



O R E G O N T R O U T

METRO - USFWS Greenspaces Environmental Education Grant

Salmon Watch 1997

Metro Contract Number: 905419

Project Contact: Rebecca Martin, Director of Education

Program Description: Salmon Watch is a collaborative, field based environmental education program for middle and high school classrooms in Oregon. The program teaches youth about the importance of watershed stewardship using salmon as an indicator of watershed health. Through classroom instruction, field experience, and community service projects, Salmon Watch instills in youth a sense of value for our Northwest natural resources. Students gain an appreciation for watersheds by visiting a local river or stream in the fall where they conduct a thorough watershed field assessment. More than 10,000 students, 300 teachers, and 1,000 volunteers have participated in Salmon Watch over the past five years.

Program Significance: Salmon Watch provides an opportunity for urban students to gain a personal connection to the natural environment. By involving professionals from diverse organizations, Salmon Watch provides participants with an understanding of the importance of collaborative problem solving in watershed conservation. In addition, students learn that they can contribute to improving the health of a local watershed.



Salmon Watch Timeline

Wild Fish, Watersheds, and Stewardship

A SALMON WATCH SEASON Training (July-September)

Teachers and volunteers participate in an all-day Saturday field orientation/training session during the summer in preparation for their Salmon Watch field trips and community projects. These trainings are presented by specialists from partnering agencies, schools, and organizations. In 1997, 10 trainings were offered throughout the state with 3 trainings held at Metro's Oxbow Park. All of the trainings used field equipment purchased with the Metro grant, assisting more than 100 teachers and volunteers in learning watershed assessment techniques.



Classroom Instruction (September - November)

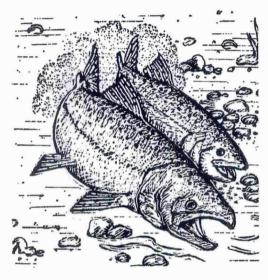
After attending a training session during the summer, teachers present the Salmon Watch curriculum to students in the classroom during the fall. The interdisciplinary curriculum incorporates numerous specific curriculum content requirements mandated by the Oregon Curriculum Content Framework.

Field Trips (September - November)

Salmon Watch field trips feature a nature walk, observation of spawning salmon, and Native American story telling. Students discuss the relationship between man's activities and effects on salmon and ways to accommodate both. They also study aquatic insects and participate in water quality monitoring, spawning surveys and stream mapping.

Teachers, Oregon Trout staff, agency naturalists (including Metro), Native Americans, industry representatives, parents and other volunteers accompany students on their field trips. These diverse Salmon Watch participants enable students to interact with an assortment of positive adult role models, receive individualized attention and hear differing perspectives about the plight of the salmon.

Field equipment purchased with the Metro grant was used on approximately 20 school field trips in the Portland area, reaching 600 students. In addition, the equipment was used during a new salmon education pilot program with 25 Boy Scouts.



Student Service Learning Projects (October – May)

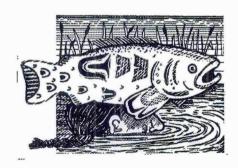
Students are required as a part of Salmon Watch to participate in a community service project during the school year. Working often with teachers, volunteers and/or agency experts, students engage in local projects that benefit wild salmon and the watersheds that sustain them.

Student projects are designed to engage and channel student enthusiasm, creativity and initiative to benefit wild salmon and/or its native habitat. Projects include a broad range of activities including stream restoration efforts, teaching younger children about salmon, educational exhibits, and art projects. Metro field equipment is available to classrooms for use in their service learning projects.

Program Evaluation

Every teacher and volunteer who participates in Salmon Watch is given an annual program evaluation form to complete and return to Oregon Trout as well as a training evaluation. We received very positive feedback from our teachers and volunteers in 1997, several examples are included. One teacher remarked that one of his students solidified his plans to pursue a fish and wildlife degree while attending a Salmon Watch field trip. The field equipment provided by Metro allows students to gain practical biological assessment experience. That experience, coupled with meeting professionals working in the environmental and natural resource fields, provides students with excellent resources for career planning.

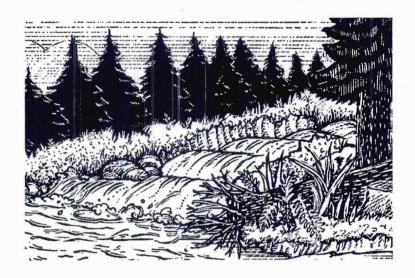
In particular, the purchasing of our field equipment was done with great care. We requested advice from agency professionals and teachers regarding what equipment they find the most useful in the field and working with student groups. In addition, we were able to receive several items at just above the wholesale cost, allowing our dollars to go further. We created eight complete field assessment kits and have since developed a wish list for additional equipment to expand the kits' capacity. Our lessons learned include creating a workable check out system and process for replacing broken items.



