

Activity 5: Salmon and Steelhead Creek Walk

[Overview](#)

[Background Information](#)

[Objectives](#)

[Time](#)

[Materials](#)

[Advance Preparation](#)

[Setting the Stage](#)

[Conducting the Activity](#)

[Wrap-Up](#)

[Enrichment](#)



Steelhead trout in creek. Photo by David Pritchett

Overview

In this activity, participants visit their local creek (or stream or river) to observe and describe the habitat and how people might be influencing it. As they continue through the unit activities, they will build on what they find here, learning how salmon and steelhead depend on an appropriate habitat and how human actions affect that habitat.

Background Information

Human activities within the watershed - even far away from the creek or river - greatly affect whether salmon and steelhead can live there. In this activity, participants visit the local creek to get an overall sense of its condition and to begin looking for ways that people affect the salmon and steelhead habitat.

For information about what salmon and steelhead need in their creek habitat, see the [Background Information section in the Unit Overview](#).

In addition to steelhead, there are five different Pacific salmon species along the west coast of North America, all of which used to live in at least some parts of California. Today, only Chinook, coho, and steelhead can be found within California, and even their ranges have been greatly reduced.

The status maps you will use in the activity show the current and past ranges of the six different species of Pacific salmon and steelhead. Following are definitions for the different status categories used on the maps:

- Extinct - The species was present in the area at one time, but is no longer found there. This is also called locally extinct.
- At Risk - The species is at risk of extinction in the area. Less than 1,000 fish survive long enough to spawn.
- Special Concern - The species is vulnerable to decline in the area.
- Low or No Risk - The species is present within the area and is at no apparent risk of decline or extinction.
- Not Evaluated - There is not enough information to determine the status of the species in the area.

Objectives

Participants will: (1) study status maps to determine whether their local creek or stream is within the current or past range of different salmon and steelhead species, (2) visit their local creek or stream to describe the habitat, and (3) use their observations to begin a map of the creek.

Time

Setting the Stage: 10-15 minutes

Activity, Part One: One group session

Activity, Part Two (walk): One hour or more

Wrap-Up: One group session

Materials

- Color copy of each of 6 Pacific Salmon and Steelhead [Status Maps](#) (click on Stock Status Maps)
- Copies of “Creek Walk Checklist,” 1 per team
- Clipboards, 1 per team*
- Paper and pencils for each team
- First aid kit(s)
- Suitable clothing and shoes for participants (see [Planning Field Study Trips](#) under [Unit Overview: Tips for Managing the Unit](#))
- Camera (optional)
- Other materials needed for study trip (see [Planning Field Study Trips](#) under [Unit Overview: Tips for Managing the Unit](#) for further suggestions)
- KWLR chart (started in [Activity 1: Getting to Know Salmon and Steelhead](#))

* = Included in Adopt-A-Watershed Kit

Advance Preparation

1. If you haven’t already done so, identify a suitable study site (see [Identifying a Study Site](#) under [Unit Overview: Tips for Managing the Unit](#) for suggestion).
2. If you are not able to take participants to a field site, you can try doing this activity through a “virtual” field trip using aerial photos and other photographic images of the creek site:
 - Search for and view aerial photos or other maps on [TerraServer-USA](#)
 - Photo Finder - Find and order aerial photos from the [USGS](#)
 - Do an online image search for the name of your creek.
 - Check with your local historical society for older photos of the creek site.

3. Set the date and plan for the field study trip, including any safety issues (see [Planning Field Study Trips](#) under [Unit Overview: Tips for Managing the Unit](#)).
4. If your field study site is more than about 1/4 mile long, plan to have teams observe and map different sections of the creek. You will need an adult chaperone for each team.
5. Make one color copy of each of the [Pacific Salmon and Steelhead Status Maps](#) (click on Stock Status Maps).
6. Make copies of the “Creek Walk Checklist.”
7. If possible, arrange for your resource professional to join you at the site (see [Resource Professionals](#) under [Unit Overview: Tips for Managing the Unit](#)).
8. Within a week before the creek walk, make a quick trip to the site to check for unexpected hazards, such as high flows, changes in access trails, or pollution. If anything about the site appears unsafe, check with your resource professional about finding another site.

Setting the Stage

Remind participants about what they learned from [Activity 4: Community Survey](#) about whether salmon and/or steelhead live in your local creek, and how people affect salmon and steelhead. Ask them how else they might be able to confirm whether salmon and/or steelhead live there.

