DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

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SF DISTRICT
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CORPS OF ENGINEERS
REGULATORY DIVISION

REPLY TO

DEPARTMENT OF THE ARMY PERMIT

LETTER OF PERMISSION PROCEDURE FOR THE SUISUN MARSH DREDGING PROGRAM

Interested parties are hereby notified that, in accordance with Title 33 C.F.R. 325.2(e), published in the Federal Register, November 13, 1986, the U.S. Army Corps of Engineers, San Francisco District (Corps) has adopted a Letter of Permission (LOP) procedure for the authorization of work describe herein.

The purpose of the LOP procedure is to streamline Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 authorizations to dredge material from tidal areas of Suisun Marsh in Solano County, California. The material would be used for exterior levee repairs and maintenance and would be dredged from adjacent tidal sloughs, bays, and dredger cuts. These activities are minor and do not pose significant adverse individual or cumulative impacts on environmental values.

The letters of permission (LOPs) to be issued under this procedure will contain special conditions intended to protect the environment and natural and cultural resources. In cases where the District Engineer (DE) considers it necessary, applications will be evaluated for individual permits.

PERMITTEES: Suisun Resource Conservation District (SRCD); California Department of Fish and Wildlife (CDFW); California Department of Water Resources (CDWR); United States Bureau of Reclamation (Bureau).

PERMIT NO.: 2012-00259N

ISSUING OFFICE: San Francisco District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittees or any future transferee. The term "this office" refers to the appropriate District or Division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below:

PROJECT LOCATION: The area where dredging work in tidal waters is authorized under the Letter of Permission (LOP) program is located in the Suisun Marsh (Marsh), which is bounded to the west by Interstate 680, Highway 12 to the north, Shiloh Road and Collinsville Road to the east, and Suisun Bay to the south, in southern Solano County west of the Sacramento river Delta, as shown on the attached project location map (Figure 1).

PROJECT DESCRIPTION: California Department of Fish and Wildlife (CDFW); California Department of Water Resources (DWR); United States Bureau of Reclamation (Reclamation); and the landowners represented by the Suisun Resource Conservation District (SRCD) are authorized to dredge material from tidal waters within the Suisun Marsh and use the material for maintenance and repair of 133.47 miles of exterior levees and maintenance dredging of sixteen (16) existing fish screens (Figure 2), Roaring River Distribution System (RRDS) fish screen, monitoring station, Salinity Control Gates, and in front of water control structures (Figure 3). In instances where material cannot be used adjacent to the dredging site, the material may be used on other levees within Suisun Marsh.

The CDFW, DWR, and Reclamation are responsible for ensuring that all authorized dredging work done by their personnel is addressed and completed in accordance with the terms and conditions of this permit. Any landowner working under this permit is responsible for ensuring that all dredging work they or their contractors undertake is in accordance with the terms and conditions of this permit. The SRCD is responsible for providing the required reports and guidance to the landowners. However, the Corps is the authority on determining if the dredging activity is authorized by this permit.

This LOP procedure shall authorize up to 100,000 cubic yards of material, and up to 19.83 acres or 90,446 linear feet (17.13 linear miles) to be dredged from major and minor tidal sloughs and bays, and dredger cuts (tidal waters of the United States) per year, to a total of 1,000,000 cubic yards over the 10-year duration of the LOP. Dredging for levee, fish screen, monitoring station, Salinity Control Gates, and water control structure maintenance in the Suisun Marsh shall occur in the following tidal waters of the United States:

- Bays - Open water areas that extend offshore from levees or the water side of tidal emergent vegetation. Major bays in the Suisun Marsh region include Suisun, Grizzly, and Honker Bays to the Contra Costa County line, and Little Honker Bay.

- Major Sloughs – Montezuma and Suisun Sloughs are classified as major. These two sloughs have a combined acreage of 2,212 acres and consist of both shallow and deep channels.

- Minor Sloughs – Minor sloughs include Cordelia, Goodyear, Chadbourne, Peytonia, Boynton, Hill, Cut off, Cross, Nurse, First Mallard, Second Mallard, and Denverton. Minor sloughs are made up of shallow channel habitats and have a combined acreage of 1,108 acres.

- Dredger Cuts – Dredger cuts are small, linear channel areas isolated by or transecting a vegetated berm. Dredger cuts are distributed throughout the Marsh and are very shallow channels.

