PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Fifteenmile Creek Wild Steelhead Smolt Production

BPA project number: 9304001
Contract renewal date (mm/yyyy): 10/1999 ☐ **Multiple actions?**

Business name of agency, institution or organization requesting funding
Oregon Department of Fish and Wildlife

Business acronym (if appropriate) ODFW

Proposal contact person or principal investigator:

Name	Erik Olsen
Mailing Address	3450 West 10th
City, ST Zip	The Dalles, Oregon 97058
Phone	541-296-8045
Fax	541-296-7889
Email address	

NPPC Program Measure Number(s) which this project addresses
2.2A, 3.1B, 3.2, 3.3D.1, 4.1A, 7.1C.3

FWS/NMFS Biological Opinion Number(s) which this project addresses

Other planning document references
Columbia River Intertribal Fish Commission. 1996. Wy-Kan-Ush-Mi Wa-Kish-Wit. Spirit of the salmon. The Columbia River anadromous fish restoration plan of the Nez Perce, Umatilla, Warm Springs, and Yakama tribes. Portland, Oregon, Volume II::34-35

Short description
Estimate subbasin smolt production for the wild population of winter steelhead in Fifteenmile Creek and collect information on selected life history and biological characteristics of downstream migrant fishes endemic to Fifteenmile Creek..

Target species
Winter steelhead

Section 2. Sorting and evaluation

Subbasin
Fifteenmile Creek

Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
Mark one or more caucus	If your project fits either of these processes, mark one or both	Mark one or more categories
☒ Anadromous fish ☒ Resident fish ☐ Wildlife	☒ Multi-year (milestone-based evaluation) ☐ Watershed project evaluation	☐ Watershed councils/model watersheds ☐ Information dissemination ☐ Operation & maintenance ☐ New construction ☒ Research & monitoring ☐ Implementation & management ☐ Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description
20513	Hood River/Fifteenmile Creek (umbrella proposal)
8805303	Hood River Production Program - CTWS M&E
8805304	Hood River Production Program - ODFW M&E
8902900	Hood River Production Program - Round Butte Hatchery/Pelton ladder
9145	Evaluate the Status of Columbia River Sea-Run Cutthroat Trout
9301900	Hood River Production Program - CTWS & ODFW
9304000	Fifteenmile Creek Habitat Restoration Project
9500700	Hood River Production Program - PGE: O&M
9705909	Securing Wildlife Mitigation Sites - Oregon, Mitchell Point
9802100	Hood River Fish Habitat Project

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship
8805304	Hood River Production Program - ODFW M&E	Project personal will provide the supervision and oversite on this project.
9304000	Fifteenmile Creek Habitat Restoration Project	Project personal will assist with the operation and maintenance of equipment.

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?
1988	Estimated subbasin wild winter steelhead and spring chinook salmon smolt production. Project was funded by the U.S. Fish and Wildlife Service.	Yes - Estimate will be used to determine the current status of the population.

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Determine abundance and life history patterns of anadromous and resident fishes in the Fifteenmile Creek subbasin.	a	Estimate numbers of downstream migrant wild winter steelhead smolts migrating past a downstream migrant trap located at RM 1 in the mainstem of Fifteenmile Creek.
		b	Count numbers of resident trout and Pacific lamprey collected at a downstream migrant trap located at RM 1 in the mainstem of Fifteenmile Creek.
		c	Estimate temporal distribution of downstream migrant winter steelhead smolts in Fifteenmile Creek.
		d	Estimate age structure of downstream migrant winter steelhead smolts in Fifteenmile Creek.
		e	Estimate selected biological and life history characteristics of downstream migrant wild winter steelhead smolts and resident trout: including mean fork length (mm), mean weight (gm) and condition factor.
		f	Compile and analyze steelhead and resident trout data collected during the field season and provide a summary of the data in an annual progress report.

Objective schedules and costs

Obj #	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
1	10/1999		This objective will provide estimates of subbasin winter steelhead smolt production and biological characteristics of downstream migrant salmonids. Data will also be used to determine the current status of anadromous salmonid populations in the subbasin.		100.00%
				Total	100.00%

Schedule constraints

Accurately estimating winter steelhead smolt production in FY 2000 will be dependent on environmental conditions. The Fifteenmile Creek subbasin is subject to extreme flow fluctuations which can effect sampling.

