Storage & Forbearance Project
Whitethorn School

The Mattole River, which drains over 300 square miles of remote forest lands on California’s North Coast, historically supported strong populations of steelhead and coho salmon. In recent decades these runs have dwindled to a fraction of their former size due to a number of factors, not the least of which is chronically low summer streamflow in the river’s headwaters, which contain the best spawning and rearing habitat. Although the Mattole has relatively healthy streamflow much of the year, combined water diversions by homeowners, communities, and small farms take a toll on the river between July and November when streamflows are lowest.

To help restore dry season streamflow in the Mattole, the non-profit groups Trout Unlimited and Sanctuary Forest created the Whitethorn School Storage and Forbearance Project – a larger version of the successful projects Sanctuary Forest pioneered at a series of residences along the Mattole over the last decade, in what has come to be called the “storage and forbearance” model. In concept, the model is simple: we build the landowner a water tank system to store water in the winter wet season, and in exchange the landowner agrees not to pump from the creek when streamflow falls below 0.7 cubic feet per second as measured at a stream gauge monitored by Sanctuary Forest. This helps keep flow from falling below critical levels young salmon and steelhead need to survive, and provides landowners with a secure supply of water.

The Whitethorn School Project added 80,000 gallons of tank storage to the School’s water system, enough to provide the School with water to last throughout the low-flow season even in the driest years. To formalize the arrangement, the school district signed a 15-year contract known as a forbearance agreement, and TU helped the district secure a new appropriative water right from the state, authorizing the storage.

The project has also become part of the School’s curriculum, demonstrating water conservation for students, staff, and the community, and helping students learn the value of native fish conservation. A video about the project and how Whitethorn School students and staff feel about it can be seen at https://vimeo.com/channels/californiastreamflow.

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