The following tables outline amounts of levee repair, dredging volume, and dredging acreage authorized annually by marsh region and waterway (Please reference Suisun Marsh Region Map [Figure 4] for marsh region location):

Table 1. Total Miles of Exterior Levee Maintained by Region/ Associated Waterway Types Dredged

	Miles of levee Region 1	Miles of levee Region 2	Miles of levee Region 3	Miles of levee Region 4	Montez. Slough	Total
Bays	0	0	0.13	5.39	0	5.52
Major sloughs	2.89	14.26	0	0	21.45*	38.60
Minor sloughs	28.84	11.98	3.90	3.18	0	47.90
Dredger cuts	8.31	3.50	6.05	14.02	9.57	41.45
Total	40.04	29.74	10.08	22.59	31.02	**133.47**

*Montezuma Slough is the border between Regions 2 and 4

Table 2. Annual Dredging Volume per Waterway Type and Region

	Region 1 Volume (cy)	Region 2 Volume (cy)	Region 3 Volume (cy)	Region 4 Volume (cy)	Montez. Slough Volume (cy)	Total Volume (cy)
Bays	0	0	100	4,000	0	4,100
Major sloughs	2,100	10,700	0	0	16,000	28,800
Minor sloughs	21,600	8,900	3,000	2,400	0	35,900
Dredger cuts	6,300	2,700	4,500	10,500	7,200	31,200
Total	30,000	22,300	7,600	16,900	23,200	**100,000**

Table 3. Annual Acreage and Linear Feet of Dredging per Waterway Type and Region (acres/linear feet)

	Region 1	Region 2	Region 3	Region 4	Montez. Slough	Total
Bays	0	0	0.02/ 90	0.79/ 3620	0	0.81/ 3700
Major sloughs	0.42/ 1900	2.12/ 9685	0	0	3.16/ 14480	5.7/ 26065
Minor sloughs	4.28/ 19550	1.76/ 8050	0.61/ 2715	0.48/ 2170	0	7.13/ 32485
Dredger cuts	1.25/ 5700	0.54/ 2445	0.89/ 4070	2.08/ 9500	1.43/ 6515	6.19/ 28230
Total	5.95/ 27150	4.42/ 20180	1.52/ 6875	3.35/ 15290	4.59/ 20995	**19.83/ 90490**

PERMIT ADMINISTRATION:

The following steps shall apply for administrating the LOP Program:

(1) Landowners, including DWR, shall submit dredging request applications to the SRCD and DFW between January 1 and April 30.

(2) The SRCD shall review all applications for completeness and check the past history of dredging program participation at each site.

(3) The applications shall contain the following information for the Corps to determine compliance with the LOP program: a detailed map of the proposed site; dimensions of the levee proposed to be repaired; the cubic yardage requested; a description of the dredging source site conditions (water type and marsh region); photographic documentation of current conditions; type of equipment proposed to conduct the work; and GPS coordinates of the extent of the proposed repair project. SRCD shall sort the applications within each of the Marsh's regions to compare the sum of the landowners' annual dredging requests with the annual regional dredging caps (information to be provided in an annual report of work completed).

(4) In March of each year, SRCD, DFW, DWR and the regulatory agencies shall have the opportunity to meet to discuss the prior year's applications and reports and the agencies shall have 30 days to provide comments.

(5) Between May 1 and May 30, SRCD and DFW shall conduct inspections of applicants' sites to assess current conditions, account for any special considerations such as listed species' restrictions, ensure avoidance of sensitive areas, emergent and submerged vegetation, and review proposed dredging methods for suitability. SRCD shall preliminarily allocate dredging amounts to the applicants and submit these recommended amounts in an application package to USACE and the other regulatory agencies.

(6) Upon receipt of complete applications from SRCD, the Corps will have 30 days to verify if proposed work is authorized by the LOP and provide written concurrence that each of the applicants qualifies for the LOP, as applicable. If proposed work cannot be authorized under the Regional Permit the Corps will notify the SRCD, CA DFW, DWR, and landowner as soon as it makes that determination.

(7) If a project is authorized, the SRCD will notify the applicant.

(8) The SRCD shall conduct post-construction inspections and collect work-completed reports from each of the permittees authorized to dredge under this permit. No later than January 31st of each year of the duration of this LOP the SRCD shall submit annual summary reports to the USACE.

PERMIT SPECIAL CONDITIONS:

1. The time limit for completing the work authorized in this permit is December 31, 2024.

2. To remain exempt from the prohibitions of Section 9 of the Endangered Species Act, the non-discretionary Terms and Conditions for incidental take of federally-listed Species shall be fully implemented as stipulated in the enclosed NMFS BO dated **July 3, 2013**, and the enclosed U.S. Fish and Wildlife Service BO dated **June 10, 2013**. Project authorization under this permit is conditional upon compliance with the mandatory terms and conditions associated with incidental take. Failure to comply with the terms and conditions for incidental take, where a take of a federally-listed species occurs, would constitute an unauthorized take and non-compliance with the authorization for your project. The Service and NMFS are, however, the authoritative federal agency for determining compliance with the incidental take statement and for initiating appropriate enforcement actions or penalties under the Endangered Species Act.