Completion date

Section 5. Budget

FY99 project budget (BPA obligated): $22,996

FY2000 budget by line item

Item	Note	% of total	FY2000
Personnel		%43	11,826
Fringe benefits		%17	4,730
Supplies, materials, non-expendable property		%9	2,505
Operations & maintenance			
Capital acquisitions or improvements (e.g. land, buildings, major equip.)			
NEPA costs			
Construction-related support			
PIT tags	# of tags:		
Travel		%3	998
Indirect costs	@ 35.5%	%26	7,121
Subcontractor			
Other			
TOTAL BPA FY2000 BUDGET REQUEST			$27,180

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount ($)
Total project cost (including BPA portion)			$27,180

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget	$28,500	$30,000	$31,500	$33,000

Section 6. References

Watershed?	Reference
☐	Columbia River Intertribal Fish Commission. 1996. Wy-Kan-Ush-Mi Wa-Kish-Wit. Spirit of the salmon. The Columbia River anadromous fish restoration plan of the Nez Perce Umatilla, Warm Springs, and Yakama tribes. Portland, Oregon, Volume II::34-35
☐	ODFW and CTWSRO. 1990. Fifteenmile creek subbasin salmon and steelhead production

	plan. Final Report of Oregon Department of Fish and Wildlife and Confederated Tribes of the Warm Springs Reservation of Oregon to BPA, Portland, Oregon.
☐	Olsen, E.A., R.A. French, and A.D.Ritchey. 1996. Hood River and pelton ladder evaluation studies. Annual Progress Report of ODFW to Bonneville Power Administration, Portland, Oregon.
☐	Ricker, W.E. 1975. Computation and interpretation of biological statistics of fish populations. Bulletin of the Fisheries Research Board of Canada 191, Ottawa, Ontario.

PART II - NARRATIVE

Section 7. Abstract

Little quantitative data exists on the current status of the winter steelhead population in the Fifteenmile Creek subbasin and the current status of other populations of anadromous salmonids is generally limited to qualitative types of information based on undocumented observations. This project proposes estimating 1) subbasin winter steelhead smolt production, 2) selected biological and life history characteristics for all downstream migrant salmonids, 3) relative abundance of downstream migrant salmonids other than winter steelhead, and 4) relative abundance of pacific lamprey. A mark and recapture program will be implemented at a downstream migrant screw trap to estimate subbasin winter steelhead smolt production and count other downstream migrants. All downstream migrant salmonids will be sampled at the trap for selected biological characteristics. Data will be used to 1) determine the current status of the winter steelhead population, 2) identify populations of anadromous salmonids, other than winter steelhead, in the subbasin and determine their current status, and 3) provide critical baseline biological and life history information on anadromous salmonids endemic to the Fifteenmile Creek subbasin. This project is expected to require a long term commitment in resources (i.e., a minimum of 4-6 years) because of the complex life history pattern of winter steelhead.

Section 8. Project description

a. Technical and/or scientific background

The Fifteenmile Creek subbasin supports the eastern most stock of wild winter steelhead (*Onchorynchus mykiss*) in the Columbia River Basin. The population has never been supplemented with hatchery steelhead although a limited number (i.e., approximately 500) of hatchery legal rainbow trout were released annually through 1987, near the city of Dufur, to support a local area fishery. Escapements of adult winter steelhead are currently depressed below historical levels. Low escapements are primarily attributed to the loss, or degradation, of habitat in the subbasin, but also occur as a result of both juvenile and adult passage related problems at Bonneville Dam.

