

**MEMORANDUM OF UNDERSTANDING
BETWEEN
THE STATE OF CALIFORNIA
EMERGENCY MANAGEMENT AGENCY
AND
THE U.S. DEPARTMENT OF HOMELAND SECURITY'S
FEDERAL EMERGENCY MANAGEMENT AGENCY**

**REGARDING CRITERIA FOR PUBLIC ASSISTANCE ELIGIBILITY
FOR RECLAMATION DISTRICTS IN THE
SACRAMENTO/SAN JOAQUIN LEGAL DELTA**

I. PARTIES

The Parties to this Memorandum of Agreement (MOU) are the State of California Emergency Management Agency (Cal EMA) and the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA).

II. PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to clarify for the Parties, the requirements for FEMA Public Assistance funding for emergency flood fighting, emergency repair, permanent restoration, and/or replacement of eligible damaged Non-Project Levees within the Reclamation Districts (Districts) in the Sacramento/San Joaquin Legal Delta (Legal Delta). "Districts" refers to special districts that are formed pursuant to the Reclamation District Act in the California Water Code Section 50000 et seq. This MOU clarifies disaster assistance eligibility requirements for Non-Project Levees that are the responsibility of Districts in the Legal Delta under major disasters and emergencies declared after the date this MOU is executed. This MOU applies to facilities owned by the Districts that are levees or their facilities directly linked to levees. Eligibility criteria for other facilities owned by the Districts but not directly related to the levees will be addressed as any other.

The minimum criteria set forth in this MOU are solely for the purpose of meeting FEMA Public Assistance eligibility. The minimum criteria do not constitute "FEMA Standards or design" as FEMA does not exercise specific regulatory authority over the Districts, nor do the criteria herein meet Public Law 84-99 or any other federal criteria applicable to facilities that provide protection against flood. The criteria stated herein do not supersede any provisions of the National Flood Insurance Act of 1968 (P.L. 90-488); the Flood Disaster Protection Act of 1973 (PL 93-234); or Executive Order 11988, Floodplain Management.

III. AUTHORITY

Sections 306 (a) and 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. Sections 5149 and 5172, respectively.

IV. BACKGROUND

- A. Following the joint approval of the FEMA-State (State of California) Agreement for FEMA-677-DR-CA (1983), an Amendment No.1 was necessary to add a portion of the Legal Delta to the Declaration. In addition, the Amendment established specific responsibilities and actions for FEMA, the State, and the affected Districts. One of the primary requirements of this Amendment was the development of a Flood Hazard Mitigation Plan (FHMP) for the Legal Delta by the State. This FHMP, dated September 15, 1983, was submitted to FEMA and approved.
- B. Following flooding that resulted in Presidential Declaration FEMA-758-DR-CA (1986), FEMA requested a status report on the progress of the FHMP work. The report showed little progress had been made on the implementation of the required work; furthermore, the FHMP did not (1) specify an implementation plan, (2) specify a time frame for completion of the work, or (3) specify that the work was to protect against a 100-year flood. FEMA issued a Mission Assignment to the U.S. Army Corps of Engineers (USACE) to develop the elevations for a flood of that magnitude for the Legal Delta. Following the completion of those studies, Amendment No. 5 to the FEMA-State Agreement for Disaster FEMA-758-DR was signed to address issues of the implementation plan, a time frame for completion, and requirements for levee geometry (see Attachment 1). The Amendment was only applicable to certain Districts.
- C. Since Amendment No. 5 was signed, it has become apparent that additional clarification of Public Assistance eligibility is required. The Districts manage and control Legal Delta levees that are a major collection point for potable water supplied to approximately two-thirds of the State's population. In addition, the Legal Delta and its levees are of vital concern to agricultural, transportation, urban, industrial, environmental, and recreational interests. For these reasons, the uniform eligibility criteria provided in Article VI applies solely to the District Non-Project Levees in the Legal Delta.

