

# Welcome

Welcome to the Hayfork Community Wetland. Situated on 20 acres of Trinity County owned land, these wetlands were destroyed in the 1920s-40s when large-scale dredge mining operations removed plants and soil that turned an ecosystem once teeming with wildlife into a barren stretch of land. In 2014, the Watershed Research and Training Center began a wetland enhancement project that was designed to protect existing wetlands, restore additional wetlands, improve habitat connectivity, and create a vibrant outdoor classroom for the schools of the Hayfork Community.

During the enhancement process, previously dredged mine tailings were removed from depressions allowing for the re-emergence of groundwater to support wetland development. Next, working with volunteers and partners from the community, large amounts of trash, tires, and scrap metal waste along with invasive weeds were removed and replaced with trails, bridges, and native plants to create an outdoor community space. The Hayfork Community Wetland demonstrates the importance of restoration work, providing a beautiful recreation area for Hayfork that will serve to enhance, preserve, and celebrate the natural beauty of Trinity County.

# What is a Wetland?

A wetland is an area inundated with water for an extended period of time leading to the establishment of water loving plants and hydric (wet) soils. They are ecosystems that often occur at the edge of aquatic and dry upland systems. Wetlands act as natural filters that remove pollutants from community storm and agricultural water run-off, slow and absorb flood waters, replenish groundwater for slow release during drier months, provide cold water in low flow conditions, and thus improve water quality and quantity in Hayfork Creek.



## INSECTS

Wetlands provide a rich living area for insects. Water striders, the long-legged bugs you will see skirting across the surface of the pond waters, eat mosquito larvae and insects that fall onto the water surface. Water boatmen are small, football shaped insects with oar-like arms that propel them through the water. Dragonflies are another fantastic insect observed within wetland areas, known for their beautiful opalescent wings and vibrant colors. These plentiful insects, and many others, provide food for other wetland wildlife such as frogs, birds, and bats; predators that keep the mosquito population low. Concerns about mosquitoes are often raised in relation to wetlands. However, contrary to popular belief, a healthy, well-functioning wetland can actually reduce mosquito populations.



## INVASIVE PLANTS

Many invasive plants are present in this Community Wetland area, including cattail, Himalayan blackberry, yellow star thistle, bull thistle, sweet pea, and several European annual grasses. Invasive plants thrive in disturbed areas and spread through "hitch-hiking" on clothes, vehicles, and wildlife. Ongoing maintenance and eradication of these plants will be necessary to protect the wetland ecosystem.



## PLANTS

As you walk through the wetlands, you will see a variety of upland and wetland plants. Ponderosa pine, gray pine, white and black oak populate the drier upland areas. Black cottonwood, white alder, and a variety of willows are riparian trees that require more water than upland species and are found in the wetlands and on the fringes of streams. Within the wetlands, you will see a variety of sedges, rushes, native mints, and watercress. There are also many kinds of shrubs such as chokecherry, mock orange, and skunk bush that grow well in moist areas. Equisetum, commonly called horsetail, is a prehistoric plant you will find throughout these wetlands.



## MAMMALS

Bats, deer, rabbits, beavers, foxes, and raccoons are just some of the mammals that call this area their home. Bats love to cruise over the water catching insects. Deer and rabbits hide in the thick vegetation. Raccoons enjoy the variety of foods from fish to berries to amphibians. Be on the lookout and you just might see some of this exciting wetland wildlife!



## BIRDS

Birds utilize wetlands for food and shelter. Woodpeckers feed on the insects within the tall alders and build their nest cavities in tree trunks. Wood ducks feed on the aquatic vegetation and nest in tree cavities near the ponds, while swallows and kingfishers build their homes in the clay cliffs along Hayfork Creek. There are also a wide variety of songbirds that feed on the fruit of the chokecherry, blackberry, and dogwood found throughout the wetlands. Keep your ears open for the song of a red-winged black bird or the chirp of a bald eagle.