3. Dredging authorized under this LOP shall be completed between August 1 and November 30 of each year.

4. This LOP does not authorize dredging in areas where tidal wetland habitat restoration has been performed.

5. Major and minor slough exterior levee repair conducted with material dredged as authorized under this permit shall be placed on the levee crown and backslope and completed to maintain pre-existing levee contours. No expansion beyond the original levee footprint or configuration is authorized.

6. Fish screen, monitoring station, Salinity Control Gate, and water control structure maintenance dredging shall incorporate the following sedimentation control Best Management Practices: dredging shall be conducted during low tide and in adherence to all other terms and conditions stipulated in this permit; the newly cleaned fish screen apparatus shall be opened as the tide returns to allow turbid water to be drawn into the managed wetland; dredged material accumulated during fish screen maintenance shall be used for levee maintenance, this permit does not authorize "suction dredging," (see Figure 2 for fish screen locations and Figure 3 for DWR facilities).

7. The permittees shall allow the dredging area, equipment, and levee repair area to be inspected by Corps staff

upon request. Landowners working under this LOP authorization shall allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.

8. Your use of this LOP must not interfere with the public's right to free navigation on all navigable waters of the United States.

9. No overflow or decant water shall be discharged from the barge, with the exception of spillage incidental to mechanical dredge operations; during transport from the dredging site to the levee repair site, no material shall be permitted to overflow, leak, or spill from the barge, bins, or dump scows.

10. The SRCD shall conduct post-construction inspections and collect work-completed reports from each of the permittees authorized to dredge under this permit. No later than January 31st of each year of the duration of this LOP the SRCD shall submit annual summary reports to the USACE. These reports shall include: a map depicting levee segment(s) maintained by dredging; a summary of total yearly dredging volume requests; total volume of dredged material authorized by this LOP; actual levee work completed; and a breakdown of dredging activities by region and waterway type including a map of levee segments maintained by dredging and pre- and post-dredging/placement photos for each levee segment. This report shall be submitted to the Corps, US Environmental Protection Agency (EPA), NMFS, US FWS, State Lands Commission, CDFW, and the RWQCB. This report must be submitted in accordance with "Permit Administration" process previously described in this document

11. Dredging work and associated levee repair authorized under this LOP may not be conducted in the areas shown on the attached California clapper rail (*Rallus longirostris obsoletus*) Breeding Habitat maps (Figure 5) between February 1 and August 31 (refer to the aforementioned habitat maps and reference the latest club map [Figure 4] for properties that are affected by this restriction). This Corps permit does not authorize you to take an endangered species (Please see Special Condition #2). The Service is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA as it pertains to California clapper rail and its habitat

12. A temporary berm shall be constructed on the channel-side of the levee crown to prevent sediment laden runoff from discharging into adjacent waters of the U.S. (e.g., bays, major and minor sloughs, and dredger cuts).

13. Dredging authorized under this LOP shall occur in the deepest portions of the slough or dredger cut areas, as much as is practicable. Each dredging site may require specific considerations prior to approval. The quantity of excavation per linear foot shall range from 0.75 cubic yards per linear foot to a maximum of 2.1 cubic yards per linear foot of channel, and a depth of 4 feet below the pre-dredge sediment surface elevation, and shall not occur more than once every three years, on a rolling basis. Topping of only the levee crown (minor maintenance) shall range from 0.75 to 1.0 cubic yards per linear foot, and topping the levee crown and backslope (major maintenance) shall range from 1.5 to 2.1 cubic yards per linear foot.

14. Dredging will not be allowed in channels separated from the levees by vegetated berms greater than 50 feet wide.

15. Both emergent and submergent aquatic vegetation shall be avoided during dredging activities. No dredging will be allowed in areas that would disturb or remove vegetation.

16. Dredging and its associated levee repair/maintenance and/or dredging associated with maintenance of the designated sixteen (16) fish screens, Roaring River Distribution System (RRDS) fish screen, monitoring stations, Salinity Control Gates, and water control structures authorized under this permit shall avoid wetlands to the greatest extent practicable. In situations where the Corps determines impacts to wetlands are unavoidable, the following compensatory mitigation ratios would apply prior to initiation of dredging: tidal

wetland restoration would be required at a 3:1 ratio or 2:1, if tidal wetland restoration is provided by the permittee and approved by the Corps in advance of the authorized impact. Under either of the aforementioned mitigation ratio scenarios, the Corps approved compensatory mitigation plan must be completed or under construction prior to initiation of any dredging activities authorized under this LOP for the following season.

17. If any previously unknown historic or archeological artifacts are discovered while accomplishing the authorized work, the landowner must stop work immediately and notify the Corps. The activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

18. All parties must comply with the attached conditions of the State of California San Francisco Bay Regional Water Quality Control Board Certification, dated June 4, 2014, Titled, "Conditional Water Quality Certification for the Suisun Marsh Exterior Levee Maintenance Dredging Program, Solano County", (CIWQS Place ID: 792443).