V. LEGAL DELTA AREA AND TYPES OF LEVEES

The area defined as the Legal Delta is shown in Attachment 2. The Districts within that boundary have levees that generally fall into one of two categories. In some instances, a District may have a combination of Project Levees and Non-Project Levees.

- A. "Project Levees." These levees are within the USACE Rehabilitation and Inspection Program (RIP), as authorized by P.L. 84-99. Attachment 3 is a map showing the Project Levees. Such levees generally are eligible for FEMA Public Assistance only for the purpose of flood-fighting and debris removal following a presidentially declared disaster.

Project levees are integral to the functioning of the legal delta system. This MOU does not supersede or suggest any additional eligibility criteria for project levees.

- B. “Non-Project Levees.” Levees not under the USACE RIP and in compliance with requirements as set forth herein, are eligible for FEMA Public Assistance. These levees are shown in Attachment 4.

VI. CRITERIA FOR FEMA PUBLIC ASSISTANCE ELIGIBILITY

A. General

The following eligibility criteria shall be utilized for all Districts requesting FEMA Public Assistance for future disaster events after the date of signature of the MOU by Cal EMA and FEMA under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288 amended, or subsequent applicable Federal Law:

B. Levee Geometry

1. The levee crown elevations must be at least one foot above the elevation of a flood expected to occur on the average of once every 100 years, and must meet levee cross section requirements as set forth in this section.
2. The minimum levee crown width shall be at least 16 feet. On the waterside of the levee, the slope shall be at least 1.5 feet horizontal to 1 foot vertical, with revetment in areas where erosion has been a problem. On the landside of the levee, the slope shall be at least 2 feet horizontal to 1 foot vertical, with flatter slopes in the lower portion of the levee in areas where soil sloughing and/or seepage have previously been identified.
3. Alternative engineering or design methods may be employed to meet the criteria set forth in this section, provided that the District furnish such engineering and design data that clearly demonstrates such methods meet or exceed the minimum level of protection provided for in this section. FEMA will evaluate such methods on a case-by-case basis to ensure the level of protection is met.

C. Profile/Cross Section Criteria

1. Each District must have available profiles and cross sections prepared no more than five years prior to the disaster event. If the information on these documents shows any discrepancies, the District must provide to Cal EMA updated profiles and cross sections for the area where the discrepancies were noted or a maintenance plan as set forth in Section VI D. Failure to address areas of non-compliance may result in a determination of ineligibility.

2. The 100-year stage-frequency elevation and the one foot of freeboard shall be clearly delineated on the profiles. The datum to be used in preparing the profiles and cross sections shall be Mean Sea Level (NVGD), 1988.
3. Field work and preparation of profiles and cross sections must be conducted (and documents certified) by a licensed surveyor.
4. Profiles of the existing levee grade shall be made with elevations shown at a minimum of every 1000 feet, unless there are low points in elevations between intervals. If that occurs, cross section profiles at intervals frequent enough to identify each low point must be taken. Obvious deviations include but are not limited to erosion along levee slopes, infrastructure encroachment into levee slopes, and areas of subsidence. The profile shall be taken on the entire length of all Non-Project levees within the District.

D. Annual Maintenance Plan

Non-Project levees belonging to the Districts shall meet the current standard set by the state or the criteria set forth in this section, whichever provides a greater level of flood protection, to be eligible for FEMA Public Assistance. The parties acknowledge that there may be instances where a District may be deficient in meeting these criteria. If one or more of the criteria is not met, the respective District shall submit an Annual Maintenance Plan to Cal EMA that fully describes any deficiencies, including a strategy and schedule for correcting said deficiencies based on risk. Cal EMA will review the plans to ensure all required elements have been addressed.

