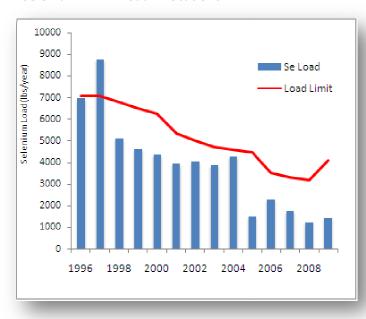
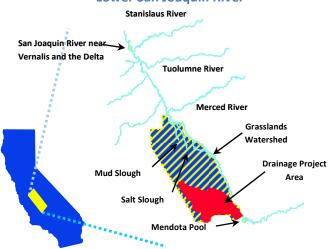
Total Maximum Daily Load Progress Report		San Joaquin River Selenium TMDL	
Beneficial uses affected	BIOL, RARE, WILD	Implementation STATUS	✓ Conditions Improving  ☐ Data Inconclusive ☐ Improvement Needed
Pollutant(s) addressed:	Selenium		
Implemented through:	WDRs, prohibition of discharge		
Approval date:	March 2002		

TMDL summary: The lower San Joaquin River (SJR) was formerly impaired for selenium, which is toxic to waterfowl and aquatic life at high levels. The primary source (88%) of selenium loading to the river is from subsurface agricultural drainage from the 97,000-acre Drainage Project Area of the Grassland Watershed. A TMDL for selenium in the San Joaquin River was completed by the Central Valley Regional Board and approved by US EPA in March 2002. The TMDL is implemented through a prohibition of discharge and Waste Discharge Requirements (WDRs) on the Grassland Bypass Project. The Project, which addresses the control of selenium, has reduced the amount of selenium discharged by more than 60 percent.

## **Selenium TMDL Load Allocations**



## **Lower San Joaquin River**



## Water quality outcomes:

- Significant reductions in selenium loading from agricultural sources in the Grasslands watershed
- San Joaquin River Selenium Water Quality Goal/Objective continuously met at Crows Landing since 2006
- Delisting of three reaches (60 miles total) of California's San Joaquin River and tributary Salt Slough
- Protection of wetlands (93 miles of channels)
   by keeping selenium levels below 2 μg/L
   most of the time

## San Joaquin River Water Quality