There currently exists only limited quantitative or qualitative biological data to assess the present status of the wild winter steelhead population. The only long term data set available for winter steelhead are annual spawning ground counts made at selected index sites located throughout the subbasin. Annual spawning ground surveys were conducted beginning in 1964. These surveys provide information that can be used to infer, in a general sense, the status of the wild winter steelhead population but do not provide the necessary quantitative biological data needed to more accurately define subbasin production. The status of other salmonid populations is generally limited to unrecorded observations made while conducting other work in the subbasin. The need

for collecting baseline information on the current status of the wild winter steelhead population in Fifteenmile Creek is specifically identified in Columbia River Intertribal Fish Commission (1996) and addresses data requirement needs identified in measure 3.3D.1 of the NPPC's Fish and Wildlife Program.

This project proposal provides funding for an ongoing project which was first funded by the Bonneville Power Administration in FY 99. Funding in FY 2000 primarily provides for the operation and maintenance of a juvenile migrant trap located at River Mile (RM) 1 in the mainstem of Fifteenmile Creek. Data collected at the migrant trap will be used to estimate 1) subbasin winter steelhead smolt production, 2) relative numbers of downstream migrant anadromous salmonids, other than winter steelhead, leaving the subbasin, 3) relative numbers of Pacific lamprey leaving the subbasin, and 4) selected life history, morphometric, and meristic characteristics of winter steelhead smolts and other anadromous salmonids. This project proposal does not contain funding for purchase of a downstream juvenile migrant trap. The U.S. Fish and Wildlife Service (USFWS) offered to loan us a migrant trap during FY 99 and have indicated that the migrant trap would be available to this project in FY 2000. If this arrangement falls through in FY 2000 then additional funding will need to be added to this projects contract in order to purchase a migrant trap.

This project will be implemented, in large part, with assistance from personnel working on the Hood River Production Program - ODFW M&E project (M&E project; Project #88-053-04) and the Fifteenmile Creek Habitat Restoration Project (Fifteenmile Creek project; Project #93-040-00). This should reduce the overall costs associated with implementing this project and will provide access to personnel with extensive experience in areas that will be useful in facilitating the timely completion of the proposed project tasks.

Permanent and seasonal personnel on the Fifteenmile Creek project will be used to develop and install the migrant trap. Permanent personnel on the M&E project would be responsible for supervising the seasonal personnel hired for this project to 1) install, operate, and maintain the juvenile migrant trap; 2) summarize and analyze the data; and 3) prepare an annual progress report. Personnel on the M&E project have implemented similar work for the last five years in the Hood River subbasin and bring to this project extensive experience in the operation and maintenance of juvenile migrant traps and in the summarization and analysis of life history and biological data. All ongoing activities, pertaining to this project, will be administered by personnel associated with the M&E project and any required maintenance of the juvenile migrant trap would be the responsibility of personnel associated with the Fifteenmile Creek project.

b. Rationale and significance to Regional Programs

The Fifteenmile Creek subbasin has long supported both tribal and non-tribal fisheries (personal communication on 1/28/98 with Jim Newton, Oregon Department of Fish and Wildlife, The Dalles, Oregon). The Suefert Falls area in lower Fifteenmile Creek has long been a popular dipnetting and eel gathering spot for tribal fishers and non-tribal fishers fished Fifteenmile Creek for steelhead up until the early 1980's when the fishery was closed. The Fifteenmile Creek stock of wild winter steelhead also represents the eastern most population of winter steelhead returning to the Columbia River Basin and the subbasin has never been supplemented with hatchery winter steelhead. Limited empirical information exists on either subbasin smolt production or the biological and life history characteristics of the indigenous population of winter steelhead. Empirical information on salmonid populations indigenous to the Fifteenmile Creek subbasin is primarily limited to data collected at a downstream migrant trap operated in the spring of 1998.