19. Dredging work and associated levee repair authorized under this LOP may not be conducted in the areas shown on the attached California clapper rail (*Rallus longirostris obsoletus*) Breeding Habitat maps (Figure 5) between February 1 and August 31 (refer to the aforementioned habitat maps and reference the latest club map [Figure 4] for properties that are affected by this restriction). This Corps permit does not authorize you to take an endangered species (Please see Special Condition #2). The Service is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA as it pertains to California clapper rail and its habitat.

20. Any suspected take of endangered species shall be immediately reported to the CDFW or the SRCD who shall immediately contact the Service or the NMFS. Any carcasses of protected fish shall be frozen in a whirl-pak bag and retained until instructions are received from the applicable Federal agency.

21. The proposed work reports shall be submitted to the Corps, NMFS, State Lands Commission, and RWQCB by the 1st day in each month. When the 1st day falls on a weekend the report shall be due the following Monday.

22. The SRCD shall prepare an annual report that summarizes the amounts and locations of activities performed under this LOP authorization. This report shall be submitted to the Corps, US Environmental Protection Agency (EPA), NMFS, US FWS, State Lands Commission, CDFW, and the RWQCB. This report must be submitted in accordance with "Permit Administration" process previously described in this document.

23. No dredging or construction related waste, debris, petroleum products, or hazardous materials shall be allowed to enter waters of the United States. Upon completion of authorized work any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be washed into waters of the United States.

GENERAL CONDITIONS:

1. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

2. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate

the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

3. You must comply with the conditions specified in the San Francisco Bay Regional Water Quality Control Board conditioned water quality certification as special conditions to this permit. For your convenience, a copy of the certification is attached.

4. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

5. You understand and agree that, if future operations by the United States require the removal, relocation or other alteration of the structure or work authorized herein, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, you will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

FURTHER INFORMATION:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

   (X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403).
   (X) Section 404 of the Clean Water Act (33 U.S.C. Section 1344).

2. Limits of this authorization:

   a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

   b. This permit does not grant any property rights or exclusive privileges.

   c. This permit does not authorize any injury to the property or rights of others.

   d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability: In issuing this permit, the Federal Government does not assume any liability for the following:

   a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

   b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

   c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

   d. Design or construction deficiencies associated with the permitted work.

   e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

   a. You fail to comply with the terms and conditions of this permit.

   b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate. (See Item 4 above.)

   c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

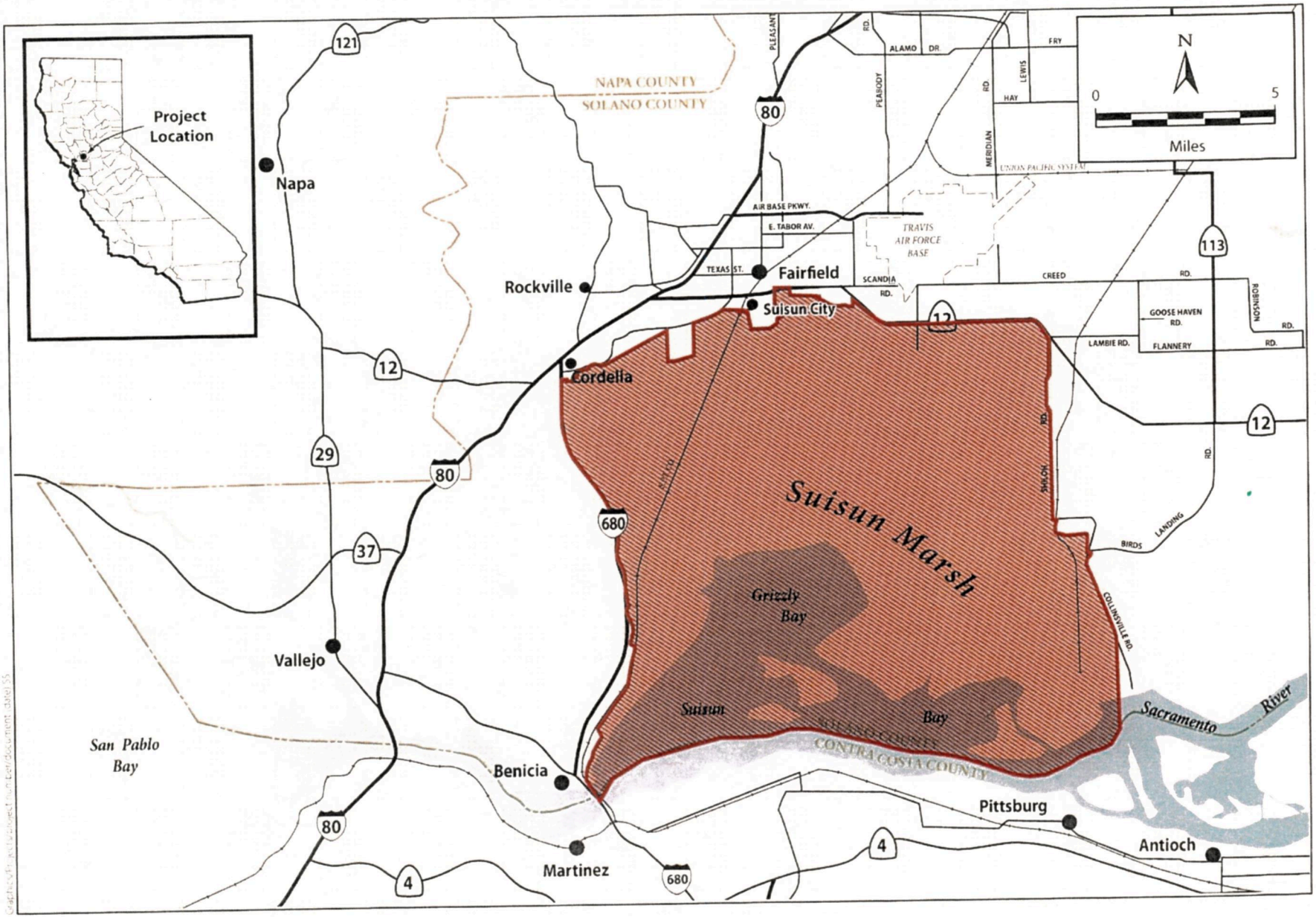
Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 C.F.R. Section 325.7 or enforcement procedures such as those contained in 33 C.F.R. Sections 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 C.F.R. Section 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

