

Farmington Groundwater Recharge Program: Section: About the Program

Overview

The objective of the Farmington Groundwater Recharge Program (Program) is to recharge an average of 35,000 acre-feet of water annually into the Eastern San Joaquin Basin, a groundwater basin generally bound by Highway 99, Jake Tone Road, Mokelumne River and Temple Creek. It is a region that for a half-century has seen groundwater levels decline an average of 1.7 feet per year, with some areas dropping to 100 feet below historic levels. Coupled with this overdraft, it is estimated that the basin has lost up to 2 million acre feet of storage capacity*. As a result, water quality has declined as saline tainted water from the west has been moving eastward into the basin at a rate of up to 150 feet per year.



The goal of the Program is to directly recharge surface water to the groundwater aquifer on 800 to 1,200 acres of land and increase surface water deliveries in-lieu of groundwater pumping to reduce overdraft and establish a barrier to saline water intrusion. Spreading water on agricultural fields and other recharge basins provides seasonal migratory waterfowl habitat.

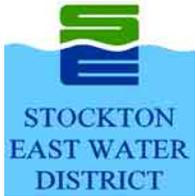
The Program provides a cost-effective and cost-efficient process where landowners can participate through short-term and long-term agreements and receive market-based compensation for the use of their land. It is an arrangement that essentially allows the rotation of groundwater recharge practices with traditional land use – making water a cash crop for Eastern San Joaquin County.

The recharge method of choice is field-flooding, a practice where a small perimeter levee is built at the parcel, then flooded to a depth of up to 18 inches. Because many lands in the region have a gradual slope for drainage, typical 40 to 100 acre parcels will have varying water depths ideal for a wide range of migratory waterfowl.

By applying this shallow-water recharge process, lands can be rotated in and out of the program quickly and economically. In fact, construction inputs for field-flooding do not require specialized heavy equipment and, therefore, can be completed easily by the landowner.

* *American River Water Resources Investigation, USBR, 1996*

Program Sponsors



The Program is lead by Stockton East Water District (SEWD), in partnership with the Sacramento division of the U.S. Army Corps of Engineers (Corps). The Program was launched following completion in August 2001 of the Farmington Groundwater Recharge and Seasonal Habitat Study (see Program History for more information). The study was lead by SEWD, in partnership with the Corps, the Central San Joaquin Water Conservation District, the North San Joaquin County Water Conservation District, City of Stockton, San Joaquin County and Cal Water Service Company.

"Building water storage projects in harmony with agriculture is a complex task. I congratulate the Corps for its efforts and for adding this valuable layer of service to California."

*Assembly Member
Barbara Matthews*

In 2000, Congress authorized a \$25 million program for groundwater recharge and conjunctive use projects in SEWD. When combined with funds from Propositions 13 and 50, and local agency funds, the program has \$33.5 million to invest in the future of the Eastern San Joaquin County [Groundwater] Basin.