERVIEW DATE:

8/12/91

DATASET

Code: WW01

Name: Steelhead Resource Inventories

Description: Summary of all steelhead management data

AREA/SITE

Description: Western WA Boldt Case area

List:

none listed

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver Bright
	N	Fall Unclass	N	Summer	N	Tule Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	Y	Winter	N	A-M	Summer
			N	B-M	Summer
			Y		Summer-Unclassified

Other: no

STORAGE

Begins Year: 1975

Ends Year: 1989 Update Schedule: Yearly

Media: Electronic File Type: SMART,Lotus

Computer

Description: PC compatible

Location: Olympia

CONTACT

Name/Position: Bob Leland, Steelhead Program Manager

Phone Number: 206-753-5713

LISTED DATA ITEMS:

river system	return year	biweekly sport c est
tot biweek tribal ca	totsporthatchery c	sport wild catch
tribal hatchery catc	tribal wild catch	hatchery escapement
wild escapement	total M size	sport catch by age
tribal catch by age	escapement by age	total by age

KNOWN LIMITATIONS:

electronic data not up-to-date as of 1989

COMMENTS:

currently funds are insufficient to maintain this system in electronic form; There is some data to early 1960's; Converted to SMART system in 1988 but not maintained

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDW

INTERVIEW DATE:

8/14/91

DATASET

Code: WW02

Name: Steelhead Age/Length & Weight

Description: Fish age from scale analysis of sport and commercial samples

AREA/SITE

Description: Western WA Boldt Case area

List:

none listed

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver	Bright	
	N	Fall	UnclaSS	N	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	Y	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1976

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: Lotus

Computer

Description: PC compatible

Location: Olympia

CONTACT

Name/Position: Bob Leland, Steelhead Program Manager

Phone Number: 206-753-5713

LISTED DATA ITEMS:

river	date	fish length
fish weight	fish age	fin clip
dorsal fin condition		

KNOWN LIMITATIONS:

weight and length data are incomplete

COMMENTS :

each river (fish source) age data is on a different spreadsheet file; Sane rivers are subdivided into separate files

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDW

INTERVIEW DATE:

2/26/92

DATASBT

Code: WW03

Name: Hatchery Game Fish Stocking Data base

Description: Quantitative description of hatchery releases in WA

AREA/SITE

Description: Statewide

List:

none listed

SPECIES

Salmon: no Chinook: N Unclassified N Spring N Upriver Bright
N Fall Unclass N Summer N Tule Fall

Other: N Coho N Pink Other: N
N Chum N Sockeye

Steelhead: yes Y Winter N A-run Summer
N B-run Summer
Y Sumner-Unclassified

Other: cutthroat, trout, warm water species

STORAGE

Begins Year: 1981

Ends Year: 1992 Update Schedule: Variable

Media: Electronic File Type: Hence-Info DB

Computer

Description: Prime/Primos

Location: Olympia

CONTACT

Name/Position: Terry Lovgren, Biologist

Phone Number: 206-586-9025

LISTED DATA ITEMS:

program area	county	hatchery
month	year	lot
species	brood	subgroup
fiscal year	csize	water
water type	river no.	section
township	range	river mile
river system	day	pounds
size	m1/m2	cwt no.
BRNO	BRNOPOS	tank temperature
water temperature	number	region

KNOWN LIMITATIONS:

water codes are WDW standards

C - S :

coded wire code information is available

Columbia River Coordinated Information System DATASET DIRECTORY

AGENCY: WDW

INTERVIEW DATE:

8/12/91

DATASET

Code: WW04

Name: Angler Fish Database

Description: Sport catch and effort from creel surveys; including biological data

AREA/SITE

Description: Statewide

List:

none listed

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver	Bright
	N	Fall	Unclass	N	Summer	N	Tule Fall

Other: N	Coho	N	Pink	Other: Y
N	Chum	N	Sockeye	

Steelhead: yes	Y	Winter	N	A-run	Summer
			N	B-run	Summer
			Y	Summer-	Unclassified

Other: any freshwater species caught by sport gear (not salmon)

STORAGE

Begins Year: 1985

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: dBase IV

Computer

Description: PC compatible

Location: Regional WDW Biologists

CONTACT

Name/Position: Pete Hahn, Fish Research Manager

Phone Number: 206-753-5713

LISTKD DATA ITEMS:

water type	water code	date
time	observer	no. of boats
no. of boat anglers	no. of shore anglers	complete observation
subsection	no. in fishing party	angler reference
no. of adults	no. of juveniles	ending fishing time
no. hours fished	completed	satisfied
angler type	gear	target fish
species origin	no. kept	lengths
marks	no. released	reason released

KNOWN LIMITATIONS:

cannot enter lengths of released catch; Post 1990 data is incomplete

COMMENTS:

requires digitized water codes

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDW

INTERVIEW DATE:

8/12/91

DATASET

Code: WW05

Name : Steelhead Creel Survey and Sport Catch Estimates

Description: Creel survey data; provides expanded catch estimates

AREA/SITE

Description: Western WA Boldt Case area

List:

none listed

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver	Bright	
	N	Fall	Unclass	N	Summer	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
N	Chum	N	Sockeye	

Steelhead: yes	Y	Winter	N	A-run	Summer
			N	B-run	Summer
			N	Summer-Unclassified	

Other: no

STORAGE

Begins Year: 1974

Ends Year: 1991 Update Schedule: Variable

Media: Electronic File Type: dBase IV

Computer

Description: PC compatible

Location: Olympia

CONTACT

Name/Position: Bob Leland, Steelhead Program Manager

Phone Number: 206-753-5713

LISTED DATA ITEMS:

river code	section	date
hours of daylight	index expansions	effort expansion
total adjusted	hours of effort	river-out-conditon
trip completion	angling type	no. of anglers
no. of vehicles	no. of fish	effort counts
no. of boats		

KNOWN LIMITATIONS:

river codes are WDW standards

C - S :

1974-1985 data is on paper only; 1985-1990 data is in Lotus spreadsheets

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDW

INTERVIEW DATE: 10/01/91

DATASET

Code: WW06

Name : Fish Health Database

Description: Diseases of hatchery brood-stock, juveniles, and natural fish

AREA/SITE

Description: Statewide hatcheries and stream/lake samples

List:

none listed

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver	Bright
		N	Fall	Unclass	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
	N	Chum	Y	Sockeye

Steelhead: yes	Y	Winter	N	A-run	Summer
			N	B-run	Summer
			Y	Summer	Unclassified

Other: cutthroat, trout, warm water species

STORAGE

Begins Year: 1986

Bnds Year: 1991 Update Schedule: Variable

Media: Electronic File Type: Lotus

Canputer

Description: PC compatible

Location: Wenatchee District Office-WDW

CONTACT

Name/Position: Steve Roberts, Fish Pathologist

Phone Number: 509-663-9711

LISTED DATA ITEMS:

sampling site name	subbasin name	species
disease type	disease name	

KNOWN LIMITATIONS:

lakes & streams are sampled infrequently

COMMENTS:

hatchery data input is incomplete

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDW

INTERVIEW DATE:

8/12/91

DATASET

Code: WW07

Name : Commercial Steelhead Fish Tickets

Description: Record of commercial (tribal) sale of steelhead

AREA/SITE

Description: Statewide

List:

none listed

SPECIES

Salmon: no	Chinook: N Unclassified	N Spring	N Upriver Bright
	N Fall Unclass	N Summer	N Tule Fall

Other: N Coho	N Pink	Other: N
N Chum	N Sockeye	

Steelhead: yes	Y Winter	N A-M Sumner
		N B-M Sumner
		Y Sumner-Unclassified

Other: no

STORAGE

Begins Year: 1976

Ends Year: 1991 Update Schedule: Yearly

Media: Magnetic Tape File Type: SMART

Computer

Description: unspecified

Location: Olympia

CONTACT

Name/Position: Bob Leland, Steelhead Program Manager

Phone Number: 206-753-5713

LISTED DATA ITEMS:

non listed

KNOWN LIMITATIONS:

data entry is out-of-date as of 1989; post 1985 data is for western WA Boldt Case area only

COMMENTS:

this system is no longer operative and is being considered for revision

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDW

INTERVIEW DATE:

8/12/91

DATASET

Code: WWO8

Name: Steelhead Permit Card Program

Description: Data to estimate statewide steelhead sport catch by river

AREA/SITE

Description: Statewide

List:

none listed

SPECIES

Salmon: no	Chinook: N	Unclassified	N	Spring	N	Upriver	Bright
		N	Fall	Unclass	N	Tule	Fall

Other: N	Coho	N	Pink	Other: N
	N	Chum	N	Sockeye

Steelhead: yes	Y	Winter	N	A - M	Summer
			N	B-M	Summer
			Y	Summer	Unclassified

Other: no

STORAGE

Begins Year: 1982

Ends Year: 1991 Update Schedule: Yearly

Media: Electronic File Type: ASCII

Computer

Description: PC compatible, Prime

Location: Olympia

CONTACT

Name/Position: Pete Hahn, Fish Research Manager

Phone Number: 206-753-5713

LISTED DATA ITEMS:

permit no.	permit ending year	date caught
river code	fish origin	punchcardno.
license year	total fish	fisherman's age cate

KNOWN LIMITATIONS:

uses WDW river codes

COMMENTS:

data structure prior to 1991 included other administrative information and is on Prime only

**Columbia River Coordinated Information System
DATASET DIRECTORY**

AGENCY: WDW

INTERVIEW DATE: 8/13/91

DATASET

Code: WWO9

Name : Washington Rivers Information System

Description: Resident and anadromous fish distribution; habitat and population description

AREA/SITE

Description: Statewide

List:

all hydrological units

SPECIES

Salmon: yes	Chinook: N Unclassified	Y Spring	N Upriver Bright
	Y Fall Unclass	Y Summer	N Tule Fall

Other: Y Coho	N Pink	Other: all
Y chum	Y Sockeye	

Steelhead: yes	Y Winter	N A-M Summer
		N B-M Summer
		Y Summer-Unclassified

Other: resident & anadromous

STORAGE

Begins Year: 1989

Ends Year: 1991 Update Schedule: Other

Media: Electronic File Type: not specified

Computer

Description: Prime

Location: Olympia

CONTACT

Name/Position: Lea Knutson, WARIS Coordinator

Phone Number: 206-586-1449

LISTED DATA ITEMS:

hydrography	anadromous fish	resident fish
-------------	-----------------	---------------

KNOWN LIMITATIONS:

Imperial data from interviews; limited to 1:100,000 map scale; river reach specific

COMMENTS:

being converted to IBM DOS; update schedule planned to be quarterly soon.
Available with a menu-driven user access system.

APPENDIX D - AN INDEX TO THE DATASET DIRECTORY

Columbia River Coordinated Information System

AN INDEX TO THE DATASET DIRECTORY

The following codes refer to page numbers in Appendix C of the CIS Data Catalog Report on which dataset directories can be found describing collections of data falling into these CIS Needs Survey categories. Note that most datasets contain data from more than one category, and the intent here is to express the *predominant* data type found in each dataset.

NATURAL PRODUCTION - HABITAT

N100	Escapement, Spawners, and Subbasin Harvest C.2, C.3, C.6, C.14, C.25, C.26, C.28, C.40, C.41, C.43, C.44, C.51, C.73, C.75, C.77, C.78, C.79, C.82, C.83, C.84
N200	Juveniles C.7, C.42
N300	Migrants/Smolts C.63, C.80
N400	Survival, Recruitment, Production Studies C.5
N500	Genetics Characteristics (none)
N600	Fish and Wildlife Program - Habitat C.39
N700	Drainage Basin Characteristics C.12
N800	Stream Channel Characteristics C.4, C.45, C.54
N900	Barriers, Diversions, Screens (none)
N1000	Water Quantity (none)
N1100	Water Quality C.17, C.47

Columbia River Coordinated Information System

AN INDEX TO THE DATASET DIRECTORY

- N1200** **Invertebrates, General Biotic**
NC48
- N1300** **Substrate**
C.46
- N1400** **Habitat Type and Cover**
C.11, C.30
- N1500** **Riparian and Streambanks**
(none)
- N1600** **Habitat Analysis and Summaries**
(none)

HATCHERY PRODUCTION

- H100** **Escapement and Spawners**
C.29, C.49 C.50, C.53, C.56, C.59, C.71
- H200** **Hatchery Information**
C.57, C.62
- H300** **Rearing Information**
C.10, C.76, C.90
- H400** **Release Information**
C.9, C.24, C.27, C.35, C.52, C.58, C.64, C.87
- H500** **survival Rates**
C.65

SYSTEM

- S100** **Fish and Wildlife Program Effect Data**
C.1, C.8, C.13, C.31, C.32, C.33, C.68, C.85, C.86, C.93
- S200** **Escapement and Spawners**
C.66, C.67, C.72

D.2

Columbia River Coordinated Information System

AN INDEX TO THE DATASET DIRECTORY

\$300	Adult Dam Loss/Conversion (none)
S400	Ocean Harvest C.36, C.37, C.55, C.61
S500	Inriver Harvest C.15, C.16, C.19, C.60, C.69, C.70, C.74, C.88, C.89, C.91, C.92
S600	Subbasin Harvest C-18, c.21, C.22, C.81
\$700	Presmolt Production (none)
\$800	Smolt Production C.20, C.23, C.34
S900	Smolt Passage and Survival C-38

APPENDIX E - DATA ITEM DIRECTORY CONTACTS

Columbia River Coordinated Information System

DATA ITEM DIRECTORY CONTACTS

This is a list of the CIS Needs Survey respondents who noted that they collect data of regional interest (sorted by survey number). Use it in combination with the Data Item Directory to find the names of people to contact for data related to your interest. The full list of Needs Survey respondents can then be used to obtain the phone number and address of these individuals.