PROGRAM EXPANSION:

Salmon Watch is currently undergoing evaluation to determine the most suitable means for program expansion. Oregon Trout and our partners are hoping to expand the program to be statewide over the next few years. Salmon Watch has grown over the past five years to seven times its original size and the demand for the program continues to grow.

The ability to purchase field equipment for the Portland-Metro area has enabled us to permanently support field based watershed education in the region. We anticipate that the use of the equipment will become increasingly popular. In addition, the Metro - USFWS funds allowed us to leverage additional dollars from Salmon Watch partners in other communities and provide similar equipment support to classrooms in all of our hubs.



Artwork courtesy of Adriana Martinez

SALMON WATCH 1997

Environmental education for a sustainable tomorrow
Annual Fall Report

SUMMARY OF PROGRAM

Salmon Watch teaches the next generation of decision-makers the importance of wild fish conservation in watershed management. The program is designed to instill in students and other participants a deeper appreciation of the value of their natural heritage and the importance of being well-informed and responsible citizens.

Salmon Watch includes teacher and volunteer training, classroom instruction, fall field trips to observe wild salmon spawning and monitor local watersheds, and student community service projects. Since its inception in 1993, Salmon Watch has reached more than 9,000 students from the Portland, Eugene/Springfield, Corvallis and Medford areas.

UNIQUE PUBLIC AND PRIVATE PARTNERSHIP

Oregon Trout's Salmon Watch partners work collaboratively to provide resources and financial support for the program. Partners for Salmon Watch 1997 include: U.S. Forest Service, Oregon State University Department of Fisheries & Wildlife, Portland State University Center for Science Education, METRO Regional Parks & Greenspaces, Portland General Electric Company, Eugene Water & Electric Board, Oregon Department of Fish and Wildlife, Bonneville Power Administration, Northwest Power Planning Council, Pacificorp, Oregon Chapter of the American Fisheries Society, Oregon Department of Education, Bureau of Land Management, U.S. Fish & Wildlife Service, Oregon Department of Water Resources, Weyerhaeuser, Columbia River Inter-Tribal Fish Commission, Willamette Industries, Governor's Watershed Enhancement Board, Oregon Department of Environmental Quality, Pacific States Marine Fisheries Commission, AmeriCorps/Northwest Service Academy, and Oregon Sea Grant.

1997 FIELD SEASON ACCOMPLISHMENTS

The following is a summary of achievement from the 1997 Salmon Watch field trip and training season as reported by participating teachers and volunteers.

FIELD TRIPS	Trips	<u>Teachers</u>		Students	<u>Volunteers</u>	# schools
Portland	45	15 new	30 returning	1350	128	35
Corvallis	14	10 new	4 returning	420	54	10
Eugene	24	8 new	16 returning	720	91	14
Medford	9	9 new		275	32	8
TOTAL	92	42 new	50 returning	2765	305	67

Please note that teachers often teach the Salmon Watch curriculum to more than 100 students. These numbers represent students attending the field trip component of the program.

VOLUNTEER HOURS

Field trips 2920 hours Training 1365 hours Steering Committees 350 hours

Total

4635 hours

SERVICE LEARNING PROJECTS

Community service projects are nearing completion. Several classrooms participated in community outreach projects including developing a web site, teaching other students at their school about salmon through presentations and bulletin boards, and stenciling storm drains warning of the hazards of dumping waste to local watersheds. Many classrooms have taken part in restoration activities at local streams or in their watershed.

Evaluations of these projects are currently being completed and received. A summary of these projects will be available in the summer of 1998.

SALMON SCOUT PROGRAM

This fall, two boy scout troops from the Pioneer District participated in a pilot scout program. Two scoutmasters instructed their troops in salmon biology and watershed issues during troop meetings and field experiences. Twenty-two of the scouts and fourteen adults then spent a weekend conducting field studies and participating in a community service project on tributaries of the Nestucca River. The Bureau of Land Management, Oregon Trout, and the Pioneer District of the Boy Scouts all contributed to the success of this endeavor. Program revisions are currently underway and an expansion of the pilot program will occur within the Pioneer District in 1998.