Conducting the Activity

Part One – Getting Ready for the Creek Walk

1. Explain that one of the ways participants can determine whether salmon or steelhead live in the local creek is to check out the range of where they can be found. Show participants the salmon and steelhead status maps, and explain:
 - That there are 6 different species of Pacific salmon and steelhead that live along the western coast of North America.
 - That the maps show where the salmon and steelhead species can be found now and where they once lived, but are extinct.
 - What the different colors of the map show about the salmon and steelhead in a given area (see Definitions of Status in the [Background Information](#)).
2. Give each team one of the maps.
3. Have teams look at their map, locate where your community would be on the map, and determine the status in your area of the species indicated on the map. Ask teams to share what they learned from their maps.
4. Explain that participants will be taking a walk along the creek to observe and describe the habitat and how people might affect the creek. Ask participants the following, listing

their responses on the board (at this point, accept all their ideas):

- What is a habitat?
 - What things must a habitat include? (food, water, air, space, conditions for reproduction)
 - What might we see that would tell us how people affect the creek, and salmon and steelhead? (Participant responses may include, “Trash in the creek,” “A road along the creek,” or “Someone fishing.”)
5. Hand out copies of the “Creek Walk Checklist” and read it over together. Ask participants to review the lists you made on the board to see whether there is anything to add to the checklist.
 6. Explain that as part of the creek walk, participants will sketch a map of the creek to help them notice details and remember what they see. Participants will include some of this information in community maps they will make in [Activity 8: Mapping Our Community](#).
 7. Ask students what a map legend or key is. If they do not know, tell them that it explains the symbols used on a map.
 8. Explain that each team will work together to answer the questions and sketch their maps. Each team member will have a job: The recorder will write the team’s responses on the checklist; the sketcher will sketch the team’s map; the mapper will mark on the map where the team saw the checklist items; and the reporter will report to the whole group what the team learned.
 9. Make clear your behavior expectations for the creek walk and explain any logistical details. Be sure to talk about any safety issues such as poison oak, water safety, or wearing sunscreen (see [Planning Field Study Trips](#) under [Unit Overview: Tips for Managing the Unit](#)).
 10. Answer any questions participants may have about the checklist, the map, or the walk.

Part Two – Creek Walk

1. On the day of the creek walk, make sure that participants are appropriately dressed. Review the purpose of the walk.
2. As soon as you arrive at the site, gather the group and ask, “What safety concerns might there be here? What potential hazards do we have to look out for? What areas appear to be fragile (such as stream banks or certain plants)? How can we avoid damaging the habitat here?”
3. Point out boundaries for the walk and review behavior expectations. Make sure that adult chaperones know what you want them to do with the participants.

4. Encourage participants to work as quietly as they can so that they will be more likely to see wildlife.
5. Have participants work together to sketch out a map and find the information on their “Creek Walk Checklist.”

Wrap-Up

1. Go through the worksheets as a group. For each item, have teams share what they observed.
2. Display the participants’ maps.
3. Have participants look at the KWLR chart. Have them think about the guiding question: How do people affect salmon and steelhead, and how do salmon and steelhead affect people? Ask whether there is anything they want to add to or adjust on the chart based on what they learned from the creek walk.
4. Have teams add their checklist and map to their portfolios.
5. Explain to participants that the maps will be used again in [Activity 8: Mapping Our Community](#) and in [Activity 11: Creek Monitoring](#) when participants will be learning more about the habitat needs of salmon and steelhead.

Enrichment

Using a field guide for the local area, make a bulletin board of plants and animals that may be found at the field study site to help participants learn to identify them.

Names: _____

Date: _____

Creek Walk Checklist

What to do:

- Look at the creek as a whole: Is the section you are studying straight or curved? What features really stand out?
- On a separate piece of paper, sketch a map of the creek section showing its general shape and any major features.
- As you walk along the creek, check off and describe each thing you observe. Add these features to your map showing where you saw them. You may need to create a legend or key describing the symbols you use to represent different features on your map.

1. The bottom of the creek is made of:

- Concrete
- Rocks
- Gravel
- Sand
- Soil
- Other: _____

The creek bottom:

- Is the same all along this section.
- Changes in places along this section.

2. The water is:

- Clear
- Muddy
- Greenish
- Yellowish to brownish
- Foamy
- Oily
- Smelly
- Creek is dry
- Other: _____

The water:

- Is the same all along this section.
- Changes in places along this section.

3. Animals you see in and around creek:

- Fish. How big and how many: _____
- Insects. What kind(s): _____
- Birds. Describe: _____
- Other animals. What kind(s): _____
- Animal signs (like bird nests, beaver dams, animal tracks). What kind(s):

- Other: _____

4. Plants you see in and around creek:

- Algae. Describe: _____
- Grass. Describe: _____
- Shrubs. Describe: _____
- Trees. Describe: _____
- Other: _____

5. Human structures you see in and around creek:

- Trail or path
- Road
- Concrete creek bed
- Dam
- Bridge
- Stormwater drain or other discharge pipe
- Playground
- Parking lot
- Picnic tables
- Metal utilities cover (“manhole” lid). How lid is labeled – sewer, water, telephone, electric utility: _____
- Building. What kind(s): _____
- Other: _____

6. Other signs of people in and around creek:

People (other than the group). What are they doing?

Trash. What kind(s): _____

Shopping cart

Park

Animal pasture

Landfill

Golf course

Other: _____

7. Other clues about how people affect this creek:

8. Other clues about whether salmon and steelhead could live in this creek:

Adapted from "Stream Walk Questionnaire," *Hands On Save Our Streams: The Save Our Streams Teacher's Manual for Grades One through Twelve*. Gaithersburg, MD: Izaak Walton League of America, 1996.