District Annual Maintenance Plans shall include, at a minimum:

- The regular annual maintenance and inspection schedule and frequency.
- Work items and standards to be employed for each scheduled cycle.
- The method used to identify, prioritize, and carry out maintenance efforts.
- Maintenance and repairs that would warrant immediate corrective action and the corresponding action.
- The annual maintenance budget.

VII. Cal EMA RESPONSIBILITIES

- A. Cal EMA will be responsible for providing the Districts with the criteria set forth in Article VI above and ensuring Districts are aware of the following responsibilities:
 - 1) In the event a District submits an application for FEMA Public Assistance, each District is responsible for knowing the requirements for, and ensuring compliance with, eligibility criteria set forth in Section VI of this document.

- 2) The District is responsible for preparing and having available profile and cross-section information, as set forth in Section VI C.
 - 3) The District is responsible for developing an annual maintenance plan to address any deficiencies, including an aggressive strategy and a schedule for correcting those deficiencies, as per Section VI D.
 - 4) The District is responsible for notifying Cal EMA of any participation in the USACE RIP.
 - 5) The District is responsible for knowing FEMA and State requirements for requesting Public Assistance, documentation requirements, time lines and deadlines, and applicable Federal contracting requirements. The District is also responsible for informing any engineering firms and/or construction firms of time constraints and deadlines, and for ensuring that any disaster-related work is done within required time frames.
 - 6) The District will agree to indemnify and hold harmless the United States and the State of California against any and all liability, claims, suits, losses, costs, and legal fees caused by, arising out of, or resulting from any negligent act or omission related to the performance of work to meet the standards and criteria set forth herein.
- B. Cal EMA will ensure that specific information provided by FEMA that may impact the eligibility of, or funding for, disaster-related damage in the Legal Delta is provided to the Districts in a timely manner.
- C. Cal EMA will review District Annual Maintenance Plans to ensure compliance with Section VI D and maintain a list of each District's plan status.
- D. Cal EMA will ensure that consideration of eligibility for emergency repairs and emergency management work should be based on whether a District has demonstrated a good faith effort to substantially comply with eligibility criteria set forth in Section VI of this document.

VIII. FEMA RESPONSIBILITIES

- A. FEMA will work with Cal EMA to ensure timely submittal of information that could affect applicable program criteria or eligibility status for the Legal Delta.
- B. FEMA will inform the State of any issues that may arise related to disaster funding for reported damage to any eligible District levees in the Legal Delta.
- C. FEMA will work with Cal EMA to maintain the District Annual Maintenance Plan list and use the list to establish the eligibility of Reclamation Districts.

IX. POINTS OF CONTACT

William Roche, Infrastructure Branch Chief
U.S. Department of Homeland Security, Federal Emergency Management Agency
Disaster Assistance Division, Infrastructure Branch
1111 Broadway, Suite 1200
Oakland, CA 94607-4052
Email: William.Roche@dhs.gov
Phone: 510-627-7077

Michael Baldwin, State Public Assistance Officer
California Emergency Management Agency
Recovery Division, Public Assistance
3650 Schriever Avenue
Mather, CA 95655
Email: Michael.Baldwin@calema.ca.gov
Phone: 916-845-8203

X. MODIFICATION

This MOU may be modified by mutual written consent of the Parties. The party desiring modification or amendment of this MOU should explain the basis for the need to modify the MOU.

XI. EFFECTIVE DATE AND TERMINATION

This MOU is effective the date of the last signature below, and shall remain in effect until terminated upon agreement of the Parties. Either party can terminate this MOU by providing forty-five (45) days written notice of its intent to terminate to the non-terminating party.

XII. APPROVALS

The following officials are authorized to sign this MOU expressing their respective party's intent to agree to all terms above.

XIII. FEMA AND Cal EMA CONCURRENCE

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Understanding as of the day and year signed.

California Emergency Management Agency

By: 

Secretary

Date: 2/16/10

By: Tom M

Date: 1/29/10

Director, Office of Statewide Operations

DHS/Federal Emergency Management Agency

By: Nancy Ward

Date: 2/24/10

Regional Administrator

By: T. B.