John C. Morrow

John C. Morrow
Lieutenant Colonel, U.S. Army
Commander and District Engineer

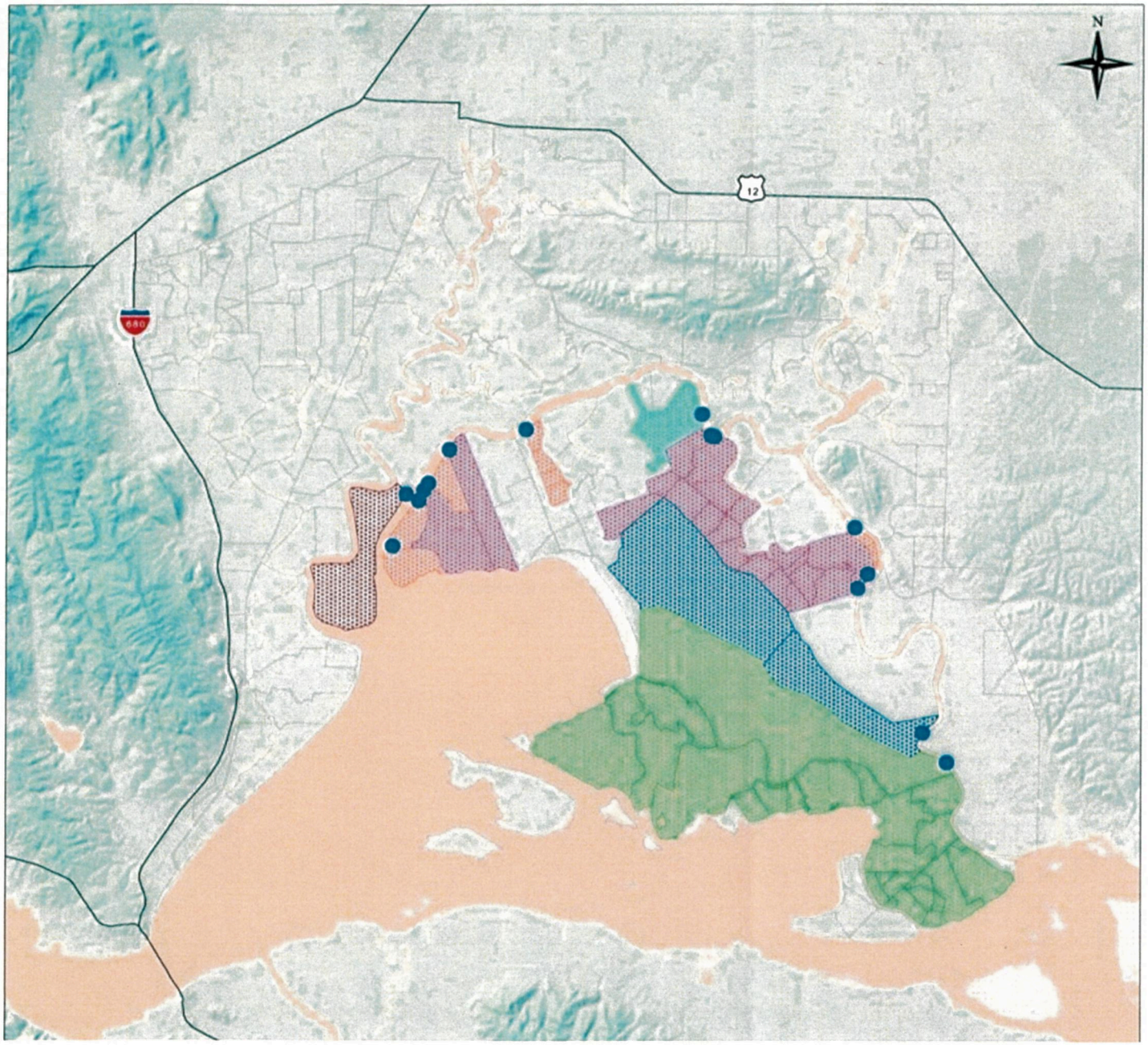
03 JUL 14
(DATE)



