UNIT 2. SALMON WATCH FIELD TRIP PLANNING AND IMPLEMENTATION



Illustration by Sari Ogden, Hidden Valley High

BENCHMARKS (for Field Trip Stations)	
Next Generation Science Standards	MS-LS-4 MS-LS2-1 MS-LS2-3 HS-LS2-2 HS-LS2-4 HS-LS2-6 HS-ESS3-3
Disciplinary Core Ideas	MS-LS2.A MS-LS2.B MS-LS2.C MS-ESS3.C HS-LS2.C HS-LS4.D HS-ESS3.A
Science & Engineering Practices	-Developing and using models -Planning and carrying out investigations -Analyzing and interpreting data -Using mathematics and computational thinking -Engaging in arguments from evidence
Common Core-State Standards-Math	MP.2 MP.4 6.SP.4 7.SP.1
Oregon Social Sciences Academic Content Standards	HS.14 HS.60 HS.61

INTRODUCTION

Getting to know new friends is more than a matter of just meeting them. The place where they live helps to put them within a context that helps you understand them better. Your students have learned about salmon, who they are, where they live, and how humans share their habitat. If your students haven't yet met a salmon, your Salmon Watch field trip is a wonderful opportunity for them to do so.

This unit is designed to help you plan and implement your Salmon Watch field trip. To ensure that your students get the most out of their Salmon Watch experience, careful and organized field trip planning is a must. This section takes you step by step through your field trip site preview, developing an agenda, organizing volunteers and agency experts, and the actual day of your Salmon Watch field trip.

EDUCATIONAL OBJECTIVES OF FIELD TRIP

Students will:

- → Establish their own personal connection to salmon as living creatures.
- → understand the importance of high quality salmon habitat.
- → collect meaningful data regarding salmon habitat.
- → experience the interconnectedness of all living creatures in the web of life.
- → understand their own personal impact on their natural environment.
- → be exposed to a variety of perspectives about the salmon crisis.
- → help facilitate science inquiry benchmark.

You are encouraged to determine what your own additional expectations and objectives are for your Salmon Watch field trip and keep those in mind while developing your field trip.

FIELD TRIP PLANNING CHECK LIST

Complete preliminary site visit prior to trip:

- -Check out safety hazards
- -Identify nearby toilet and medical facilities
- -Provide pertinent information for parents:
- -Purpose and nature of trip
- -Times of departure and return and site information
- -Proper student clothing
- -Invitation to attend field trip
- -Obtain signed parental permission slip
- -Information about World Salmon Council and Salmon Watch

Contact volunteers and other adult participants (at least two weeks before trip):

-Discuss volunteer's assignment and role

- -Discuss field trip agenda & locations of activities
- -Clarify what you expect of them
- -Explain student expectations
- -Determine time and place of rendezvous
- -Discuss responsibility for necessary equipment, handouts, etc.
- -Finalize field trip agenda & provide volunteers with copies of any student worksheets, data forms or journals

Know your pick up and drop off of equipment with World Salmon Council staff

Complete School Administrative Requirements:

- -Obtain permission from school officials
- -Obtain written permission from parents
- -Complete standard field trip procedure in your school
- -Order yellow bus (as soon as you have confirmed your field trip date, could be previous spring)

-Arrange for substitute teacher

Confirmation of trip information:

-Send copy of agenda to Salmon Watch staff in advance including: number of students expected (30 or fewer), grade level of students, times of arrival and departure

Safety precautions:

-Identify in advance any field trip participants with medical or safety training

-Bring cell phone (if available)

-Bring list of participants with special medical needs and have students with bee allergies bring their epinephrine kit

Complete other necessary arrangements:

-Student handouts prepared: review data forms and choose activities that help to meet your goals for the field trip.

-Share your selections with your volunteers and allow adequate time for the riparian activity(s) you have selected.

-Lunch provisions

Student orientation/preparation:

- -Field trip goals clarified
- -Field trip questions and projects assigned
- -Safety guidelines discussed
- -Warnings issued for hazards
- -Appropriate clothing required
- -Lunch, drink and snack needs communicated
- -Discuss appropriate student behavior in nature

STUDENT HANDOUTS

Teachers can choose whatever handouts they would like to have their students use in the classroom and/or in the field. Please make copies of the materials needed for your students. It is your responsibility to email your field trip volunteers prior to the field tip and notify them of the data forms you intend to use. On the day of the field trip give copies to the appropriate volunteer when the bus arrives at the field trip site or mail prior to the field trip. If you would like an electronic version of just data forms and protocols you can download and print them from StreamWebs <u>www.streamwebs.org</u> or contact World Salmon Council.