SALMON WATCH IN 1998

Salmon Watch plans to continue to expand the program as a whole targeting 110 classrooms in 1998. Expansion will occur primarily in the Medford and Corvallis hubs. Continued growth of the volunteer program is also expected to occur. The program hopes to add an additional 50-100 volunteers (including Native Americans, community members, and fish biologists) in 1998 and enhance the volunteer component of Salmon Watch with a formal system for recognition of outstanding volunteers.



R E G O N T U R \mathbf{O}

SALMON WATCH 1997 TEACHER PROGRAM EVALUATION FORM

Please take the time to fill out this program evaluation form as completely as possible. Your candid and thoughtful comments will help us to improve the Salmon Watch program for future years. Please type or print clearly. NOTE: Reimbursement monies for buses and/or substitute teachers are contingent upon our receipt of this evaluation

Your name Peresa Whelan	Today's Date 10-6-97
Name of School Markham Adventure School 9-23-97	Name of Principal Michael Kelly
Field Trip Date 9-23-97	Field Trip Site Salmon liver # 2
No. of Students who Participated 28	Age/Grade Levels 10-11/40 c sto
PRE-FIELD TRIP AC	•
Did you attend the 1997 Salmon Watch training? Y In retrospect, how helpful was the training in prepar Excellent Very Good Good Fair Poor Comments	ing you for your field trip?
How would you rate the quality of the 1997 Salmon Excellent Very Good Good Fair Poor How could the curriculum be improved in the future	
Which sections of the curriculum did you cover in the Biology of Salmonids Relation of Humans to their Environment Student Community Service Projects	Life in the Steam Field Trip Preparation Supplemental Resources

MORE ON REVERSE



Comments					
Were you a part of the Yes No If so, how would you Excellent Very Go Comments	No me corate the quality of cod Good I	your mentor/mentairPoor	ntee relationsh		
,	F	ELD TRIP			
N				4	
Names of the Salmon					
Jim Mymon		mar	y Klein		
Gary Chn	stofferson		J .		
Jeff HEDE	21				
Names of parent volume for Salmon Watch in t					olunteer
Have you sent thank y Yes No(trip particij	pants?
What were the weather				old	Cool.
How was the quality of Excellent Very Go	of salmon viewing	conditions on yo	ur field trrp?		
			ır field trip?		

If you participate in Salmon Watch in the future, would you be willing to take your students to the same site as you did this year? (We will use your response to this question
when assigning sites for Salmon Watch 1998, please respond thoughtfully
Ves No Maybe T would one Control of a Control of the Control of th
Yes No Maybe I would prefer to do so please If not, why not and where/when would you rather go?
If not, why not and whole when would you rather go:
TT
How would you rate the contribution of the volunteers on your field trip?
Excellent Very Good Good Fair Poor
Comments regarding agency experts, volunteers and Native Americans:
All volunteers where positive and entruscrastic
and taught the Kids or lot of info about
and fught the Kids & lot of info about
the salmon
Which part of your field trip did you enjoy the most/least?
Which part of your field trip did you enjoy the most/least? Most: All of it - Seeing The Salmon spawn
3
Least: ?
Which part of your field trip do you believe your students enjoyed most/least?
Which part of your field trip do you believe your students enjoyed most/least? Most: Salmon Vitwing and macro invertebrate Do
Jacobson Victory Williams
Least: 2
Least.
How do you plan to change the organization of your trip in the future?
bus to and from me site.
bus to and from me site.
How would you rate your students' overall reaction to the field trip?
Excellent Very Good Good Fair Poor
Mey all enjoyed it very much!

Do you believe that participation in Salmon Watch 1997 has affected your students attitudes toward watersheds, fish and their ecosystems? Yes No Maybe Comments: They are more knowledgeable about the human tenuronment interactions as it pertains to salmon and salmon habitat
POST FIELD TRIP
Please describe the community service project(s) that you intend to organize or participate in with your students as part of Salmon Watch 1997? We are in The process of warnizing a community service project with reighborhood parents. We'd like to restore likely plants, plant native plants and monitor the creek is water que How can Oregon Trout staff better support you and your students in completing your community service project(s)? (We have several contacts who may be interested in working with your classroom.) Provide volunteers who would like to work with the students in the freld and for provide instruction in the classroom (i.e., developing a planting plan).
Would you be willing to write a letter of endorsement/support for the program?
Are you interested in participating in Salmon Watch in 1998? Definately ! yes! My partner teacher - Pat Washington is also interested. Would you be willing to be a teacher mentor for a new teacher next year?
Are you interested in helping in other ways next season such as training new volunteers or teachers, revising curriculum, recruiting new volunteers or teachers?
Possibly
Please add any additional comments below. Thank you for the opportunity to bring my kids into the field to learn about salmon
I they habitats and
experts in the field.