The Fifteenmile Creek subbasin plan (Oregon Department of Fish and Wildlife and The Confederated Tribes of the Warm Springs Reservation of Oregon, 1990) states that the primary problem in managing winter steelhead in the subbasin is the lack of any quantitative data on the status of the indigenous population. However, it is believed that the population is currently in a depressed state. The National Marine Fisheries Service (NMFS) issued a proposed rule on August 9, 1996 to list the Middle Columbia River Evolutionary Significant Unit (ESU) of west coast steelhead as a candidate species under the Endangered Species Act (ESA). The Fifteenmile Creek population of winter steelhead is included in NMFS's Middle Columbia River ESU. Subbasin production and life history information on the Fifteenmile Creek stock of winter steelhead will be essential in developing a recovery plan for this stock and for ensuring that subbasin management actions are in compliance with the ESA if winter steelhead are ultimately listed as a threatened or endangered species.

c. Relationships to other projects

We propose integrating this project with activities associated with the Hood River Production Program - ODFW M&E project (M&E project; Project #88-053-04) and the Fifteenmile Creek Habitat Improvement Project (Fifteenmile Creek project; Project #93-040-00). Personnel on the Fifteenmile Creek project will assist in the development of the juvenile trapping site and in the installation of the juvenile migrant trap. Personnel on the M&E project will 1) assist in the installation of the juvenile migrant trap, 2) supervise project personnel, 3) assist project personnel in summarizing and analyzing data, and 4) prepare the annual report. The integration of this project into these two other ongoing projects will significantly reduce the administrative costs associated with this project.

d. Project history (for ongoing projects)

This project was first funded by Bonneville Power Administration in FY 1999. The project was funded for $22,996.

The U.S Fish and Wildlife Service funded a similar project in FY 98. A downstream migrant trap was operated from mid-March through the end of July. Migrant trapping was discontinued at the end of July because streamflows became to low to work the trap. Data is currently being summarized and will be published in an annual report in 1999. Preliminary estimates indicate that subbasin smolt production will probably be somewhere around 6,000 steelhead and 200 spring chinook salmon smolts. A total of six downstream migrant cutthroat trout were also caught at the migrant trap during the sampling period. All cutthroat trout were greater than 150 mm fork length.

e. Proposal objectives

Objective 1. Determine abundance and life history patterns of anadromous and resident fishes in the Fifteenmile Creek subbasin.

Sub-objective 1. Determine wild winter steelhead smolt production from the Fifteenmile Creek subbasin. (Associated with Tasks a-b in **Section 4**)

Hypothesis: Not applicable

We propose conducting a juvenile mark and recapture program at a downstream juvenile migrant trap, located near RM 1 in the mainstem of Fifteenmile Creek, to estimate wild winter steelhead smolt production from the Fifteenmile Creek subbasin. Data will primarily be used to determine the current status of the winter steelhead population in the Fifteenmile Creek subbasin but will also provide qualitative information on the present status of 1) populations of anadromous salmonids other than winter steelhead and 2) Pacific lamprey. Data collected in 1998 provides the only empirical information on subbasin winter steelhead smolt production for the Fifteenmile Creek subbasin.

Sub-objective 2. Determine selected biological and life history characteristics of downstream migrant anadromous salmonids in Fifteenmile Creek. (Associated with Tasks c-f int **Section 4**)

Hypothesis: Not applicable.

We propose sampling downstream migrant anadromous salmonids at a migrant trap located near RM 1 in the mainstem of Fifteenmile Creek. Downstream migrant anadromous salmonids collected at the migrant trap will be sampled for selected life history, morphometric, and meristic characteristics. Data will be used to estimate age structure and to provide age specific estimates of mean fork length (mm), mean weight (gm), and condition factor. Information will also be collected on the temporal distribution of the winter steelhead smolt migration.

f. Methods

Objective 1.

Sub-objective 1. (Associated with Tasks a-b in **Section 4**)

Downstream migrant anadromous salmonids and Pacific lamprey will be trapped at a rotary-screw trap located at approximately RM 1 in the mainstem of Fifteenmile Creek. The screw trap will be sampled on a daily basis. Sampling will be conducted primarily in the morning to reduce temperature related stress. Anadromous salmonids will be anesthetized, examined for marks, and counted. Pacific lamprey will only be counted at the trap.