ICF INTERNATIONAL

Project Location

Figure 1



Areas Flooded by Screened Diversions

- DFG Grizzly Ditch
- DFG Island Slough
- DWR/USBR Lower Joice Island
- DWR/USBR Roaring River
- SRCD Phase 1
- SRCD Phase 2

SAN FRANCISCO BAY–DELTA

FIGURE 2

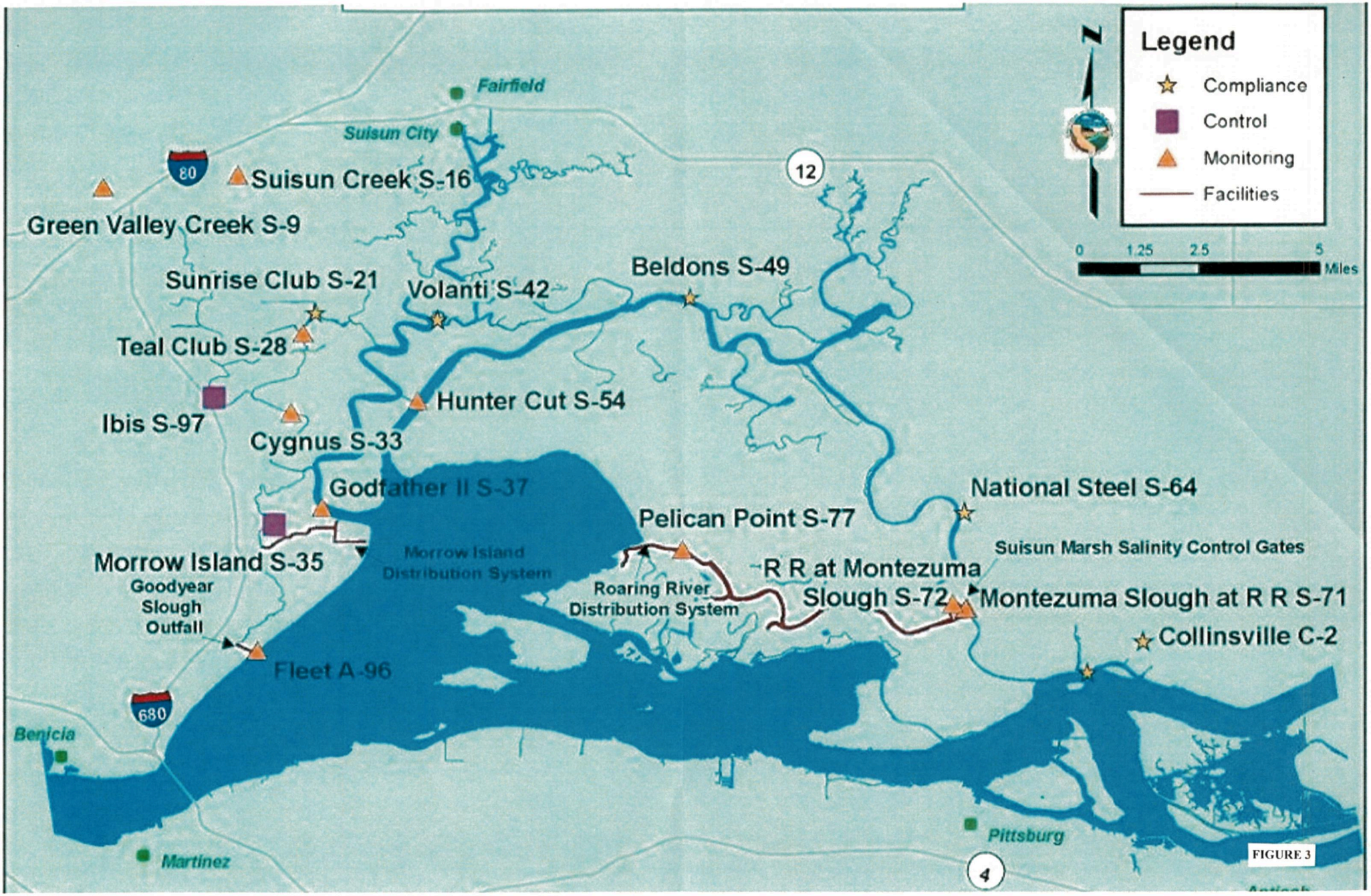
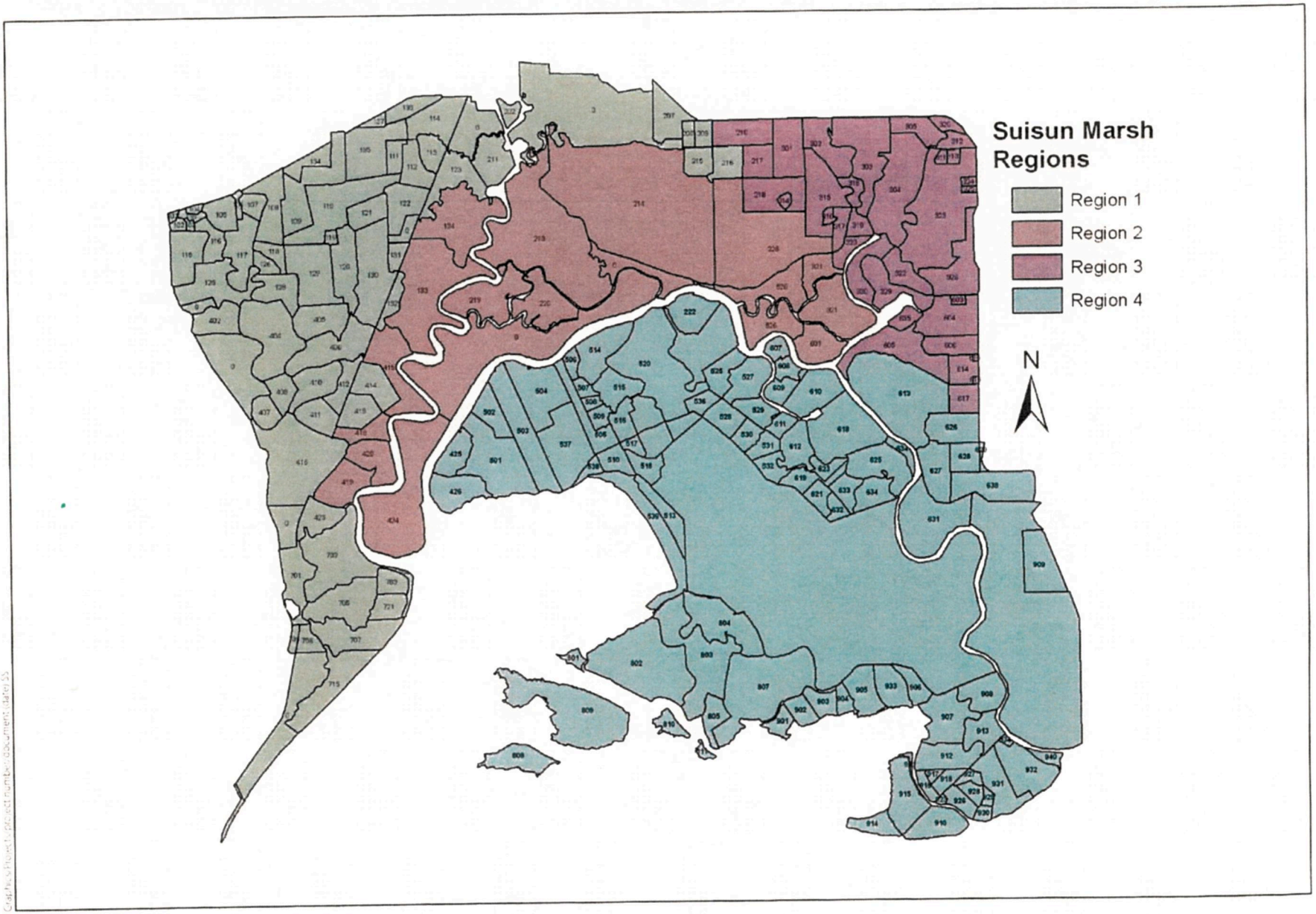

