

ANNUAL PROGRESS REPORT

PROJECT TITLE: Salmonid Enhancement and Restoration Management
Program
PROJECT NUMBER: F-121-R
SEGMENT NUMBER: 05
PROJECT PERIOD: 1 October 1990 to 30 September 1991

Prepared by: Dennis Wise

Oregon Dept. of Fish & Wildlife
2501 SW First
P.O. Box 59
Portland, OR 97207

This project was partially financed with funds obtained through the
Federal Aid in Sport Fish Restoration Program.

Contents

Introduction.. 3

Job 1. Program Development of the Salmon and Trout
Enhancement Program

Objectives 3

Accomplishments. 3

Job 2. Collect Physical and Biological Stream Survey
Information

Objectives 5

Accomplishments. 5

Job 3. Enhance Fish Passage and Rearing Habitat

Objectives 6

Accomplishments. 6

Job 4. Enhance Populations of Naturally Produced Salmon and
Trout to Meet Management Objectives.

Objectives 7

Accomplishments. 7

Table 1. 9

Appendix 1 10

INTRODUCTION

The Salmonid Enhancement and Restoration Program is designed to enhance and restore self-sustaining populations of salmon and trout by undertaking habitat improvement projects and supplemental fish stocking programs. Work is conducted by Oregon Department of Fish and Wildlife (ODFW) personnel and by trained volunteers. A major component of the program is training citizens to undertake projects such as stream surveys, habitat enhancement, and fish rearing through the Salmon and Trout Enhancement Program, commonly referred to as STEP. STEP is a program whereby citizens volunteer their labor to enhance the fishery resources of the state.

The Department's management programs call, in part, for the collection of physical and biological stream survey information, habitat enhancement work, and fully seeding fish rearing area. Funding through this contract has allowed us to increase our efforts in these areas.

Job 1. Program development of the Salmon and Trout Enhancement Program.

Objectives:

1. Meet with Salmon and Trout Enhancement Advisory Committee bimonthly to review STEP activities for consistency with ODFW management programs and policies.
2. Make presentations on STEP to citizen groups, schools, and local and state governments. Distribute informational brochures explaining the STEP program.
3. Develop training brochures on how to do various types of stream surveys (juvenile, spawning fish, habitat) and how to incubate eggs in a streamside incubator.
4. Conduct an Annual STEP Volunteer Workshop bringing together STEP participants from throughout the state to exchange information and ideas on STEP projects.
5. Publish a STEP Volunteer Newsletter on a quarterly basis informing the public of STEP activities. Over 2,500 copies will be distributed.

Accomplishments:

The objective was to increase public participation in, and develop guidelines for, the Salmon and Trout Enhancement Program (STEP). The objective was accomplished by meetings of the STEP Advisory Committee; presentations to sport groups, schools, and government entities; developing instructional materials; and the distribution of a STEP Volunteer Newsletter.

Objective 1. Six meetings of the STEP Advisory Committee were held and attended.

The 12 member STEP Advisory Committee, appointed by the Governor, reviewed department policies and programs affecting STEP. Meetings were held at various locations within the state to allow volunteer groups to discuss their work with the Committee.

Major areas of concern addressed by the Committee were: review of STEP Administrative Rules; STEP budget, increased school participation in STEP, project record keeping, and STEP rearing programs. Basin and species plans were reviewed. The Wild Fish and Natural Production Policy initial implementation was studied and impacts addressed by the committee.

Objective 2. STEP biologists made 182 presentations to citizen groups, schools, and other governmental agencies. STEP displays were staffed at local sports shows, environmental workshops, and county fairs.

Objective 3. A Classroom Incubation Manual is in the second draft. New ten year patches were designed and made available to veteran volunteers. A Storm Drain Marking guide was initiated to support water quality protection.

Step continued to assist the Department's Office of Public Affairs in developing an educational activity guide for secondary teachers and youth leaders. The Stream Scene - Watersheds, Wildlife and People was printed. Three teacher workshops were held to provide "hands on" training for sixty nine teachers. Emphasis of the guide is to incorporate STEP into classroom activities. During the last year workshop teachers involved over 5,000 students in watershed awareness activities.

Objective 4. The 1991 STEP Volunteer Conference was held in Hillsboro, Oregon on March 8-9-10, 1991. Two hundred twenty volunteers attended. The program included training sessions on habitat restoration, aquatic education, scale reading, fish culture, and safety. Volunteers from California, Washington, and British Columbia also attended to learn more about Oregon's program.

Objective 5. Two issues of the STEP Volunteer were published. The newsletter alerts volunteers of statewide STEP activities, techniques for habitat enhancement or egg incubation, and activities in other states. Over 2,000 copies of each issue were distributed. A Ten Years in STEP slide show was produced to supplement two issues of the newsletter. Video copies were made and distributed to inform the public about STEP activities since its conception in 1981.