Counts of downstream migrant rainbow-steelhead (rb-st) will be made for two size categories; they will include fish greater than or equal to 150 mm fork length and fish less than 150 mm fork length. This separation into two size categories will be made because data from other studies indicates the smaller size category is predominately comprised of age 0 migrants which are not considered to be smolts. The cutoff defining each size category may change as subbasin specific data is collected at the screw trap. A random sample of anadromous salmonids will be measured to the nearest millimeter fork length, weighed to the nearest 0.1 gram, and sampled for scales for purposes of aging the fish. Data will be recorded on computerized data entry forms and keypunched into a computer database. Juvenile scale samples will be transferred to glass slides and read by trained personnel located at ODFW's research lab in Corvallis.

Downstream migrant rb-st trapped at the screw trap will be used to indirectly estimate winter steelhead smolt migration timing and production because no accurate methodology exists to visually identify rainbow trout from downstream migrant steelhead smolts. A mark and recapture methodology will be used to estimate numbers of migrant rb-st passing the migrant trap. Downstream migrants will be marked with a panjet needle-less injector. The panjet will be used to shoot a narrow high speed stream of colored dye at selected fins. This process will be used to mark the fin with a unique color code by infusing a small

amount of colored dye below the epidermal layer. The dye color and marked fin combination will be changed every two weeks to uniquely mark fish at defined time intervals throughout the period of smolt migration.

A pooled Petersen estimate with Chapman's modification (Ricker 1975) will be used to estimate numbers of downstream migrant rb-st, by size category. Approximate 95% confidence intervals will be calculated according to methods described in Olsen et al. (1996).

Data collected at the juvenile migrant trap will be summarized in an annual progress report.

Constraints: Several uncertainties make it difficult to evaluate our ability to accurately estimate numbers of downstream migrant winter steelhead smolts in Fifteenmile Creek. The lack of a long term dataset on smolt production makes it difficult to determine if current population sizes will allow us to mark and recapture enough juveniles to develop an accurate estimate of smolt production. Trapping efficiency will also effect our ability to obtain adequate sample sizes. Recapture rates at a floating screw trap operated at a site locate near the mouth of the Hood River average 5-8%. Highly fluctuating streamflows and heavy debris loads, common in the Fifteenmile Creek subbasin, may effect our ability to achieve similar catch rates. Depending on what types of problems are encountered it may be necessary to either adjust our operating schedules or to identify alternative trapping sites. Few other alternative trapping sites are available, however, that would alleviate these problems and still provide the capability of estimating smolt production for the entire subbasin.

Sub-objective 2. (Associated with Tasks c-f in **Section 4**)

Sampling procedures associated with this objective are outlined in **Sub-objective 1**.

Data collected at the migrant trap will primarily be used to estimate subbasin winter steelhead smolt production, mean fork length(mm), mean weight(gm), mean condition factor, and migration timing, by age category. Summaries will be formatted either by brood year or year of sampling. Data collected on anadromous salmonids, other than winter steelhead, will be summarized to provide information on the relative numbers of migrants and on mean fork length(mm) and mean weight(gm), by age category. Counts of Pacific lamprey at the migrant trap will be summarized to provide information on the relative numbers of migrants leaving the subbasin.

Data collected at the juvenile migrant trap will be summarized in an annual progress report.

Constraints: Constraints associated with this objective are outlined in **Sub-objective 1**.

g. Facilities and equipment

Approach: We propose operating a downstream migrant trap at a site located approximately one mile upriver from the mouth of Fifteenmile Creek. The trapping site will be located on private property in which the ODFW currently has an easement for operating a trapping facility. The site was chosen because of the limited number of suitable sites available for operating a downstream migrant trap in the lower Fifteenmile Creek subbasin. There are no capital expenditures proposed for this project in FY 2000. The U.S. Fish and Wildlife Service has offered to lend this project a migrant trap in FY 2000.