C001	Ruff, Jim
C002	Tanovan, Bolyvong
C003	Hartner, Keith
CI01	Weber, Earl
C301	Roger, Phil
C302	Anderson, Duane
c311	Shaw, Mark
C312	Pansky, Tom
c314	Poe, Pat
C316	Fisher, Tim
C320	Donnelly, Robert
1001	L&zinger, Eric
1002	Bowles, Ed
1003	Hauck, Kent
1004	Petrosky, Charlie
1005	Cochnauer, Tii
1006	Kiefer, Sharon
1007	Crase, Frederick
1100	Kiefer, Russel
1101	Cannamela, Dave
1102	Holubetz, Terry
1103	Maret, Terry
1105	Forsgren, Harv
1106	Lloyd, John
1107	Smith, Bruce
1108	Jadlowski, Leon
1109	Lukens, Jim
1110	Miller, Bill
1111	Moffitt, Christine
1113	Bjornn, Ted
1114	Duke, Rodney
1115	Heberger, Roy
1116	Herrig, Dan
1117	McIntyre, Jack
1118	Overton, Kerry

Columbia River Coordinated Information System

DATA ITEM DIRECTORY CONTACTS

1121	Bowler, Bert
1125	McArthur, Tom
1126	Hassemer, Pete
1127	Moore, Virgil
1128	Hutchinson, Bill
1129	Rogers, Tom
1130	Groen, Cal
1131	Reid, Will
1132	Heimer, John
1134	Allen, Stan
1135	Whitman, Si
1137	Larson, Ed
1140	Johnson, Craig
1142	Andrews, John
1143	Espinosa, Al
1144	Anderson, Kathy
1145	Mauney, James
1146	Buettner, Ed
1147	Wasson, Norm
0112	King, Steve
0113	Corrarino, Charlie
0114	Carmichael, Rich
0118	Wade, Mark
0120	Newton, Jim
0123	Claire/Gray, Errol/Mike
0125	Phelps, Jim
0128	Buckman, Bob
0129	Degenhardt, Dave
0130	smith, Clint
0132	Mattick, Mike
0134	Shea, Cordy
0135	Foster, Gene
0147	Anderson, John
0152	House, Bob
0154	Morgan, Lee
0155	Armantrout, Neil
0156	Smith, Bob
0159	Hawkes, Clayton
0165	Olney, Fred
0170	Athem, Jim
0171	Wick, Sarah

Columbia River Coordinated Information System

DATA ITEM DIRECTORY CONTACTS

0182	Lackey, Robert T.
0191	Fritsch, Mark
0192	Cramer, Doug
0194	Eddy, Bruce
0202	Nyara, Bill
0203	Robart, Randy
0500	Massey, Jay
so01	Kutchins, Keith
S002	Griffith, Jack
S003	Scully, Richard
S004	Rowe, Mike
S005	Spaulding, Scott
W101	Woodin, Rod
W102	LaVoy, Larrie
W103	LeFleur, Cindy
W104	Appleby, Andy
W105	Banks, Joe
W106	Larrick, Walter
W107	Brown, Larry
W108	Tipping, Jack
W109	Michak, Patty
W110	Toedtemeier, Guy
W111	Roth, Tii
W112	Geist, David
W113	Howerton, Jack
W114	Guy, Dan
W115	Castaneda, Ron
W116	Nicolay, Robin
W117	Anderson, Ted
W118	Beeman, John
W119	Hymmer, Joe
W120	Fuss, Howard
W121	Byrne, James
W122	Foster, Robert
W123	Hays, Steven
W124	Williams, Kenneth
W125	Wagner, Paul
W126	Easterbrooks, John
W127	Weinheimer, John
W128	Dugger, Carl

Columbia River Coordinated Information System

DATA ITEM DIRECTORY CONTACTS

W129	LaMotte, Ed
W130	Lucas, Bob
W131	Aksamit, Richard
W132	Lock, John
W133	Ledgerwood, Richard D
W134	Fuller, Ross
w135	Mongillo, Paul
W136	Winans, Gary
W137	Anderson, Eric
W138	Dauble, Dennis
W139	Pedersen, Paul
W140	Olney, Fred
W141	Lind, David
W142	Hahn, Peter
W143	Leider, Steven
W144	Amos, Kevin
W145	Hopley, Bill
w146	Dawley, Earl
w147	Kerwin, John
W148	Schuck, Mark
W149	Dennelly, Robert
W150	Knutson, Lea

APPENDIX F - NEEDS SURVEY RESPONDENTS (by name)

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

-A-

Aksamit, Richard
(W131)

Hatchery Manager 3
WA Department of Fisheries
1318 SR 407
Cathlamet, WA 98612
Phone: (206) 795-3608

Allen, Stan
(I134)

Fish & Wildlife Data Coordinator
ID Department of Fish & Game
600 S Walnut, P.O. BOX 25
Boise, ID 83707
Phone: (208) 334-3098
E-ax : (208) 334-2114

Amos, Kevin
(W144)

Chief Fish Pathologist
WA Department of Fisheries
RM. 115, Gen. Ad. Bldg., MS: AX-11
Olympia, WA 98504
Phone: (206) 586-2825
Fax : (206) 664-0661

Anderson, Duane
(C302)

Database Coordinator
NW Power Planning Council
851 SW 6th, Suite 1100
Portland, OR 97204
Phone: (503) 222-5161
Fax : (503) 795-3370

Anderson, Eric
(W137)

Fish Biologist
WA Department of Wildlife
2807 Fruitvale Blvd
Yakima, Wa 98902
Phone: (509) 575-2740
Fax : (509) 575-2474

Anderson, John
(0147)

Forest Fisheries Biologist
US Forest Service, Wallowa Whitman
Box 907
Baker City, OR 97814
Phone: (())
Fax : () . -

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Anderson, Kathy (1144)	Resource Staff Officer US Forest Service Wasatch-Cache National Forest 125 S. State Salt Lake City, UT 84138 Phone: (801) 524-5030 Fax : (801) 524-3172
Anderson, Ted (W117)	Klickitat Hatchery Manager WA Department of Fisheries 301 Fish Hatchery Road Gleenwood, WA 98619 Phone: (509) 364-3310 Fax : (509) 364-3639
Andrews, John (1142)	ID Fish Coordinator-BPA Projects US Forest Service 1750 Front Boise, ID 83702 Phone: (208) 364-4152 Fax : (208) 364-4111
Appleby, Andy (W104)	Fish Biologist 3 WA Department of Fisheries RM. 115, Gen. Ad. Bldg., MS: AK-11 Olympia, WA 98504 Phone: (206) 586-6344 Fax : (206) 664-0661
Armantrout, Neil (0155)	District Fisheries Biologist US Bureau Of Land Management Eugene District, Box 10226 Eugene, OR 97440 Phone: (503) 683-6451 Fax : (503) 683-6251
Athearn, Jim (0170)	Fishery Biologist US Army Corps Of Engineers P.O. Box 2870 Portland, OR 97208 Phone: (503) 326-2835 Fax : (503) 326-7328

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

-B-

Banks, Joe (W105)	Fishery Biologist US Fish and Wildlife Service 1440 Abernathy Road Longview, WA 98632 Phone: (206) 425-6072 Fax. : (206) 636-1855
Beecher, Hal (W114)	Hydroproject Coordinator WA Dept of Wildlife 600 Capitol Way N. Olympia, WA 98501-1091 Phone: (206) 753-3318 Fax : (206) 586-0248
Beeman, John (W118)	Fishery Biologist US Fish and Wildlife Service Col. R. Field Station, Star Route Cook, WA 98605 Phone: (509) 538-2299 Fax : (509) 538-2843
Bjornn, Ted (1113)	Asst. Leader - Professor ID Coop Fish & Wildlife Res Unit University of Idaho Moscow, ID 83843 Phone: (208) 885-7617 Fax : (208) 885-6226
Bowler, Bert (1121)	Columbia River Policy Coordinator ID Dept of Fish & Game 600 S Walnut, Box 25 Boise, ID 83707 Phone: (208) 334-2646 Fax : (208) 334-2114
Bowles, Ed (1002)	Principal Fishery Res. Biologist ID Dept of Fish & Game 1798 Trout Road Eagle, ID 83616 Phone: (208) 939-6709 Fax : (208) 939-6808

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Brown, Larry
(W107)

Area Fish Biologist 3
WA Department of Wildlife
3860 Chelan Highway
Wenatchee, Wa 98801
Phone: (509) 663-9711
Fax : (509) 662-0490

Buckman, Bob
(0128)

District Fish Biologist
OR Department of Fish and Wildlife
Hamlet Route, Box 360
Seaside, OR 97138
Phone: (503) 738-7066
Fax : (503) 738-6929

Buettner, Ed
(1146)

Sr Fish Research Biologist
ID Dept of Fish & Game
1540 Warner Ave
Lewiston, ID 83501
Phone: (208) 743-6502
Fax : (208) 743-4314

Byrne, James
(W121)

Stock Characteristic Evaluator
WA Department of Wildlife
5405 WE Hazel Dell Ave
Vancouver, WA 98663
Phone: (206) 896-6902
Fax : (206) 690-7234

- C -

Cannamela, Dave
(1101)

Fisheries Research Biologist
ID Dept of Fish & Game
1798 Trout Road
Eagle, ID 83616
Phone: (208) 939-6709
Fax : (208) 939-6808

Carmichael, Rich
(0114)

Program Leader
OR Dept of Fish and Wildlife
Inlow Hall EOSC 1410 L Ave.
Lagrande, OR 97850
Phone: (503) 962-3777
Fax : (503) 962-3849

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Castaneda, Ron
(W115)

Hatchery Manager 3
WA Department of Fisheries
3900 Kalama River Road
Kalama, WA 98625
Phone: (206) 673-4825

Claire/Gray, Errol/Mike
(0123)

District Fish Biologist/Asst.
OR Dept of Fish and Wildlife
P.O. Box 9
John Day, OR 97845
Phone: (503) 575-1167
Fax : (503) 575-0948

Cocbnauer, Tim
(I005)

Regional Fishery Manager
ID Dept of Fish & Game
1540 Warner
Lewiston, ID 33501
Phone: (208) 743-6502
Fax : (208) 743-4314

Corrarino, Charlie
(0113)

Fisheries Data Base Manager
OR Dept of Fish and Wildlife
2501 SW First Ave., P.O. Box 59
Portland, OR 97207
Phone: (503) 229-5410
Fax : (503) 229-5602

Cramer, Doug
(0192)

Environmental Scientist
PGE
33831 SE Faraday Rd.
Estacada, OR 97023
Phone: (503) 630-6831
Fax : (503) 630-8219

Cruse, Frederick
(1007)

Environmental Specialist
US Bureau of Reclamation
Box 043, 550 W.Fort Street
Boise, ID 83724
Phone: (208) 334-1550
Fax : (208) 334-1341

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

-D-

Dauble, Dennis
(W138)

Sr Research Scientist
BPNW
PO Box 999
Richland, WA 99352
Phone: (509) 376-3631
Fax : (509) 376-9201

Dawley, Earl
(W146)

Fish Biologist Supervisor
NMFS
PO Box 155
Hammond, OR 97121
Phone: (503) 861-1853
Fax : (503) 861-1853

Degenhardt, Dave
(0129)

Forest/Water Issues Coordinator
OR Dept of Forestry
2600 State Street
Salem, OR 97310
Phone: (503) 378-2957
Fax : (503) 373-1937

Donnelly, Robert
(C320)
(W149)

Fisheries Biologist
University Of Washington / FRI
260 Fisheries Center, WH-10
Seattle, WA 98195
Phone: (206) 543-2541
Fax : (206) 684-7471

Dugger, Carl
(W128)

Area Habitat Biologist
WA Department of Wildlife
5405 NE Hazel Dell Ave
Vancouver, WA 98663
Phone: (206) 696-6211
Fax : (206) 690-7238

Duke, Rodney
(1114)

Sr Fish Research Biologist
ID Dept of Fish & Game
1540 Warner Avenue
Lewiston, ID 83501
Phone: (208) 743-6502
Fax : (208) 743-4314

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

-E-

Easterbrooks, John
(W126)

Fish Biologist 4, Scrn'g Prog Mgr
WA Department of Fisheries
P.O. Box 9155
Yakima, WA 98909
Phone: (509) 575-2734
Fax : (509) 454-4139

Eddy, Bruce
(0194)

Principle Scientist
Pacific Power
720 SW 6th Ave
Portland, OR 97204
Phone: (503) 464-6471
Fax : (503) 464-6424

Espinosa, Al
(1143)

Forest Fisheries Biologist
Clearwater N.F.
12730 Highway 12
Orofino, ID 38544
Phone: (208) 476-4541
Fax : (208) 476-0129

-F-

Fisher, Tim
(C316)

Fisheries Biologist
Bonneville Power Administration
905 NE 11th, Po Box
Portland, OR 97208
Phone: (503) 230-5480
Fax : (503) 230-3314

Forsgren, Harv
(1105)

Regional Fish Hab Mgmt Prgm Leader
USDA Forest Service
14th & Independence SW
PO Box 96090
Washington, DC 20090-6090
Phone: (202) 205-0830
Fax : (202) 205-1599

Foster, Gene
(0135)

Aquatic Resource Specialist
DEQ - Water Quality Division
811 SW 6th Ave.
Portland, OR 97204
Phone: (503) 229-6982
Fax : (503) 229-6124

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Foster, Robert
(W122)

Computer Information Consultant 3
WA Dept of Fisheries
RM. 115, Gen. Ad. Bldg., MS: AK-11
Olympia, WA 98504
Phone: (206) 751-1852
Fax : (206) 664-0661

Fritsch, Mark
(0191)

Fisheries Biologist
Confederated Tribes Of W. Spgs
PO Box C
Warm Springs, OR 97761
Phone: (503) 553-3233
Fax : (503) 553-1433

Fuller, Ross
(W134)

Fish Biologist 4
WA Dept of Fisheries
RM. 115, Gen. Ad. Bldg., MS: AK-11
Phone: (206) 753-0250
Fax : (206) 586-8884

Fuss, Howard
(W120)

Fish Biologist 3
WA Dept of Fisheries
RM. 115, Gen. Ad. Bldg., MS: AK-11
Olympia, WA 98504
Phone: (206) 586-2085
Fax : (206) 586-6550

-G-

Geist, David
(W112)

Regional Habitat Manager
WA Dept of Fisheries
500 N. Morain, Box 14, Suite 1200B
Kennewick, WA 99336
Phone: (509) 545-2034
Fax : (509) 783-1733

Griffith, Jack
(S002)

Professor, Biological Sciences
Idaho State University
Box 8007
Pocatello, ID 83209
Phone: (208) 236-2116
Fax : (208) 236-4570

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Groen, Cal
(1130)

Chief Program Coordination
ID Dept of Fish & Game
600 S Walnut
Boise, ID 83707
Phone: (208) 334-2595
Fax : (209) 334-2114

-H-

Hahn, Peter
(W142)

Fish Research & Data Manager
WA Dept of Wildlife
600 Capitol Way N.
Olympia, WA 98501-1091
Phone: (206) 753-5713
Fax : (206) 586-0248

Hartner, Keith
(CO03)

Chief Biological Planning Br.
BPA - PJS
Po Box 3621
Portland, OR 97208
Phone: (503) 230-5497
Fax : () -

