

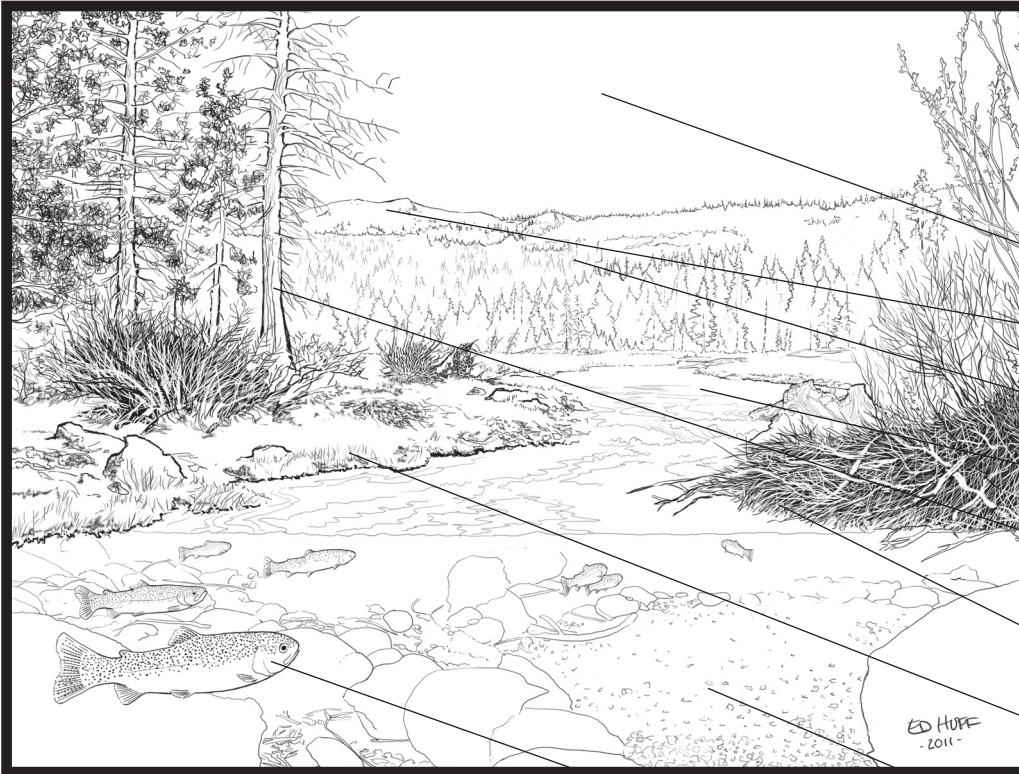


# A Trout's Habitat

ED HOPE  
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# The Trout's Habitat - A High Sierra Stream



The environment in which an animal or plant lives is called a habitat. A Habitat is a combination of all of the living and non-living parts of an environment. Within a habitat are many complex relationships and interdependencies. If one part is affected, many other parts will be affected.

All living things depend on the sun for energy to live and grow. Plants change sunlight to the food energy they need. Animals get food energy by eating plants or eating animals that eat plants. Food chains represent this flow of energy and show all living things are connected by what they eat.

Clouds bring the rain and snow that keep the creek flowing and healthy. Water is life to the entire ecosystem, including us. "The water in every cell of our bodies has already flowed down every stream and slept in every sea." (Fredrick Lehman)

Snow-capped mountains store a "reservoir" of frozen water after the winter season ends. This provides a constant source of cold water as the snow melts during the summer months.

Healthy forests help shade the creek, keeping the water cool and providing a healthy habitat for trout. The leaves dropped into the creek provide food for aquatic invertebrates, which in turn are food for trout.

Clear, cold water is needed for a healthy trout habitat. Muddy water could smother trout eggs and destroy many of the aquatic invertebrates trout feed upon. The lower visibility also makes it harder for the trout to find food.

The dead trees in the illustration are not "wasted". They will provide homes for wildlife such as woodpeckers who make their nests in cavities they carve in the dead trees. Eagles and hawks break off the smaller branches to build their nests. Ultimately they will fall and decompose, contributing to the soil and nurturing young trees, bushes and grasses.

Fallen tree limbs and twigs in the creek provide hiding places for trout where predators like egrets, bears and river otters can't reach them. The branches also slow the stream flow immediately downstream, providing a more restful habitat. Submerged branches also provide a home for many animals the trout feed on.

Creekbank vegetation provides food and cover for mammals, birds, amphibians and insects. Insects that fall into the creek from these plants can become trout food. The root systems from these creekside plants hold the stream bank in place, helping prevent erosion, keeping the stream clear and providing a good environment in which the trout can reproduce.

Rocks in the creekbed, if they are just the right size, provide successful nesting habitat for trout. The size of the rocks is reduced by freezing and thawing and by the tumbling action of the moving water. Rocks that are too large can't be moved to form the redd (the trout's spawning bed). Rocks that are too small prevent enough oxygen from reaching the eggs and alevin.

When trout grow old and die or are eaten by predators, their bodies fertilize the forest, helping it grow. Aquatic invertebrates like insect larva, snails, and worms, feed on the decaying trout. The invertebrates are then eaten in turn by the baby trout.

These engaging Project WILD and Project WILD Aquatic activities complement the theme of this poster. Use them to create a unit that fits your curriculum and the diverse learning styles of your students. You can also go to this link to review the activities online: [www.dfg.ca.gov/projectwild/](http://www.dfg.ca.gov/projectwild/)

### Project WILD Aquatic

- Blue Ribbon Niche
- Migration Headache
- Silt: A Dirty Word
- Water Canaries
- Water Plant Art
- Water Wings
- Wetlands Metaphors

### Project WILD K-12

- Beautiful Basics
- Everyone Needs a Home
- Habitat Lap Sit
- What's That Habitat?



[www.classroomaquarium.org](http://www.classroomaquarium.org)