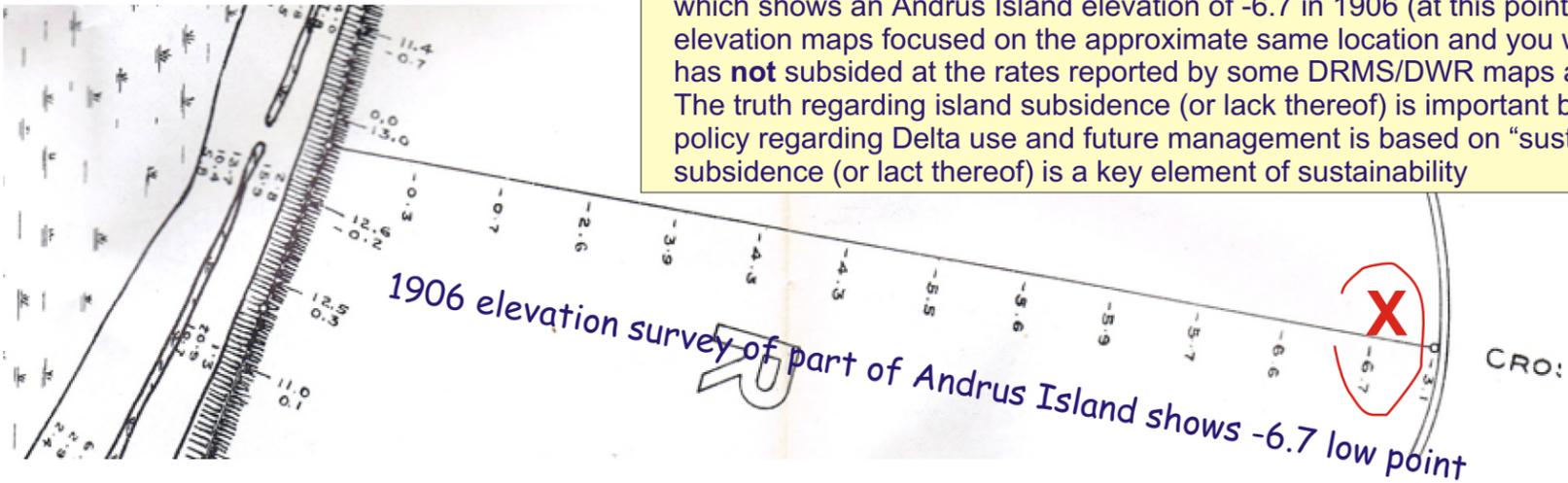


**COMPARING ELEVATION MAPS
1906 TO 2007 Focus: Andrus Island**

The first graphic below is a section of sheet 9 of the 1906 official survey of the San Joaquin River for a report to the U.S. Congress. The red "x" was added to show location on Andrus Island on other maps below and on page 2. Compare this map, which shows an Andrus Island elevation of -6.7 in 1906 (at this point) with other elevation maps focused on the approximate same location and you will find this area has **not** subsided at the rates reported by some DRMS/DWR maps and studies. The truth regarding island subsidence (or lack thereof) is important because public policy regarding Delta use and future management is based on "sustainability" and subsidence (or lack thereof) is a key element of sustainability