The field office will be located in the same office used by the Hood River Production Program - ODFW M&E project (Project #88-053-04) and the Fifteenmile Creek Habitat Improvement Project (Fifteenmile Creek project; Project #93-040-000). Sharing the field office with these two projects will allow us to significantly lower the general overhead costs associated with the implementation of this project. The primary savings are achieved by having ready access to equipment and machine tools that would be exceedingly expensive to buy, but which are needed on a periodic basis throughout the field season. The Fifteenmile Creek project owns or leases virtually all the machine tools needed to maintain and repair the migrant trap, and also provides our project staff with the expertise of personnel trained in the operation and maintenance of the machine tools. Additionally, all major expenses associated with maintaining the field office and shop are currently funded by the two projects identified above.

h. Budget

This project primarily provides funding for the personal services required to operate and maintain a juvenile migrant trap in the Fifteenmile Creek subbasin. There are no capital costs associated with this project. The U.S. Fish and Wildlife Service (USFWS) currently plans on loaning this project a migrant trap in FY 2000. Funding for the migrant trap will need to be added to this projects contract, or in a future contract, if the USFWS is unable to loan us a migrant trap in either FY 2000 or in subsequent years.

Section 9. Key personnel

Program Leader (Chip Dale; FTE 0.04)

Education

1986 Colorado State University, Fort Collins, CO.
Degree: MS in Wildlife Biology
1977 Colorado State University, Fort Collins, CO.
Degree: BS in Wildlife Biology

Training

AFS Habitat Workshop, Bellevue, WA. 1991
State of Oregon DAS Core Curriculum for Managers and Supervisors.
USFS GAWS Aquatic Habitat Inventory.

Experience

1993 – Present
Oregon Department of Fish and Wildlife Assistant Regional Supervisor (Fisheries).
Administer the fisheries resources of the High Desert Region of ODFW. Programs include research, habitat, Fisheries, and Propagation. Administer Programs involving ~60 FTE's and ~$3.5 million dollar budget.

1983-1990
Denver Water Department, Environmental Planner.
Responsible for planning and implementation of habitat restoration projects for mitigation for mitigation of impacts related to dam construction. Also oversaw inventory programs conducted jointly with Colorado Division of Wildlife to measure fish population abundance in impacted reaches of rivers affected by Denver Water District's operations.

Reports authored or co-authored

Dale, A. R. and J. A. Bailey. 1982. Application of optimal foraging theory for bighorn sheep habitat analysis. Proc. 3rd Bienn. Symp. North Wild Sheep and Goat Counc. Pp 254-264.

Chilcote, M., K. Kostow, H. Weeks, H. Schaller, and A. Dale. 1991. First Biennial Report on Status of Oregon's Wild Fish Populations. ODFW.

Project Leader (Erik Olsen; Hood River/Pelton ladder project; Funded under Proj. #8805304)

Education

1970-1974 Portland State University, Portland, Oregon
Major: Biology

1974-1976 Oregon State University, Corvallis, Oregon
Degree: B.S. in Fisheries Science

Experience

12/92-Present

Oregon Department of Fish and Wildlife

Project leader on the Hood River/Pelton ladder project (Project No. 88-053-04). Primary responsibilities include: 1) project administration, 2) preparation of a research sampling plan to evaluate a hatchery supplementation program and to collect information on the life history and biology of anadromous and resident salmonids in the Hood River subbasin, 3) summarizing and analyzing project data, and 4) preparation of annual progress reports and statements of work. Experience gained in 1) the development and maintenance of databases, 2) development of software to summarize data using both FORTRAN and Fox Pro programming languages, and 3) the life history and biology of anadromous salmonids.

06/90-11/92

Oregon Department of Fish and Wildlife

Project leader on the Coordinated Information System (Project No. 88-108; Contract No. DE-FC79-89BP94402). Primary responsibilities include: 1) project administration, 2) preparation of a standardized reporting format for reporting information on the life history and biology of anadromous salmonids in Oregon subbasins to the Columbia River basin, 3) preparation of a report, summarizing in a standardized format, all available information on the life history and biology of anadromous salmonids in Oregon subbasins to the Columbia River Basin, and 4) preparation of quarterly reports and statements of work. Experience gained in 1) the presentation and summarization of complex biological data, 2) development and maintenance of databases, 3) development of software to summarize data using both FORTRAN and Fox Pro programming languages, 4) the life history and biology of stocks of anadromous salmonids located throughout the Columbia River Basin, and 5) issues pertaining to the management of stocks of anadromous salmonids in the Columbia River Basin.