Hassemer, Pete
(1126)

Sr Fish Research Biologist
ID Dept of Fish & Game
600 S Walnut, PO Box 25
Boise, ID 83707
Phone: (208) 334-3791
Fax : (208) 334-2114

Hauck, Kent
(I003)

Fish Pathologist Supervisor
ID Dept of Fish & Game
1800 Trout Rd
Eagle, ID 83616
Phone: (208) 939-2413
Fax : (208) 939-2415

Hawkes, Clayton
(0159)

Fishery Biologist
National Marine Fisheries Serv
911 NE 11th, Room 620
Portland, OR 97232
Phone: (503) 230-5425
Fax : (503) 230-5435

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Hays, Steven
(W123)

Fish Biologist
CCPUD
PO Box 1231
Wenatchee, WA 98807
Phone: (509) 663-8121
Fax : (509) 664-2879

Heberger, Roy
(1115)

Asst. Field Supervisor
US Fish & Wildlife Service
4696 Overland - Room 576
Boise, ID 83705
Phone: (208) 334-1931
Fax : (208) 334-9493

Heimer, John
(1132)

Staff Fisheries Biologist
ID Dept of Fish & Game
600 S Walnut, PO Box 25
Boise, ID 83707
Phone: (208) 334-2597
Fax : (208) 334-2114

Herrig, Dan
(1116)

Evaluation Studies Coordinator
US Fish & Wildlife Service
4696 Overland Road, Room 560
Boise, ID 83705
Phone: (208) 334-1963
Fax : (208) 334-1896

Holubetz, Terry
(1102)

Regional Fishery Manager
ID Dept of Fish & Game
109 W 44th
Boise, ID 83714
Phone: (208) 327-7025
Fax : (208) 327-7030

Hopley, Bill
(W145)

Resource Manager 1
WA Dept of Fisheries
RM. 115, Gen. Ad. Bldg., MS: AX-11
Olympia, WA 98504
Phone: (206) 586-1991
Fax : (206) 586-8884

House, Bob
(0152)

Fishery Biologist
Bureau of hand Mgmt
1717 Fabry Rd. SE
Salem, OR 97306
Phone: (503) 375-5608
Fax : (503) 375-5622

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Bowerton, Jack
(W113)

CIC
WA Dept of Wildlife
600 Capitol Way N.
Olympia, Wa 98501
Phone: (206) 753-2736
Fax : (206) 586-0248

Hutchinson, Bill
(1128)

State Fish Hatchery Manager
ID Dept of Fish & Game
600 S Walnut PO Box 25
Boise, ID 83707
Phone: (208) 334-3791
Fax : (208) 334-2114

Hymer, Joe
(W119)

Scientific Tech IV
WA Dept of Fisheries
16118 NE 219th St, PO Box 460
Battle Ground, WA 98604
Phone: (206) 696-6261
Fax : (206) 696-6259

-J-

Jadlowski, Leon
(1108)

Fisheries Biologist
USDA Forest Service
HC63 Box 1671 Hwy93
Challis, ID 83226
Phone: (208) 879-2285
Fax : (208) 879-5242

Johnson, Craig
(1140)

Fisheries Biologist
Bureau of Land Management
Rt 3, Box 181
Cottonwood, ID 83522
Phone: (208) 962-3245
Fax : (208) 962-3275

-K-

Kerwin, John
(W147)

Hatchery Program Manager
WA Dept of Wildlife
600 Capitol Way N.
Olympia, WA 98501
Phone: (206) 753-5713
Fax : (206) 586-0248

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Kiefer, Russell
(1100)

Sr Fisheries Res Biologist
ID Dept of Fish & Game
1798 Trout Road
Eagle, ID 83616
Phone: (208) 939-2592
Fax : (208) 939-2808

Kiefer, Sharon
(1006)

Fish Subbasin Analyst, Anad
ID Dept of Fish & Game
600 S Walnut, PO Box 25
Boise, ID 83707
Phone: (208) 334-3791
Fax : (208) 334-2114

King, Steve
(0112)

Columbia River Harvest Manager
OR Dept of Fish & Wildlife
17730 SE Evelyn St.
Clackamas, Or 97015
Phone: (503) 657-2031
Fax : (503) 657-2095

Knutson, Lea
(W150)

WA Rivers Info System Coordinator
WA Dept of Wildlife
600 Capitol Wy N
Olympia, WA 98501
Phone: (206) 586-1440
Fax : (206) 586-8348

Kutchins, Keith
(S001)

Anadromous Fisheries Biologist
Shoshone-Bannock Tribes
Box 306
Fort Hall, ID 83203
Phone: (208) 238-3900
Fax : (208) 238-3742

-L-

LaMotte, Ed
(W129)

Hatchery Manager
US Fish & Wildlife Service
Spring Creek Nat'l Fish Hatchery
Underwood, Wa 98651
Phone: (509) 493-1730
Fax : (509) 493-2980

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

LaVoy, Larrie
(W102)

Fish Biologist 3
WA Dept of Fisheries
610 N. Mission Ave #B-8
Wenatchee, WA 98801
Phone: (509) 565-0481
Fax : (509) 565-0488

Lackey, Robert T.
(0182)

Deputy Laboratory Director
EPA Envir. Research Lab
200 SW 35th Street
Corvallis, OR 97333
Phone: (503) 757-4601
Fax : (503) 754-4799

Larrick, Walter
(W106)

Fisheries Biologist
RID
PO Box 810
Sunnyside, WA 98944
Phone: (509) 837-5141
Fax : (509) 837-8541

Larson, Ed
(I137)

Director Hatchery Operations
Nez Perce Tribe - Fisheries
PO Box 365
Lapwai, ID 83501
Phone: (208) 843-2253
Fax : (208) 843-5324

LeFleur, Cindy
(W103)

Fish Biologist 3
WA Dept of Fisheries
PO Box 460
Battle Ground, Wa 98604
Phone: (206) 696-6261
Fax : (206) 696-6259

Ledgerwood, Richard D
(W133)

Fish Biologist - Research
National Marine Fisheries Service
NMFS Pt. Adams Bio. Station, Box155
Hammond, OR 97121
Phone: (503) 861-1853
Fax : () -

Leider, Steven
(W143)

Fish Research Coordinator
WA Dept of Wildlife
804 Allen St., Suite 3
Kelso, WA 98626
Phone: (206) 577-0197
Fax : (206) 577-0387

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Leitzinger, Eric (1001)	Fisheries Research Biologist ID Dept of Fish & Game 1798 Trout Road Eagle, ID 83616 Phone: (208) 939-6709 Fax : (208) 939-6808
Lind, David (W141)	Fisheries Biologist YIN PO Box 151 Toppenish, Wa 98948 Phone: (509) 865-5121 Fax : (509) 865-6293
Lloyd, John (1106)	Forest Fisheries Biologist US Forest Service Sawtooth National Forest 2647 Kimberly Rd East Twin Falls, ID 83301 Phone: (208) 737-3211 Fax : (208) 737-3236
Loch, John (W132)	Fish Biologist 2 WA Dept of Wildlife PO Box 73 Toutle, WA 98649 Phone: (206) 274-7757
Lucas, Bob (W130)	Area Fish Biologist 3 WA Dept of Wildlife 1541 Kool Rd Kelso, WA 98626 Phone: (206) 423-9341
Lukens, Jimaret (1109)	Regional Fishery Manager ID Dept of Fish & Game PO Box 1336 Salmon, ID 83467 Phone: (208) 756-2271 Fax : (208) 756-6274

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

-M-

Maret, Terry

Biologist
U.S. Geological Survey
230 Collins Road
Boise, ID 83702
Phone: (208) 334-1750
FaX : (208) 334-1272

Massey, Jay
(0500)

District Fish Biologist
OR Dept of Fish & Wildlife
17330 SE Evelyn St.
Clackamas, OR 97015
Phone: (503) 657-2041
Fax : (503) 657-2050

Mattick, Mike
(0132)

Senior Water Rights Specialist
OR Water Resources Dept.
3850 Portland Rd. NE
Salem, OR 97310
Phone: (503) 378-3671
Fax : () -

Mauney, James
(1145)

Fish Biologist
Nez Perce Tribe
PO Box 365
Lapwai, ID 83501
Phone: (208) 843-7195
Fax : () -

McArthur, Tom
(1125)

Fisheries Staff Biologist
ID Dept of Fish & Game
600 S Walnut PO Box 25
Boise, ID 83707
Phone: (208) 334-3791
Fax : (208) 334-2114

McIntyre, Jack
(1117)

Project Leader
USDA Forest Service
316 E Myrtle St
Boise, ID 83702
Phone: (208) 334-1135
Fax : (208) 364-4346

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Michak, Patty (W109)	Fish Biologist 3 WA Dept of Fisheries RM. 115, Gen. Ad. Bldg., MS: AX-11 Olympia, WA 98504 Phone: (206) 586-2812 Fax : (206) 586-6550
Miller, Bill (1110)	Fishery Biologist US Fish & Wildlife Service Box 18 Ahsahka, ID 83520 Phone: (208) 476-7242 Fax : (208) 476-3252
Moffitt, Christine (1111)	Adjunct Associate Professor University of Idaho Dept of Fish & Wildlife Res, U of I Moscow, ID 83843 Phone: (208) 885-7047 Fax : (208) 885-6226
Mongillo, Paul (W135)	Fish Biologist 3 - Research WA Dept of Wildlife 600 Capitol Way N. Olympia, WA 98501-1091 Phone: (206) 753-5713 Fax : (206) 586-0248
Moore, Virgil (1127)	Fisheries Research Manager ID Dept of Fish & Game 600 S Walnut PO Box 25 Boise, ID 83707 Phone: (208) 334-3791 Fax : (208) 334-2114
Morgan, Lee (0154)	Fishery Biologist BLM - Vale District 100 Oregon St. Vale, OR 97914 Phone: (503) 473-6292 Fax : () .

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

-N-

Newton, Jim
(0120)

District Fish Biologist
OR Dept. Fish & Wildlife
3701 W 13th Street
The Dalles, OR 97058
Phone: (503) 296-4628
Fax : (503) 298-4993

Nicolay, Robin
(W116)

Hatchery Manager 4
WA Dept of Fisheries
4404 Lewis River Rd.
Woodland, WA 98674
Phone: (206) 225-7413
Fax : (206) 225-9512

Nyara, Bill
(0202)

Hatchery Manager
OR Dept of Fish & Wildlife
Round Butte Hatchery, Po Box 15
Madras, OR 97741
Phone: (503) 475-6393
Fax.: () -

-O-

Olney, Fred
(0165)
(W140)

Columbia River Coordinator
US Fish & Wildlife Service
9317 Highway 99, Suite A
Vancouver, WA 98665
Phone: (206) 696-7888
Fax : (206) 696-7968

Overton, Kerry
(1118)

Fish Biologist - Tech Transfer
US Forest Service
316 E Myrtle
Boise, ID 83702
Phone: (208) 334-1457
Fax : (208) 334-4346

-P-

Pansky, Tom
(C312)

Energy Resource Specialist
BPA/PG
Po Box 3621 - PG
Portland, OR 97208
Phone: (503) 230-3969
Fax : () -

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Pedersen, Paul
(W139)

Hatchery Manager 4
WA Dept of Fisheries
Box 937
Mattawa, WA 99344
Phone: (509) 932-4481
Fax : (509) 932-5188

Petrosky, Charlie
(1004)

Fisheries Staff Biologist
ID Dept of Fish & Game
600 S Walnut
Boise, ID 83707
Phone: (209) 334-3791
Fax : (208) 334-2114

Phelps, Jim
(0125)

District Fish Biologist
OR Dept of Fish & Wildlife
Route 1 Box 18
Pendleton, OR 97801
Phone: (503) 276-2344
Fax : (503) 276-4414

Poe, Pat
(C314)

Fishery Biologist Mgmt.
BPA
905 NE 11th Ave.
Portland, OR 97208
Phone: (503) 230-3656
Fax : (503) 230-3314

-R-

Reid, Will
(I131)

Fishery Program Coordinator
ID Dept of Fish & Game
600 S Walnut
Boise, ID 83707
Phone: (208) 334-2598
Fax : (208) 334-2114

Robart, Randy
(0203)

Fish & Wildlife Manager II
OR Dept. Of Fish & Wildlife
Route 1 Box 443
Maupin, OR 97037
Phone: (503) 395-2546
Fax : (503) 395-2595

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Roger, Phil
(C301)

Senior Fishery Scientist
CRITFC
975 SE Sandy, Suite 202
Portland, OR 97214
Phone: (503) 238-0667
Fax : (503) 238-7207

Rogers, Tom
(1129)

Anadromous Hatchery Supervisor
ID Dept of Fish & Game
600 S Walnut
Boise, ID 83707
Phone: (208) 334-3791
Fax : (208) 334-2214

Roth, Tim
(W111)

Fishery Management Biologist
US Fish & Wildlife Service
9317 NE Highway 99, Suite I
Vancouver, WA 98665
Phone: (206) 696-7605
Fax : (206) 696-7503

Rowe, Mike
(S004)

Fisheries Biologist
Fisheries Department
Shoshone-Bannock Tribes
PO Box 306
Fort Hall, ID 83203
Phone: (208) 238-3748
Fax : (208) 238-3742

Ruff, Jim
(C001)

Staff Hydrologist
NW Power Planning Council
851 SW Sixth Ave., Suite 1100
Portland, OR 97204
Phone: (503) 222-5161
Fax : (

-S-

Schuck, Mark
(W148)

Fish Biologist 3
WA Dept of Wildlife
411 S. First
Dayton, WA 99328
Phone: (509) 382-4391

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Scully, Richard
(S003)

Regional Fishery Manager
ID Dept of Fish & Game
1345 Barton Rd
Pocatello, ID 83204
Phone: (208) 232-4703
Fax : (208) 233-6430

Shaw, Mark
(C311)

Fisheries Biologist
Bonneville Power Admini.
Po Box 3621 / Mail Stop PJSP
Portland, OR 97208
Phone: (503) 230-5710
Fax : (503) 230-3314

Shea, Cordy
(0134)

Prog Coord Lwr Col River Wq Prg
OR DEQ
811 SW 6th Ave.
Portland, OR 97204
Phone: (503) 229-5664
Fax : (503) 229-6124

Smith, Bob
(0156)

Direct. Col River F. Develop P
National Marine Fisheries Service
911 Ne 11th, Suite 620
Portland, OR 97232
Phone: (503) 230-5409
Fax : (503) 230-5435

