

State of California
The Resources Agency

Department of Water Resources

OFFICE MEMO

TO: Ruth Lambert, DWR
Fred Bachman, DWR

DATE: 4-6-93

FROM: Michael Norris
DWR Central District
(916) 445-6518SUBJECT: Update of Figure
8 on page 14 of the
August of 1987
Sacramento-San Joaquin
Delta Atlas

As per a memo sent to Mary Johannis on March 26, 1993, the Delta Atlas is being revised by the Delta Planning Branch. It appears that a memo I sent to Ruth Lambert on 12-20-91 was never incorporated into the revision. I prepared a "revised Figure 8" that showed all the additional levees that are now NFIP certified for the 100-year flood. Ruth Lambert subsequently informed me that I had missed the Walnut Grove area (Reclamation District 554). In the time that has passed, Bishop Tract has also certified their levees to meet FEMA standards and the area was removed from the floodplain through the Letter of Map Revision (LOMR) process. Enclosed is a further update to Figure 8. Please ensure that this one makes it to the final printing of the revised Delta Atlas. Below are listed the additional levees from what was originally portrayed on Figure 8 that are now certified by the National Flood Insurance Program (NFIP) to meet the FEMA criteria.

<u>Area</u>	<u>Community</u>	<u>FIRM No(s)</u>	<u>LOMR</u>
Brannan Is.	Sacramento Co	680,685	none
Sargent Barnhart	San Joaquin Co	430	2-21-90
Quail Lake	Stockton	15	2-21-90
RD 1614	San Joaquin Co	430	8-14-91
RD 1614	Stockton	15	8-14-91
RD 828	Stockton	15,20	8-14-91
Rough and Ready Is.	Stockton	15,30	none
RD 17	San Joaquin Co	440,445,580, 585,590,595	2-9-90
RD 2089	San Joaquin Co	560,570	none
Del Rio	San Joaquin Co	145	8-7-90
RD 554 (Walnut Grove)	Sacramento Co	420,440,560,580	9-30-88 none
RD 2042 (Bishop Tract)	San Joaquin Co	260,270,280,290	12-28-92

In addition, I wish to comment on the enclosed figure entitled National Flood Insurance Program Approved Levees. I do not feel that the descriptive paragraph conveys the correct information to the reader. The paragraph should convey some information on what is required for a levee to meet the NFIP requirements. I suggest you revise the paragraph to read: "Some levee systems within the delta are certified to meet the minimum requirements for