Please note that schools/teachers are responsible for reviewing safety and site protocols and should know that schools assume all liability and risk as far as students wading into potentially deep and fast-moving water.

SALMON WATCH FIELD TRIP SITE PREVIEW SHEET

This is your chance to get a head start on your Salmon Watch field trip. You will visit your assigned field trip site with an experienced Salmon Watch teacher to begin to explore the possibilities for your field trip. In order for your students to make the most of their time on the site, they should have a comprehensive set of plans and tasks. It's much easier to begin to formulate these plans and tasks when you can see all of the parts of the ecosystem you will bring your class to observe. Take some time now to partition this environment with your students and curriculum in mind.

Salmon Viewing Identify:

- → Areas where students can stand to observe spawning salmon.
- → Areas of sensitive habitat, where students should not tread.

Nature Walk Identify:

- → A nature walk route with which to take that will give students a chance to observe a variety of ecosystems and habitat.
- → Interesting things not to be missed on the nature walk.
- → Contrasting habitats and ecosystems.
- → Human and natural disturbances along the walk.
- → Wildlife habitats on the walk.

Riparian Zone (stream banks) Identify:

- → Sections where there is good riparian habitat to study.
- → Sections where there is poor riparian habitat to study.
- → Contrasting riparian habitat areas.

Substrate (stream bottom) Identify:

→ Sections where good salmon spawning gravels are for observation.

Stream Form Identify:

→ Sections where you would like students to map or sketch.

Stream Flow (Optional) Identify:

- → Sections where stream flow is rapid and potentially dangerous.
- → A 20 foot section where students can safely determine stream flow velocity.

Stream Morphology Identify:

→ Sections where you would like you students to profile the stream and what they should include.

* Please note that schools/teachers are responsible for reviewing safety and site protocols and should know that schools assume all liability and risk as far as students wading into potentially deep and fast-moving water.

Water Quality Identify:

- → Areas where students can conduct water quality tests.
- → Potential contrasting bodies of water nearby like a lake, pond, or slow eddy to conduct water quality tests.

Fish Habitat Identify:

- → Areas where the stream is partitioned into fish habitats (pools, riffles, etc.).
- ➔ Potential spawning areas.
- ➔ Potential rearing areas.
- → Areas where cover is available to protect fish from predators and where there is not cover.

Aquatic Organisms Identify:

→ Areas where your students might sample the aquatic biota, without disturbing spawning grounds.

Watersheds Identify:

→ The geography and geology of the area that defines the site's watershed (use your topographic maps).

Lunch/Class Gatherings Identify:

→ Areas where all can congregate to eat lunch and have group gatherings.

Restroom facilities Identify:

- → Where the nearest restroom facilities are.
- → Where you would like students to "go," if there are no facilities at the site.

Safety Hazards Identify:

→ All potential safety hazards in the area. Be sure students are aware of these areas before the field trip.

All required field trip equipment is provided by Salmon Watch. Additional equipment may be provided by either the teacher and/or volunteer and be utilized if determined to be useful and appropriate for the learning outcomes.

WHAT TO WEAR AND TAKE

Clothing - Layer system is best in the Northwest (bring a backpack to put removed layers):

- ➔ Tee shirt
- ➔ Long-sleeved shirt
- ➔ Sweater
- ➔ Jacket
- ➔ Rain gear
- ➔ Hat
- ➔ Gloves
- ➔ Boots or extra shoes
- ➔ Long pants
- → Warm socks (wool or synthetic are best)
- → Name tags for all

Other essentials

- ➔ Water
- → Lunch and a drink
- → Paper and pencil (a clip board is also great)
- → First aid kit (available in field kit provided by Salmon Watch)
- → Epinephrine kit for bee allergies
- ➔ Sense of humor, wonder and gratitude
- ➔ Respect for nature

Equipment

- → Field equipment checked out from Salmon Watch staff or provided by teacher *
- → Data Forms and/or Field Journals

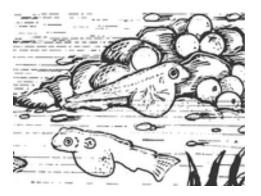
Recommended

- ➔ Extra socks
- ➔ Extra sweater
- → Sunglasses (Salmon Watch provides polarized glasses for students)
- ➔ Backpack
- ➔ Sun screen
- ➔ Mosquito repellant
- → Topographic maps of the area
- ➔ Camera
- ➔ Binoculars
- ➔ Spotting scope
- → Hand Warmers (one time use packets available at sporting goods stores)

SALMON WATCH STREAM SAFETY AND ETIQUETTE

Take care when near any stream from September 15-April 15. During these months salmon are spawning, and their nests (redds) are vulnerable to damage. In some streams, steelhead and cutthroat redds persist until late July. Redds can be hard to see, and salmon eggs are easily killed by a poorly placed foot.

