Monitoring Fish

***Steelhead trout** are **rainbow trout** that go to the ocean to feed as adults and return to spawn in freshwater. Tenmile Creek has both steelhead and resident trout. The population shrinks and swells. depending on the water year.*

***Coho salmon,** once a dominant species in Tenmile Creek, are at low levels, but could be restored.*

***Warmwater, non-native fish species** proliferate in ponds and escape to Tenmile Creek seasonally.*

***Chinook salmon** are abundant in Tenmile Creek in some years because of ideal spawning gravel, but they are threatened by excess sediment.*

Timelapse Cameras

The Eel River Recovery Project has been placing timelapse cameras at strategic locations throughout the watershed since 2015 for the purpose of documenting flow conditions. Photos are taken at half hour intervals and then made into movies of seasonal flow. There are now ten such cameras in the Tenmile Creek watershed and they will help to the community track water conservation success over time.

Why Volunteer?

Our goal in organizing volunteer monitoring is to help the community take the pulse of Tenmile Creek to track success of restoration efforts. Invite us to help you monitor and learn more about your local tributary or reach. Find out more about aquatic life forms and feel more connected. Want to see wild fish? Come on a spawning survey or put on a mask and snorkel and spy on fish underwater. Call 223-7200 to get more information or volunteer.

Working Together to Monitor the Health of Tenmile Creek

- *Water Temperature*
- *Fish Community*
- *Flow - Aquatic Life*
- *Sediment*

Eel River Recovery Project

Coastal Conservancy

PROP 1 GOVERNOR GAVIN NEWSOM WATER BOND 2014 RELIABILITY | RESTORATION | RESILIENCE

707 223-7200
www.EelRiverRecovery.org

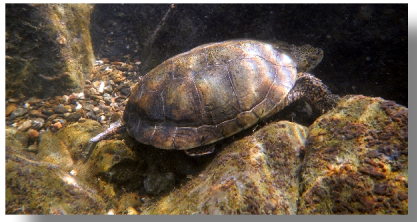
Water Temperature...

Water temperature is one of the most powerful of aquatic monitoring tools, especially if one of your main interests is the health of the water body for salmon and steelhead. We place automated water temperature gauges at more than 100 locations all over the Eel River watershed annually since 2012, and at about 20 places in Tenmile Creek and its tributaries. The water temperature is taken every half hour for several months, indicating salmonid suitability. We have found that Tenmile Creek water temperature varies annually with flow, and very few places are cold enough to support coho salmon, but many are supportive of steelhead. Call us to volunteer or to allow us to monitor your creek.

Sediment...

Sediment is a silent killer of fish. Suspended sediment can limit their visibility and prevent them from eating during high flows. Fine sediment particles can also settle out of the flow and be sucked into salmon nests by stream currents, smothering eggs or capping the redd so that fry can't emerge. Sediment fills pools, making them less habitable for juvenile salmon and steelhead rearing. Catastrophic sediment loads that accompany major floods can scour riparian areas and cause stream widening that contributes to warmer stream temperatures. Starting in 2021, we will begin working with Layotonville Elementary School and community volunteers to measure sediment in pools, using a technique called V-Star. Understanding sediment source areas will help to prioritize where watershed restoration is needed. Call if you want to help –707 223-7200.

Aquatic Life...



Western pond turtles *are the only native turtle species in the Eel River basin, but they are ancient survivors. While turtle populations elsewhere in California dwindle, they are abundant in some areas of the Eel River, including Tenmile Creek. They can live up to 70 years!*

Photo by Alessandro Catenazzi

Yellow-legged frogs *thrive in some parts of the Eel River watershed, including in Tenmile Creek, but they are effected by industrial agricultural pesticides and herbicides and are declining in most of California. We monitor the South Fork Eel at Benbow Dam, but we could study the frog population in Tenmile Creek, if there is interest..*

Aquatic insects *live in stream bed gravels and are an indicator of aquatic health. They are important food for fish and other wildlife. Presence of pollution intolerant species, community structure, and diversity indices are important tools in understanding stream health.*