Smith, Bruce
(1107)

Fisheries Biologist
Salmon National Forest
P.O. Box 729
Salmon, ID 83467
Phone: (208) 756-2215
Fax : (208) 756-5151

Smith, Clint
(0130)

Resource Specialist
OR Dept. Of Forestry
2600 State Street
Salem, OR 97310
Phone: (503) 373-1294
Fax : (503) 363-0754

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Spaulding, Scott
(S005)

Fisheries Biologist
Fisheries Department
Shoshone-Bannock Tribes
PO Box 306
Fort Hall, ID 83203
Phone: (208) 238-3914
Fax : (208) 238-3742

-T-

Tanovan Bolyvong
(C002)

Hydraulic Engineer
US Corps Of Engin. (cenpd-Pewm)
Po Box 2870
Portland, OR 97208
Phone: (503) 326-3764
Fax : (503) 326-4161

Tipping, Jack
(W108)

Fish Biologist 3
WA Dept of Wildlife
2101 Hwy 508
Onalaska, WA 98570
Phone: (206) 978-4962

Toedtemeier, Guy
(W110)

Hatchery Manager 1
WA Dept of Fisheries
MP 5.85 R Washougal River Road
Washougal, WA 98671
Phone: (206) 837-3311
Fax : (206) 837-3996

-W-

Wade, Mark
(0118)

Asst. District Biologist
OR Dept Fish & Wildlife
3150 Main
Springfield, OR 97478
Phone: (503) 726-3503
Fax : (503) 726-2505

Wagner, Paul
(W125)

Fish Biologist 3
WA Dept of Fisheries
McNary Dam, PO Box 1441
Umatilla, OR 97882
Phone: (503) 922-3630
Fax : (503) 922-3211

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Wasson, Norm (11471)	Hatchery Prod Asst - NFTH Nez Perce Tribe/Fisheries Box 365 Lapwai, ID 83540 Phone: (208) 843-5426 Fax : (208) 843-5324
Weber, Earl (C101)	Fishery Scientist Col. River Inter-Tribal Fish Comm. 975 SE Sandy Portland, OR 97214 Phone: (503) 238-0667 Fax : (503) 235-4228
Weinheimer, John (W127)	Area Fish Biologist 3 WA Dept of Wildlife 5405 NE Hazel Dell Ave. Vancouver, WA 98663 Phone: (206) 696-6211 Fax : (206) 690-7238
Whitman, Si (1135)	Nez Perce Tribe, Fisheries PO Box 365 Lapwai, ID 83540 Phone: (208) 843-5426 Fax : (208) 843-5324
Wick, Sarah (0171)	Fisheries Biologist US Army Corps Of Engineers DOA, Walla Walla District Walla Walla, WA 99362 Phone: (509) 522-6629 Fax : (509) 522-6433
Williams, Kenneth (W124)	Area Fish Biologist WA Dept of Wildlife Rt. 1, Box 11-D Brewster, WA 98812 Phone: (509) 689-2607
Winans, Gary (W136)	Super. Research Geneticist National Marine Fisheries Service 2725 Montlake Blvd E Seattle, WA 98112 Phone: (206) 553-2737 Fax : (206) 553-4313

Columbia River Coordinated Information System

NEEDS SURVEY RESPONDENTS

Woodin, Rod
(W101)

Fish Biologist 4
WA Dept of Fisheries
RM. 115, Gen. Ad. Bldg., MS: AX-11
Olympia, WA 98504
Phone: (206) 586-2823
Fax : (206) 586-8884

APPENDIX G - NATURAL PRODUCTION DATA ITEM DIRECTORY

(by species, run)

NATURAL PRODUCTION: Spring Chinook

NATURAL PRODUCTION: Summer Chinook

NATURAL, PRODUCTION: Fall Chinook

NATURAL PRODUCTION: Coho

NATURAL PRODUCTION: Chum

NATURAL. PRODUCTION: Sockeye

NATURAL PRODUCTION: Winter Steelhead

NATURAL PRODUCTION: Summer Steelhead

HABITAT

Coordinated Information System

NATURAL PRODUCTION Spring Chinook

Natural Production Data Parameters	Interview No.
N100 Escapement, Spawners, and Subbasin Harvest	1102 1113 1125 1137 1147 0120 0123 0191 0192 0194 W102 W123
N101 Spawner weir count	C302 1001 1002 1113 1137 1144 1147 0114 0120 0125 0191 0192 0500 W123
N102 Spawning escapement estimate	C302 1001 1002 1113 1126 1137 1147 0114 0120 0123 0152 0191 0192 0194 0500 W102 W103 W123
N103 Total redds in drainage	C302 1001 1002 1100 1113 1147 0114 0123 0152 0191 W102 W123
N104 Redd count - Index or trend	C302 1102 1109 1113 1126 1143 1147 0114 0120 0123 0152 0191 0192 0500 SO01 SO04 W102 W123 W126
N105 Egg deposition estimate	1002 1100 1113 1147 0123 SO03 SO04 W123
N106 Spawner age composition	C302 1002 1113 1126 1137 1147 0114 0120 0123 0500 W103 W123
N107 Spawner length frequency	1002 1102 1109 1113 1126 1147 0114 0120 0123 0500 W103 W123
N108 Adult length-weight	1113 1147 0114 0120 0123
N109 Spawner sex ratio	C302 1001 1102 1109 1113 1126 1137 1147 0114 0120 0123 W103
N110 Fecundity	C302 1113 1137 1147 0114 0120 0123
N111 Spawner distribution in basin	1001 1002 1100 1113 1137 1147 0114 0123 0152 0191

Coordinated Information System

NATURAL PRODUCTION Spring Chinook

Natural Production Data Parameters	Interview No.
	0500
N112 Spawning timing	1001 1002 1147 0114 0123 0152 0191 0500 W102
N113 Straying rate	1001 1113 1147 0114 0120 0152 0500
N114 Repeat Spawners (steelhead)	
N115 Hatchery spawners in wild	1001 1002 1113 1137 0123 0125 0152 0194 0500
N116 Wild/natural sport harvest	1002 1137 0120 0152 0191 0194 0500 S001 W102
N117 Wild/natural tribal harvest	1002 1137 0120 0123 0191 0194 S001
N200 Juveniles	1113 1137 1143
N201 Total parr abundance	1001 1002 1100 1102 1137 1140 1143 1147 0123 0191 S003 S004
N202 Density - ages combined	1001 1002 1102 1109 1137 1140 1143 1144 1147 0123 S001 S 0 0 3 S004
N203 Density - by age	1001 1002 1100 1109 1137 1140 1143 1144 1147 0123 S001 S003
N204 Length frequency	1001 1002 1100 1109 1137 1140 1147 0123 0191 S004 W133
N205 Length - weight	1002 1100 1137 1140 1147 0123 0191 S004 W133
N206 Condition coefficient	1002 1137 1147 0123 S004

Coordinated Information System

NATURAL PRODUCTION Spring Chinook

Natural Production Data Parameters	Interview No.
	w133
N207 Emergence timing	1137 1144 1147 0123 0500
N208 Distribution (time/area)	1001 1002 1100 1137 1140 1143 1144 1147 0123 0191 S003 S004
N209 Supplementation history	1001 1002 1100 1137 1144 1147 0120 0194
N300 Migrants/Smolts	1113 1137 0123 W125
N301 Smolt yield (total)	1001 1002 1100 1137 1144 1147 0123 0191 0192 0500
N302 Index or relative yield	0123 0191
N303 Smolt size distribution	1002 1100 1137 1147 0123 0191 0192 0500
N304 Length - weight	1002 1100 1137 1147 0123 0191 0500 w133
N305 Proportion smolting by age	1002 1100 1137 1147 0123 0191
N306 Residualism	1001 1002 1100 1137 1147 0123 0191 0192 W133
N307 Timing	1001 1002 1100 1137 1144 1146 1147 0123 0191 0500 w133
N308 Travel time	1002 1100 1137 1144 1146 1147 0123 0191 W133

Coordinated Information System

NATURAL PRODUCTION Spring Chinook

Natural Production Data Parameters	Interview No.
N400 Survival, Recruitment, Production Studies	1002 1113 1137 0191 0194
N401 Prespawning survival	C302 1002 1100 1137 1144 0191
N402 Carrying capacity	C302 1100 1137 1140 1144 1147 0191 0194 S003 S004 w133
N403 Egg to fry survival	1137 1144 1147 0191 S005
N404 Egg to parr survival	1002 1100 1137 1144 1147 0191 S003 S 0 4 so05
N405 Egg to smolt survival	C302 1002 1100 1137 1144 1147 0191
N406 Parr to smolt survival	1002 1100 1137 1144 1147 0191
N407 Inbasin smolt survival	C302 1002 1100 1137 1144 1147 0191
N408 Mainstem smolt survival	C302 1100 1137 1144 0191
N409 Smolt to adult return	1002 1004 1137 1144 1147 0120 0191 0192 0194 0500
N410 Stock recruitment	1002 1137 1147 0191 0194 0500
N411 Production (tissue elaboration)	1137 0191
N412 Influence of cover	1137 1140 1144 1147 0191 so05
N413 Influence of sediment	1100 1102 1137 1140 1144 1147 0191 S003 S004 S005
N414 Influence of LWD	1100 1137 1140 1144 1147 0191

Coordinated Information System

NATURAL PRODUCTION Spring Chinook

Natural Production Data Parameters	Interview No.
N415 Influence of channel unit type and composition	1100 1137 1140 1144 1147 0191 S003 S 0 4 so05
N416 Influence of habitat type	1100 1106 1137 1140 1144 1147 0191 S004 SO05
N417 Influence of temperature	1137 1140 1144 1147 0191 0500 S 0 4 so05
N418 Effects of habitat improvement	1100 1106 1137 1140 1144 1147 0191 0194 0500 S003 S004 so05 w112
N419 Project costs	1137 1140 1144 1147 0191 0194
N500 Genetics Characteristics	1002 1137 W136
N501 Stock history	1001 1002 1137 1144 1147 0114 0123 0191 0194 0500 so05
N502 Hatchery stocks supplemented	1001 1002 1100 1137 1144 1147 0114 0191 0194 W136
N503 Hatchery strays	1001 1002 1137 1144 1147 0114 0123 0191 0194 0500
N504 Electrophoretic profile	1001 1002 1113 1137 1144 0191 W136
N505 Meristics	1137 0191
N506 Morphometrics	1137 0191
N507 Parasites and diseases	1002 1003 1137 1147 0191 so05
N508 Effectiveness of hatchery spawners in the wild	1001 1002 1100 1137 1144 1147 0114 0191 0500

Coordinated Information System

NATURAL PRODUCTION Spring Chinook

Natural Production Data Parameters	Interview No.				
N509 Viability of hatchery offspring	1001 0114	1002 0191	1137 0500	1144	1147
N600 Fish and Wildlife Program Habitat	C312 0191	1108 0194	1113	1118	1137
N601 Pre-project habitat condition	1108 0147	1137 0191	1142 S003	1144 S004	1147
N602 Post-project habitat condition	1100 1147 so5	1108 0147	1137 0191	1142 S003	1144 S004
N603 Predicted physical change	1108 0147	1137 0191	1142 S004	1144	1147
N604 Actual physical change	1108 0147	1137 0191	1142 S003	1144 S004	1147 so5
N605 Predicted fish production	1108 0191	1137 S003	1144 S004	1147	0147
N606 Actual fish production change	1137 S003	1144 S004	1147 so5	0147	0191
N607 Predicted initial project costs	1137	1144	1147	0191	
N608 Actual initial project costs	1137	1144	1147	0191	
N609 Predicted continuing costs	1108	1137	1144	1147	0191
N610 Actual continuing costs	1108	1137	1144	1147	0191
N611 Discounted benefits :	1108	1137	1144	1147	0191
discounted costs					

Coordinated Information System

NATURAL PRODUCTION Summer Chinook

Natural Production Data Parameters	Interview No.
N100 Escapement, Spawners, and Subbasin	1113 1125 1137 1147 W102 W123
N101 Spawner weir count	C302 1001 1002 1113 I137 1147 0114
N102 Spawning escapement estimate	C302 1001 1002 1113 1126 1137 1147 0114 0155 W102 W123
N103 Total redds in drainage	C302 1001 1002 1113 1147 0114 W102 W123
N104 Redd count - Index or trend	C302 1107 1109 1113 1126 1147 0114 0155 SO01 W102 W123 W126
N105 Egg deposition estimate	1002 1113 1147 W123
N106 Spawner age composition	C302 1002 1113 1126 1137 1147 0114 W123
N107 Spawner length frequency	1002 1109 1113 1126 1147 0114 W123
N108 Adult length-weight	1113 1147 0114
N109 Spawner sex ratio	C302 1001 1102 1109 1113 1126 1137 1147 0114
N110 Fecundity	C302 1113 1137 1147 0114
N111 Spawner distribution in basin	1001 1002 1107 1113 1137 1147 0114 0155
N112 Spawning timing	1001 1002 1107 1147 0114 0155 W102
N113 Straying rate	1001 1113 1147 0114
N114 Repeat Spawners (steelhead)	
N115 Hatchery spawners in wild	1001 1002 1113 1137

Coordinated Information System

NATURAL PRODUCTION Summer Chinook

Natural Production Data Parameters	Interview No.
N116 Wild/natural sport harvest	1002 1137 S001
N117 Wild/natural tribal harvest	1002 1137 S001
N200 Juveniles	1113 1137
N201 Total parr abundance	1001 1002 1137 1147 S003
N202 Density - ages combined	1001 1002 1109 1137 1147 so01 S003
N203 Density - by age	1001 1002 1109 1137 1147 so01 S003
N204 Length frequency	1001 1002 1109 1137 1147 w133
N205 Length - weight	1002 1137 1147 W133
N206 Condition coefficient	1002 1137 1147 W133
N207 Emergence timing	1137 1147
N208 Distribution (time/area)	1001 1002 1137 1147 S003
N209 Supplementation history	1001 1002 1137 1147
N300 Migrants/Smolts	1113 1137 W125
N301 Smolt yield (total)	1001 1002 1137 1147
N302 Index or relative yield	
N303 Smolt size distribution	1002 1137 1147
N304 Length - weight	1002 1137 1147 W133
N305 Proportion smolting by age	1002 1137 1147