While walking or working around the stream, take precautions to <u>limit the impacts of your activities</u>. Take steps to avoid creating unnecessary erosion, or disturbing fish and wildlife.



If spawned-out fish carcasses are removed from the stream for close observation, be sure to return them to the stream. These carcasses are an integral part of the food web, providing nutrition both to salmon fry and macroinvertebrates, which themselves become fry prey.

Stream surveying is not a dangerous activity but you should keep in mind that stream channels are natural, uncontrolled environments. A few common sense precautions will help ensure your safety.

Never survey alone.

<u>Fast-moving water can be dangerous</u>. Know what depth and velocity of water are safe for you and your group to work in. When crossing a stream or river it is best to use one or more of the following precautions: cross with a partner, use a walking stick or staff, and/or use footwear with felt-soled shoes for improved traction.

<u>Be prepared for the unexpected.</u> Know your stream; study available maps and be aware of your location and neighboring access points. Have a plan of action prepared in the event of an accident or injury. If possible, carry a cellular phone or other communication device and a first aid kit.

Never drink the water!

If you discover a serious problem that is impacting the stream or the salmon in it (such as a fish barrier), notify Salmon Watch and/or the appropriate agency.

OBSERVATION SUGGESTIONS: Observation techniques vary from situation to situation, and experience will reveal which techniques work best. However, these suggestions may help in getting started.

Salmonids, both adults and juveniles, are sensitive to movement on the streambank. To avoid scaring off spawning fish, you should limit your movement as much as possible during the period of observation. Avoid getting too close to the fish, and wear clothes that blend into the surroundings; bright colors are easily seen and may spook any fish in the area. Remember that female salmon guard their nests. Take precautions not to scare them away.

Keep in mind that even professional fish biologists have difficulty seeing and identifying fish and fry from the streambank. There are occasions when adult spawning salmonids can be swimming right in front of a surveyor but are nearly impossible to observe.



SELECTING YOUR FIELD TRIP ACTIVITIES

Described below are activities that have been used successfully by teachers on their Salmon Watch field trips in the past. Please review the core teaching stations materials thoroughly, as this reflects what volunteers are trained to teach. The other activities may be helpful as back up or alternates if needed. Please feel free to use your creativity to come up with your own ideas for field trip activities. Anything beyond the core activities that you would like taught by volunteers will need to be communicated to your assigned volunteers

These activities are probably best taught in small group rotations. We recommend that you divide your class into small groups of no more than seven or eight students per group. Assign one or more adults to supervise each small group. Provide nametags for all students, as this helps volunteers connect with students

Core Teaching Stations

<u>Salmon Biology</u>: The Salmon Watch field trip is the perfect time for a discussion about the species of salmon they will observe on the field trip, and their life cycle, anatomy, and spawning behavior. All of these topics will bring more meaning to the students' observations. An agency fish biologist usually teaches this station.

Macroinvertebrates: This activity reinforces what students have learned about water quality and the kinds of organisms, which inhabit a stream with a particular water quality profile. At this station, students sample for macroinvertebrate populations in the stream and use that information to evaluate the health of the stream as salmon habitat.

<u>Water Quality:</u> The salmon's home stream helped to form the land through which it flows, and in tum, is modified by the land and its inhabitants. First hand experience of the riparian habitat and water quality parameters will strengthen your students' connection to salmon and illustrate another way humans impact the salmon life cycle. Suggested water quality parameters to test on your Salmon Watch field trip might include: temperature, pH, turbidity, dissolved oxygen and flow. Water quality parameters can be measured using manual/chemical equipment, electronic Vernier equipment or by doing a comparative study using both.