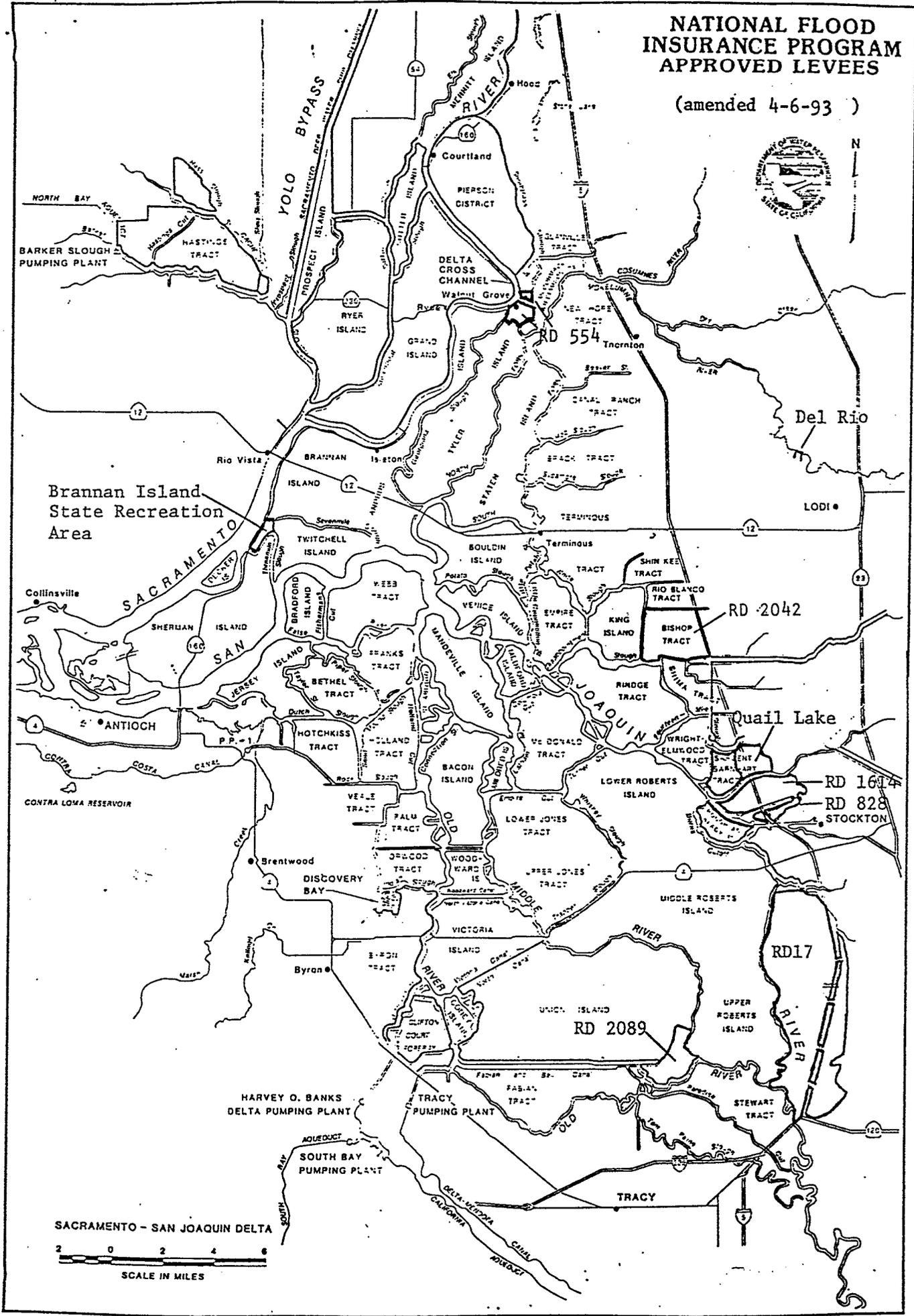
providing 100-year flood protection. These levee systems are shown on Figure 8. The requirements for NFIP certification are set forth in the federal regulations in 44 CFR 65.10. Among these requirements are three feet of freeboard (increasing to four feet at bridge crossings) and evidence that an adequate design and operation and maintenance system is in place and engineering analyses of such things as embankment protection, foundation stability, settlement, and interior drainage. After all requirements are met, a submittal of data and a request for certification must be made to the Federal Emergency Management Agency (FEMA) by a registered civil engineer. In lieu of meeting all the structural requirements, FEMA will accept another federal agency's certification of a levee system if that agency has responsibility for levee design. These agencies are typically the Soil Conservation Service and the U.S. Army Corps of Engineers."

Lastly, I noticed that the photos on the figure entitled National Flood Insurance Program Approved Levees are for levee projects near the City of Sacramento. Figure 8 only goes as far north as the community of Hood along the Sacramento River. I suggest you show some photos of levee systems on Figure 8 such as Discovery Bay, Sargent Barnhart, and Bishop Tract.

figure8.mn

NATIONAL FLOOD INSURANCE PROGRAM APPROVED LEVEES

(amended 4-6-93)



