



Article for Trinity Journal
Trinity River Restoration Program
By Doug Schleusner, Executive Director
August 24, 2007

Lake Levels, Salmon Runs, Indian Creek and Other Items of Interest

With the spring Chinook run well underway, many people are paying closer attention to the river - and to the Trinity River Restoration Program (TRRP). We've observed several related articles in north state papers, and had interesting conversations with some local residents and summer visitors, so it seems timely to provide an update about the TRRP, the river, and related topics. Along with this short article is a reminder that I and my staff are always available for a phone call (623-1800) or a visit (1313 South Main Street, next to Tops Market) if you have more questions.

As we near the end of August with daytime temperatures again nearing triple digits, many local streams down to a mere trickle, and popular boat ramps at Trinity Reservoir no longer usable, it is easy to forget that little over a year ago we had one of the wettest years on record and lake elevations stood at three feet above the "glory hole" crest. Even after extended safety of dam releases that winter, in May 2006 we were still able to release over 10,000 cubic feet per second (cfs) for fishery restoration purposes into the Trinity River, the second highest peak since completion of the dams in 1964.

It should be no great surprise when I say that we are nearing the end of a Dry water year (the new water year begins on October 1). The water surface elevation of Trinity Reservoir now stands at 2309, about 33 feet lower than last year at this time. The Bureau of Reclamation projects that at the end of September the elevation will be 2293, which would be 77 feet below the spillway crest. A Dry year classification means that 453,000 acre feet (AF) will have been released into the Trinity River this year compared to the 815,000 AF released during the Extremely Wet year in 2006. The 453,000 AF is still significantly more than the 340,000 AF that was released annually prior to the Record of Decision (ROD) signed by the Secretary of the Interior in December 2000. Compared to last year's peak release of 10,200 cfs, this year flows topped out at 4,500 cfs. This variation is by design, and consistent with the five water year types that correspond to available rainfall and snowpack. In other words, we are trying to mimic the natural variation found within the Trinity River basin, including the Trinity Alps headwaters. Over the past seven years, two have been Dry (2001 and 2007), two have been Normal, two have been Wet, and one (2006) was Extremely Wet.

Even with this year's lower water volumes, key objectives of the TRRP have been achieved. Flows earlier in the season were sufficient to aid juvenile salmon and steelhead in their migration to the ocean. Summer base flows of 450 cfs are maintaining temperatures needed for the returning adult spawners. Initial projections by the California Department of Fish and Game suggest a slightly larger than average run size for fall run Chinook. Weir counts at Junction City are showing good pulses of spring run Chinook moving up river, partly triggered by the small but much appreciated rain showers in mid-July and mid-August. Earlier concerns about a potential repeat of the 2002 fish die-off in the lower Klamath River have eased somewhat as spring run fish have moved out of thermal refugia available in the Klamath River and into the

Trinity River. Signs are encouraging for the rest of the season, with flows in the Klamath River three times higher than they were in 2002, and on-going fish health monitoring by Program partners indicating relatively low levels of disease.

We've also been hearing questions about the construction activity in the Douglas City area. The goal of the current construction project is the same as others within the TRRP – improvement in the quantity and quality of rearing habitat for juvenile salmon and steelhead. By removing dense thickets of riparian vegetation and the berms that confine the main channel, we enable the river to access a larger portion of its pre-dam floodplain during spring fishery restoration flows from Lewiston Dam. This creates the shallower and slower moving water that young salmonids need before beginning their journey to the ocean later in the spring and early summer. In this particular project, clearing the floodplain just above Weaver Creek has the added benefit of reducing the constriction of the river and lowering the water surface elevation adjacent to upstream houses.

Consisting of three main work areas, this contract follows last year's set of four projects in the Canyon Creek to North Fork reach of the Trinity River. The current vegetation removal and gravel processing activities just upriver of Weaver Creek and the "berm notching" at the large bend just below Vitzhum Grade are all part of the Indian Creek channel rehabilitation project. Notching the riparian berms at the upper end of the reach, rather than removing all of the vegetation and accumulated silt with heavy equipment, is a new technique that we hope will prove more cost effective because it allows the river to remove more of the silt and vegetation during high winter storm events and future spring fishery flows. It also allows the river to access the floodplain on the back side of the bend, preserves existing fish cover habitat, and helps minimize potential stranding of juvenile fish. The gravels being processed at the lower part of

the project are being sorted and cleaned to provide a supply of coarse sediment that will be reintroduced into upper reaches of the river that are presently deficient in gravel. This will help replenish spawning beds and gravel bars that are also needed as rearing habitat for juvenile salmon and steelhead.

While these construction projects are designed to provide immediate fish habitat benefits, their most significant purpose is to allow the river to evolve and create conditions similar to those that existed before the dams were built in the 1960s. Since the ROD was signed in December 2000 nearly 1.5 million acre feet more water has been released into the Trinity than if it had not been signed. These flows have already had many benefits including improved temperatures for both juvenile and adult fish, and combined with the construction projects, addition of spawning gravels, and control of fine sediments, there are encouraging upward trends for both Coho salmon and steelhead populations. Restoration of naturally spawning fish populations is the primary focus of the TRRP, and we appreciate the strong support of the local community as we work toward this goal.