Legend
Compliance
Control
Monitoring
Facilities
N
0
1.25
2.5
5
Miles
Fairfield
Suisun City
80
12
Suisun Creek S-16
Green Valley Creek S-9
Sunrise Club S-21
Volanti S-42
Beldons S-49
Teal Club S-28
Hunter Cut S-54
Ibis S-97
Cygnus S-33
Godfather II S-37
National Steel S-64
Pelican Point S-77
Morrow Island Distribution System
Suisun Marsh Salinity Control Gates
Morrow Island S-35
Goodyear Slough Outfall
R R at Montezuma Slough S-72
Roaring River Distribution System
Montezuma Slough at R R S-71
Collinsville C-2
Fleet A-96
680
Benicia
Pittsburg
Martinez
4

FIGURE 3



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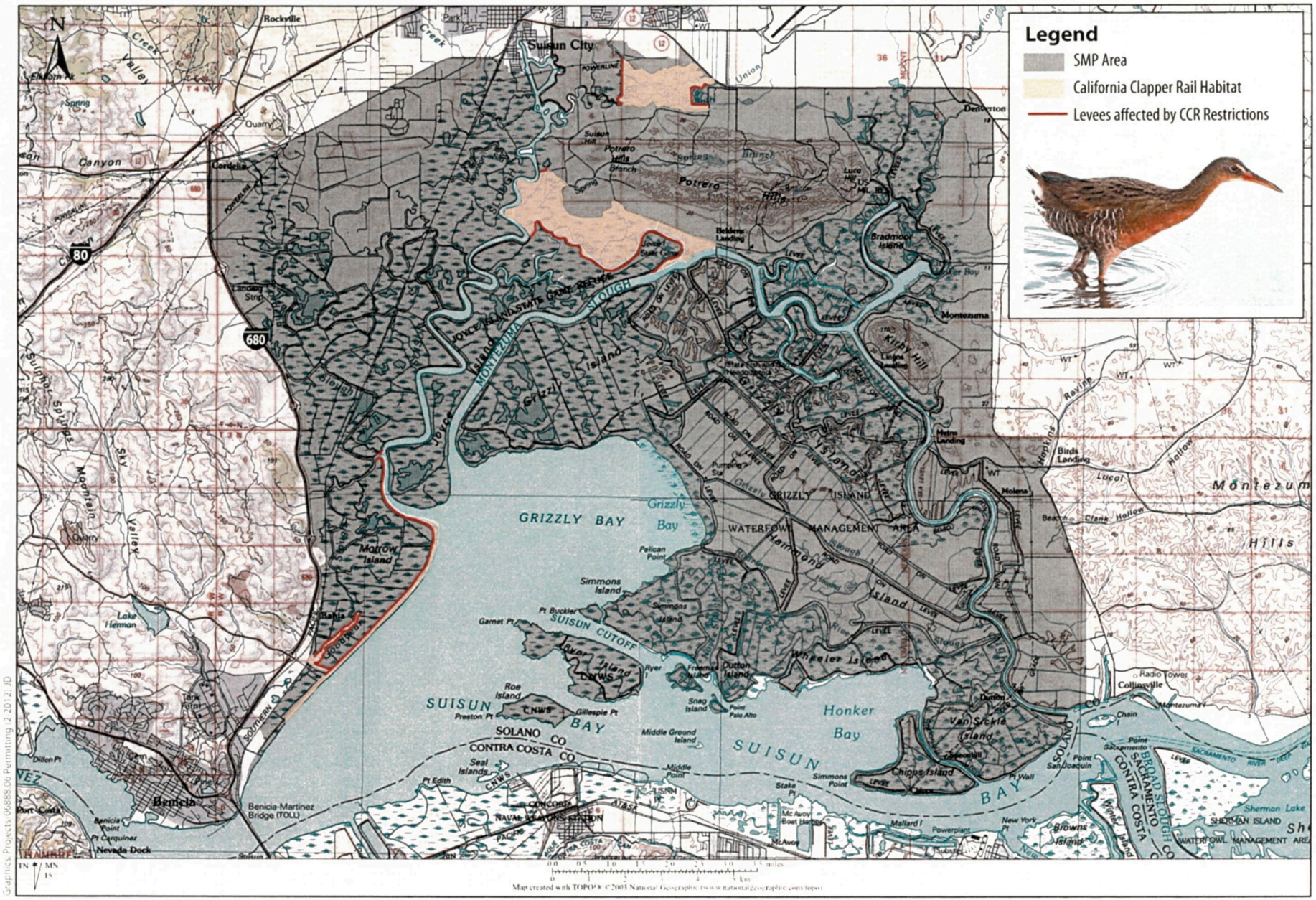
Suisun Marsh Regions

FIGURE 4



Graphics, Projects 06888 06 Permitting (2 2012) JD

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FIGURE 5

California Clapper Rail Habitat in Suisun Marsh