Riparian Observation & Nature Awareness: It is important that during their Salmon Watch field trip students understand the interrelationship among salmon, humans and the watershed they share. This station allows students to understand salmon in a larger context and emphasizes the importance of high quality habitat for salmon survival. Activities that help students gain a broader perspective include: Riparian and Aquatic Area Survey, Riparian Area Transect, Riparian Mapping, Riparian Profile, Soil Survey and Canopy Cover Survey.

Resource Guides for each station available online. Shorter versions are in equipment bins on each field trip. Data sheets and grease pencils are in the bins for collecting water quality and macroinvertebrate data. If one trip, leave in bin. If taking multiple trips, please take a photo of sheets, wipe clean, and send picture to Salmon Watch staff.

Other Activities

(Teachers may want to utilize these either in the classroom or at the field site)

Nature Walk or Plant & Wildlife Identification: Use nature observation skills to explore the terrestrial ecosystem. Have students identify their location on a map, and then document observed wildlife and wildlife signs. The activity could include, for example, plant identification, bird watching, animal signs, etc. You can collect data to share with other classrooms and Salmon Watch to help create an annual site profile. This activity may be incorporated into the riparian assessment.

<u>Art/Poetry</u>: An art and/or poetry station has worked well for an interdisciplinary field trip and allows the students to experience nature, and the salmon, on many different levels. Successful activities have included drawing, painting, making fish prints, and writing haiku poetry.

Salmon Politics: The salmon crisis is one of the most critical issues in the Pacific Northwest today. What better time to start students thinking about these issues than when they are sitting beside a salmon stream watching the miracle of spawning. Experiencing salmon and their watershed on a personal level will give students powerful insight into discussions about historic abundance of salmon and declining runs, factors contributing to population declines, the Endangered Species Act, possible solutions, importance of salmon in the Pacific Northwest, and what individuals can do to help. This activity is best done as a group with all of your volunteers present to participate.

<u>Guided Visualization</u>: If you or one of your adult volunteers is interested in leading guided visualizations, then the field trip will be enhanced by devoting one station to this activity. Find a quiet place for this station, one that is close to the stream. An excellent example of a recorded guided visualization is The Drought by Barry Lopez.

<u>Miscellaneous Other Activities:</u> "Hooks and Ladders." This activity allows students to appreciate the strength, determination, and perseverance of the salmon along their life's journey. We only recommend this activity if a large open area is available that will have minimal impact on the site. The activity may be more appropriate for a pre or post-field trip activity because of the time required.

<u>Fly-casting Demonstration</u>: If you or one of your adult volunteers are interested in fly-fishing, then a possible station might be a demonstration on fly-fishing techniques, along with a discussion on issues such as catch & release fishing and hatchery vs. wild fish, artificial lures and the macroinvertebrate life cycle.

Journal Writing: Find several areas where the forest floor is relatively clear, or the stream bank provides a place which "feels quiet". Have the adult volunteers take students to these quiet places. The volunteer should sit down, and remind students of the assignment that you made in class: students are to relax and open their minds (be present) to the place where they are. When they feel ready, they respond to an assignment you have posed. This assignment can be to describe their thoughts or feelings, write a poem, relate their experiences to a parent in a letter, etc. Once the students are engaged, the volunteers leave and gather at a base area designated by the teacher. When students have finished writing, they also move to the base area. (They have been instructed by the teacher beforehand to do this.)

Native American Culture/Philosophy: If available, contact a Native American who is knowledgeable about the role of salmon in the culture of Indian tribes that inhabited this area in the past. He or she might share legends or other information that will allow students to better appreciate the importance of salmon to Native Americans. Encourage your students to prepare questions beforehand. Other topics may include treaty rights, tribal customs, and attitudes toward nature, music, dance, artifacts, art or food.

Stream Flow: Flow affects everything from the concentration of various substances in the water to the distribution of habitats and organisms throughout the stream. Flow is the volume of water moving past a point in a unit of time. This activity has students determine the two components that make up flow: the volume of water in the stream and the velocity of the water moving past a given point. They then use a formula to calculate the stream flow. Flow can be done as its own independent activity or as part of the Water Quality station.

Safety and site protocols need to be strictly followed during this activity:

- ➔ avoid redd areas.
- → life jackets required if students are above knee level in the stream.
- → school assumes all risk associated with having students wading into potentially deep and fast moving streams.

PRE-FIELD TRIP TASKS

FIELD TRIP AGENDA

Once all of the pieces of your Salmon Watch field trip are in place, be sure to formalize your field trip agenda. This agenda should include information concerning the times, locations, names of people involved in the day's activities, and the various activities that will take place on the trip.