Job 2. Collect physical, chemical, biological data on fish populations necessary for basin management programs.

Objectives:

1. Work with district fish biologists and other land managers to identify stream systems or areas where physical and biological stream data and information on fish populations is inadequate, and develop programs to collect this information.
2. Conduct 20 training sessions to teach volunteers how to conduct physical and biological stream surveys, spawning fish surveys, and compile survey information for management use.
3. Coordinate and supervise volunteer efforts to conduct physical and biological stream surveys and spawning fish surveys on selected streams.

Accomplishments:

The objective was to obtain physical and biological data on fish populations necessary to implement basic management programs. It was accomplished by meeting with district fish biologists and other land managers to identify stream systems where information was lacking; conducting workshops to train volunteers to do surveys; and by coordinating and supervising volunteer survey projects.

Objective 1. Statewide stream survey records were reviewed and areas identified where surveys have not been conducted in recent years, or where evaluations of STEP projects needed to be done.

Objective 2. Twenty training workshops were held to train volunteers to conduct various types of stream surveys. Two-hundred-thirty-five volunteers were trained.

Objective 3. Volunteers conducted stream surveys in 40 stream systems (Appendix 1). Almost 84 miles of stream were surveyed and the information provided to management biologists.

Job 3. Enhance fish passage and rearing habitat.

Objectives:

1. Initiate fish habitat improvement projects on streams or standing waters identified by district fish biologists in management programs or when plans call for habitat improvement. Projects will be developed and undertaken by either volunteers or through contractual services.
2. Provide on-site training to volunteers on the various methods to improve fish habitat.
3. Provide technical assistance and available materials and supplies to volunteer groups to undertake habitat improvement projects.

Accomplishments:

The objective was to enhance fish passage and rearing habitat. It was accomplished by training and supervising volunteers to undertake stream enhancement projects and providing materials for them to do the work. We also participated in cooperative projects with federal and state land managers. Materials were provided to Oregon Youth Conservation Corps crews hired by the Department to improve fish habitat.

Sill logs deflectors and rock filled wire baskets (gabions) were installed in streams to improve pool/riffle ratios, create adult holding pools or juvenile rearing areas, and to trap spawning gravel. Additional instream habitat was created by placing large boulders, root wads, and brush bundles in the stream. Fish passage was improved by removing log jams, fixing or modifying improperly installed culverts, installing jump pools, or providing passage at impassable barriers. Streamside vegetation was improved by plantings, seeding of exposed areas, or fencing to include livestock.

- Objective 1. Ninety-seven stream enhancement projects were undertaken in 42 stream systems (Appendix 1). All of the work was conducted by volunteers. Almost 2,214 volunteers participated in stream enhancement projects and contributed more than 11,859 hours of their time to the work. Volunteers donated \$106,605.00 and ODFW provided \$34,808.00 for projects.
- Objective 2. STEP biologists directly supervised many of the stream enhancement projects and were able to instruct the volunteers as the project was undertaken.

Objective 3. STEP biologists visited each proposed project site and worked with the volunteers to design and plan the enhancement work. Materials and supplies were provided as needed.

Job 4. Enhance populations of naturally produced salmon and trout to meet management objectives.

Objectives:

1. Investigate and approve volunteer requests to incubate salmonid eggs or rear fish under the STEP program. Requests will be coordinated with and approved by the ODFW district fish biologist.
2. Plan and coordinate the distribution of eggs from ODFW hatcheries to 244 STEP volunteer projects.
3. Provide fish culture technical assistance to over 244 citizen volunteers participating in the egg incubation program.
4. Develop volunteer operated broodstock development projects (fish rearing) on selected streams.

Accomplishments:

The objective is to enhance populations of naturally produced salmon and trout through the release of fry or smolts. Work was accomplished by using volunteers to incubate salmon or trout eggs and releasing the resultant fish in underseeded streams or estuaries. Volunteers were also involved in broodstock development programs to rear fish to presmolt or smolt size, and capture returning adults for egg broodstock.

Objective 1. We received requests from over 300 individuals to participate in the STEP egg incubation program. The applicant was contacted, the request evaluated for meeting a management need, and, if needed, the site investigated.

Objective 2. We coordinated the collection and distribution of salmon and trout eggs from department hatcheries or STEP rearing facilities to volunteers. As a result, 8.7 million fry, presmolts, and smolts were released into underutilized habitat. We worked with ODFW's Fish Culture Division to ensure all eggs were distributed, and necessary forms recording disposition of eggs were included into the ODFW Hatchery Record system.

Objective 3. Fish culture assistance was provided to 244 egg incubation sites. With many volunteers hatching multiple fish species, eggs were being distributed and incubated from September through May and required considerable monitoring.

