

Dry Creek/Secret Ravine

Description

The Dry Creek Watershed is located in southwestern Placer County and northeastern Sacramento County, encompassing an area from Newcastle and Folsom Lake on the northeast portion of the drainage, following Interstate 80 southwest to Steelhead Creek (Natomas East Main Drainage Canal). Steelhead Creek enters the Sacramento River just upstream of the mouth of the American River. The Dry Creek Watershed includes Cirby Creek, Linda Creek, Antelope Creek, Strap Ravine, Miners Ravine and Secret Ravine. Of these streams, Secret Ravine provides the best opportunities for the restoration of anadromous fish spawning areas.

Aquatic Biodiversity values

Presently, insufficient flows result in unhealthy temperatures for all life stages of Chinook and steelhead, the inability to reach spawning areas, a decrease in usable riffle area and the drying of redds. Insufficient flows are the consequence of depressed groundwater, lack of flow from effluent sources and change in PCWA flows (tailwater spills and irrigation run-off). Reduced flows can also effect the amount of usable spawning habitat which may increase redd superimposition rates.

Recreation

The Dry Creek CRMP recreation goal is to “[p]romote recreational use of the watershed consistent with protection of private property and natural and cultural resources.” Potential for increased recreational uses exist on public land in Rocklin, Roseville, and at Sierra College. In addition, the City of Sacramento has a \$2.1 million TEA 21 grant for the Ueda Parkway trail which would include a six mile section along Dry Creek from Discovery Park to above Hyer Dam.

Current Condition

The most obvious constraint to habitat quality in Secret Ravine beyond inadequate and unreliable flows is excess sand resulting from upstream gravel mining operations. The fishery is also constrained by deeply entrenched channels, ORV use, and encroaching development. Years of late or low rainfall, changes in the discharge levels from wastewater treatment plants, and changes in PCWA operations can result in reduced flows during the fall migration season and in non-optimal flows after migration has begun. Low flows contribute to higher water temperatures. Early fall flows in Secret Ravine have been measured from 0.5 to 2 – 3 cfs. There are no recording stream gages. Vegetation has also been impacted by development, grazing and invasive plants (primarily blackberry).

Support Groups

The Dry Creek Conservancy was formed in 1996 as a nonprofit corporation to preserve and restore the resources of the Dry Creek Watershed. The Dry Creek CRMP was also formed in 1996 by the Conservancy, Placer County Resource Conservation District, and the National Park Service's Rivers, Trails and Conservation Program. The Dry Creek Conservancy has produced a Secret Ravine Adaptive Management Plan (December 2001). The Conservancy also works with Placer Legacy, the cities of Rocklin and Roseville, Sierra College, CDFG, SWRCB, DWR and USFWS and has received in excess of \$3 million in grant funding since 1996.

Target Flows

Optimum flows and their timing have not yet been determined for Dry Creek/Secret Ravine; however, the Dry Creek watershed does have a viable Chinook and steelhead population, and the smaller, less stable, lower elevation streams have always played a critical role in sustaining anadromous fisheries. "Due to highly variable natural conditions in the Central Valley, interpopulation dynamics may be essential to the persistence of rainbow trout in the smaller stream systems. Historically, larger source populations occupying more stable habitats (for example, upper Sacramento, Feather, Yuba, and American Rivers) provided a source for recolonization and gene flow to the smaller, less persistent sink populations occupying more hydrological unstable stream systems. Conversely, the long-term persistence of the source populations may be affected by the diversity and viability of the smaller subpopulations. The precipitous decline of Central Valley steelhead has been alarming not only from the standpoint of reduction in absolute numbers, but also in the elimination of the populations that occupied the many tributaries. A reduction in the large river source populations may also explain the precipitous decline of steelhead in smaller streams, in spite of the large amount of quality habitat that still exists in these systems. Thus, restoration that focuses only on increasing absolute numbers and ignores the need to increase population diversity may be inadequate." (McEwan, 2001, page 23.)

Partnership Benefits

PCWA water enters the Dry Creek watershed from spill into Secret Ravine from the Boardman Canal, through leakage from other PCWA canals, and from run-off from irrigated pasture. As such, the Dry Creek watershed depends in part on Yuba/Bear/American River water to augment naturally-occurring rain and groundwater supplies. A comprehensive program to enhance anadromous fisheries and habitat in the lower reaches of the Yuba/ Bear system through the acquisition of environmental water or the re-routing/timing of existing deliveries would greatly benefit from a relationship with the Dry Creek Conservancy. The Conservancy is a well-funded and broad-based coalition with a proposed restoration program which could provide maximum returns for a minimum investment in additional flows. (See above.)