Sample Field Trip Schedule/Agenda

Salmon Watch – Field trip to Fish River [site] Joe Jones [teacher]		
West Middle School [school]		
Wednesday September 20, 2000 [date]		
8:45am	Students meet Teacher in main hallway	
9:00am	Bus leaves school	
10:00am	Bus arrives at field site	
10:00-10:20am	Students put into groups & hike to stations	
	Sessions from 10:20am-1:30pm	
	(35-minute rotations with 5-minute transition time)	
	1. Salmon Biology [Instructor's name]	
	Macroinvertebrate Identification [Instructor's name]	
	Water Quality Testing [Instructor's name]	
	Riparian Zone Observation [Instructor's name]	
10:20-11:00 am	Session 1	
11:00-11:40 am	Session 2	
11:40-12:00 pm	Lunch	
12:10 -12:50 pm	Session 3	
12:50- 1:30 pm	Session 4	
1:30 -1:45 pm	Hike back to bus, closing circle & load bus to return to school	
2:45 pm	Arrive back at school	
2:45-3:00 pm	Student debrief back at school	

If you have any questions, please contact [teacher], [cell], [email].

CONTACT YOUR FIELD TRIP VOLUNTEER EDUCATORS

All of your field trip participants are dedicated to making your field trip a success. The more they are informed and involved in your field trip planning, the more your students will get out of their Salmon Watch experience.

All participants should be contacted at least two weeks prior to the date of your field trip. Communicate with each of your volunteers regarding trip agenda, equipment needs, and expectations or education goals for the field trip. Remember that Salmon Watch volunteers come from all walks of life, and therefore have diverse backgrounds, expertise and perspectives to contribute to your Salmon Watch field trip.

Dear Salmon Watch Volunteer Educators,

Thank you so much for taking the time out of your busy schedule to join my class on our Salmon Watch field trip! We look forward to seeing you on [DATE of FIELD TRIP] at [SITE of FIELD TRIP]. My students will greatly benefit from your knowledge and expertise, and we're looking forward to being outside at a beautiful wild area for the day.

I've attached the field trip agenda. Please plan on arriving at the field trip site by [INSERT TIME]. Driving directions to the site and other helpful resources are located on the World Salmon Council website at the following link: <u>https://worldsalmoncouncil.org/salmonwatch-resources</u>.

Please let me know if you have any questions leading up to the field trip. The best phone number to reach me at is [INSERT PHONE NUMBER].

Thank you again!

[YOUR NAME] [YOUR CLASS AND GRADE] [YOUR SCHOOL]

We encourage you to talk with your assigned field trip participants to understand their areas of interest/expertise and how they would best like to assist you on your field trip. Utilizing their strengths will help make your field trip more enjoyable and beneficial for all.

Please be sure to schedule time when you arrive at the field trip site to meet briefly with your volunteers, confirm any schedule changes, and identify the locations for each of the activities they will be leading.

We encourage teachers to make a reminder phone call or e-mail message the day before the trip to all adult participants.

PARENT VOLUNTEERS

If possible, please consider recruiting a few parents from your school to accompany the students on your field trip. This can be very helpful for you as they can help safeguard and monitor the behavior of the student participants. As noted above, any parents who participate also need to sign a liability waiver and should receive a copy of the agenda.

LIABILITY WAIVER & PHOTO/VIDEO RELEASE FORMS

MANDATORY - All participants on Salmon Watch field trips must sign a liability waiver & photo/video release form prior to the field trip. Copies located on our Salmon Watch Resources Page.

1. <u>ADULT WAIVER:</u> If you haven't already, please complete & sign the adult waiver (even if you filled out one last year). Please also use this form for any parent chaperones that accompany your field trip. Adults use this online e-Signature form: <u>https://worldsalmoncouncil.org/liabilityphoto-release-waiver/</u>.

2. <u>STUDENT WAIVER</u>: We also need a signed Student liability waiver for every student who will be on your field trip – note that it will need to also be signed by the parent/guardian, so make sure to print them well in advance of your field trip. Please collect these and have them ready to hand over when you pick up your field trip equipment the day before your field trip. These are located online in the Salmon Watch Resources page <u>https://worldsalmoncouncil.org/salmonwatch-resources/</u>.