Date: 2/25/10

for Director, Disaster Assistance Division

ATTACHMENTS:

- Attachment 1. Amendment #5 to the FEMA/State Agreement for FEMA-758-DR
- Attachment 2. Map of Sacramento/San Joaquin Legal Delta
- Attachment 3. Map of Project Levees
- Attachment 4. Map of Non-Project Levees

Attachment 1

Amendment #5 to the FEMA/State
Agreement for FEMA-758-DR



Federal Emergency Management Agency

Region IX Building 105
Presidio of San Francisco, California 94129

April 28, 1987

The Honorable George Deukmejian
Governor, State of California
State Capitol
Sacramento, California 95814

Dear Governor Deukmejian:

Subject: Amendment #5, FEMA/State Agreement
FEMA-758-DR-CA

This letter is Amendment #5 to the FEMA/State Agreement on the subject major disaster declaration which was executed on behalf of the State of California dated February 25, 1986. This Agreement is amended as follows:

1. Paragraph 10 of the original Agreement is changed to include:

Add: The intent of this section of the the Federal/State Agreement is to establish the requirements for the approval of Damage Survey Reports (DSRs) under major disaster declaration FEMA-758-DR-CA, and to define eligibility criteria for reclamation districts requesting Federal disaster assistance in the event of future declarations under Public law 93-288 (PL 93-288) or subsequent applicable Federal law. The requirements contained within this section are applicable to districts requesting assistance under major disaster declaration FEMA-758-DR, and to those districts that received assistance under major disaster declarations FEMA-633-DR, FEMA-651-DR, FEMA-669-DR, FEMA-677-DR, and emergency declaration FEMA-3078-EM. This section applies to those reclamation districts, referenced above, located within the Sacramento/San Joaquin Delta, and RD 1607 (Van Sickle Island) and RD 2122 (Winter Island). The specific requirements are as follows:

A. IMPLEMENTATION PLAN

The aforementioned districts must submit an Implementation Plan, to be approved by FEMA, which upgrades their levees to the standards of the Short-Term Levee Rehabilitation Plan of September 15, 1983, the FEMA required Flood Hazard Mitigation Plan for the Sacramento/San Joaquin Delta (HMP). The implementation plan must be submitted by November 1, 1987, and must include:

1. Schedule
 - a. Districts must establish a five-year time frame to upgrade levees to the Short-Term HMP. The starting point for the five-year program is September 10, 1986, and all required short-term mitigation must be completed by September 10, 1991.

- b. Exceptions to the implementation schedule may be granted by FEMA, if a district is restricted in the placement of material because of sub-soil instability or other geologic conditions affecting stability. The implementation plan may also be adjusted if a district sustains significant additional damage as a result of future disaster events.
- c. The implementation schedule must identify the type, extent and location of HMP work (i.e., raising levee crown, rock placement, etc.) to be accomplished each year. The estimated cost for such work must be identified by station.
- d. The implementation schedule must include the estimated cost of FEMA required HMP work, per year, over the five-year period. The estimated cost must be supported by calculations from cross sections.
- e. A district must immediately notify FEMA, through the Office of Emergency Services (OES), if the FEMA approved schedule cannot be met. Within 30 days of the notice of non-compliance, FEMA will meet and confer jointly with district, OES, and Department of Water Resources (DWR) representatives to develop appropriate remedial action. Districts must provide documentary proof to justify any exceptions to the schedule. Failure to comply with the approved schedule, without justification acceptable to FEMA (see b. above) will result in the withdrawal of eligible disaster assistance funding, the issuance of a Bill for Collection for advanced or reimbursed funding provided under major disaster declaration FEMA-758-DR, and a determination by FEMA of ineligibility for future disaster assistance.