Thank you for your support of the program!

Chesting Chart

4111 Kelkinger



 \mathbf{O} N T R U **SALMON WATCH 1997** TEACHER PROGRAM EVALUATION FORM Please take the time to fill out this program evaluation form as completely as possible. Your candid and thoughtful comments will help us to improve the Salmon Watch program for future years. Please type or print clearly. NOTE: Reimbursement monies for buses and/or substitute teachers are contingent upon our receipt of this evaluation form. Today's Date Oct 2,97 Name of School H.B. Lee. H.S. Name of Principal DV. Verry Brown Field Trip Date SIDT. 25, 97 Field Trip Site Schmon River # 1 No. of Students who Participated Age/Grade Levels PRE-FIELD TRIP ACTIVITIES Did you attend the 1997 Salmon Watch training? Yes X No In retrospect, how helpful was the training in preparing you for your field trip? Excellent Very Good K Good Fair Poor Comments Ine

How would you rate the quality of the 1997 Salmon Watch curriculum?

Excellent X Very Good Good Fair Poor

How could the curriculum be improved in the future? (i.e. new ideas, organization etc.)

Which sections of the curriculum did you cover in the classroom prior to your field trip? Biology of Salmonids

Relation of Humans to their Environment

X Life in the Steam X Field Trip Preparation X Supplemental Resources

Student Community Service Projects

MORE ON REVERSE



	How would you rate the coordination of Salmon Watch 1997 by Oregon Trout staff? Excellent Very Good Good Fair Poor Comments Focks
ų	Were you a part of the 1997 Salmon Watch teacher mentor program? Yes NoX If so, how would you rate the quality of your mentor/mentee relationship? Excellent Very Good Good Fair Poor Comments
	My mentor, Chang Wright, was so Wonderful a halpful.
	FIELD TRIP
	Names of the Salmon Watch volunteers who participated on your field trip: White White Worden Boodwin
NAX	What were the weather conditions on the day of your field trip? Sunny Cloudy Rainy Snowy Windy Hot Cold How was the quality of salmon viewing conditions on your field trrp? Excellent Very Good Good Fair Poor
	Approximate number of spawning salmon sighted on your field trip? Alive 304 Dead Dead Steel was brown!

students to the same site as you did this year? (We will use your response to this question when assigning sites for Salmon Watch 1998, please respond thoughtfully.)	
Yes X No Maybe Maybe	
If not, why not and where/when would you rather go?	
	v
How would you rate the contribution of the volunteers on your field trip?	
Excellent Very Good Good Fair Poor	
Comments regarding agency experts, volunteers and Native Americans: These people were west great, Very good with the	
ack groups I tooks o ' 0 0	
Extra kndos to - Mayle Dole of Brian Barrot	
Which part of your field trip did you enjoy the most/least? Most: War War He Salman for alare t Least: Lawing !!	ime.
Which part of your field trip do you believe <u>your students</u> enjoyed most/least? Most:	
Least: 4 Laving - Salmon - + Just being und	te wood
How do you plan to change the organization of your trip in the future?	
plan to leave carrier than 9:15-	
How would you rate your students' overall reaction to the field trip? Excellent Y Very Good Good Fair Poor Comments:	
This was a great bonding top.	

1460
Do you believe that participation in Salmon Watch 1997 has affected your students attitudes toward watersheds, fish and their ecosystems? Yes No Maybe Comments: Two W 50 interested in Salmon Watch 1997 has affected your students **Example Comments** Two W 50 interested in Salmon Watch 1997 has affected your students **Example Comments** Two W 50 interested in Salmon Watch 1997 has affected your students **Example Comments** **Exa
POST FIELD TRIP
Please describe the community service project(s) that you intend to organize or participate in with your students as part of Salmon Watch 1997?
Not sure yet.
How can Oregon Trout staff better support you and your students in completing your community service project(s)? (We have several contacts who may be interested in working with your classroom.)
Would you be willing to write a letter of endorsement/support for the program?
Are you interested in participating in Salmon Watch in 1998?
yes
Would you be willing to be a teacher mentor for a new teacher next year?
Are you interested in helping in other ways next season such as training new volunteers or teachers, revising curriculum, recruiting new volunteers or teachers?
Sure~
Please add any additional comments below.
What a great program this is. I are org
what a great program this is. I am very anxioupate anxious that I was asked to participate thanks so much!