



## News for Immediate Release

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### **DWR Hopes Underwater Light and Sound Show Will Keep Salmon in Safer Waters**

**SACRAMENTO** -- The Department of Water Resources (DWR) hopes that underwater strobe lights and offensive electronic sounds contained within a curtain of bubbles will keep migrating salmon on the straight-and-narrow in the Delta.

The "bubble barrier" is intended to deter ocean-bound Chinook salmon from leaving the main channel of the Sacramento River near Walnut Grove to take a risky detour into Georgiana Slough. Georgiana Slough leads young salmon through the predator-infested waters of the interior Delta toward huge state and federal water export pumps.

Studies indicate that 65 percent of the young salmon that enter Georgiana Slough don't survive. Many are eaten by striped bass or other predators, and some are lost to pumping operations of the State Water Project and Central Valley Project in the southern Delta.

DWR will begin installing the bubble curtain as early as this week at the head of Georgiana Slough. The barrier structure will be installed deep enough to allow at least 9 feet of clearance for boaters on average low tides.

The barrier will utilize Bio-Acoustic Fish Fence (BAFF) technology, combining acoustics and a strobe-lit sheet of bubbles to create an underwater wall of light and sound at frequencies that repel young salmon. This is the same technology DWR

has used at the head of Old River in the south Delta in 2009 and 2010 where it was proven effective in deterring salmon.

Effectiveness of the Georgiana Slough barrier will be evaluated over a 45-day period by DWR, with assistance from the Bureau of Reclamation, U.S. Geological Survey, and consultants. Approximately 1,500 juvenile salmon will be tagged and tracked using underwater sound receivers. The study will be completed by April 30, and the barrier removed by mid-May.

The bubble fence test is in response to a National Marine Fisheries Service requirement that DWR and the Bureau of Reclamation pursue engineering solutions to reduce the diversion of young, ocean-bound salmon into the central and southern delta.

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*The Department of Water Resources operates and maintains the State Water Project, provides dam safety and flood control and inspection services, assists local water districts in water management and water conservation planning, and plans for future statewide water needs.*

Contact the [DWR Public Affairs Office](#) for more information about DWR's water activities.