

THREATS TO STEELHEAD

HOW YOU CAN HELP

WATER SCARCITY

Drought, population growth, increased water use, and irrigation have depleted water supplies in many regions. Less water makes it difficult, and sometimes impossible, for fish to migrate and spawn.

BE WATER WISE

Use less water for cleaning, flushing, and showering; replace your lawn with native, drought-resistant plants and water them early in the day; eat less meat and dairy products; and reuse greywater.

BARRIERS TO PASSAGE

Barriers, such as dams, may block their passage and create slow-moving pools that are ideal for predators.

CONSERVE ELECTRICITY

Turn off lights and electronics when not in use and unplug unused electronics. Using less electricity decreases the demand for dam-generated electricity.

WARMING WATER

Climate change, dams, and industrial discharge can increase water temperature. Water warmer than 64°F/18°C makes steelhead more susceptible to predators, parasites, and disease.

CUT YOUR CLIMATE CHANGE FOOTPRINT

Rethink and reduce purchases; reuse products and packing before throwing them out; compost and recycle when possible; and bike, bus, and carpool.

NATIVE PLANT LOSS

Without native plants, fish are more vulnerable to predation and warming waters. Native plants also provide habitat for the invertebrates that steelhead eat.

RESTORE HABITAT

Volunteer with your local stream team or green team to plant native species, clean up litter, remove invasive species, and create rain gardens.

RUNOFF

Animal wastes, pesticides, and other pollutants run off from lawns and farms. Oil, heavy metals, and antifreeze runoff from roads. When they reach rivers and streams, these pollutants kill fish, stunt their growth, and impair their reproduction.

MINIMIZE RUNOFF

Use fewer pesticides, fertilizers, and household chemicals; dispose of pet waste properly; wash your car at commercial car washes; and maintain your vehicles.

OVERFISHING AND BYCATCH

Historically, many steelhead populations were overfished. Today, endangered and threatened steelhead can accidentally be caught by people fishing for other types of fish.

EAT SUSTAINABLE SEAFOOD

Visit [FishWatch.gov](https://www.fishwatch.gov) to learn how to choose seafood with a smaller impact on the environment.

I'm counting on you!



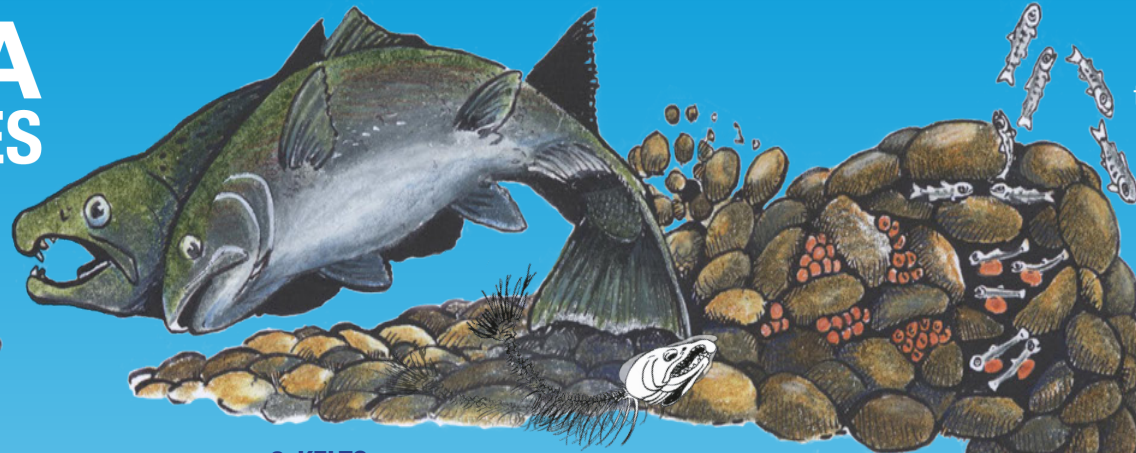
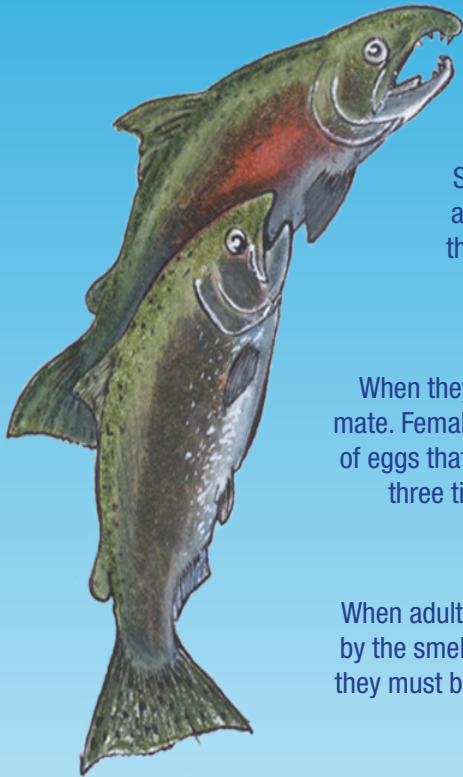
Learn what steelhead need to live, and how you can make a difference.



**NOAA
FISHERIES**



NOAA FISHERIES



1. EGGS
Under the gravel, thousands of eggs develop in nests called redds.

2. ALEVIN
Alevin hatch and remain under the gravel for protection against predators until their yolk sac is fully absorbed.



3. FRY

Once alevin have absorbed their yolk, they become fry. They head for protected spots, like under logs and behind boulders. They dart out to catch tiny insects that come their way.



4. SMOLTS

When they feel the urge, young steelhead begin migrating toward estuaries where they begin adapting to saltwater in a process called smoltification.



5. OCEAN ADULTS

Steelhead enter the ocean as juveniles and leave it as mature adults. In the ocean, steelhead travel thousands of miles and feed on other fish, squid, eels, and shrimp.



8. KELTS

Steelhead that have spawned and make it back to the ocean are called kelts. When they begin the difficult journey back to the ocean, they are weak. Kelts return to the ocean for up to a year before returning to spawn again.

7. SPAWNING ADULTS

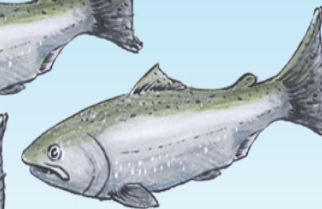
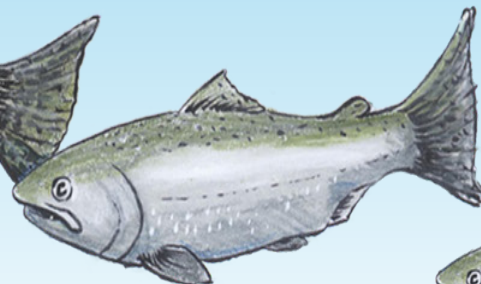
When they reach the spawning grounds, they find a mate. Females dig nests in the gravel and lay thousands of eggs that are fertilized by milt. Steelhead can spawn three times, but most do not survive that long.

6. MIGRATING ADULTS

When adults are ready to spawn, they are guided home by the smells of their home stream. On their way home, they must battle rapids, waterfalls, dams, and predators.

Steelhead Lifecycle

At every life stage, steelhead need abundant cold, clean water.



LEARN MORE: www.nmfs.noaa.gov