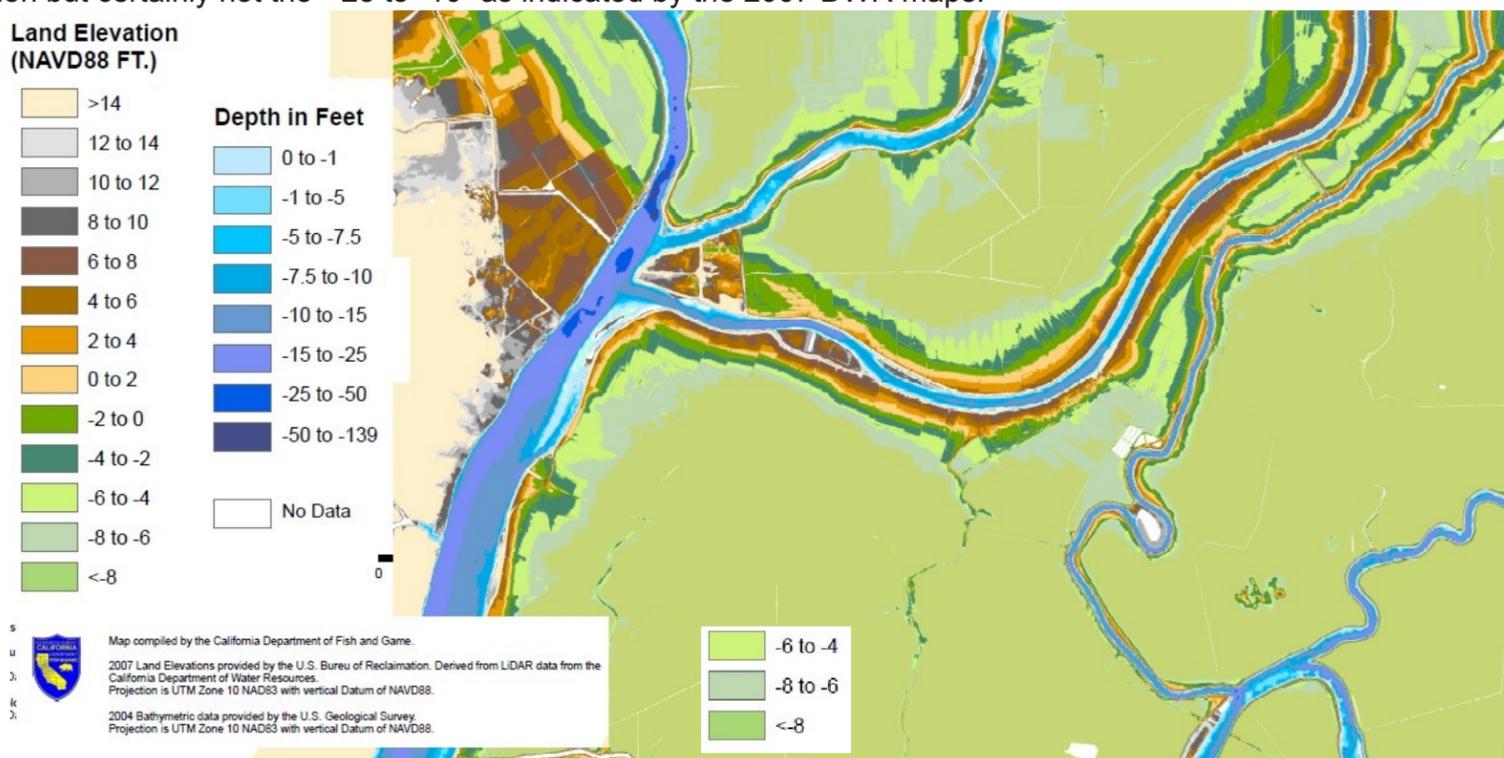
A section of this 2001 Elevation Map shows the same area of Andrus Island as -5 to -10 feet, or Less. At most, this shows an elevation change from 1906 to 2001 of -3.3 at the lowest point.



Here is an enlargement of the 2007 DWR/URS map which most observers would assume indicates this area of Andrus Island is -25 to -10 feet, which does not match any other elevation records found so far, and in fact inflates the elevation data a minimum of -2 feet and a maximum of -17 feet. See Attachment called 2007_DWR_Subsidence.pdf for full map

