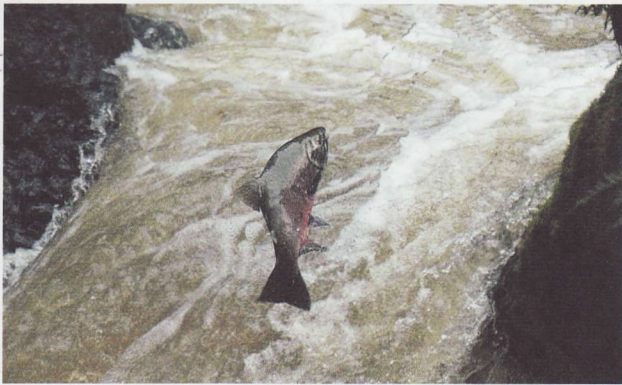


# A CREEK RUNS THROUGH Us

Newsletter of SPAWN, the Salmon Protection And Watershed Network - Summer 2011

## MARIN COHO SPIRAL TOWARD EXTINCTION

### SPAWN PRESSES COUNTY TO PROTECT CRITICAL SALMON HABITAT



Marin's coho population continues to slide toward extinction, after experiencing the third year in a row of extremely low numbers of returning spawning fish.

Coho have a total life span of three years, which means with the dismal numbers this year, all three year-classes have experienced declines of more than 90% in two short (3-yr) generations! Compared to historic populations of 50 years ago, the coho numbers have declined by nearly 99%.

SPAWN already knew the fish were facing extinction years ago when it called on Marin County (beginning in 2002) to enact and enforce better regulations to protect the most important spawning and nursery grounds, located in the Lagunitas Watershed in West Marin County.

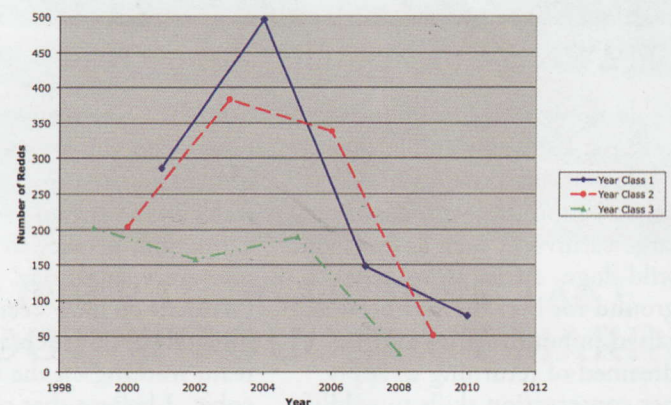
When the County failed to act over a period of years, and with the fish sliding toward extinction, SPAWN threatened to sue the County in 2007, when it enacted its new County-Wide Plan with inadequate protections for coho.

At this point, Marin County Supervisors agreed to propose a two-year creekside building moratorium (enacted from 2008-10), while it completed more studies and could create new ordinances to protect the coho's critical habitat.

The moratorium came and went and Marin County Supervisors still failed to take any regulatory action to protect the coho's spawning and nursery grounds. The County then asked SPAWN to give it an additional 7 more months, and SPAWN yet again granted the County more time to meet its legal obligations to protect the coho's critical habitat.

And yet again the County failed to act. The County now says it will be at least a couple more years before it enacts better creek-side habitat protections, and it still has not even enacted a new tree protection ordinance that it

Coho Redds, Lagunitas Creek (and Tributaries)



promised SPAWN more than three years ago.

With the coho facing imminent extinction, described by the US National Marine Fisheries Service as being in an "extinction vortex," SPAWN felt it had no choice but to

*"Extinction Spiral" continued on Page 7*

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## Restoration helps valley residents and enhances coho habitat

### Roads and banks projects reduce sediment and improve safety

SPAWN is tackling several large restoration projects throughout the San Geronimo Valley to assist landowners and enhance the watershed for coho salmon and steelhead trout. SPAWN secured over \$500,000 in state and federal funds and mobilized volunteers to provide these services at no cost to valley residents.

#### The Roads Project

In 2010, SPAWN improved over two miles of non-county-maintained roads on E. Cintura, Arroyo, and other roads during the first phase of the Roads Project. SPAWN and the Pacific Watershed Associates (PWA) are onto Phase II, which will focus on Park St. and Conifer Rd. in Woodacre. Roads are targeted for repair to reduce sediment run-off. Rolling dips, ditch relief culverts, outsloping, and other techniques will be applied.

#### Bioengineering Banks

SPAWN, working with Prunuske Chatham, Inc., is implementing several creek bank restoration projects to protect landowner properties and improve creek habitat for endangered salmon. The projects apply bioengineering techniques and native riparian plants to protect banks of San Geronimo Creek and its tributaries.

Later this year, SPAWN will conduct public hands-on workshops to disseminate knowledge about bioengineering techniques and fish-friendly dirt road repairs.

#### Woody Debris

This summer, SPAWN, working with the Dragon Fly Stream Enhancement firm, will install large woody debris structures in San Geronimo Creek to improve habitat complexity for coho. Installing logs and rootwads in the creek will provide cover and create pool habitat.

Stay tuned for a chance to visit these sites and learn the benefits of in-stream woody debris!

The Association of Bay Area Governments funded the roads and banks projects. The Department of Fish and Game provided additional funds for the roads project and supported the woody debris project.



Newly planted natives at Straus Family Ranch beside Tomales Bay.

### Collaboration with local ranches opens acres for habitat restoration

During the past year, SPAWN began work at the Straus Family Ranch to improve water quality running into Tomales Bay, where coho salmon smolts transform from freshwater fish into saltwater fish, as they migrate to the ocean, and where they reverse the process 18 months later. SPAWN planted trees and shrubs along the eroding banks of a creek that will stabilize the soil and shade the water.

At the Flanders Ranch, near the headwaters of the watershed, work included road repairs to reduce sedimentation, replacing a damaged culvert to

prevent road failure; and planting hundreds of natives grown in SPAWN's nursery to stabilize a steep bank and eventually provide improved habitat and shade for wildlife.



Above: SPAWN, with PWA, replaced an old culvert at Flanders Ranch and regraded the adjacent road to decrease sediment and run-off flowing into the seasonal creek.

Contact Aaron at [aaron@spawnusa.org](mailto:aaron@spawnusa.org) if you have a creek bank or road problem!