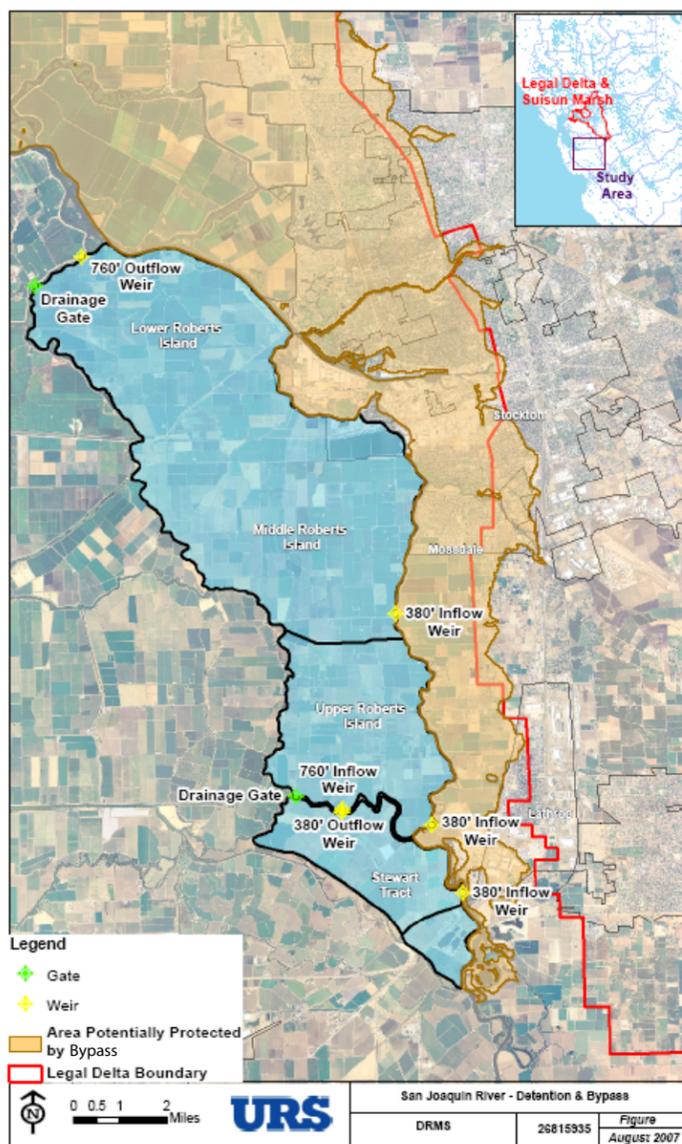
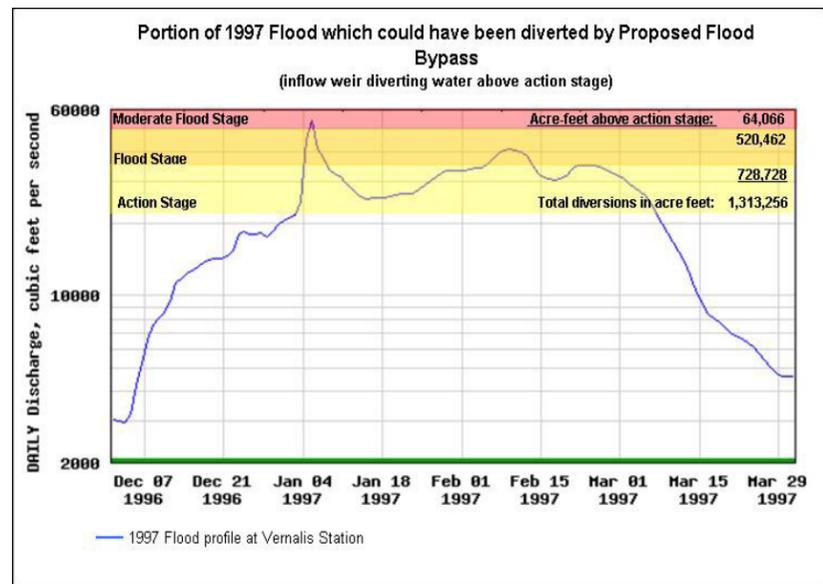


Weir and Drainage Locations San Joaquin Bypass

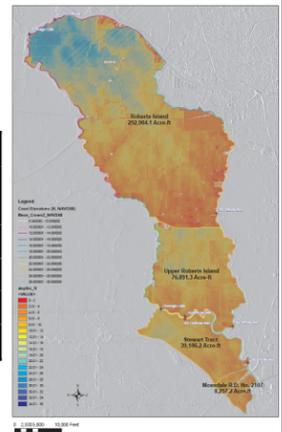


Flood Volumes Channeled Through Bypass System:



Detention Capacity of Stewart Tract and Roberts Island

Island	acre-feet
Lower and Middle Roberts Island	292,984
Upper Roberts Island	76,891
Stewart Tract	39,186
South Stewart Tract	8,257
Total Capacity	417,318



San Joaquin Detention & Bypass Building Block:

Low level weirs will be placed in the west bank levees of the San Joaquin River between Lathrop and Stockton. These weirs will direct excess flood water out of San Joaquin River into Stewart Tract, or, when necessary, into both Stewart Tract and Roberts Island. The diverted flood water will be detained until the flood has passed, or, once the storage capacity of the islands is approached, released via weirs that directed the flow away from developed areas.

Objective:

To protect lives and property in Lathrop, Mossdale, Stockton and adjacent communities from extreme flood events

Project Criteria:

- Project must provide substantially increased flood protection to east bank communities.
- Project should maximize potential environmental benefits
- Land ownership will not be considered in the initial identification of project location.

Benefits

- Eases strain of both upstream and downstream levees to reduce failure during flood events.
- Preserves existing agricultural lands

Additional Consequences

- Current dwellings will be relocated off affected islands
- Current agricultural lands and utilities on affected islands will be subject to flooding at an increased frequency compared to current conditions

San Joaquin Setback Levee Statistics:

Flood Activity on the San Joaquin River:

San Joaquin River discharge data is available from 1923 through 2007¹. During those 84 years:

- The river has exceeded the flood stage ten times (once every 8.34 years on average).
- The river exceeds moderate flood stage every 16.8 years on average, or 5 times.
- Stewart Tract has breached and flooded 3 times, on average every 28 years, easing strain on other levees and protecting vulnerable neighborhoods

Project Impacts

Effects on Residential Use	196 dwellings relocated
Effects on Agriculture:	
Agriculture with increased flood risk	37,275 acres
Permanent Loss of Agricultural Land	0 acres
Acres preserved as permanently agricultural	37,275 acres
Effects on Infrastructure:	
oil or gas wells with increased flood risk	180
utilities with increased flood risk:	
minor roads	97 miles
major roads	5 miles
highways	7 miles
rail	9 miles
Effects on Land Value	decreased for all 37,275 acres
Effects on Habitat and Sensitive Species	poor habitat quality, minor effects
Project Cost	\$1.9B

¹ Data available at <http://waterdata.usgs.gov>