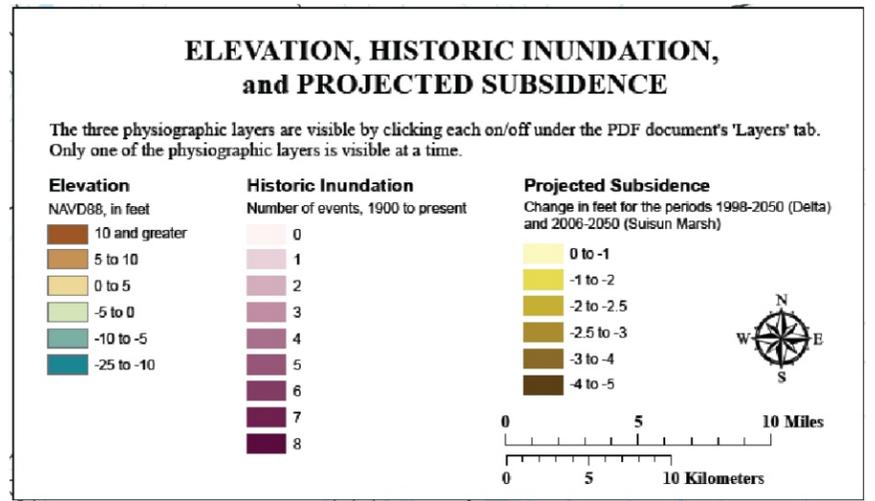


This 2007 is a section of the Fish & Game Yolo Bypass elevation map, which used increments of 2 feet. It did not cover the Andrus Island focus point, but comparison of land levels on Grand and Brannen would indicate -8 to -4 elevation but certainly not the "-25 to -10" as indicated by the 2007 DWR maps!

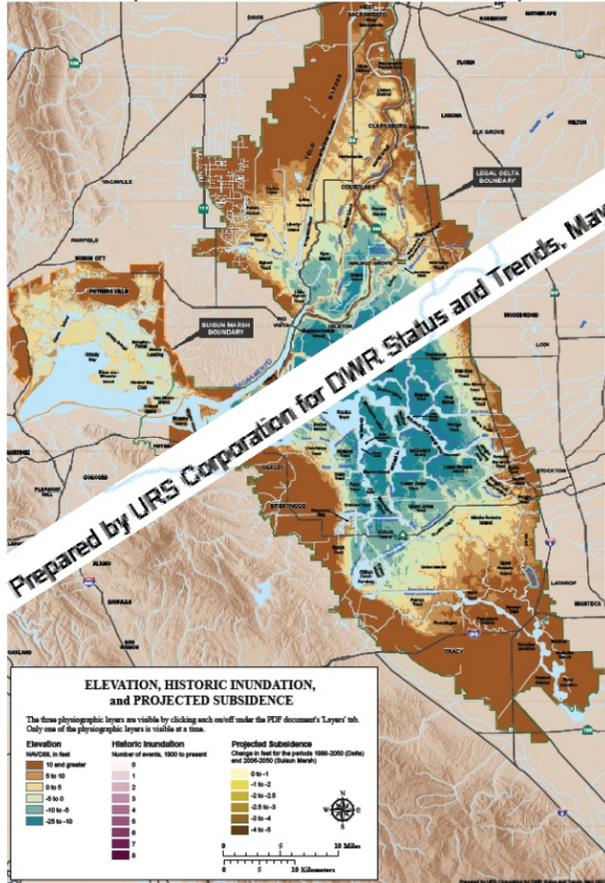


HOW MANY WAYS CAN A MAP BE WRONG?