Reports authored or co-authored

Lindsay, R.B., W.J. Knox, M.W. Flesher, B.J. Smith, E.A. Olsen, and L.S. Lutz. 1986. Study of wild spring chinook salmon in the John Day River system. Final Report of Oregon Department of Fish and Wildlife (Project No. 79-4; Contract No. DE-A179-83BP39796) to Bonneville Power Administration, Portland, Oregon.

Olsen, E.A., R.A. French, and J.A. Newton. 1994. Hood River and pelton ladder evaluation studies. Annual Progress Report of Confederated Tribes of the Warm Springs Reservation and Oregon Department of Fish and Wildlife (Project Numbers 89-29, 89-29-01, 89-053-03, 89-053-04, and 93-019; Contract Numbers DE-BI79-89BP00631, DE-BI79-89BP00632, DE-BI79-93BP81756, DE-BI79-93BP81758, DE-BI79-93BP99921) to Bonneville Power Administration, Portland, Oregon.

Olsen, E.A., and R.A. French. 1996. Report A: Hood River and Pelton ladder evaluation studies. *in* Oregon Department of Fish and Wildlife and The Confederated Tribes of the Warm Springs Reservation of Oregon. Hood River production program monitoring and evaluation. Annual Progress Report of Oregon Department of Fish and Wildlife and The Confederated Tribes of the Warm Springs Reservation of Oregon (Project No. 88-053-03 and 88-053-04; Contract No. 89BP00631 and 89RP00632) to Bonneville Power Administration, Portland, Oregon.

Olsen, E.A., R.A. French, and A.D. Ritchey. 1995. Hood River and pelton ladder evaluation studies. Annual Progress Report of Oregon Department of Fish and Wildlife and The Confederated Tribes of the Warm Springs Reservation (Project Numbers 88-29, 89-29-01, 89-053-03, 89-053-04, and 93-019; Contract Numbers DE-BI79-89BP00631, DE-BI79-89BP00632, DE-BI79 93BP81756, DE-BI79-93BP81758, DE-BI79 93BP99921) to Bonneville Power Administration, Portland, Oregon.

Olsen, E.A., R.A. French, and A.D. Ritchey. 1996. Hood River and pelton ladder evaluation studies. Annual Progress Report of Oregon Department of Fish And Wildlife (Project Numbers 88-29, 89-29-01, 89-053-03, 89-053-04, and 93-019; Contract Numbers DE-BI79-89BP00631, DE-BI79-89BP00632, DE-BI79-93BP81756, DE-BI79-93BP81758, DE-BI79-93BP99921) to Bonneville Power Administration, Portland, Oregon.

Olsen, E.A., and R.B. Lindsay. 1984. Evaluation of habitat improvements – John Day River. Closing Quarterly Report of Oregon Department of Fish and Wildlife (Project Number 82-9) to Bonneville Power Administration, Portland, Oregon.

Olsen, E.A., and R.B. Lindsay. Undated. Summer steelhead in the Deschutes River, Oregon. Information Reports (Fish) of the Oregon Department of Fish and Wildlife, Portland, Oregon. (Unpublished draft.)

Olsen, E., P. Pierce, M. McLean, and K. Hatch. 1992. Stock summary reports for Columbia River anadromous salmonids, volume I: Oregon. Final Report of Oregon Department of Fish and Wildlife (Project No. 88-108; Contract No. DE-FC79-89BP94402) to Bonneville Power Administration, Portland, Oregon.

Olsen, E., P. Pierce, M. McLean, and K. Hatch. 1992. Stock summary reports for Columbia River anadromous salmonids, volume II: Oregon. Final Report of Oregon Department of Fish and Wildlife (Project No. 88-108; Contract No. DE-FC79-89BP94402) to Bonneville Power Administration, Portland, Oregon.

Oregon Department of Fish and Wildlife and Confederated Tribes of the Warm Springs Reservation of Oregon. 1990. Hood River subbasin salmon and steelhead production plan. Columbia Basin System Planning Report to Northwest Power Planning Council, Portland, Oregon.