SACRAMENTO
DELTA
SAN JOAQUIN
ATLAS



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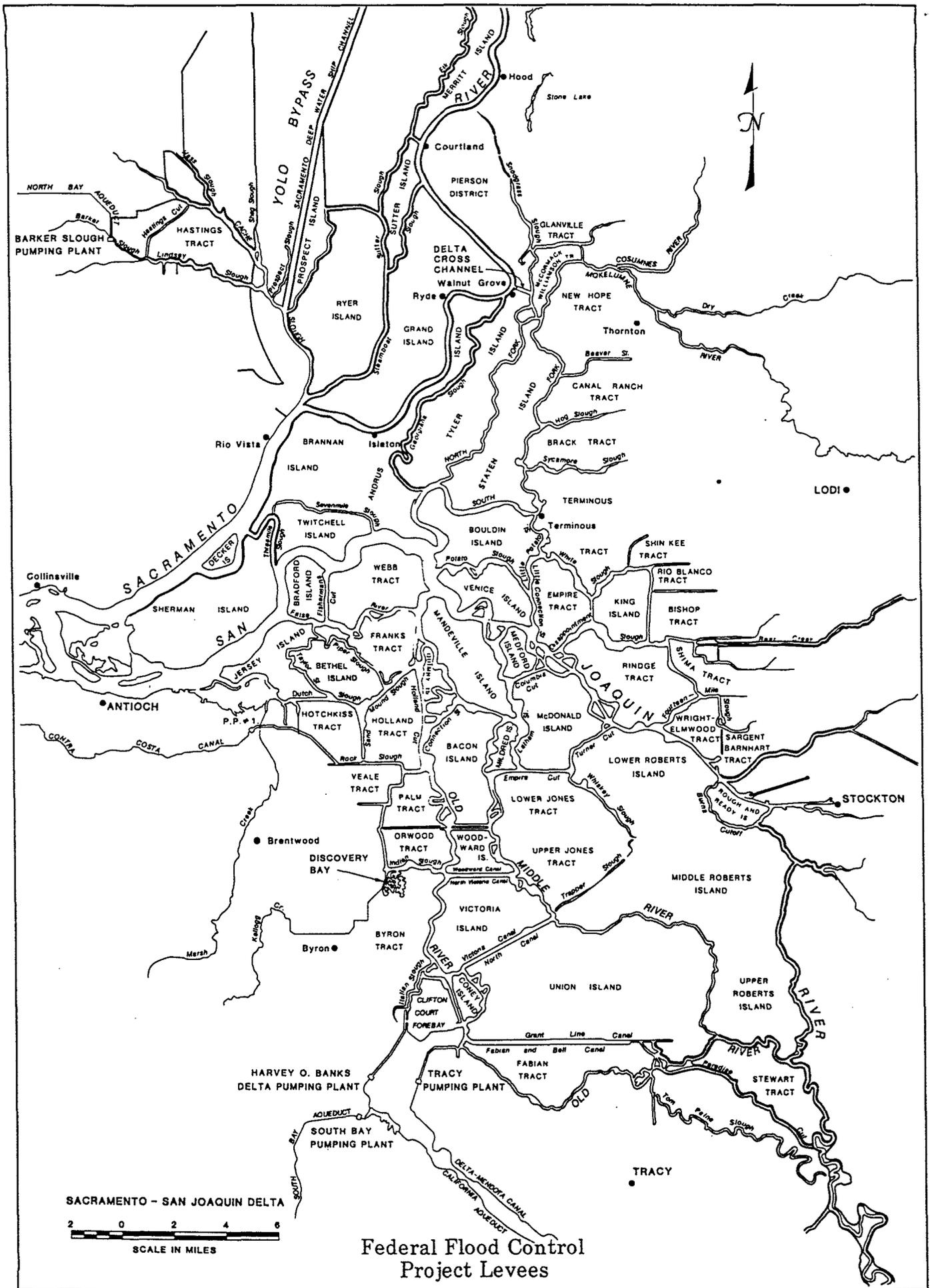
Federal Flood Control Project Levees

In 1880, the State Engineer designed a flood control plan for the Sacramento Valley. This plan included a system of levees and bypasses for transporting floodwaters away from protected areas. In 1917 Congress authorized the Sacramento Flood Control Project, which was completed by the U. S. Army Corps

of Engineers in 1960. Storage reservoirs and similar protective measures have been provided on the San Joaquin River. As shown on the map at left, these systems, denoted "project levees" to distinguish them from other levees, provide effective flood control for a portion of the Delta.