2. Profiles

Profiles submitted by districts must include:

- a. Existing levee profiles (1983 or later) at 1,000-foot intervals.
- b. The 100-year frequency elevations (waterside) at 1,000-foot intervals, using the 1982 Sacramento/San Joaquin Delta USACE Stage Frequency Study (Revised 1986).

3. Cross Sections

Cross Sections submitted by districts must include:

- a. Existing levee cross sections (1983 or later) at 1,000-foot intervals. Cross sections must be provided at more frequent intervals if 1,000-foot intervals do not show typical cross section. For those reclamation districts that have already submitted their profiles/cross sections to FEMA, a resubmission of more frequent than 1,000 foot intervals is not required.

- b. The HMP standard cross sections superimposed on the existing cross sections.
 - c. The minimum levee crown width shall be at least 16 feet.
 - 1. Waterside slopes shall be at least 1.5 horizontal to 1 vertical, with revetment in areas where erosion has been a problem.
 - 2. Landslide slopes shall be at least 2 horizontal to 1 vertical, with flatter slopes in the lower portion of the levee in areas where soil stability and seepage have been a problem.
 - 3. The levee shall have all-weather access roads.
 - d. Where applicable, cross sections must indicate the FEMA-758 disaster-related damage, in order to separate those damages from the HMP work to be accomplished. Disaster related damages will be calculated from cross sections or other acceptable site specific documentation.
4. As-Built Drawings
- a. As-built drawings must be submitted annually until work completion. The drawings must include levee profiles at 500-foot intervals. Typical cross sections at 500-foot intervals must show the type of work accomplished. Cross sections and profiles must be provided at more frequent intervals if 500-foot intervals do not show typical cross sections.

B. PROJECT APPLICATION APPROVAL

Project applications will be evaluated by FEMA, and approved or denied on a district by district basis. Districts must complete the following, in order for FEMA to remove DSRs from suspension, approve project applications and obligate funds under major disaster declaration FEMA-758-DR-CA and future major disaster declarations.

- 1. District Actions
 - a. A district must submit to FEMA, through OES, the information required and outlined by FEMA under Section A above. If the required information is not submitted, FEMA will inform the Governor's Authorized Representative of what must be submitted by the district, before FEMA will concur with the district's Implementation Plan.
 - b. A district must formally adopt a resolution committing itself to accomplish the levee mitigation and improvement work according to the FEMA approved Implementation Plan, and to maintain the levee to FEMA approved HMP standard.

- c. A district must submit as-built drawings after completion of disaster-related work. The drawings must include typical cross sections at 500-foot intervals. Typical cross sections must be provided at more frequent intervals if 500-foot intervals do not show typical sections, especially in those areas where disaster related damage occurred.

2. Supplemental Damage Survey Reports

- a. A district must notify FEMA, through OES, of anticipated cost overruns associated with approved permanent work, and prior to undertaking projects not identified on previously approved Damage Survey Reports (DSRs). A district must notify OES of emergency work cost overruns within five days after receiving the approved project application. Without advance notification, FEMA may not approve additional funding for cost overruns or supplemental work.
- b. To support requests for consideration of cost overruns and/or additional work, a district must provide substantial supporting documentation, including stationing and quantities. Insufficiently documented costs will be ineligible for reimbursement.

3. Funding (Letter of Credit)

- a. Reimbursement is limited to costs incurred to date, including billings on hand which require payment, and those expenditures expected to be incurred within the next four days of filing the claim for reimbursement. FEMA progress payments are limited to 75% of the FEMA 75% share of eligible costs, pending final inspection findings. Final payments to districts may be adjusted by FEMA after audit.
- b. FEMA will only fund costs for engineering and surveys applicable to disaster-related damage repairs. FEMA will not fund those costs for engineering and surveys that are necessary to accomplish the hazard mitigation requirements indicated above.