Coordinated Information System

NATURAL PRODUCTION Summer Chinook

Natural Production Data Parameters	Interview No.
N306 Residualism	1001 1002 1137 1147
N307 Timing	1001 1002 1137 1146 1147 w133
N308 Travel time	1002 1137 1146 1147 W133
N400 Survival, Recruitment, Production Studies	1002 1113 1137
N401 Prespawning survival	C302 1002 1137
N402 Carrying capacity	C302 1137 1147 S003 W133
N403 Egg to fry survival	1137 1147
N404 Egg to parr survival	1002 1137 1147 S003
N405 Egg to smolt survival	C302 1002 1137 1147
N406 Parr to smolt survival	1002 1137 1147
N407 Inbasin smolt survival	C302 1002 1137 1147
N408 Mainstem smolt survival	C302 1137
N409 Smolt to adult return	1002 1137 1147
N410 Stock recruitment	1002 1137 1147
N411 Production (tissue elaboration)	1137
N412 Influence of cover	1137 1147
N413 Influence of sediment	1137 1147 S003
N414 Influence of LWD	1137 1147
N415 Influence of channel unit type and composition	1137 1147 S003
N416 Influence of habitat type	1137 1147

Coordinated Information System

NATURAL PRODUCTION Summer Chinook

Natural Production Data Parameters	Interview No.
N417 Influence of temperature	1137 1147
N418 Effects of habitat improvement	1137 I147 0194 S003
N419 Project costs	1137 1147 0194
N500 Genetics Characteristics	1002 1137 W136
N501 Stock history	1001 1002 1137 1147 0114 0194
N502 Hatchery stocks supplemented	1001 1002 1137 1147 0114 0194 W136
N503 Hatchery strays	1001 1002 1137 I147 0114 0194
N504 Electrophoretic profile	1001 1002 1113 1137 W136
N505 Meristics	1137
N506 Morphometrics	1137
N507 Parasites and diseases	1002 1003 1137 1147
N508 Effectiveness of hatchery spawners in the wild	1001 1002 1137 1147 0114
N509 Viability of hatchery offspring	1001 1002 1137 1147 0114
N600 Fish and Wildlife Program Habitat	C312 1108 1113 1118 1137 0194
N601 Pre-project habitat condition	1108 1137 1142 1147 0155 S003
N602 Post-project habitat condition	1108 1137 1147 0155 S003

Coordinated Information System

NATURAL PRODUCTION

Summer Chinook

Natural Production Data Parameters	Interview No.
N603 Predicted physical change	1108 1137 1147 0155
N604 Actual physical change	1108 1137 1147 0155 S003
N605 Predicted fish production change	1108 1137 1147 0155 S003
N606 Actual fish production change	1137 1147 0155 S003
N607 Predicted initial project costs	1137 1147 0155
N608 Actual initial project costs	1137 1147 0155
N609 Predicted continuing costs	1108 1137 1147
N610 Actual continuing costs	1108 1137 1147
N611 Discounted benefits :	1108 1137 1147
discounted costs	

Coordinated Information System

NATURAL PRODUCTION Fall Chinook

Natural Production Data Parameters	Interview No.
N100 Escapement, Spawners, and Subbasin Harvest	1137 1147 0120 0194 W102 W119 W123
N101 Spawner weir count	C302 1137 1147 0120 0125 W119
N102 Spawning escapement estimate	C302 1137 1147 0120 0152 0155 0194 W102 W119 W123 W138
N103 Total redds in drainage	C302 1147 0152 W119 W138
N104 Redd count - Index or trend	C302 1147 0120 0152 0155 W119 W138
N105 Egg deposition estimate	1147
N106 Spawner age composition	C302 1137 1147 0120 W119 W138
N107 Spawner length frequency	1147 0120 W119
N108 Adult length-weight	1147 0120
N109 Spawner sex ratio	C302 1137 1147 0120 W119 W138
N110 Fecundity	C302 1137 1147 W138
N111 Spawner distribution in basin	1137 1147 0128 0152 0155
N112 Spawning timing	1147 0128 0152 0155 W102 W119 W138
N113 Straying rate	1147 0128 0152 W119
N114 Repeat Spawners (steelhead)	
N115 Hatchery spawners in wild	1137 0128 0152 0194 W119 W138
N116 Wild/natural sport harvest	1137 0128 0152 0194 W119
N117 Wild/natural tribal harvest	1137 0120 0194 W119

Coordinated Information System

NATURAL PRODUCTION Fall Chinook

Natural Production Data Parameters	Interview No.
N200 Juveniles	1137
N201 Total parr abundance	1137 1147 0128
N202 Density - ages combined	1137 1147 0128
N203 Density - by age	1137 1147 0128
N204 Length frequency	1137 1147 0128 W133
N205 Length - weight	1137 1147 W133
N206 Condition coefficient	1137 1147 W133
N207 Emergence timing	1137 1147
N208 Distribution (time/area)	1137 1147 0128
N209 Supplementation history	1137 1147 0128 0194
N300 Migrants/Smolts	1137 W125
N301 Smolt yield (total)	1137 1147 W103
N302 Index or relative yield	
N303 Smolt size distribution	1137 1147
N304 Length - weight	1137 1147 W118 W133
N305 Proportion smolting by age	1137 1147
N306 Residualism	1137 1147 W133
N307 Timing	1137 1146 1147 W125 W133
N308 Travel time	1137 1146 1147 W125 W133

Coordinated Information System

NATURAL PRODUCTION Fall Chinook

Natural Production Data Parameters	Interview No.
N400 Survival, Recruitment, Production Studies	1137 0194
N401 Prespawning survival	C302 1137
N402 Carrying capacity	C302 1137 1147 0128 0194 w133
N403 Egg to fry survival	1137 1147
N404 Egg to parr survival	1137 1147
N405 Egg to smolt survival	C302 1137 1147
N406 Parr to smolt survival	1137 1147
N407 Inbasin smolt survival	C302 1137 1147
N408 Mainstem smolt survival	C302 1137
N409 Smolt to adult return	1137 1147 0194
N410 Stock recruitment	1137 1147 0194
N411 Production (tissue elaboration)	1137
N412 Influence of cover	1137 1147
N413 Influence of sediment	1137 1147
N414 Influence of LWD	1137 1147
N415 Influence of channel unit type and composition	1137 1147
N416 Influence of habitat type	1137 1147
N417 Influence of temperature	1137 1147
N418 Effects of habitat improvement	1137 1147 0194
N419 Project costs	1137 1147 0194

Coordinated Information System

NATURAL PRODUCTION Fall Chinook

Natural Production Data Parameters	Interview No.
N500 Genetics Characteristics	1137 W136
N501 Stock history	1137 1147 0194
N502 Hatchery stocks supplemented	1137 1147 0194
N503 Hatchery strays	1137 1147 0194
N504 Electrophoretic profile	1137 W136
N505 Meristics	1137
N506 Morphometrics	1137
N507 Parasites and diseases	1137 1147
N508 Effectiveness of hatchery spawners in the wild	1137 1147
N509 Viability of hatchery offspring	1137 1147
N600 Fish and Wildlife Program Habitat	C312 1118 1137 0194
N601 Pre-project habitat condition	1137 1147 0155
N602 Post-project habitat condition	1137 1147 0155
N603 Predicted physical change	1137 1147 0155
N604 Actual physical change	1137 1147 0155
N605 Predicted fish production change	1137 1147 0155
N606 Actual fish production change	1137 1147 0155
N607 Predicted initial project costs	1137 1147 0155
N608 Actual initial project costs	1137 1147 0155
N609 Predicted continuing costs	1137 1147

Coordinated Information System

**NATURAL PRODUCTION
Fall Chinook**

Natural Production Data
Parameters

Interview No.

N610 Actual continuing costs

1137 1147

N611 Discounted benefits :
discounted costs

1137 1147

Coordinated Information System

NATURAL PRODUCTION Coho

Natural Production Data Parameters	Interview No.
N100 Escapement, Spawners, and Subbasin Harvest	1137 0192 0194 W123
N101 Spawner weir count	C302 1137 0125 0192 0500
N102 Spawning escapement estimate	C302 1137 0152 0155 0192 0194 0500 W123
N103 Total redds in drainage	C302 0152
N104 Redd count - Index or trend	C302 0152 0155 0500
N105 Egg deposition estimate	
N106 Spawner age composition	C302 1137 0500
N107 Spawner length frequency	0500
N108 Adult length-weight	
N109 Spawner sex ratio	C302 1137
N110 Fecundity	C302 1137
N111 Spawner distribution in basin	1137 0128 0152 0155 0192 0500
N112 Spawning timing	0128 0152 0155 0500
N113 Straying rate	0128 0152 0500
N114 Repeat Spawners (steelhead)	
N115 Hatchery spawners in wild	1137 0128 0152 0194 0500
N116 Wild/natural sport harvest	1137 0128 0152 0194 0500
N117 Wild/natural tribal harvest	1137 0194

Coordinated Information System

NATURAL PRODUCTION Coho

Natural Production Data Parameters	Interview No.
N200 Juveniles	1137
N201 Total parr abundance	1137 0128 W132
N202 Density - ages combined	1137 0128 0155 W132
N203 Density - by age	1137 0128 0155 W132
N204 Length frequency	1137 0128 W132 W133
N205 Length - weight	1137 W133
N206 Condition coefficient	1137 W133
N207 Emergence timing	1137 0500
N208 Distribution (time/area)	1137 0128 0155
N209 Supplementation history	1137 0120 0128 0194 W132
N300 Migrants/Smolts	1137 W125
N301 Smolt yield (total)	1137 0152 0192 0500
N302 Index or relative yield	
N303 Smolt size distribution	1137 0152 0192 0500
N304 Length - weight	1137 0500 W133
N305 Proportion smolting by age	1137 0152
N306 Residualism	1137 0152 0192 W133
N307 Timing	1137 0152 0500 W133
N308 Travel time	1137 W133

Coordinated Information System

NATURAL PRODUCTION Coho

Natural Production Data Parameters	Interview No.
1400 Survival, Recruitment, Production Studies	1137 0194
N401 Prespawning survival	C302 1137
N402 Carrying capacity	C302 1137 0128 0194 W133
N403 Egg to fry survival	1137
N404 Egg to parr survival	1137
N405 Egg to smolt survival	C302 1137
N406 Parr to smolt survival	1137
N407 Inbasin smolt survival	C302 1137
N408 Mainstem smolt survival	C302 1137
N409 Smolt to adult return	1137 0192 0194 0500
N410 Stock recruitment	1137 0194 0500
N411 Production (tissue elaboration)	1137
N412 Influence of cover	1137
N413 Influence of sediment	1137
N414 Influence of LWD	1137
N415 Influence of channel unit type and composition	1137
N416 Influence of habitat type	1137
N417 Influence of temperature	1137 0500
N418 Effects of habitat improvement	1137 0194 0500
N419 Project costs	1137 0194

Coordinated Information System

NATURAL PRODUCTION

Coho

Natural Production Data Parameters	Interview No.
N500 Genetics Characteristics	1137 W136
N501 Stock history	1137 0194 0500
N502 Hatchery stocks supplemented	1137 0194 W136
N503 Hatchery strays	1137 0194 0500
N504 Electrophoretic profile	1137 W136
N505 Meristics	1137
N506 Morphometrics	1137
N507 Parasites and diseases	1137
N508 Effectiveness of hatchery spawners in the wild	1137 0500
N509 Viability of hatchery offspring	1137 0500
N600 Fish and Wildlife Program Habitat	C312 1118 1137 0194
N601 Pre-project habitat condition	1137 0155
N602 Post-project habitat condition	1137 0155
N603 Predicted physical change	1137 0155
N604 Actual physical change	1137 0155
N605 Predicted fish production change	1137 0155
N606 Actual fish production change	1137 0155
N607 Predicted initial project costs	1137 0155
N608 Actual initial project costs	1137 0155
N609 Predicted continuing costs	1137

Coordinated Information System

**NATURAL PRODUCTION
Coho**

Natural Production Data Parameters	Interview No.
N610 Actual continuing costs	1137
N611 Discounted benefits : discounted costs	1137

Coordinated Information System

NATURAL PRODUCTION

Chum

Natural Production Data Parameters	Interview No.
N100 Escapement, Spawners, and Subbasin Harvest	W119
N101 Spawner weir count	C302
N102 Spawning escapement estimate	C302 0152
N103 Total redds in drainage	C302 0152
N104 Redd count - Index or trend	C302 0152 W119
N105 Egg deposition estimate	
N106 Spawner age composition	W119
N107 Spawner length frequency	
N108 Adult length-weight	
N109 Spawner sex ratio	
N110 Fecundity	
N111 Spawner distribution in basin	0128 0152
N112 Spawning timing	0128 0152 W119
N113 Straying rate	0128 0152
N114 Repeat Spawners (steelhead)	
N115 Hatchery spawners in wild	0128 0152
N116 Wild/natural sport harvest	0128 0152
N117 Wild/natural tribal harvest	
N200 Juveniles	
N201 Total parr abundance	0128

Coordinated Information System

NATURAL PRODUCTION Chum

Natural Production Data Parameters	Interview No.
N202 Density - ages combined	0128
N203 Density - by age	0128
N204 Length frequency	0128 W133
N205 Length - weight	w133
N206 Condition coefficient	
N207 Emergence timing	
N208 Distribution (time/area)	0128
N209 Supplementation history	0128
N300 Migrants/Smolts	
N301 Smolt yield (total)	
N302 Index or relative yield	
N303 Smolt size distribution	
N304 Length - weight	w133
N305 Proportion smolting by age	
N306 Residualism	
N307 Timing	w133
N308 Travel time	w133
N400 Survival, Recruitment, Production Studies	
N401 Prespawning survival	

Coordinated Information System

NATURAL PRODUCTION

Chum

Natural Production Data Parameters	Interview No.
---------------------------------------	---------------

N402 Carrying capacity	0128 W133
------------------------	-----------

N403 Egg to fry survival

N404 Egg to parr survival

N405 Egg to smolt survival

N406 Parr to smolt survival

N407 Inbasin smolt survival

N408 Mainstem smolt survival

N409 Smolt to adult return	1144
----------------------------	------

N410 Stock recruitment

N411 Production (tissue elaboration)

