Trinity River Restoration Program

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**Thursday, September 4**

*Showing events after 9/4.*
*Look for earlier events*

**Tuesday, September 9**

TAMWG Meeting

**Wednesday, September 10**

Google Calendar

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# Typical Releases

There are three basic types of flow releases to the Trinity River: 1) Releases for River Restoration; 2) Safety of Dams; 3) Other. The flow scheduling process varies for each type of flow release as described below.

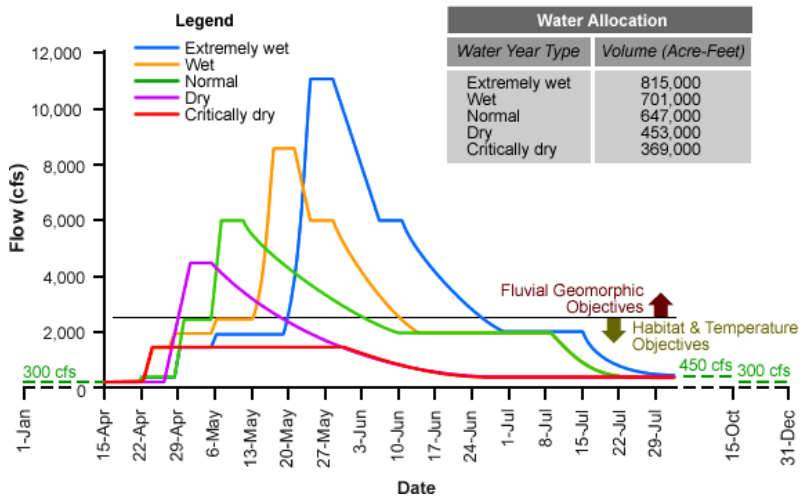
## *Releases for River Restoration*

The best scientific information available recommends more natural and variable flow releases based on snow-melt driven hydrographs. Variable flows of sufficient size clean spawning gravels, build gravel/cobble bars, scour sand out of pools, provide adequate temperature and habitat conditions for fish and wildlife at different life stages, control riparian vegetation, and perform many other ecological functions. In order to recreate inter-annual, or "between-year" flow variability, the Record of Decision defined five water year types with a minimum volume of water to be released into the Trinity River for each of the five types. The water volumes are measured in acre-feet (af), which is the volume of water one foot deep in the area of one acre. Each year, the water not allocated to the river is available for export to the Central Valley Project for water supply and power generation.

| Water year type | Frequency of occurrence | Volume (AF) | Peak Release (cfs) |
|---|---|---|---|
| Critically dry | (12%) | 369,000 | 1,500 |
| Dry | (28%) | 453,000 | 4,500 |
| Normal | (20%) | 647,000 | 6,000 |
| Wet | (28%) | 701,000 | 8,500 |
| Extremely wet | (12%) | 815,000 | 11,000 |

The Record of Decision also recommended typical flow releases for each of the five water year types as shown below. These typical release schedules may be adapted to meet specific restoration needs for the current year. See the Current Flow Release Schedule for this year's planned flow releases.

**Typical Flow Releases from Lewiston Dam to the Trinity River**



### *"Safety of Dams" Flow Releases*

During the winter, the Bureau of Reclamation maintains lower levels in Trinity Lake to provide a buffer in the event of an extremely large winter storm. The quantity of that buffer is based on several factors, and primarily references many years of hydrologic record for the basin. Maintaining storage space is a very important aspect of flood control operations, and is fundamental in protecting areas downstream of Trinity Dam, as well as the dam itself. As winter storms fill Trinity Lake, the Bureau of Reclamation may need to increase releases to maintain the lower lake levels. Because these elevated winter releases help protect the dam, they are commonly called "Safety of Dams releases" and may or may not occur in conjunction with actual winter storms. These releases are made independently from the ROD releases for river restoration.

Safety of Dams releases are scheduled by the Bureau of Reclamation in response to current conditions and typically have no more advance warning than a few days. The Bureau of Reclamation uses a combination of increased releases to the Trinity River through Lewiston Dam and trans-basin diversions to the Sacramento River through the Clear Creek Tunnel to lower the water level in Trinity Lake. Consequently, releases from Trinity Dam to Lewiston Reservoir may be higher than releases from Lewiston Dam to the Trinity River. Safety of Dams releases from Lewiston Dam to the Trinity River are typically no greater than 6,000 cfs, but may go higher if conditions warrant.

### *Other Flow Releases*

The Bureau of Reclamation occasionally makes flow releases from Lewiston Dam to the Trinity River for other purposes such as tribal releases or to mitigate late summer conditions in the lower Klamath River for fish health purposes. The Bureau of Reclamation coordinates these releases with the Trinity River Restoration Program and usually provides several weeks public notice. Such releases are independent from the ROD releases for river restoration.

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