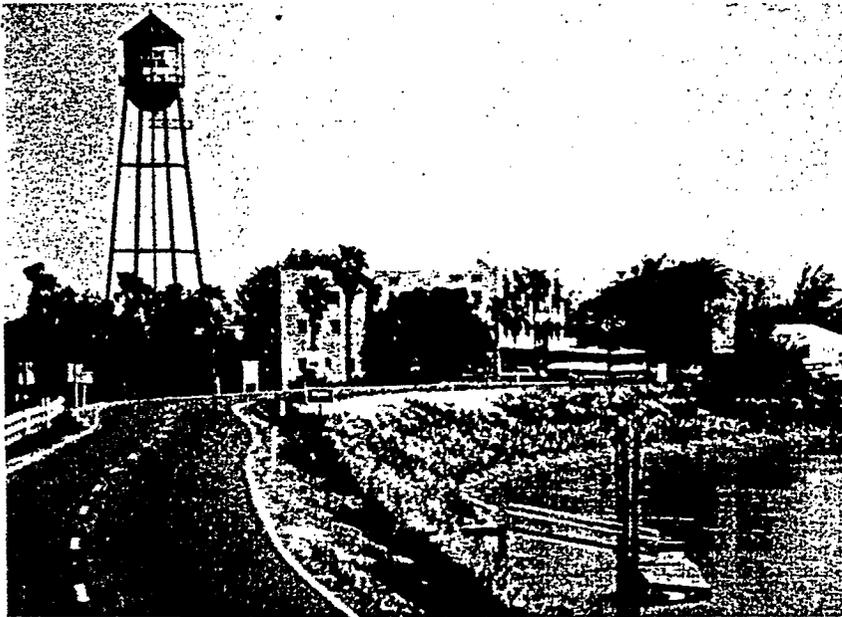
Experimental levee maintenance programs are being conducted at various locations in the Delta to determine better ways to protect the environment while maintaining proper safety for flood control. This photo shows a project to develop a berm that will provide for environmentally important shaded aquatic habitat.



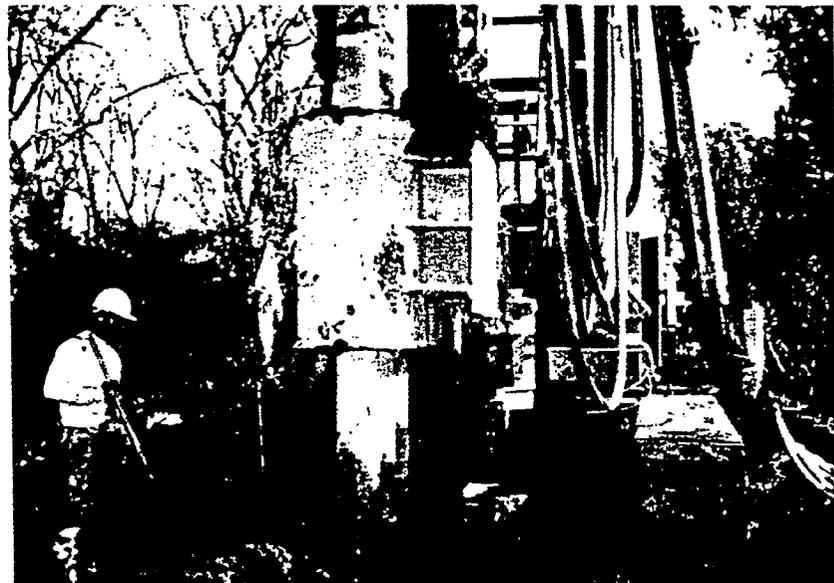
National Flood Insurance Program Approved Levees

Some levee systems within the Delta are certified to meet the minimum requirements for providing 100-year flood protection. This certification entitles property owners within the area protected by the levee system to purchase flood insurance at reduced rates