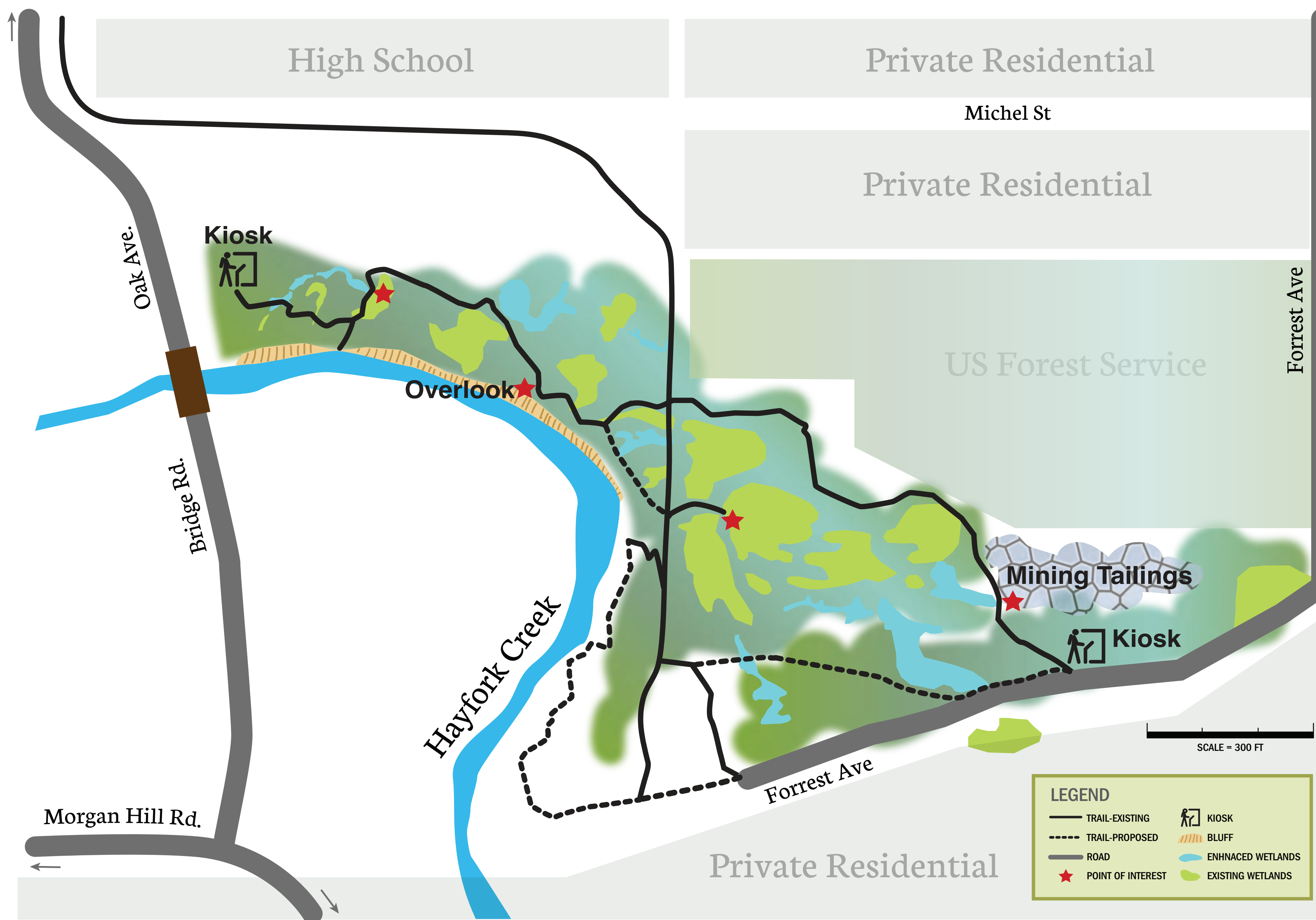
## AMPHIBIANS AND REPTILES

Wetlands and ponds offer habitat for Western pond turtles, salamanders, rough-skinned newts, and garter snakes along with other reptiles and amphibians. In the warmer months, these animals feed on the vegetation and insects that are plentiful in the wetlands. In the cold winters, some amphibians and reptiles bury themselves in the mud and hibernate until the area warms in the spring. During the late winter of 2016 we were already seeing rough-skinned newts breeding in some of the newly constructed wetlands.



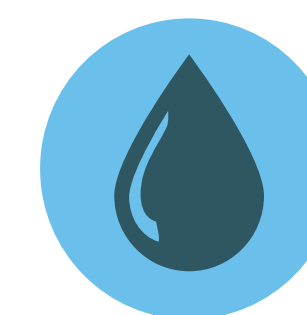
## SALMONIDS

Steelhead, Chinook salmon and potentially coho salmon can be present in Hayfork Creek. Currently, these populations are drastically reduced from their numbers of the past, a result of ongoing and cumulative human and ecological impacts. At a time when habitat for these species is shrinking, and their survival is increasingly at-risk, the Hayfork Community Wetland will help support fish habitat by restoring the nearby ecosystem, removing pollutants from the water, and releasing cold water from the wetland into Hayfork Creek.



## GEOLOGIC HISTORY

The ground underlying the Hayfork Valley is a series of sediments like a layer cake including alternating layers of sand and gravel, then a layer of claypan, then sand and gravel again, and so forth. The Hayfork Community Wetland sits on top a layer of claypan which is an aquitard: it prevents surface water from going further into the ground, thus saturating the soil and filling ponds. This layered geology was likely formed during the geologic Quaternary period, when a giant prehistoric lake or huge river filled the Hayfork Valley. This claypan layer can be seen along the exposed cliff bluffs above Hayfork Creek.



## HYDROLOGY

The surface water in our rivers and ground water in our aquifers are part of a global hydrologic cycle. Water evaporates off oceans and lakes, or is put into the air through transpiration from trees. The evaporated water forms clouds and when saturated, rain or snow falls to the earth surface. This precipitation hits the ground and either percolates into shallow aquifers or flows across the surface into rivers. Water that enters the rivers flows down to the ocean to eventually evaporate, forming clouds, thus starting the cycle all over again. Water that enters the aquifers travels slowly through the ground, eventually reaching the rivers and oceans.

The water in the wetland and Hayfork Valley is sourced from snow-melt and rain runoff of the neighboring mountains. The water level in these wetlands can vary from shallow seeping water during the dry summers to multiple feet deep water flowing through the landscape during the wet winters. You can see groundwater exit the wetland as waterfalls pouring out of the bluffs into Hayfork Creek.

## WE HOPE YOU ENJOY YOUR VISIT TO THE HAYFORK COMMUNITY WETLANDS.



This project would not be possible without support from our funders at the U.S. Fish and Wildlife Service Partners Program, Trinity County Resource Advisory Committee, California Department of Conservation, and Shasta Regional Community Foundation. Many other partners contributed to this effort including: the U.S. Forest Service, Trinity County, Trinity County Office of Education, Hayfork Community Plan Committee, Mountain Valley Unified School District, Trinity County Resource Conservation District, Natural Resources Conservation Service, Five Counties Salmonid Conservation Program, Trinity River Watershed Council, Watershed Center's Indian Valley Summer Camp and Youth Restoration Crew, U.C. Davis Master Gardener's Program, and volunteers from our community.