Oregon Department of Fish and Wildlife and Confederated Tribes of the Warm Springs. Undated. Hood River/Pelton ladder master agreement. Project Plan of Oregon Department of Fish and Wildlife and Confederated Tribes of the Warm Springs Reservation of Oregon (Project 89-029; Contract DE-BI79-93BP81758) to Bonneville Power Administration, Portland, Oregon. (Unpublished draft.)

Assistant Project Leader (Rod French; Hood River/Pelton ladder project; Funded under Proj. #8805304)

Education

1986 Oregon State University, Corvallis, Oregon
Degree: B.S. in Fisheries Science

Experience

12/92-Present
Oregon Department of Fish and Wildlife

Assistant project leader on the Hood River/Pelton ladder project (Project No. 88-053-04). Primary responsibilities include: 1) the implementation of project field work, 2) assisting the project leader in the preparation of a research sampling plan to evaluate a hatchery supplementation program and to collect information on the life history and biology of anadromous and resident salmonids in the Hood River subbasin, 3) summarizing and analyzing project data, 4) the purchase of field equipment, 5) the coordination of field work with other project cooperators, 6) assisting the project leader in the preparation of annual progress reports and statements of work, and 7) giving presentations on project results and findings. Experience gained in 1) the use of downstream migrant screw traps, 2) the use of adult trapping facilities, and 3) the life history and biology of anadromous salmonids.

06/92-11/92

Oregon Department of Fish and Wildlife

Assistant project leader on the Umatilla Hatchery Monitoring and Evaluation Project. Primary responsibilities include 1) the implementation of project tasks designed to collect information on water chemistry; life history and biology of anadromous salmonids; and harvest, 2) the summarization and analysis of project data, 3) assisting the project leader in preparation of annual progress report, and 4) giving presentations at professional society meetings.

01/88-05/92

Oregon Department of Fish and Wildlife

Fisheries Biologist 1 on the Native Trout Research Project. Primary responsibilities include assisting project leader in the collection of data on native trout in Klamath, Harney and Deschutes river subbasins. Data was collected on 1) migration timing, 2) numbers of downstream migrants, temporal and spatial distribution of spawning, 3) life history and biology of resident salmonids, and 4) relative resistance of trout to specific pathogens. Assisted with preparation of monthly and annual reports and with the preparation of publications for scientific journals. Prepared and presented presentations for professional societies and sportsman's groups.

<u>Report's authored or co-authored</u>

Buchanan, D.V., A.R. Hemmingsen, D.L. Bottom, R.A. French, and K.P. Currens. 1989. Native trout project. Annual Progress Report of Oregon Department of Fish and Wildlife (Fish Research Project F-136-R), Portland, Oregon.

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Assistant Project Leader (Steve Springston; Fifteenmile Creek project; Funded under Proj. #9304000)

Education

1976 HS diploma; 15 credit hours of post secondary education

Experience

02/88-Present

Oregon Department of Fish and Wildlife

Assistant Project Leader on the Fifteenmile Creek Habitat Restoration Project (Project #86-79-01). Primary responsibilities include but are not limited to: 1) assisting project leader with administration and budget preparation, 2) develop riparian lease agreements, 3) write construction specifications and contracts, 4) administer construction contracts, 5) develop cooperative agreements with private landowners and other agencies, 6) provide feedback and recommendations to the project leader, 7) assist project leader and other agency's with grant applications, 8) write annual, monthly, and special reports, 9) enter data into computer, 10) purchase all field supplies, 11) write purchase orders, transmittals, 12) represent ODFW at meetings, 13) conduct field tours and make presentations for schools, agency's and special interest groups, 14) monitor leased riparian habitat, 15) collect and summarize stream temperature data, flow data, spawning ground data, 16) provide daily task guidance and set work priorities for one Technician II and one Technician I, and 17) direct volunteer work crews performing project maintenance.

Section 10. Information/technology transfer

Data collected from this project will be summarized in an annual progress report and distributed to fishery managers. Project personnel will present information to local watershed council's and sport's groups; the NPPC, CBFWA, CTWRS, and BPA; and ODFW staff.

Congratulations!