Names / Nombres: _____

Date / Fecha: _____

Creek Walk Checklist *Lista de verificación para la caminata a riachuelo*

What to do / *Qué hacer:*

- Look at the creek as a whole: Is the section you are studying straight or curved? What features really stand out?
 - On a separate piece of paper, sketch a map of the creek section showing its general shape and any major features.
 - As you walk along the creek, check off and describe each thing you observe. Add these features to your map showing where you saw them. You may need to create a legend or key describing the symbols you use to represent different features on your map.
- *Mire el riachuelo en su totalidad: La sección que estudias ¿es curva o recta? ¿Cuales características sobresalen?*
 - *En otro papel, trace un mapa del riachuelo que demuestre su forma general y algunas características que sobresalgan.*
 - *Al andar por el riachuelo, cancele (tache) y describa cada cosa que usted observa. Agregue estas características a su mapa indicando donde usted las vió. Puede ser que es necesario hacer una guía que describe los símbolos que usted usa para representar las características diferentes.*

1. The bottom of the creek is made of / *El fondo del riachuelo está hecho de:*

- Concrete / *Cemento*
- Rocks / *Rocas*
- Gravel / *Grava*
- Sand / *Arena*
- Soil / *Tierra*
- Other / *Otro:* _____

The creek bottom / *El fondo del riachuelo:*

- Is the same all along this section. / *Es igual lo largo de esta sección.*
- Changes in places along this section. / *Cambia durante la sección.*

2. The water is / *El Agua es:*

- Clear / *Transparente*
- Muddy / *Fangoso*
- Greenish / *Verdoso*
- Yellowish to brownish / *Amarillento...*

- Foamy / *Espumoso*
- Oily / *Grasoso*
- Smelly / *Maloliente*
- Creek is dry / *El riachuelo está seco*
- Other / *Otro* : _____

The water / *El Agua*:

- Is the same all along this section. / *Es igual lo largo de esta sección.*
- Changes in places along this section. / *Cambia durante la sección.*

3. Animals you see in and around creek / *Los animales que se ven en y alrededor del riachuelo*:

- Fish. How big and how many / *Peces. Que tan grandes y cuantos*: _____
- Insects. What kind(s) / *Insectos. De que tipo*: _____
- Birds. Describe / *Aves. Descríbalos*: _____
- Other animals. What kind(s) / *Otro tipo. Cuales*: _____
- Animal signs (like bird nests, beaver dams, animal tracks). What kind(s) / *Rastros de animales (como nidos de pájaro, diques de castor, huellas). Que tipo*:

- Other / *Otro*: _____

4. Plants you see in and around creek / *Las plantas que se ven en y alrededor del riachuelo*:

- Algae. Describe / *Algas. Describe*: _____
- Grass. Describe / *Césped. Describe*: _____
- Shrubs. Describe / *Arbustos. Describe*: _____
- Trees. Describe / *Árboles. Describe*: _____
- Other / *Otro*: _____

5. Human structures you see in and around creek / *Estructuras humanas que se ven en y alrededor del riachuelo*:

- Trail or path / *Arrastres o senderos*
- Road / *Caminos*
- Concrete creek bed / *Cama de concreto*
- Dam / *Dique*
- Bridge / *Puente*
- Stormwater drain or other discharge pipe / *Desaguadero o otros tubos de descarga...*

- Playground / *Campo de juegos*
- Parking lot / *Estacionamiento*
- Picnic tables / *Mesas*
- Metal utilities cover (“manhole” lid). How lid is labeled – sewer, water, telephone, electric utility / *Tapadera metálica de utilidades (tapa de alcantarilla) ¿Cómo está marcada? – la alcantarilla, el agua, el teléfono, la utilidad eléctrica:*

- Building. What kind(s) / *Edificio. ¿Que tipo?:* _____
- Other / *Otro:* _____

6. Other signs of people in and around creek / *Señales de personas en o alrededor del riachuelo:*

- People (other than the group). What are they doing? / *Personas (aparte del grupo) ¿Que hacen?* _____
- Trash. What kind(s) / *Basura. ¿Que tipo(s)?:* _____
- Shopping cart / *Carritos de mercado*
- Park / *Parque*
- Animal pasture / *Pasto de animal*
- Landfill / *Vertedero*
- Golf course / *Campo de golf*
- Other / *Otro:* _____

7. Other clues about how people affect this creek / *Otros indicios de cómo la gente afecta este riachuelo:*

8. Other clues about whether salmon and steelhead could live in this creek / *Otros indicios de si el salmón y la trucha del mar (el steelhead) pueden vivir en este riachuelo:*

Adapted from “Stream Walk Questionnaire,” *Hands On Save Our Streams: The Save Our Streams Teacher’s Manual for Grades One through Twelve*. Gaithersburg, MD: Izaak Walton League of America, 1996.