

ANNUAL PROGRESS REPORT

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Program  
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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

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 areas. 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.

Objective 2. STEP biologists made 165 presentations to citizen groups, schools, and other governmental agencies. STEP displays were staffed at local sports shows, environmental workshops, and county fairs. Over 3,000 brochures on STEP were distributed.

Objective 3. Four existing brochures were updated and reprinted. New five year patches were designed and made available to veteran volunteers

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 fifty-six teachers. Emphasis of the guide is to incorporate STEP into classroom activities. During the last year workshop teachers involved over 3,000 students in watershed awareness activities.

Objective 4. The 1990 STEP Volunteer Conference was held in North Bend, Oregon on March 10 - 11, 1990. Three hundred eighteen volunteers attended. The program included sessions 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. Three 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.





Job 2. Collect physical, chemical and 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 basin 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. Thirteen training workshops were held to train volunteers to conduct various types of stream surveys. Two hundred ninety volunteers were trained.
- Objective 3. Volunteers conducted stream surveys in 33 stream systems (Appendix 1). Almost 125 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 exclude livestock.

Objective 1. Ninety-two stream enhancement projects were undertaken in 42 stream systems (Appendix 1). All of the work was conducted by volunteers. Almost 1,000 volunteers participated in stream enhancement projects and contributed more than 6,800 hours of their time to the work. Volunteers donated \$27,900 and ODFW provided \$10,400 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. One portion of the STEP Conference was also used to demonstrate safe enhancement techniques.



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 326 STEP volunteer projects.
3. Provide fish culture technical assistance to over 325 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 400 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, 11.3 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 325 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. Seventy-one 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 3,400 volunteers spent 186,300 hours on these projects.





Table 1. Fish Releases by STEP volunteers - 1989 Brood Year

Species	Fry Released	Smolts/Presmolts
Chum Salmon	7,000	0
Coho Salmon	2,726,000	63,000
Spring Chinook	646,000	288,000
Fall Chinook	1,462,000	1,152,800
Summer Steelhead	376,000	0
Winter Steelhead	4,102,000	35,000
Cutthroat Trout	353,000	0
Rainbow Trout	0	123,200
<b>Total All Species</b>	<b>9,672,000</b>	<b>1,662,000</b>



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

	Job 2	Job 3	Job 4
	Physical & Biological Surveys	Habitat Improvement Projects	Egg Incubation Fish Rearing
<u>Tillamook STEP Dist.</u>			
Lewis & Clark R			X
Walluski R			X
Youngs R			X
Skipanon			X
Clatskanie R	X		X
Necanicum R	X	X	X
Nehalem R	X	X	X
Salmonberry R	X		
Miami R		X	X
Kilchis R			X
Wilson R	X	X	X
Trask R	X	X	X
Tillamook R			X
Nestucca R		X	X
Neskowin Cr			X
<u>Lincoln STEP Dist.</u>			
Salmon R	X	X	X
Siletz R	X	X	X
Depoe Bay Cr			X
Big Cr			X
Yaquina R	X	X	X
Alsea R	X	X	X
Siuslaw R	X	X	X
			X
<u>Umpqua &amp; Upper Rogue STEP Dist.</u>			
Umpqua R	X	X	X
Upper Rogue R		X	X
<u>Coos STEP Dist.</u>			
Tenmile Lakes	X	X	X
Millicoma R		X	X
Coos R	X	X	X
Coquille R		X	X
<u>So. Coast STEP Dist.</u>			
Elk R		X	



Hubbard Cr

X

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

	Job 2	Job 3	Job 4	
	Physical & Biological Surveys	Habitat Improvement Projects	Egg Incubation	Fish Rearing

So. Coast STEP Dist. (continued)

Euchre Cr			X	
Lwr Rogue R	X	X	X	X
Hunter Cr		X	X	X
Pistol R		X	X	X
Chetco R	X	X	X	X
Winchuck R	X	X	X	X

Lwr Willamette STEP Dist.

Scappoose Cr		X	X	
Lwr Willamette Tribs	X	X	X	
Sandy R	X	X	X	X
Tualatin R	X	X	X	
Clackamas R		X	X	

Mid & Upper Willamette STEP Dist.

Mollala R	X		X	
Yamhill R	X	X	X	
Mill Cr		X	X	
Rickreall Cr	X	X	X	
Luckiamute R	X	X	X	
Santiam R		X	X	
Calapooia R	X			
Mary's R	X	X	X	
McKenzie R	X		X	
MF Willamette R		X	X	

Mid-Columbia STEP Dist.

Hood R	X		X	
Deschutes R	X	X	X	
Klamath R		X		
Walla Walla R	X	X	X	
Silvies R			X	
Blitzen R		X		
John Day R	X	X		
Crooked R	X			X
Grande Ronde	X	X		



Summary of STEP participation: October 89 - September 90.

Volunteer Group	Number of Projects	Number of People	Hours Donated	Miles Surveyed
<b>Youth/Education</b>				
Habitat Improvement	9	224	1,251	
Stream Surveys	42	912	3,016	6.90
Survey Classes	5	222	1,340	6.00
Broodstock/Presmolt	1	388	115,924	
Miscellaneous	20	696	2,318	
<b>Total</b>	<b>77</b>	<b>2,442</b>	<b>123,849</b>	<b>12.90</b>
<b>General Public</b>				
Habitat Improvement	83	731	5,573	
Stream Surveys	125	258	597	111.45
Research Project	5	10	243	
Scale Collection	3	32	45	
Survey Classes	8	68	131	
Broodstock Develop.	39	1,526	32,920	
Presmolt Rearing	18	854	22,611	
Smolt Rearing	13	664	14,841	
Hatchbox Prg. 1/	326		24,450	
Miscellaneous	40	304	2,151	
<b>Total</b>	<b>660</b>	<b>4,447</b>	<b>103,562</b>	<b>111.45</b>
<b>Grand Total</b>	<b>737</b>	<b>6,889</b>	<b>227,411</b>	<b>124.35</b>

Presentations given by STEP biologists:

Youth/education:	61	4,245
General Public:	104	8,331
	<b>165</b>	<b>12,576</b>

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