C. RESPONSIBILITIES

1. District Responsibility

- a. A district is solely responsible for the work that is accomplished as a result of the Implementation Plan requirements. A district is also responsible for the maintenance of the levees to the FEMA approved HMP standard. A district must acquire the necessary data, engineering, surveys, and geotechnical information to ensure that the levee upgrading work does not result in unusual or unexpected subsidence of the levee, breaching of the levee, or subsequent damage to improved private and/or public facilities.

- b. A district will submit to and assist in an annual Delta levee inspection program, and will prepare a plan for annual maintenance and rehabilitation work, which will include information pertaining to achievement of objectives outlined in the Flood Hazard Mitigation Plan, Sacramento/San Joaquin Delta, for disaster declaration FEMA-758-DR-CA. Districts must submit this plan to DWR, Central District, by November 1 of each year, beginning November 1987.
- c. A district will complete its annual levee maintenance by November 1 of each year.
- d. A district will support a long-term comprehensive Federal/state/local flood control project that includes consideration of rehabilitating all Delta nonproject levees, thereby addressing the levee integrity issue, as well as issues such as wetlands, access to public lands, water quality, transportation, water transfer, recreation, fish and wildlife habitat enhancement, flood control, and identification of benefits and costs.
- e. A district must also hold and save the United States and the State of California free from damages due to the required work, and shall indemnify the Federal Government and the State of California against any claims arising from such work.

2. State Responsibility

- a. The State, in keeping with the comprehensive hazard Mitigation Plan for the Sacramento/San Joaquin Delta area, will notify each reclamation district within the Delta and RDs 1607 (Van Sickle Island) and 2122 (Winter Island), of the requirements for the Federal Emergency Management Agency (FEMA) approval of Damage Survey Reports (DSRs under FEMA-758-DR) and for eligibility for disaster assistance in the event of future declarations.
- b. The state will provide funding, as available, through the Delta Levee Maintenance Subvention Program, for rehabilitation and maintenance.
- c. The state will perform annual on-site inspections of district levees encompassed by the HMP.
- d. The state will prepare an annual report on the mitigation work accomplished under the FEMA required, and approved, Implementation Plan during the prior year in addition to providing information regarding the mitigation work status of each district included in the HMP. The annual report will be submitted to FEMA no later than the first day of July each year, beginning July 1988.


- e. The state must immediately notify FEMA, if the aforementioned deadline cannot be met. FEMA, OES, and DWR will meet and confer within 30 days of the discovery of non-compliance, to discuss the cause of non-compliance and to determine appropriate remedial action.

3. Federal Responsibility

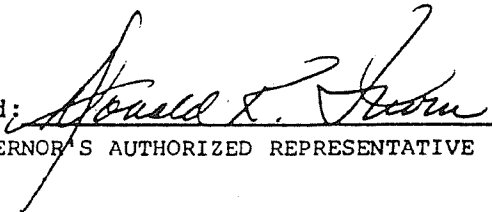
- a. FEMA will meet annually with the district, OES, and DWR representatives, to discuss and evaluate the status of and problems associated with the annual HMP report. This annual meeting will present an opportunity for FEMA and the state to raise issues and concerns relative to the Delta, and also allows more substantive communication between all parties.
- b. FEMA will provide disaster assistance funding to the reclamation districts through the state under PL 93-288 or subsequent applicable Federal law. Funding will be provided to the reclamation districts on a district by district basis.

This Agreement may be amended at any time by written approval of both parties.

