

Water Quality Report Card

Selenium in Grassland Marshes

Regional Water Board: **Central Valley, Region 5**

Beneficial Uses Affected: SPWN, WARM, WILD

Implemented Through: WDRs, Prohibition of Discharge

Effective Date: January 10, 1997

Attainment Date: March 2011

STATUS Targets Achieved/Water Body Delisted

Pollutant Type: Nonpoint Source

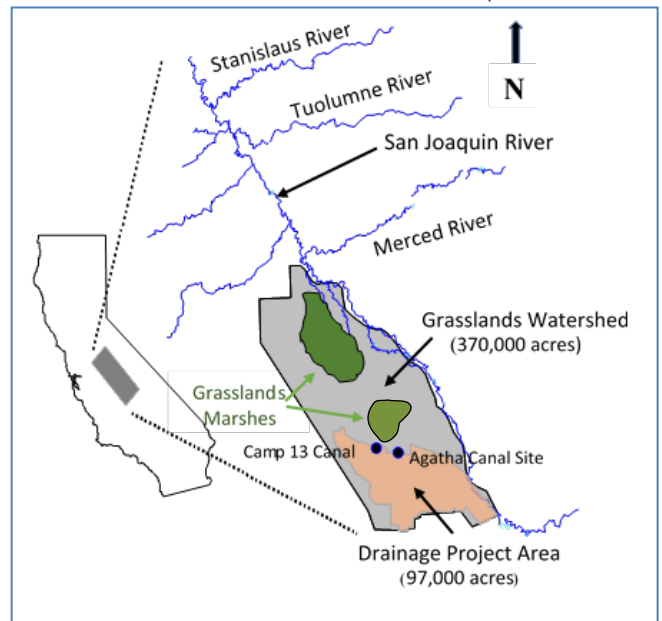
Pollutant Source: Irrigated Crop Production

Corrective Action Summary

The Grassland Marshes are within the 370,000-acre Grassland Watershed on the west side of the San Joaquin River Basin (map). In 1988 as part of the water quality assessment and 303(d) listing process, 8,224 acres of marshes were identified as impaired for exceeding selenium water quality objectives. As part of its 1996 Basin Plan Amendment, the Regional Board re-evaluated the extent of selenium impairment and determined that the Grassland Marshes included approximately 75 miles of wetland water supply conveyance channels and 61,810 acres of wetland marshes. In 2000 the Regional Board updated the [Selenium Total Maximum Daily Load for Grassland Marshes](#) to reflect the more recent evaluation.

Prior to 1996, the wetland water supply conveyance channels received agricultural drainage water in addition to high quality wetland supply water. As a result, the supply channels periodically conveyed agricultural drainage containing elevated concentrations of selenium to the Grasslands Marshes. The largest source of selenium was agricultural subsurface tile drainage which flowed through the Grassland Marshes to the San Joaquin River. Beginning in 1996, the [Grassland Bypass Project](#) has separated the wetland water supply conveyance channels from the largest selenium source, the 97,000-acre portion of the Grassland Watershed, referred to as the Drainage Project Area (DPA) Grassland Drainage Area. Since implementation of the GBP in 1996, discharges from the DPA have been diverted away from the water supply channels that supply the Grassland Marshes.

Grasslands Watershed Map



Water Quality Outcomes

- Weekly sampling at Camp 13 and Agatha Canal sites was required through 2015; currently, storm event sampling is required.
- The concentration based TMDL (20 µg/L maximum; 2 µg/L monthly mean) measured in wetland water supply conveyance channels has not been exceeded since February 2011.

Monthly Mean Selenium Concentrations