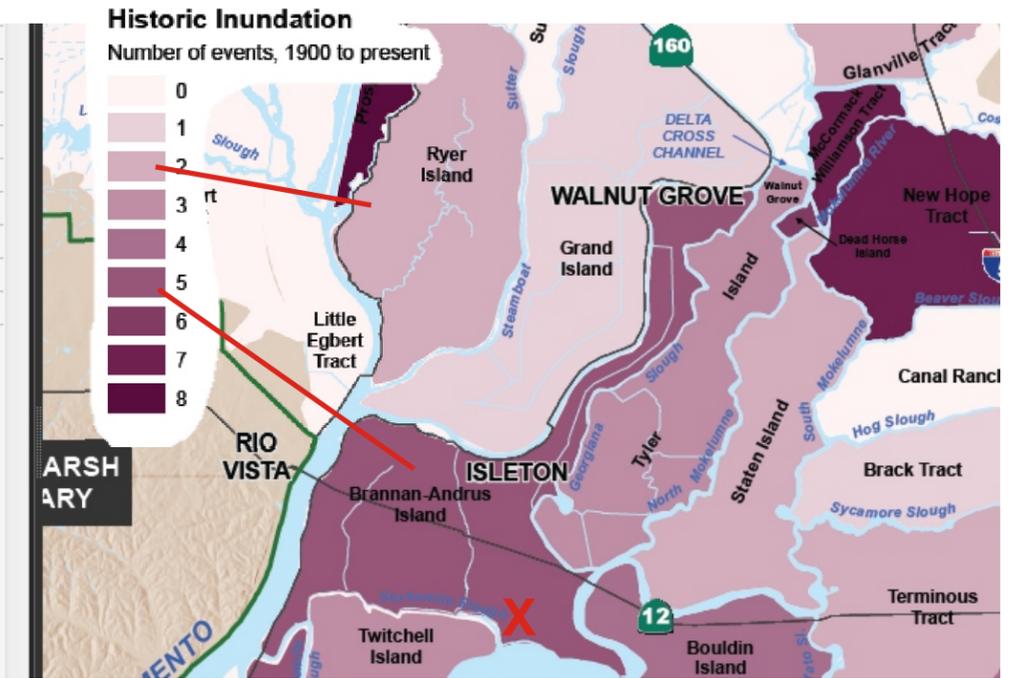
The DWR 2007 Elevation, Historic Inundation and Projected Subsidence map (small size below) reports WRONG data for historic inundation and elevations, as shown the previous sheet. It also uses confusing map key increments for no known or explained reason. It is an interactive map found online that *looks* impressive but uses incorrect underlying data to produce the various maps depending on the selections made by the viewer. (Full map in pdf provided as separate attachment, called *2007_DWR_subsidence.pdf*). Here are three examples of how the data and map are wrong:



1 URS combines the records of 3 islands and reports it as a single island, thereby inflating the actual totals of all 3 islands. This is just one example.



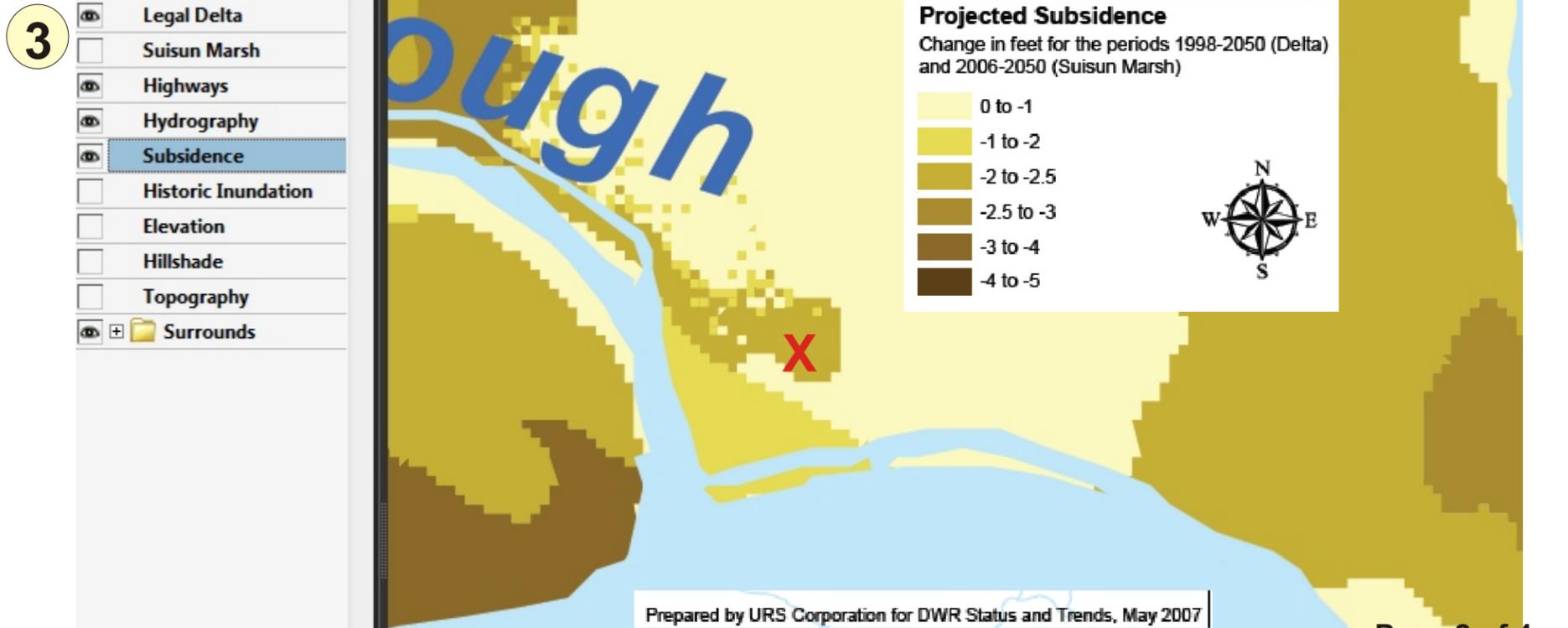
- Suisun Marsh
- Highways
- Hydrography
- Subsidence
- Historic Inundation
- Elevation
- Hillshade
- Topography
- Surrounds