N412 Influence of cover

N413 Influence of sediment

N414 Influence of LWD

N415 Influence of channel unit
type and composition

N416 Influence of habitat type

N417 Influence of temperature

N418 Effects of habitat improvement

N419 Project costs

N500 Genetics Characteristics

N501 Stock history

Coordinated Information System

NATURAL PRODUCTION Chum

Natural Production Data Parameters	Interview No.
N502 Hatchery stocks supplemented	W136
N503 Hatchery strays	
N504 Electrophoretic profile	W136
N505 Meristics	
N506 Morphometrics	
N507 Parasites and diseases	
N508 Effectiveness of hatchery spawners in the wild	
N509 Viability of hatchery offspring	
1600 Fish and Wildlife Program Habitat	C312 I118 0194
N601 Pre-project habitat condition	
N602 Post-project habitat condition	
N603 Predicted physical change	
N604 Actual physical change	
N605 Predicted fish production change	
N606 Actual fish production change	
N607 Predicted initial project costs	
N608 Actual initial project costs	
N609 Predicted continuing costs	
N610 Actual continuing costs	
N611 Discounted benefits : discounted costs	

Coordinated Information System

NATURAL PRODUCTION Sockeye

Natural Production Data Parameters	Interview No.
N100 Escapement, Spawners, and Subbasin Harvest	1137 W102 W119 W123
N101 Spawner weir count	C302 1137
N102 Spawning escapement estimate	C302 1137 W102 W119 W123
N103 Total redds in drainage	C302
N104 Redd count - Index or trend	C302 W119 W126
N105 Egg deposition estimate	
N106 Spawner age composition	1137 W102 W119
N107 Spawner length frequency	
N108 Adult length-weight	
N109 Spawner sex ratio	I137
N110 Fecundity	1137
N111 Spawner distribution in basin	1137
N112 Spawning timing	W102 W119
N113 Straying rate	
N114 Repeat Spawners (steelhead)	
N115 Hatchery spawners in wild	1137
N116 Wild/natural sport harvest	1137 W119
N117 Wild/natural tribal harvest	1137 W119
N200 Juveniles	1137
N201 Total parr abundance	1137
N202 Density - ages combined	1137

Coordinated Information System

NATURAL PRODUCTION Sockeye

Natural Production Data Parameters	Interview No.
N203 Density - by age	1137
N204 Length frequency	1137 W133
N205 Length - weight	1137 W133
N206 Condition coefficient	1137
N207 Emergence timing	1137
N208 Distribution (time/area)	1137
N209 Supplementation history	1137
N300 Migrants/Smolts	1137 W125
N301 Smolt yield (total)	1137
N302 Index or relative yield	
N303 Smolt size distribution	1137
N304 Length - weight	1137 W133
N305 Proportion smolting by age	1137
N306 Residualism	1137
N307 Timing	1137 1146 W133
N308 Travel time	1137 1146 W133
N400 Survival, Recruitment, Production Studies	1137
N401 Prespawning survival	1137
N402 Carrying capacity	1137 W133

Coordinated Information System

NATURAL PRODUCTION Sockeye

Natural Production Data Parameters	Interview No.
---------------------------------------	---------------

N403	Egg to fry survival	1137
N404	Egg to parr survival	1137
N405	Egg to smolt survival	1137
N406	Parr to smolt survival	1137
N407	Inbasin smolt survival	1137
N408	Mainstem smolt survival	1137
N409	Smolt to adult return	1137
N410	Stock recruitment	1137 W102
N411	Production (tissue elaboration)	1137
N412	Influence of cover	1137
N413	Influence of sediment	1137
N414	Influence of LWD	1137
N415	Influence of channel unit type and composition	1137
N416	Influence of habitat type	1137
N417	Influence of temperature	1137
N418	Effects of habitat improvement	1137
N419	Project costs	1137
N500	Genetics Characteristics	1137 W136
N501	Stock history	1137
N502	Hatchery stocks supplemented	1137
N503	Hatchery strays	1137

Coordinated Information System

NATURAL PRODUCTION

Sockeye

Natural Production Data Parameters	Interview No.
N504 Electrophoretic profile	1113 1137 S005 W136
N505 Meristics	1137
N506 Morphometrics	1137
N507 Parasites and diseases	1003 1137
N508 Effectiveness of hatchery spawners in the wild	1137
N509 Viability of hatchery offspring	1137
N600 Fish and Wildlife Program Habitat	C312 I113 I118 I137 0194
N601 Pre-project habitat condition	1137
N602 Post-project habitat condition	1137
N603 Predicted physical change	1137
N604 Actual physical change	1137
N605 Predicted fish production change	1137
N606 Actual fish production change	1137
N607 Predicted initial project costs	1137
N608 Actual initial project costs	1137
N609 Predicted continuing costs	1137
N610 Actual continuing costs	1137
N611 Discounted benefits : discounted costs	1137

Coordinated Information System

NATURAL PRODUCTION Winter Steelhead

Natural Production Data Parameters	Interview No.
N100 Escapement, Spawners, and Subbasin Harvest	1113 0191 0192 0194 W113 W127 W132 W143
N101 Spawner weir count	C302 1113 0192 0500 W113 W132 W142
N102 Spawning escapement estimate	C302 1113 0152 0155 0194 0500 W113 W127 W130 W132 w143
N103 Total redds in drainage	C302 1113 0152 W113 W127 W132 W142
N104 Redd count - Index or trend	C302 1113 0152 0155 0500 W113 W127 W130 W132
N105 Egg deposition estimate	1113 W113 W127
N106 Spawner age composition	C302 1113 0500 W113 W127 W132 W143
N107 Spawner length frequency	1113 0500 W113 W127 W132 w143
N108 Adult length-weight	1113 W113 W127
N109 Spawner sex ratio	C302 1102 1113 W113 W127 W132 W143
N110 Fecundity	C302 1113 W113 W127
N111 Spawner distribution in basin	1113 0128 0152 0155 0500 W113 W127 W132
N112 Spawning timing	0128 0152 0155 0500 W113 W127 W132
N113 Straying rate	1113 0128 0152 0500 W143
N114 Repeat Spawners (steelhead)	W127 W132 W143
N115 Hatchery spawners in wild	1113 0128 0152 0194 0500 W127 W143

Coordinated Information System

NATURAL PRODUCTION Winter Steelhead

Natural Production Data Parameters	Interview No.
N116 Wild/natural sport harvest	0128 0152 0194 0500 W127 W132 W142 W143
N117 Wild/natural tribal harvest	0194 W142
N200 Juveniles	1113 W142
N201 Total parr abundance	0128 0152 W113 W132
N202 Density - ages combined	0128 0155 W113 W132
N203 Density - by age	0128 0152 0155 W113 W132
N204 Length frequency	0128 W132 W133
N205 Length - weight	W132 W133
N206 Condition coefficient	w133
N207 Emergence timing	0500 w113
N208 Distribution (time/area)	0128 0155 W113
N209 Supplementation history	0120 0128 0194 W132
N300 Migrants/Smolts	1113 W142
N301 Smolt yield (total)	0152 0192 0500 W113
N302 Index or relative yield	w113
N303 Smolt size distribution	0152 0192 0500
N304 Length - weight	0500 w133
N305 Proportion smolting by age	0152
N306 Residualism	0152 0192

Coordinated Information System

NATURAL PRODUCTION Winter Steelhead

Natural Production Data Parameters	Interview No.
N307 Timing	0152 0500 W113 W133
N308 Travel time	w113 w133
N400 Survival, Recruitment, Production Studies	1113 0194
N401 Prespawning survival	C302 W113 W142
N402 Carrying capacity	C302 0128 0194 W113 W133
N403 Egg to fry survival	1103 W113
N404 Egg to parr survival	w113
N405 Egg to smolt survival	C302 W113
N406 Parr to smolt survival	w113
N407 Inbasin smolt survival	C302 W113
N408 Mainstem smolt survival	C302 W113
N409 Smolt to adult return	0192 0194 0500 W113 W127 w143
N410 Stock recruitment	0194 0500 W127
N411 Production (tissue elaboration)	
N412 Influence of cover	w113
N413 Influence of sediment	w113
N414 Influence of LWD	w113
N415 Influence of channel unit type and composition	w113
N416 Influence of habitat type	w113
N417 Influence of temperature	0500 w113

Coordinated Information System

NATURAL PRODUCTION Winter Steelhead

Natural Production Data Parameters	Interview No.
N418 Effects of habitat improvement	0194 0500 W113 W127
N419 Project costs	0194 W132
N500 Genetics Characteristics	W127 W136 W142 W143
N501 Stock history	0194 0500 W127 W132 W143
N502 Hatchery stocks supplemented	0194 W127 W132 W143
N503 Hatchery strays	0194 0500 W127 W143
N504 Electrophoretic profile	1113 W136 W143
N505 Meristics	
N506 Morphometrics	
N507 Parasites and diseases	
N508 Effectiveness of hatchery spawners in the wild	0500 W142 W143
N509 Viability of hatchery offspring	0500 W142 W143
N600 Fish and Wildlife Program Habitat	C312 1108 1113 1118 0194
N601 Pre-project habitat condition	1108 0155 W113
N602 Post-project habitat condition	1108 0155 S005 W113
N603 Predicted physical change	1108 0155 W113
N604 Actual physical change	1108 0155 W113
N605 Predicted fish production change	1108 0155 W113
N606 Actual fish production change	0155 w113

Coordinated Information System

**NATURAL PRODUCTION
Winter Steelhead**

Natural Production Data Parameters	Interview No.
N607 Predicted initial project costs	0155
N608 Actual initial project costs	0155
N609 Predicted continuing costs	1108
N610 Actual continuing costs	1108
N611 Discounted benefits : discounted costs	1108

Coordinated Information System

NATURAL PRODUCTION Summer Steelhead

Natural Production Data Parameters	Interview No.				
N100 Escapement, Spawners, and Subbasin Harvest	1102 0123 W123	1113 0191 W127	1125 0192 W143	1137 0194	0120 W113
N101 Spawner weir count	C302 0120 W113	1001 0125 W142	1113 0191 W148	1137 0192	0114 0500
N102 Spawning escapement estimate	C302 0114 0194 W127	1001 0120 0500 W143	1113 0123 S003 W148	1126 0152 W113	1137 0155 W124
N103 Total redds in drainage	C302 0152	1001 W113	1100 W127	1113 W148	0123
N104 Redd count - Index or trend	C302 1126 0155 W148	1102 1143 0191	1107 0120 0500	1109 0123 W113	1113 0152 W127
N105 Egg deposition estimate	1100 W127	1113	0123	S003	W113
N106 Spawner age composition	C302 0500 W148	1113 W113	1126 W124	0120 W127	0123 W143
N107 Spawner length frequency	1102 0123 w143	1109 0500	1113 W113	1126 W124	0120 W127
N108 Adult length-weight	1113	0120	0123	W113	W127
N109 Spawner sex ratio	C302 0114 W127	1001 0120 W143	1109 0123 W148	1113 W113	1126 W124
N110 Fecundity	C302 0123 W148	1113 0125 W113	1137 W113	0114 W124	0120 W127

Coordinated Information SySWU

NATURAL PRODUCTION Summer Steelhead

Natural Production Data Parameters	Interview No.				
N111 Spawner distribution in basin	1001 0123 W113	1100 0152 W127	1107 0155	1113 0191	1137 0500
N112 Spawning timing	1001 0191	0114 0500	0123 W113	0152 W127	0155
N113 Straying rate	1113 W132	0120 W143	0123	0152	0500
N114 Repeat Spawners (steelhead)	0123	W127	W132	W143	
N115 Hatchery spawners in wild	1001 0152 W143	1113 0194 W148	1137 0500	0120 W124	0123 W127
N116 Wild/natural sport harvest	1137 0194 W142	0120 0500 W143	0123 S001	0152 W124	0191 W127
N117 Wild/natural tribal harvest	1137 S001	0120 W142	0123	0191	0194
N200 Juveniles	1113	1137	1143	W142	
N201 Total parr abundance	1001 1140 W113	1002 1143 W132	1100 0123 W148	1102 0152	1137 S003
N202 Density - ages combined	1001 1140 S001	1002 1143 S003	1102 1144 W113	1109 0123 W132	1137 0155 W148
N203 Density - by age	1001 1140 0155 W141	1002 1143 S001 W148	1100 1144 S003	1109 0123 W113	1137 0152 W132
N204 Length frequency	1001 1140 W141	1002 0120 W148	1100 0123	1109 W132	1137 W133

Coordinated Information System

NATURAL PRODUCTION Summer Steelhead

Natural Production Data Parameters	Interview No.				
N205 Length - weight	1002 W132	1100 W133	1137 W148	1140	0123
N206 Condition coefficient	1002 W148	1137	0120	0123	W133
N207 Emergence timing	1137	1144	0123	0500	W113
N208 Distribution (time/area)	1001 1143 S004	1002 1144 W113	1100 0123 W124	1137 0155 W141	1140 S003
N209 Supplementation history	1001 0120	1002 0194	1100 W132	1137	1144
N300 Migrants/Smolts	1113	1137	0123	W125	W142
N301 Smolt yield (total)	1001 0152	1100 0192	1137 0500	1144 W113	0123
N302 Index or relative yield	0123	W113			
N303 Smolt size distribution	1100 W148	1137	0123	0152	0500
N304 Length - weight	1100 W133	1137 W148	0123	0500	W118
N305 Proportion smolting by age	1100	1137	0123	0152	W123
N306 Residualism	1001 0152	1100 0192	1137 W133	1140 W148	0123
N307 Timing	1001 0123 w133	1100 0152	1137 0500	1144 W113	1146 W125
N308 Travel time	1100 W113	1137 W125	1144 W133	1146	0123

Coordinated Information System

NATURAL PRODUCTION Summer Steelhead

Natural Production Data Parameters	Interview No.
N400 Survival, Recruitment, Production Studies	1113 1137 0194
N401 Prespawning survival	C302 1100 1137 1144 W113 W142
N402 Carrying capacity	C302 1100 1137 1140 1144 0194 S003 W113 w133
N403 Egg to fry survival	1103 1137 1144 W113
N404 Egg to parr survival	1100 1137 1144 S003 W113
N405 Egg to smolt survival	C302 1100 1137 1144 W113
N406 Parr to smolt survival	1100 1137 1144 W113
N407 Inbasin smolt survival	C302 1100 1137 1144 W113
N408 Mainstem smolt survival	C302 1100 1137 1144 W113
N409 Smolt to adult return	1137 0120 0192 0194 0500 W113 W127 W143
N410 Stock recruitment	1137 0194 W127
N411 Production (tissue elaboration)	1137
N412 Influence of cover	1137 1140 1144 S005 W113
N413 Influence of sediment	1100 1102 1137 1140 1144 S003 S004 so05 w113
N414 Influence of LWD	1100 1137 1140 1144 W113
N415 Influence of channel unit type and composition	1100 1137 1140 1144 S003 S004 S005 W113
N416 Influence of habitat type	1100 1106 1137 1140 1144 S004 W113
N417 Influence of temperature	1137 1140 1144 0500 S004 W113 W124