FIELD TRIP EQUIPMENT

The program coordinator will facilitate dropping off and picking up your field trip equipment. After your trip, especially if it is raining, please give everything a quick wipe. If the water quality waste bottle is full, please let us know and we will dispose of it properly *(it will contain chemical agents and glass shards)*. There should be an empty bottle to use in case the waste bottle is full.

STUDENT SAFETY POLICY

We would like to ask you to ensure that you assign each student on your field trip a buddy to accompany him/her during the field trip. The two buddies should stay together at all times. Please also follow the rule that no student is allowed to be alone during this field trip with any adult that is not his/her own parent or his/her own teacher. This rule is to protect both your students and the participating volunteers.

DIRECTIONS

Directions to your field trip site can be downloaded and shared on World Salmon Council's website: <u>https://worldsalmoncouncil.org/salmonwatch-resources/</u>

PHOTOS/VIDEO

Please feel free to take photos and/or video of your field trip. The student waivers include a photo/video release. We always respect the wishes of parents/kids who do not wish to have their image used. This is also a great role for parent chaperones and/or students. Please make sure to share your photos/video with World Salmon Council! You may send and/or share online links with Rachel, <u>rachel@worldsalmoncouncil.org</u>.

SCHOOL ADMINISTRATION REQUIREMENTS

In addition to preparing your field trip agenda and organizing volunteers, don't forget to complete other necessary administrative requirements for your field trip. Remember to clear the field trip with appropriate administrative personnel at your school, reserve your bus and arrange for a substitute teacher as soon as possible. This will help prevent unnecessary confusion, as your field trip date gets closer.

POST FIELD TRIP TASKS

FOLLOW-UP THANK YOU NOTES

Salmon Watch wouldn't exist without the hundreds of Volunteer Educators who give their time, expertise and energy to the program. Please be sure to write thank you notes to all of your Volunteer Educators within 1 week after your field trip and mail to World Salmon Council at PO Box 80311, Portland, OR 97280. (we like to see the notes too and we will send them immediately to the volunteers).

It is particularly meaningful to your volunteer educators when they receive thank you notes written by students. Feel free to do separate letters/notes/ cards, or one big one signed by the class. Thank you for helping us show appreciation to our volunteers!

FIELD TRIP EVALUATION FORMS

Student evaluations, pre and post program student assessments and teacher evaluations are available on our Salmon Watch Resources Page <u>https://worldsalmoncouncil.org/salmonwatch-resources/</u>.

<u>Student evaluations – download and print</u>: Please have your students complete their field trip evaluations within 1 week of your outdoor experience, while it is still fresh in their minds. Tip: Many classrooms fill out their evals on the bus ride back to school.

<u>Teacher evaluations – online form</u>: This is designed to receive feedback and input on the entirety of the program – curriculum/lesson integration, field trips and community service projects. With this in mind, we recommend completing your online evaluation after you've completed your curriculum integration and field trip. A separate short evaluation will be requested in the spring after you've completed your Salmon Watch project. We take your feedback seriously, and use your comments to continue to improve our program. Thank you!

FIELD TRIP REIMBURSEMENT

The Reimbursement Form is located on our Salmon Watch Resources Page <u>https://worldsalmoncouncil.org/salmonwatch-resources</u>. This form must be filled out, with requested amounts, for each field trip. For multiple classrooms in a school or school district, school/district may total all amounts into one invoice. Please send us a copy of your form, and make sure to also submit whatever school documents you need to your administration. The form is for our record and accounting tracking – we will need an official invoice from your school/district to reimburse your school. At some schools/districts this process can take time. We request that all reimbursement forms and invoices be received by World Salmon Council no later than December 31. You may email your form to info@worldsalmoncouncil.org, schools may email invoices to same; you can also mail to World Salmon Council, PO Box 80311, Portland, OR 97280.

SALMON WATCH PROJECT

Salmon Watch classes complete projects as part of their Salmon Watch experience. These projects are designed to engage and channel student enthusiasm, creativity and initiative to benefit wild salmon and the watersheds that sustain them. Salmon-friendly projects in which students participate throughout the school year include:

- hands-on stream restoration and monitoring efforts
- salmon spawning surveys
- teaching younger kids about nature
- making presentations to other classrooms and/or community groups
- art projects
- installing rain catchment systems
- storm drain marking
- TED talks
- and many other diverse activities chosen by the teachers and students.

We highly encourage you and your students to complete a hands-on project sometime during the school year. Rachel is available to work with you to help coordinate a project, and will check in with you after your field trip to discuss possible options with you.