Objective 4. Forty-five broodstock development/rearing projects were operated by volunteers. Some projects raised fish to full term smolts as part of a broodstock development project, while the remaining sites released fish as fry and fingerlings. Over 2,290 volunteers spent 29,739 hours on these projects.

Table 1. Fish Releases by STEP Volunteers - 1990 Brood Year

Species	Fry Released	Smolts/Presmolts
Chum Salmon	0	0
Coho Salmon	1,637,917	152,008
Spring Chinook	505,706	238,496
Fall Chinook	1,041,802	842,167
Summer Steelhead	402,833	0
Winter Steelhead	3,539,814	139,770
Cutthroat Trout	9,707	0
Searun Cutthroat	95,938	0
Rainbow Trout	81,176	0
Total All Species	7,314,893	1,372,441

Appendix 1. Summary of activities, by major stream system, carried out under Jobs 2, 3, and 4.

STEP DIST.	Job 2	Job 3	Job 4	
	Physical & Biological Surveys	Habitat Improvement Projects	Egg Incubation	Fish Rearing
Tillamook				
Clatskanie	X			
Lewis & Clark		X		
Necanicum		X	X	X
Nehalem			X	X
Nestucca	X		X	
Tillamook		X	X	X
Whiskey Cr.				X
Wilson	X		X	
Lincoln				
Alsea		X	X	
Beaver Cr.		X		
Depoe Bay Cr.			X	X
Siletz	X		X	
Siuslaw			X	X
Yachats		X		
Yaquina	X	X	X	
Coos				
Coquille	X	X	X	X
Coos	X	X	X	X
Millacoma		X		
Tenmile Cr.	X	X	X	X
South Coast				
Chetco		X	X	X
Floras Cr.		X		
Hunter Cr.			X	X
Pistol			X	X
Rogue		X	X	X
Winchuck		X	X	X
Upper Rogue				
Applegate	X			
Klamath		X		
Rogue	X	X	X	

Appendix 1, con't. Summary of activities, by major stream system, carried out under Jobs 2, 3, and 4.

STEP Dist.	Job 2	Job 3	Job 4	
	Physical & Biological Surveys	Habitat Improvement Projects	Egg Incubation	Fish Rearing
Umpqua				
Umpqua	X	X	X	X
Upper Willamette				
C.F. Willamette	X			
Mckenzie	X		X	
M.F. Willamette	X	X	X	
Long Tom	X			
Siuslaw	X	X	X	
Mid Willamette				
Mary's	X	X		
Mill Cr.	X	X	X	
Mollala			X	
N.Santiam	X		X	
Rickreall Cr.	X	X		
S.Santiam	X			
S.Yamhill	X	X		
Lower Willamette				
Balch Cr.	X			
Clackamas		X	X	
Johnson Cr.	X	X	X	
Kellog Cr.	X	X		
Sandy	X	X	X	
Scappoose		X	X	
Tryon Cr.	X	X		
Tualatin	X	X		

Appendix 1, con't. Summary of activities by major stream system, carried out under Jobs 2, 3, and 4.

STEP Dist.	Job 2	Job 3	Job4	
	Physical & Biological Surveys	Habitat Improvement Projects	Egg Incubation	Fish Rearing

Mid-Columbia				

Blitzen		X		
Columbia	X	X	X	
Crooked				X
Deshutes	X	X	X	
Hood	X	X		
John Day	X			
Grand Ronde	X			
Malheur				
Metloliuss	X			
Powder	X			
Snake	X			
Umatilla	X	X	X	
Williamson		X		
Walla Walla			X	

Summary of STEP participation: October 90 - September 91

Volunteer Group	Number of Projects	Number of People	Hours Donated	Miles Surveyed
Youth/Education				
Habitat Improvement	27	542	2511	
Stream Surveys	32	597	2302	4.7
Survey Classes	14	1242	2840	
Broodstock/Presmolt	0	0	0	
Miscellaneous	22	1198	2112	
Total	95	3,579	9,765	4.7
General Public				
Habitat Improvement	70	1672	9348	
Stream Surveys	66	310	1423	63.0
Research Project	8	20	288	
Scale Collection	0	0	0	
Survey Classes	6	107	554	
Broodstock Develop.	33	505	7422	
Presmolt Rearing	11	1169	13348	
Smolt Rearing	46	591	8849	
Hatchbox Program 1/	244		18,300	
Miscellaneous	71	588	4,231	
Total	635	4,962	63,763	63.0
Grand Total	730	8,541	73,528	67.7

Presentations given by STEP biologists:

Youth/Education:	44	1458
General Public:	138	3485
Total	182	4943

1/ Participants not available: estimated at 75 hrs/hatchbox.

File: Projsum90

Update 12/15/91