Coordinated Information System

NATURAL PRODUCTION Summer Steelhead

Natural Production Data Parameters	Interview No.				
N418 Effects of habitat improvement	1100 0194 W127	1106 S003 W148	1137 S004	1140 W112	1144 W113
N419 Project costs	1137	1140	1144	0194	W132
1500 Genetics Characteristics	1137	W127	W136	W142	W143
N501 Stock history	1001 0123 w143	1002 0194	1137 W124	1144 W127	0114 W132
N502 Hatchery stocks supplemented	1001 0194 w143	1100 W124	1137 W127	1144 W132	0114 W136
N503 Hatchery strays	1001 0194	1137 0500	1144 W127	0114 W132	0123 W143
N504 Electrophoretic profile	1001 W143	1113 W148	1137	1144	W136
N505 Meristics	1137				
N506 Morphometrics	1126	1137	W118		
N507 Parasites and diseases	1003	1137	S005		
N508 Effectiveness of hatchery spawners in the wild	1001 0500	1100 W142	1137 W143	1144	0114
N509 Viability of hatchery offspring	1001 W142	1137 W143	1144	0114	0500

Coordinated Information System

NATURAL PRODUCTION Summer Steelhead

Natural Production Data Parameters	Interview No.				
N600 Fish and Wildlife Program Habitat	C312	1113	1118	1137	0154
	0194				
N601 Pre-project habitat condition	1137	1142	1144	0147	0155
	S003	S004	W113		
N602 Post-project habitat condition	1100	1137	1142	1144	0147
	0155	S003	S004	w113	
N603 Predicted physical change	1137	1142	1144	0147	0155
	S004	w113			
N604 Actual physical change	1137	1142	1144	0147	0155
	S003	S005	W113		
N605 Predicted fish production	1137	1144	0147	0155	S003
	S004	w113			
N606 Actual fish production change	1137	1144	0147	0155	S003
	S004	S005	w113		
N607 Predicted initial project costs	1137	1144	0155		
N608 Actual initial project costs	1137	1144	0155		
N609 Predicted continuing costs	1137	1144			
N610 Actual continuing costs	1137	1144			
N611 Discounted benefits : discounted costs	1137	1144			

Coordinated Information System

HABITAT

Habitat Data Parameters	Interview No.
N700 Drainage Basin Characteristics	1103 1118 1134 0120 0154 0191
N701 Ecoregion	C316 1103
N702 Geology	C316 1107
N703 Fire history	1107 0154
N704 Landuse - qualitative	1103 1106 1134 1143 0120 0154
N705 Landuse - quantitative	C316 1103 1106 1140 1143 0120
N706 Landownership	1103 1106 1107 1134 1140
N707 River protection	C302 1103 1134 1140 0120 0123 W128 W150
N708 Watershed management	1103 1140 0123
N709 Streamside management	1103 1106 1107 1134 1140 1143 0123 0154 W128
N710 Valley segment type	1103 1140 0154
N711 Landtype	1103 1140
N712 Road construction	C316 1103 1107 1140 0154
N713 Vegetation	1103 1140 0154
N714 Soils	1103 1106
N715 Climate	1140

Coordinated Information System

HABITAT

Habitat Data Parameters	Interview No.				
N800 Stream Channel Characteristics	C312 1131 W128	1103 1134	1106 1140	1113 1143	1118 0154
N801 Channel type	1001 1131 1144	1100 1134 0147	1102 1140	1103 1142 0154	1106 1143 0155 W128
N802 Stream gradient	C316 1106 1143 W128	1001 1131 1144 W132	1100 1134 0147 W148	1102 1140 0155 W150	1103 1142 S004
N803 Stream order	C316 1142 W128	1103 1143	1131 1144	1134 0147	1140 0155
N804 Sinuosity	1103 0147	1131 0155	1140 S004	1142 W128	1144 W150
N805 Wetted width	1001 1140 0155	1100 1142 W128	1102 1144 W132	1103 0147	1131 0154
N806 Bankfull channel	C316 1140	1103 1142	1106 1144	1131 0147	1134 0155
N807 Mean depth	C316 1131 0147 W128	1001 1140 0154 W132	1100 1142 0155	1102 1143 S004	1103 1144 S005
N808 Maximum depth	1103 0147 W132	1131 0154	1140 0155	1142 S005	1144 W128
N809 Profile	1131 0147 W138	1140 0155	1142 S004	1143 S005	1144 W132
N810 Area/volume by channel unit types	C316 1140 0154	1001 1142 W132	1002 1143	1100 1144	1131 0147

Coordinated Information System

HABITAT

Habitat Data Parameters	Interview No.				
N900 Barriers, Diversions, Screens	C312 0154	1140 W128	1143	0120	0147
N901 Natural barriers, falls, etc.	1106 1144 0155 W141	1134 0120 0500 W148	1140 0128 W112	1142 0147 W128	1143 0154 W132
N902 Manmade barriers, culverts, etc.	1106 1143 0154 W141	1131 1144 0155 W148	1134 0120 0500	1140 0128 W112	1142 0147 W128
N903 Water diversions, dewatering	1100 0147 W141	1106 0154	1140 0500	1144 W112	0120 W128
N904 Screened/unscreened diversions	1100 0123 W128	1106 0147 W141	1140 0154 W148	1144 0500	0120 W112
N905 Intermittant barriers	1140 0155	1143 W112	1144 W128	0120 W132	0154 W141
N1000 Water Quantity	1134	0154			
N1001 Streamflow	C316 1118 W113	1100 1131 W128	1103 1144 W138	1106 1147	1108 0155
N1002 Stream stage	I108	1131	1144	0155	
N1003 Annual hydrograph	I108	1144	0155	W138	
N1004 Instream water rights	1106 W113	1131	1144	0120	0500
N1005 Diversion water rights	1106	0500	W113		
N1006 Gaged irrigation flow					

Coordinated Information System

HABITAT

Habitat Data Parameters	Interview No.				
N1100 Water Quality	1134	1143	0154		
N1101 Temperature - instantaneous	C316 1118 1147 SO05	1001 1140 0147 W128	1100 1143 0155 W133	1103 1144 0171 W141	1113 1146 0500 W148
N1102 Temperature - max/min	1003 1143 0192 W148	1103 1144 S004	1113 1147 S005	1118 0147 W138	1140 0155 W141
N1103 Temperature - continuous	1103 1147	1117 0147	1140 0155	1143 W148	1144
N1104 Turbidity	1003 0155	1103 0171	1140 W128	1144 W133	0147
N1105 Conductivity	C316 1143 S005	1002 1144 W124	1103 1147 W132	1117 0155	1140 0171
N1106 Dissolved oxygen	1003 1147 W128	1103 0155 W132	1140 0171 W138	1143 S004 W148	1144 S005
N1107 Total dissolved solids	1003 0155	1103 W132	1140 W138	1143	1144
N1108 Nutrients	1003 0171	1103 W138	1140	1144	0155
N1109 Metals	1003 W138	1103	1140	1144	0155
N1110 Alkalinity/hardness	C316 0155	1003 W132	1103 W138	1140 W148	1144
N1111 pH	1003 0155 W148	1103 0171	1140 W128	1143 W132	1144 W138

Coordinated Information System

HABITAT

Habitat Data Parameters	Interview No.
N1200 Invertebrates, General Biotic	1140 1143 0154 W132
N1201 Macroinvertebrate abundance	C316 1140 1143 0147 0154 0155 S004 W124
N1202 Primary production	1140
N1203 Nutrient uptake studies	
N1204 Stand. crop particulate organic	1140
N1300 Substrate	C312 1102 1143 0154 W128 W132
N1301 Surface composition - visual	1001 1100 1102 1118 1142 1143 1144 0147 0154 0155 0500 W128 W132 W150
N1302 Surface composition - measured	1118 1143 1144 0147 W128 W132
N1303 Embeddedness - visual	1100 1102 1106 1143 1144 0147 0154 W128 W132
N1304 Embeddedness - measured	C316 1143 0147 S004 S005
N1305 Surface fines - visual	1001 1100 1102 1118 1142 1143 1144 0147 0154 0155 W128
N1306 Surface fines - measure	1118 1143 0147
N1307 Pebble counts	1118 1142 1144
N1308 Core sample	1143 S005
N1309 Bedload	1144 I147
N1310 % Bedrock	1001 1100 1144 0154 0155 W128 W132

Coordinated Information System

HABITAT

Habitat Data Parameters	Interview No.
N1400 Habitat Type and Cover	C312 1113 1118 1134 1140 1143 0120 0154 W128
N1401 Habitat class or channel unit	1001 1100 1103 1106 1140 1142 1143 1144 0147 0154 0155 S004 W148
N1402 Area by habitat class/unit	1001 1106 1140 1142 1143 1144 0147 0154 0155 S004 S005 W148
N1403 Volume by habitat class/unit	1140 1142 1143 1144 0147 0154 0155
N1404 Pool:riffle ratio	1001 1103 1134 1140 1142 1143 1144 0147 0154 0155 0500 S004 S005
N1405 Pool quality	1103 1140 1142 1143 1144 0147 0154 0155 0500 S004 W148
N1406 Pool frequency	1140 1142 1143 1144 0147 0154 0155 0500 S004 S005
N1407 Microhabitat formed by	1140 1142 1143 0154 0155
N1408 Microhabitat diversity	1140 1142 1143 0154 0155
N1409 Amount of cover	1100 1103 1140 1142 1143 1144 0147 0154 0155 S004 W128 W150
N1410 Type of cover	C316 1103 1140 1142 1143 1144 0147 0154 0155 W128
N1411 Cover complexity	C316 1140 1142 1143 0154 0155 W128
N1412 Woody debris count	1140 1142 1143 1144 0147 0154 0155
N1413 Woody debris volume	1140 1142 0147 0154 0155

Coordinated Information System

HABITAT

Habitat Data Parameters	Interview No.				
N1414 Overhanging vegetation	1100 1143 S005	1103 1144 W150	1106 0147	1140 0154	1142 0155
N1415 Undercut banks	1100 1143 S004	1103 1144 S005	1106 0147	1140 0154	1142 0155
N1416 Max. depth by channel unit	1140 0155	1142	1144	0147	0154
N1500 Riparian and Streambanks	1106 0154	1134	1140	1143	0120
N1501 Condition of riparian zone	1102 1143 0155	1103 1144 W128	1106 0120	1140 0147	1142 0154
N1502 Riparian vegetation type	1106 1144	1118 0147	1140 0154	1142 0155	1143 W128
N1503 Riparian veg. diversity	1103 1143	1106 1144	1118 0147	1140 0154	1142 0155
N1504 Streambank stability	1102 1142 0155	1103 1143 so05	1106 1144	1118 0147	1140 0154
N1505 Amount of shade	1102 1144	1103 0147	1140 0154	1142 0155	1143 W128
N1506 R4 USFS Greenline	1103	1106	1118	1140	1142
N1507 Woody species regeneration	1103 0154	1106	1118	1140	1142
N1508 Encroachments in riparian zone	1118	1140	1143	0154	0155
N1509 Floodplain width	1140	0147	0154	0155	
N1510 Grazing utilization	1103 1143	1106 1144	1118 0147	1134 0154	1140

Coordinated Information System

HABITAT

Habitat Data Parameters	Interview No.
N1511 Seral (successional) stage	1103 1140 1143 0154 0155
N1512 Woody debris recruitment potential	1143 1144 0147 0154
N1513 Vegetation condition in floodplain	1106 0147 0154 0155 S004 S005
N1514 Potential natural vegetation	1106 0154
N1515 In-channel LWD	1118 1142 1143 1144 0147 0154 0155
N1516 In-floodplain LWD	1142 1144 0154 0155
M1600 Habitat Analysis and Summaries	1113 1140 1143
N1601 Sediment yield models	1103 1140 1144
N1602 R1R4 FISHSED	1140 1143 1144
N1603 Limiting factors analysis	1118 1140 1142 1143
N1604 Channel dynamics	0154
N1605 Channel geometry	
N1606 Channel stability	1103 1140 1142 1144
N1607 IFIM minimum streamflow	1106 1131 1140 1143 0500
N1608 EPA rapid bioassessment	C316 1103 1131 0155
N1609 Biotic condition index	C316 1131 1140 0154
N1610 Residual pool depth	1118 1131
N1611 Riparian rate of recovery	1106 1143 0123
N1612 Remote sensing/aerial photos	1118 1140 0155

Coordinated Information System

HABITAT

Habitat Data Parameters	Interview No.
N1613 GIS applications	C312 1118 1140 0155 W150
N1614 Channel unit distribution	1140 1143 S005
N1615 Channel network riparian analysis	1143
N1616 Cumulative effects analysis	1103 1118 1140 1143

APPENDIX H - HATCHERY PRODUCTION Data Item Directory

Coordinated Information System

HATCHERY PRODUCTION

Hatchery Data
Parameters

Interview No.

**H100 Escapement, Spawners, and
Subbasin Harvest**

1110 1114 1137 0113 0114 0128
0203 W102 W117 W122
W124 W129 W131 W142 W147

H101 Facility where spawning occurs

I003 1101 1110 1114 1129 I137 0113
0114 0202 0203 W110 W115
W116 W117 W120 W122 W124
W129 W131 W139 W142 W147
W148

H102 Sex ratio or returning adults

1101 1110 I114 1129 1137 0114
O202 W110 W115 W116 W117
W120 W121 W122 W124 W129
W131 W139 W147 W148

H103 Sex ratio of spawners used

1101 1110 1114 1129 1137 0113
0114 O202 0203 W110 W115
W116 W117 W120 W121 W122
W129 W131 W139 W147 W148

H104 Escapement estimate

(total run-all stocks)

1101 1110 1114 1137 0114 O500
W102 W110 W116 W124
W129 W131 W142 W147 W148

H105 B-k total return

estimate (to F.W.)

1101 1110 1114 1137 0114 O202
W102 W110 W116 W124
W129 W131 W142 W147

H106 Broodstock age structure

1110 1114 1137 0114 O202 W102
W103 W119 W121 W124 W129
W131 W147 W148

H107 Broodstock fecundity

1101 1110 1111 1129 1137 0114
O202 0203 W110 W115 W116
W117 W122 W124 W129 W131
W139 W147 W148

H108 Broodstock selection methods

1101 I1 10 1137 0114 0202 0203

Coordinated Information System

HATCHERY PRODUCTION

Hatchery Data
Parameters

Interview No.