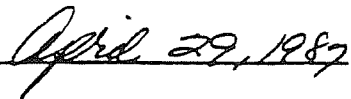
Sincerely,


Robert L. Vickers
for Regional Director

Agreed:

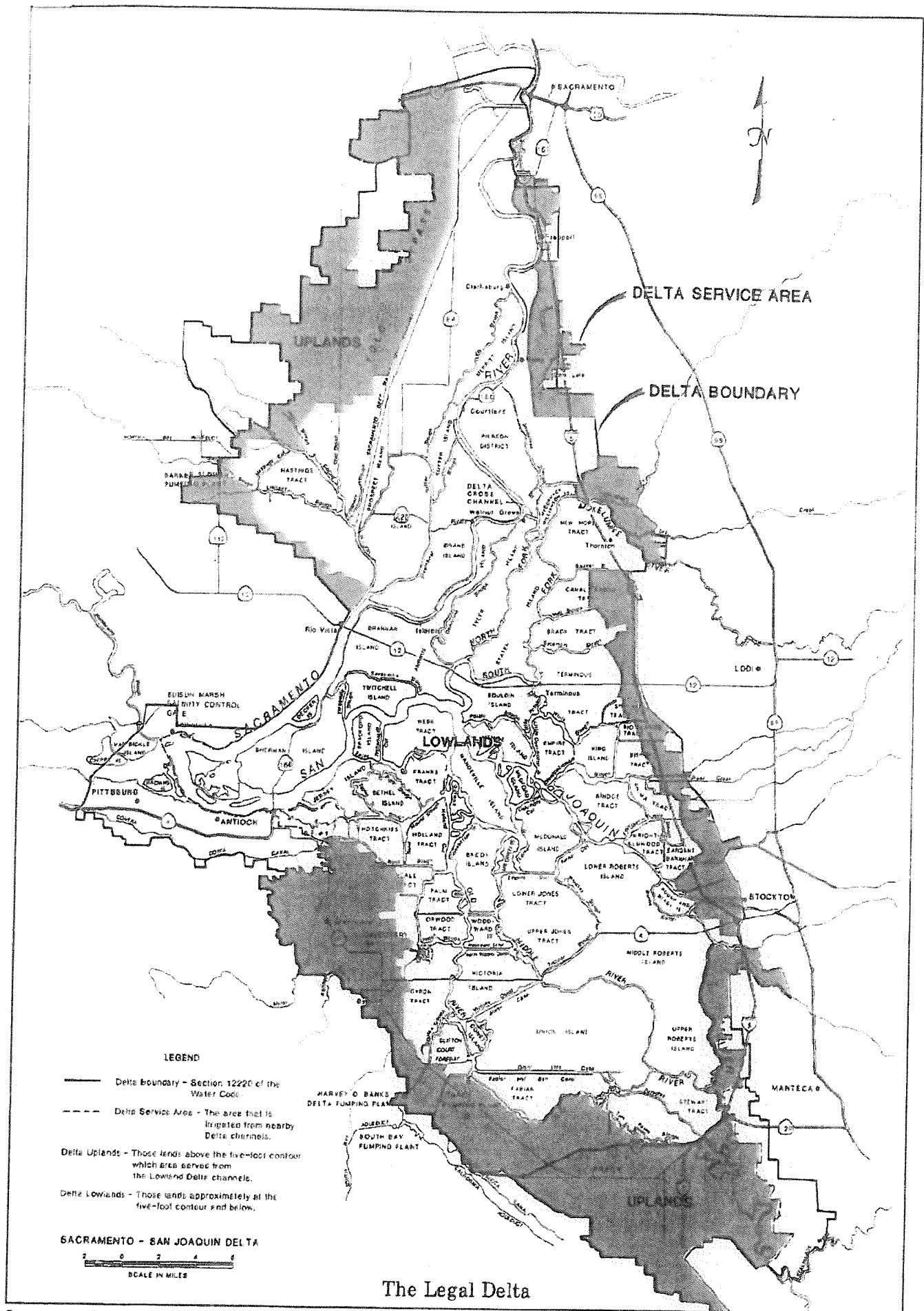

GOVERNOR'S AUTHORIZED REPRESENTATIVE

Date:



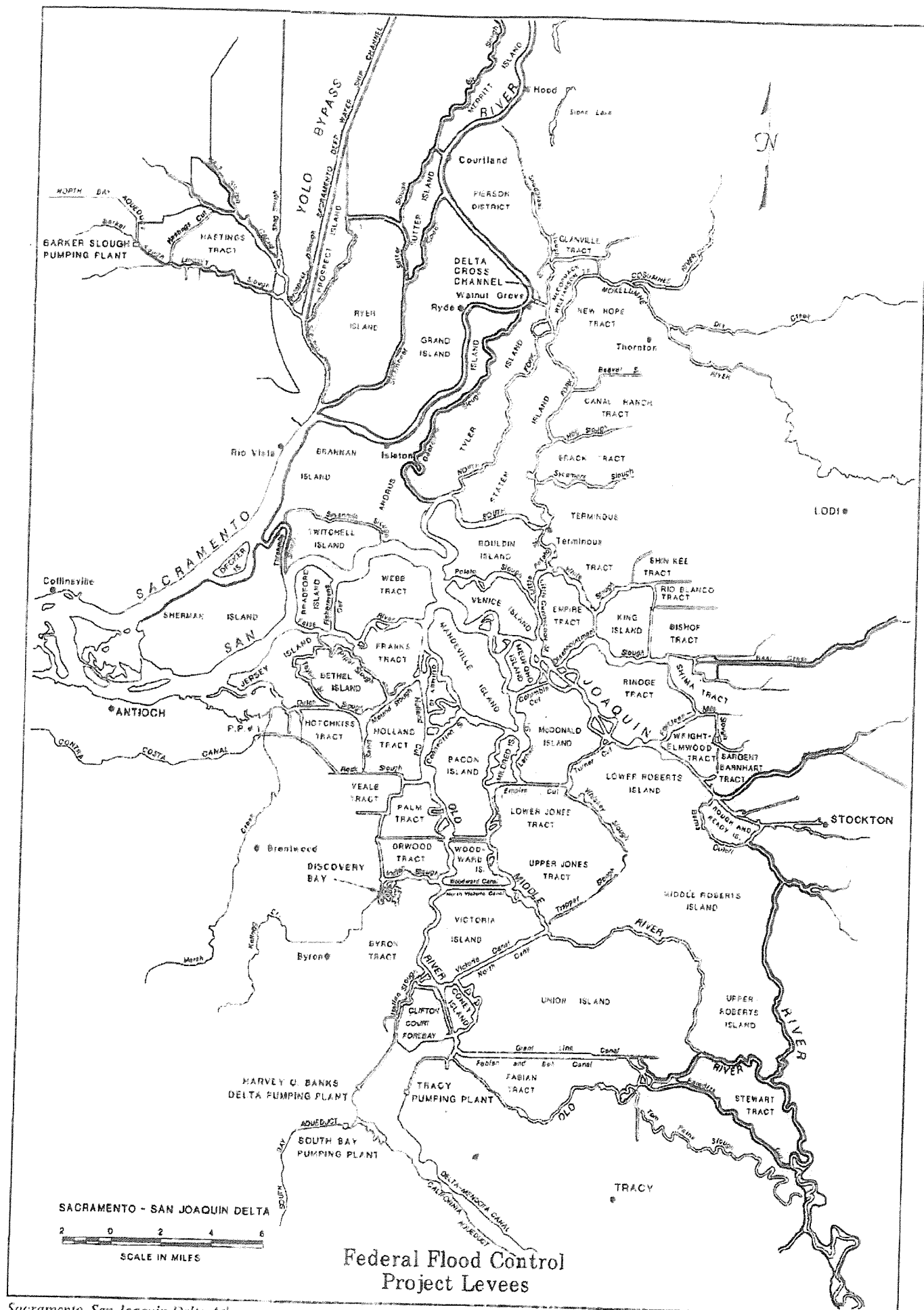
Attachment 2

Map of Sacramento/San Joaquin
Legal Delta



Attachment 3

Map of Project Levees



Attachment 4

Map of Non-Project Levees