The map key uses increments of 5 feet, then jumps to 15 foot increment, and based on other elevation maps its not correct anyway. The data is available in increments of 1-2 feet or less. Why not provide that data?



When you ask for subsidence information, you get the "projection" for future subsidence, not the facts. However, the subsidence information for each island is known. Why isn't this provided and why is the map misleading?



Comment:

Reference information listed with the 2007 DWR/URS map which displays incorrect data for Delta Island Inundation History and current elevations. The logical assumption is that if the underlying data regarding historic flooding is wrong, and the underlying data regarding elevation changes over time is wrong, then most likely the projected subsidence map is also wrong. In any case, Mr. Dudas of DWR is aware of the data inconsistencies regarding island inundation histories, at a minimum, and says the data will be corrected and posted at DWR website.

**METADATA FOR ELEVATION, HISTORIC INUNDATION,
AND PROJECTED SUBSIDENCE**

Elevation

Info: Elevation in the Delta-Suisun region
Source: IFSAR (NAVD 88, feet, March 2002) for the Delta and LIDAR (NAVD88, feet, September and October 2005) for Suisun Marsh
Date: 2002/2005
Contact: Sarah Lewis, URS Corporation
sarah_lewis@urscorp.com

Historic Inundation

Info: Historic inundation of islands in the Delta region 1900 - Present
Source: URS Corporation 2006. Island inundation data provided by Joel Dudas of DWR to URS Corp (12 Jun 2006).
Date: 02/2007
Contact: Sarah Lewis, URS Corporation
sarah_lewis@urscorp.com

Projected Subsidence

Info: Delta region projected subsidence 1998-2050 and Suisun Marsh projected subsidence 2006-2050
Source: Supplied to URS by Dave Leighton of Hydrofocus (Jan 2007).
Date: 2007
Contact: Sarah Lewis, URS Corporation
sarah_lewis@urscorp.com

