Emergency Drought Salinity Barrier



The Emergency Drought Barrier shown during construction in the Sacramento-San Joaquin Delta at West False River. The temporary 800-foot wide barrier is to control water salinity into the Delta and preserve water in upstream reservoirs.

In response to worsening drought conditions in California, in June 2021 DWR constructed a temporary Emergency Drought Salinity Barrier (EDSB) on the West False River in the Sacramento-San Joaquin Delta. The barrier is designed to help slow the movement of saltwater into the central and south Delta and prevent contamination of water supplies for Delta agriculture and municipal supplies for millions of Californians who rely on Delta-based federal and state water projects for at least some of their water.

The EDSB also supports conservation of critical water supplies in upstream reservoirs for later use by reducing the large volumes of water released from upstream reservoirs, including Lake Oroville and Lake Shasta, into the Delta to repel salinity.

The installation of the barrier was preceded by a temporary urgency change petition to modify <u>State</u> <u>Water Project</u> and Central Valley Project water rights conditions, approved by the State Water Resources Control Board, which allows for water to be conserved for later instream uses and water quality requirements.

These modifications are needed to help protect cold water pools for salmon and steelhead and maintain water quality while ensuring some water supplies are maintained if drought conditions persist. The

approximately 800-foot-wide temporary barrier, consisting of nearly 90,000 cubic yards of rock, is located near the mouth of the West False River where it flows into the San Joaquin River. The barrier prevents salty tides and slower moving salinity from intruding into the interior Delta at this location. When fully intact, the barrier blocks watercraft passage on West False River and is marked by warning signs, lights, and buoys. <u>Alternative routes between the San Joaquin River and interior Delta are available.</u>

The West False River drought salinity barrier is just one of many actions DWR is taking to mitigate drought impacts consistent with <u>Governor Newsom's executive order</u> directing state agencies to take immediate action to bolster drought resistance across the state.

Delayed Removal

At the end of the 2021 water year on September 30, the continuing dry conditions and low storage levels provided clear evidence of the dire hydrologic conditions across the State. As a result, DWR has updated the EDSB deployment plan to accommodate a delay in the barrier's removal from fall 2021 until a future date when it is determined that the barrier is no longer needed, with full removal expected by November 30, 2022. Keeping the barrier in place longer will provide continued protection of the beneficial uses of water by keeping saltwater from entering the central and south Delta. DWR is actively engaged in working with all regulatory agencies involved in this action.

Temporary Notch

To facilitate fish and boat passage from January to March 2022, DWR will install a temporary 400-footwide, 12-foot-deep notch in the barrier. Implementation of the notch is expected to commence the first week of January 2022 and will take one to two weeks to complete. The rock material removed will be returned to the Weber stockpile in Stockton or retained on material barges.

The notch will remain in place through the end of March for fish passage and boat navigability and will be backfilled the first week of April 2022. The barrier will then remain in place until the fall, with all rock material removed from the channel by November 30, 2022.

DWR's existing environmental monitoring program will continue to assess the physical and biological effects of the barrier and its impact on overall Delta productivity for the duration of the project. Appropriate signage and aids to alert boaters of underwater obstruction will also be provided to safely guide boaters as they approach and navigate through the notch.

DWR will confer with all applicable regulatory agencies on the appropriate timing of the barrier's removal and ways to minimize impacts. DWR will also maintain the ability to expeditiously remove the barrier if needed in response to a Delta flood, seismic, or other emergency.

DWR is pursuing long-term planning and permitting in anticipation of future drought conditions. There will be opportunities for public involvement during this process, which will continue into 2022.

Contact

Jacob McQuirk, Principal Water Resources Engineer Jacob.Mcquirk@water.ca.gov

https://water.ca.gov/Water-Basics/Drought/Emergency-Drought-Salinity-Barrier