	W110 W115 W116 W117 W122 W124 W131 W147 W148
H109 BROODSTOCK health conditions	1003 1114 1137 0114 0202 0203 W109 W110 W115 W116 W117 W129 W131 W147 W148
H1 10 Hatchery/wild ratio returned to hatchery	100111011110 11111114 1137 0114 0202 W119 W121 W122 W124 W147 W148
H11 1 Broodstock inclusion ratio of 0203 W124 wild fish	10011110 11111129 1137 0114 0202 W147 W148
H112 Broodstock collection type	1003 1110 1114 1137 0114 0202 W115 W116 W117 W122 W124 W147 W148
H113 Date(s) broodstock returned to hatchery W139 W147 W148	10011003 1110 1114 1129 1137 0114 0202 W110 W115 W116 W117 W121 W122 W129 W131
H114 Dates of spawning	1003 1110 1114 1129 1137 0114 0202 0203 W110 W115 W116 W117 W121 W122 W124 W129 W131 W139 W147 W148
H115 Length Frequency of spawners by sex	1101 1110 1114 1137 0114 0202 W103 W117 W119 W121 W124 W129 W147 W148
H117 Weight of spawners	1114 1137 0114 0202 W110 W131 W147
H118 Stock of origin	1003 1110 1114 1137 0114 0202 W110 W116 W119 W120 W121

Coordinated Information System

HATCHERY PRODUCTION

Hatchery Data Parameters

Interview No.

	W129 W131 W147 W148
H119 Electrophoretic profile of stock	1001 1002 1110 1137 0114 W136
H120 Repeat spawning percentage	1110 1137 0114 0202 W147 W148
H121 Broodstock mark return count	1001 1101 1110 1114 1137 0114 0202 W102 W110 W116 W117 W120 W129 W131 W147 W148
H122 Scale age vs. mark age correction factor	1114 1137 0114 W103 W117 W119 W129
H123 Hatchery sport harvest	1114 1137 0113 0114 S001 W102 W103 W119 W129 W142 W148
H124 Hatchery tribal harvest	1114 1137 0114 SO01 W102 W122 W129 W142
H200 Hatchery Information	1137 0113 W147
H201 Hatchery/facility where eggs were hatched	1003 11011110 1114 1129 1137 0113 0114 0202 0203 W110 W115 W116 W117 W120 W122 W129 W131 W139 W147 W150
H202 Hatchery/facility where fish were last reared	1003 1101 1110 1114 1129 1137 0113 0114 0202 0203 W110 W115 W116 W117 W120 W122 W129 W131 W139 W147 W150
H203 Facilities where fish were	1003 1101 1110 1114 1137 0113

Coordinated Information System

HATCHERY PRODUCTION

Hatchery Data
Parameters

Interview No.

previously read

0114 0203 W110 W115
W116 W117 W120 W122 W129
W131 W139 W147 W150

H204 Hatchery number(s) or code(s)

1110 1129 1137 0114 0203 W110
W115 W116 W120 W121 W122
W129 W131 W139 W142 W147

H205 Source of water at hatchery

1003 1101 1110 1129 1137 0114
0202 0203 W110 W115 W116
W117 W120 W122 W129 W131
W139 W144 W147 W150

H206 Hatchery water quantity

0003 1110 1129 1137 0114 0202
0203 W110 W115 W117 W120
W121 W122 W129 W131 W139
W144 W147

G207 Hatchery water quality

1003 1110 1111 1129 1137 0114
0202 0203 W105 W115 W116
W117 W129 W131 W139 W144
W147

I-J.208 Hatchery effluent quality

1003 1110 1129 1137 0114 0202
0203 W105 W110 W115 W116
W117 W129 W131 W139 W144
W147

H209 Hatchery capacity

1003 1101 1110 1129 1137 0114
0202 0203 W105 W110 W115
W116 W117 W122 W129 W131
W139 W144 W147

G210 Hatchery methods/procedures

100311011110111112911370114
0202 0203 W105 W110 W116
W117 W121 W122 W129 W131
W139 W147

Coordinated Information System

HATCHERY PRODUCTION

Hatchery Data
Parameters

Interview No. .

H211 Published hatchery goals

I003 1101 1129 1137 0114 O202
0203 W121 W122 W129 W131
W147

H212 Major limiting factors at
hatcheries

I003 1101111011111129 1137 0114
O202 0203 W105
W110 W116 W122 W129 W131 W147

H213 Annual hatchery budgets

1129 1137 0114 0202 0203 W116
W122 W129 W131 W139 W147

H300 Rearing Information

1137 W118

H301 Detailed feeding history (diet)

I003 1110 1111 1137 0114 0202
0203 W105 W110 W115 W116
W117 W118 W120 W121 W129
W131 W139 W147

H302 Growth rate

I003 1110 1137 0114 O202 0203
W105 W110 W115 W116 W117
W118 W120 W129 W131 W139
W147

H303 Rearing density

I003 1110 1111 1137 0114 0202
0203 W105 W110 W115 W116
W117 W118 W129 W131 W139
W144 W147

H304 Rearing water temperature

I003 1110 1111 1137 0114 0202
0203 W105 W110 W115 W116
W117 W118 W120 W122 W129
W131 W139 W147

H305 Number of ponds used in rearing

1003 1110 1111 1137 0114 0202

Coordinated Information System

HATCHERY PRODUCTION

Hatchery Data
Parameters

Interview No.

	0203 W105 W110 W115 W116 W117 W118 W129 W131 W139 W147
H306 Condition factor	1003 1137 0114 0202 W110 W115 W116 W118 W121 W129 W131 W147
H307 Disease history (Inoculations/treatments)	1003 III1 1114 1137 0202 0203 W109 W110 W115 W116 W117 W118 W129 W131 W139 W144 W147
H308 Transfer history & methods	1003 1114 1137 0114 0202 0203 W110 W115 W116 W117 W118 W122 W129 W131 W139 W144 W147
H309 Days reared	1137 0114 0202 0203 W110 W115 W116 W117 W118 W122 W129 W131 W139 W147
H400 Release Information	W105 W118 W131 W147
H401 Total number released	C302 1003 1101 1110 1114 1129 1137 1146 0113 0114 0202 0203 W104 W105 W110 W115 W116 W117 W120 W122 W129 W131 W139 W147
H402 Counting/estimation method (# released) W147	1110 1114 1137 0113 0114 0202 0203 W105 W110 W115 W116 W117 W118 W129 W131 W139
H403 Release location	C302 1101 1110 1114 1129 1137 1146

Coordinated Information System

HATCHERY PRODUCTION

Hatchery Data
Parameters

Interview No.

	0113 0114 0202 0203 0500 W105 W110 W115 W116 W117 W118 W122 W129 W131 W139 W147
H404 Release location coded	C302 1110 1114 1129 1137 0113 0202 0203 0500 W104 W110 W115 W116 W118 W122 W129 W139
H405 Release Date(s)	C302 1003 11011110 1114 1129 1137 1146 0113 0114 0202 0203 W105 W110 W115 W116 W117 W120 W122 W129 W131 W139 W147
H406 Release information coded by brood year	1110 1114 1129 1137 0113 0202 0203 W116 W117 W122 W129 W131 W139 W147
H407 Release residualism data	1137 0202
H408 Release purpose	1101 1110 1114 1137 0113 0202 0500 W122 W129 W147
H409 Physiological status at release (e.g. ATP-ase)	1114 1137 0113 0114 W116 W117 W118 W129 W131 W147
H410 Size at release	1101 1110 1114 1129 1137 0113 0114 0202 0203 W105 W110 W115 W116 W117 W118 W120 W122 W129 W131 W139 W147
H411 Stage or class (e.g. fry, smolt, yearling)	11011110 1114 1129 1137 1147 0113 0114 0202 0203 0500 W105 W110 W115 W116 W117 W120 W122 W129 W131 W139 W147

Coordinated Information System

HATCHERY PRODUCTION

Hatchery Data Parameters	Interview No.
H412 Type (e.g. production, experimental, index)	I001 1101 1110 1114 1137 0113 0114 O202 O500 W105 W110 W116 W117 W120 W122 W129 W131 W139 W147
H413 Release transition information	1101 1110 1114 1137 O202 W121 W129 W147
H414 Outmigration timing	I001 1101 1137 1146 O202 W117 W125 W131 W133 W147
H415 Riverine water conditions after release	11371147 W110 W117 W129 W131
H416 Riverine habitat inventory	1137
H417 CWT marking data	1110 1114 1137 0113 0114 O202 W104 W105 W110 W116 W117 W118 W121 W129 W139
H418 PIT tagging data	I001 1101 1110 1114 1137 1146
H419 Fin clip data	1110 1114 1137 O202 0203 O500 W116
H420 Chemical marking data	1101 1114 1137 W116

Coordinated Information System

HATCHERY PRODUCTION

Hatchery Data Parameters	Interview No,
H421 Natural missing adipose fin percentage	1114 1137 W131
H422 Lot number (plant slip#, etc.)	1110 1114 I129 1137 0113 0203 W110 W115 W116 W117 W122 W129 W131 W147
H500 Survival rates	1137 0203 W105 W129 W147
II501 Pre-spawning pre-hatchery survival rate	1001 1003 1129 1137 W129 W147
H502 Pre-spawning at hatchery survival rate	I003 I110 I129 I137 O202 W110 W116 W117 W129 W131 W147
H503 Egg to fry survival rate	1003 1101 1110 1129 1137 0114 0202 0203 W110 W115 W116 W117 W129 W131 W139 W147
I-I.504 Fry to smolt survival rate	1003 1101 1110 1129 1137 0114 0202 0203 W105 W110 W115 W116 W117 W129 W131 W139 W147
H505 Smolt outmigration survival rate (to ocean)	1001 1002 1101 1137 1146 0114
H506 Smolt to adult survival rate	1001 1002 1101 1110 1137 0114 0202 W104 W105 W120
H507 Escapement to smolt survival rate	1002 1003 1137 0114

APPENDIX I - SYSTEM MONITORING Data Item Directory

Coordinated Information System

SYSTEM MONITORING

System Monitoring Data Parameters	Interview No.
S100 Fish and Wildlife Program Effectiveness Data	1131
S101 Water budget	1114 W122 W123 W125 W146
S102 Screens (FGE)	1109 W123 W125 W133 W146
S 103 Transportation	W121 W125 W132 W146
S104 Upstream passage improvement	1113
S105 Habitat improvement	1105 0147 0152 0155 S004 W112 W125 W148
S106 Program hatchery production	C302 1114 0113 0203 W120 W122 W125 W131 W148
S107 Hatchery effectiveness	1002 1111 0113 0203 W120 W122 W131 W144 W148
S 108 Supplementation	I002 1147 0113 0203 SO04 W123 W125 W148
S109 Genetic risks	1002
Sl 10 Contribution to doubling goal	0113
S111 program costs	1002 0155 0203 W122 W125
S200 Escapement and Spawners	W142
S201 Columbia R. mouth	1114 0112 0113 W119
S202 Bonneville Dam	1114 0112 0113 W131
S203 To upper dam	1113 1114 0112 0113 W102 W123

Coordinated Information System

SYSTEM MONITORING

System Monitoring Data
Parameters

Interview No.

	W131 W148
S204 By major tributary	C302 1109 1126 0112 0113 W102 W119 W123 W124 W126 W130 W132 W143 W148
S204 By indicator stream	1102 1109 1126 1137 1147 0112 0113 0155 W119 W126 W130 W148
S300 Adult Dam Loss/Conversion	
S301 Bonneville to McNary	
S302 McNary to Ice Harbor	1113 W125
S303 Ice harbor to Lower Granite	1113
S304 McNary to Priest Rapids	W102 W125
S305 Priest Rapids to mid-Co1 dams	W102
S400 Ocean Harvest	
S401 Catch	1114 0112 0113 W120
S402 Harvest rate	1114 0112
S403 Allocation by fishery	1114 0112 0113
S404 Stock-specific	0112 W146

Coordinated Information System

SYSTEM MONITORING

System Monitoring Data
Parameters

Interview No.

S405 Economics/social

S500 Inriver Harvest

S501 Catch - Zones 1-6

1114 1145 0112 0113 W103 W119
w146

S502 Harvest rate - Zones 1-6

1114 1145 0112 0113 W103 W119

S503 Allocation by fishery

1114 0112 W103 W119

S504 Stock-specific

0112 w119 w131 w146

S505 Economics/social

0112

Coordinated Information System

SYSTEM MONITORING

System Monitoring Data
Parameters

Interview No.

S600 Subbasin Harvest

S601 Catch

1145 0112 0113 SO01 W102 W103
w119

S602 Harvest rate

1145 0112 S001 W102 W103 W119
W124

S603 Allocation by fishery

1145 0112 SO01 W102 W103 W1 19

S604 Stock-specific

0112 W102 W119 W124 W148

S605 Economics/social

S001

S700 Presmolt Production

W148

S701 Carrying capacity

C302 1002 0203 S004 W117 W120
W132

S702 Egg to parr survival

C302 1002 0203 S004 W117 W120

S703 Potential carrying capacity

C302 1006 1134 1137 0203 SO04
w117

S704 Production levels by subbasii

C302 1002 0113 0203 S004

S705 Production levels-
indicator or other stocks

1002 0113 0203 SO04

S800 Smolt Production

S801 Carrying capacity

C302 0203 W117 W120 W146

Coordinated Information System

SYSTEM MONITORING

System Monitoring Data Parameters	Interview No.
S802 Egg to smolt survival	C302 1002 0203 W117
S803 Potential carrying capacity	C302 1006 1134 0203 W117
S804 Production levels by subbasin	C302 0203
S805 Production levels- indicator or other stocks	0113 0203 W103 W117 W147 W148
S806 Hatchery releases	C302 1002 1114 0112 0113 0203 w117 W120 W122 W125 W131 W133 W136 W138 W142 W146
S900 Smolt Passage and Survival	
S901 Reservoir survival	1146
S902 Smolts arriving at dams	1002 1146 W125
S903 Number transported	W125
S904 Transport benefit ratio	
S905 Fish guidance efficiency	w133
S906 By pass survival	w133 W146
S907 Turbine survival	w133 w146
S908 Predation rates	w133 W146
S909 Total smolt survival	1146 W146
S910 Arrival timing - aggregate stocks	1146 W125 W133

Coordinated Information System

SYSTEM MONITORING

System Monitoring Data
Parameters

Interview No.

S911 Arrival timing - indicator stocks

1002 1146 W125 W133

S912 Flow/velocity effects

1146 W125 W133

S913 Spill effects

W125 W133

S9 14 Gas supersaturation effects

COO2 1003 W146