Legal Delta

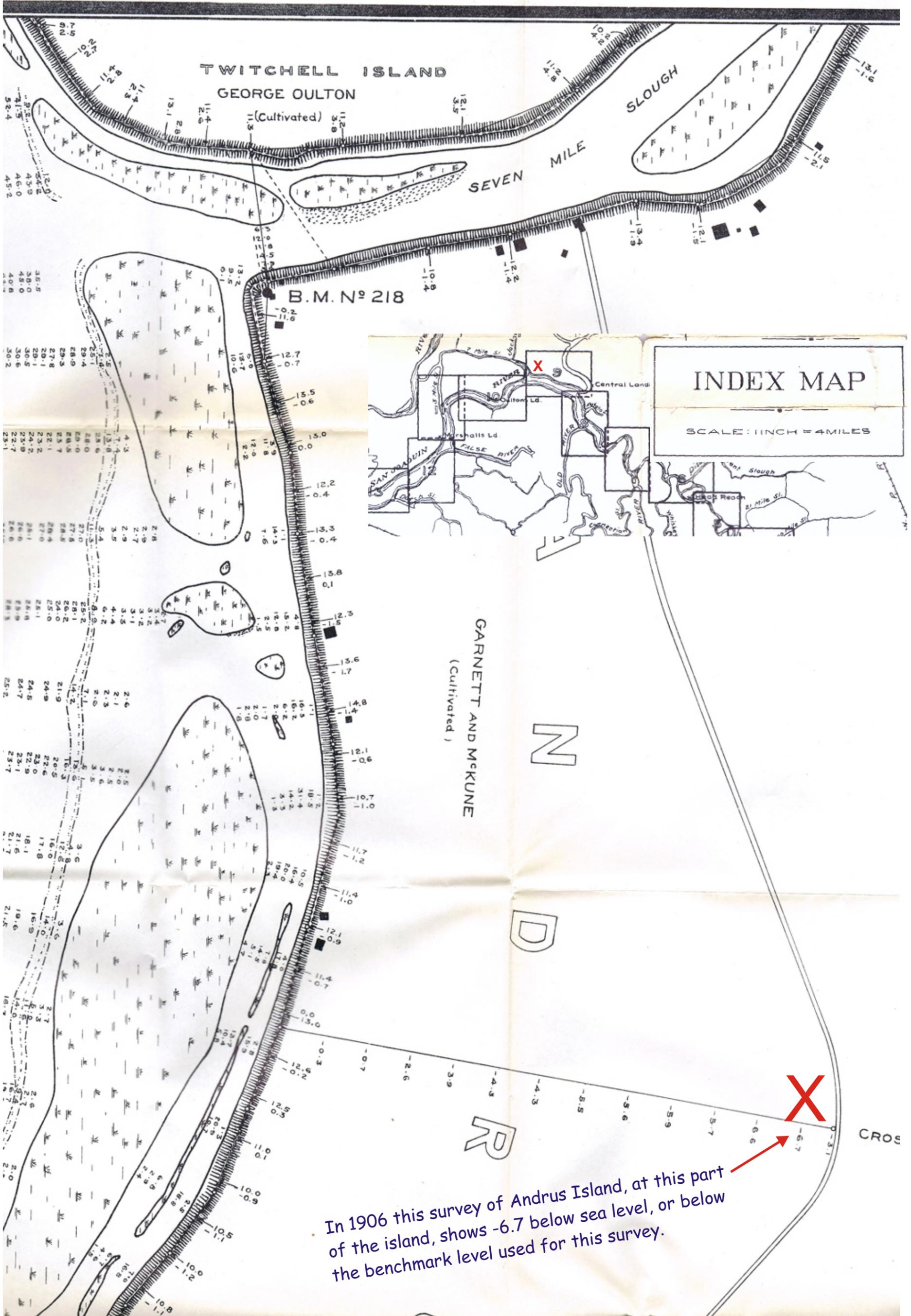
Info: Legal Delta boundary version 2002.4 - delineates the legal Delta established under the Delta Protection Act (Section 12220 of the Water Code) passed in 1959.
Source: DWR Delta Levees Program.
Date: 04/2002
Contact: Joel Dudas, DWR

Status and Trends of Delta-Suisun Services

Suisun Marsh

Info: Suisun Marsh boundary
Source: "Suisun Marsh Protection Plan Map" published by San Francisco Bay Conservation and Development Commission in December of 1976.
Date: Paper - 1976; Digital - 2006
Contact: Amy Keeley, URS Corporation
amy_keeley@urscorp.com

Scan of one section of sheet 9 of the 1908 survey of the San Joaquin River, including island elevations. This full size scan is provided as an example of the information that is available to DWR and scientists; so why not provide the data to the public so others can assess for themselves the facts regarding Delta island subsidence?



In 1906 this survey of Andrus Island, at this part of the island, shows -6.7 below sea level, or below the benchmark level used for this survey.