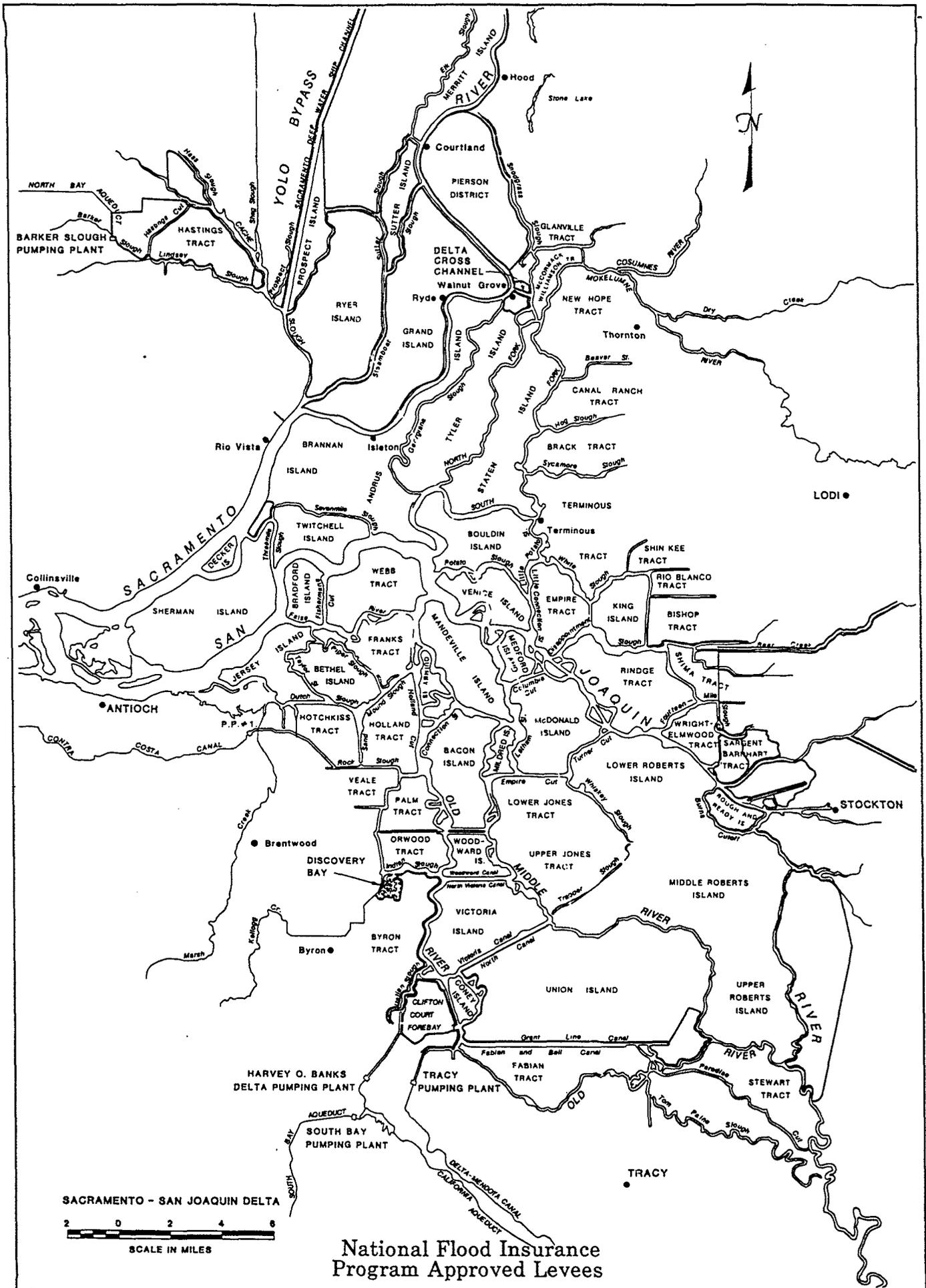
through the National Flood Insurance Program. The community of Walnut Grove, which was threatened by the flooding on Tyler Island in 1986, is now surrounded by an improved levee system which was recently certified by the NFIP.



The town of Ryde is one of many communities protected from flooding by project levees.



The U.S. Army Corps of Engineers working to increase the strength of project levees along the Sacramento River.



National Flood Insurance
Program Approved Levees