

**Large stream wood** from fallen trees, logs, root wads and large branches provides essential habitat for steelhead and coho salmon and helps maintain natural stream function.

#### Large stream wood on your property

Many people believe that large wood should be cut up or removed from the stream because it can cause localized flooding or bank erosion. While this is certainly a concern, wood can slow the flow of water, stabilize stream channels and banks and promote groundwater recharge. Large wood along a stream may actually reduce flooding by catching wood and debris that would otherwise wash downstream all at once and create larger logjams. Read more to find out about local resources available for assistance with assessing stream wood on your property.

#### Help our local Steelhead & Coho

In Santa Cruz County, steelhead populations are threatened, but can be improved with good stream care. Coho salmon are critically endangered and may become locally extinct without serious efforts to improve their stream habitat.

You can play a part in preserving Santa Cruz County steelhead and coho salmon by learning more about the important role of stream wood.

# Concerned about stream wood on your property?

Contact the County of Santa Cruz Public Works Department at **(831) 477-3999** for assistance with the assessment and/or modification of large wood.

Leave wood—uncut—to benefit the stream

#### Stream wood creates habitats

Stream wood is an important part of habitats for steelhead, coho salmon and other wildlife.

Local monitoring shows that many young steelhead do not live through the winter. Increasing the amount of stream wood in our waterways can help young fish survive so they can migrate out to the ocean and return as adults to spawn.

During winter storms, stream wood helps form pools where young fish live and hide and riffle areas where adult fish lay their eggs. The wood also provides slow water refuge during high flows and creates cover that protects fish from predators. Endangered Coho salmon are found mostly in pool habitats with lots of large wood.

Wildlife such as the red-legged frog and western pond turtle prefer habitats with large wood. Stream wood also provides food and habitat for even smaller creatures like aquatic insects. In turn, these insects are food for steelhead and coho salmon.

#### Can I cut up or remove stream wood?

Unless it's causing flooding or erosion that threatens life or property, stream wood should be left in place. Steelhead and coho salmon and their habitat are protected under the federal Endangered Species Act, state and local laws. To cut up or remove large stream wood requires permission from the California Department of Fish and Wildlife (CDFW).

If you are concerned about stream wood on your property and feel modification is necessary, the County of Santa Cruz provides nocost assessments. **Contact Public Works Drainage Division at (831) 477-3999 for assistance.** Assistance is also available from the local Resource Conservation District (RCD) and the Natural Resources Conservation Service (NRCS).

In an emergency, first trim smaller branches that catch other material. Otherwise, cut large trees by leaving as much of the trunk attached to the root wad as possible.

Pay close attention to large wood near bridges or drainage structures. Always keep brush, weeds, grass clippings, or other small material out of the stream and off the stream banks. This small material can wash downstream and create debris jams that cause flooding, erosion or culvert blockage.

### What if fish passage is blocked?

Most fish can swim through, under, or around log clusters or debris jams, especially during high flows. If you are concerned about fish passage, contact the County of Santa Cruz Environmental Health Department or the California Department of Fish and Wildlife (CDFW) for assistance.



During winter storms, stream wood protects young fish and improves their survival. Adults can rest during migration in the slower water created by stream wood.

Young coho salmon and steelhead live in pools where stream wood provides protection from predators.



# What else can I do to:

- > Enhance streams
- > Protect water supplies
- > Reduce flooding and erosion
- > Help steelhead and coho

# **Conserve Water!**

Fish and wildlife need adequate stream flows to survive and thrive. Whether you live in town or in the country, practice water conservation for household and outdoor use. Protect stream flows if you divert from a stream. Learn about local water issues.

# **Protect Riparian Habitats!**

Streamside property owners play an important role in protecting stream habitat. Maintaining and restoring native vegetation that grows along our streams protects drinking water quality and supports our local fish and wildlife populations.

## **Keep Streams Clean!**

Prevent sediment, wastewater, chemicals or garbage from entering a stream. Reduce stormwater runoff that carries pollutants to the stream by capturing rain in barrels or cisterns, directing runoff away from roads or driveways and into areas that allow water to soak into the ground, and by making sure road culverts and drainage features are properly sized and placed.

Learn more about stream wood and general stream care in the Santa Cruz County Stream Care Guide!



Available at www.rcdsantacruz.org

# **CONTACT INFORMATION**

Resource Conservation District (RCD) and Natural Resources Conservation Service (NRCS) Local Partnership Office Assistance with various natural resource concerns 820 Bay Ave, Ste 136 Capitola, CA 95010 RCD: (831) 464-2950 NRCS: (831) 475-1967 www.rcdsantacruz.org

County of Santa Cruz, Environmental Health Services

General stream information and fish passage Water Resources Program (831) 454-2022

#### County of Santa Cruz, Public Works

Stream wood assessment or modification Drainage Division (831) 477-3999

### California Department of Fish and Wildlife

Stream wood removal permits and fish passage Bay Area Region (707) 944-5500





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