

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

ORDER NO. R2-2003-0075

WASTE DISCHARGE REQUIREMENTS, WATER QUALITY CERTIFICATION AND
RESCISSION OF ORDER 98-012 FOR:

CARNEROS RIVER RANCH, NORTH WEST AND NORTH CENTRAL FIELDS
DREDGED MATERIAL AND FILL PLACEMENT
SONOMA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter referred to as the Board, finds that:

1. This Order will serve as Waste Discharge Requirements and Water Quality Certification under Section 401 of the Clean Water Act for disposal of dredged material on two agricultural fields operated by Carneros River Ranch (hereinafter referred to as "the Discharger"). As the property is subject to an agricultural conservation easement benefiting the Sonoma Land Trust limiting use of the property to activities "producing food and fiber," the fields will be returned to agricultural production at the end of this project.
2. This Order provides requirements for operation and maintenance of the disposal site. This Order also provides monitoring and reporting requirements, including effluent limits, for return flow (decant water) from the dredged material disposal areas and for shallow groundwater.

Site Description

3. The Carneros River Ranch is located near the mouth of the Petaluma River, in the Sears Point area of unincorporated Sonoma County (Figure 1). It includes about 540 acres of low-lying agricultural fields where hay is farmed. The specific disposal locations at Carneros River Ranch are the North West and the North Central fields (Figure 2). The area was formerly part of San Francisco Bay, but was diked and drained in the late 1800's. The elevation of the agricultural fields vary, with an average elevation in the North West field of -2 feet (NGVD 29), and in the North Central field of 0.5 feet elevation (NGVD 29). The fields are drained by ditches that flow to pumps that drain to the Petaluma River on the ranch's western border. There are Section 404 wetlands in the ditch along the ranch's western border, but not in either of the locations where fill will be placed.
4. The placement of fill will raise the elevations of the fields to approximately +2 feet (NGVD 29). The Discharger anticipates that this elevation will improve agricultural production on the fields by raising crop roots beyond the influence of saline shallow groundwater that underlies the ranch.

Project Description

5. The Discharger will dispose of up to 663,000 cubic yards (cy) of dredged material or other fill at two agricultural fields at the Carneros River Ranch. The Discharger has already identified

dredging projects as sources for some of the fill, as described in Table 1, below. The remaining fill may be additional dredged material, or may be from other sources.

Table 1. Sources of planned dredged material fill for agricultural fields at Carneros River Ranch.

Disposal Location	Volume	Source of Dredged Material
North West Field	300,000 cy	Bel Marin Keys North Lagoon - 35,000 cy Remaining capacity - 165,000 cy
North Central Field	363,000 cy	Port Sonoma Marina - 120,000 cy Remaining capacity - 243,000 cy

6. Bel Marin Keys is a waterfront community in northeastern Marin County (Figure 3). The community consists of approximately 700 waterfront homes on two manmade lagoons and Novato Creek.
7. Port Sonoma Marina is located on the east side of the Petaluma River, near its mouth at San Pablo Bay, in Sonoma County (Figure 4). It is owned and operated by Port Sonoma Associates, LLC. Typically, sediment dredged from the marina is dried in one of four on-site dredged material drying ponds, and then eventually taken offsite and reused as construction fill or landfill daily cover. Dredging was not performed in 2002, and the amount of sediment that has accumulated is more than can be handled at the existing drying ponds. Therefore, the Discharger will dispose of maintenance dredging material from the marina at the North Central field.
8. The disposal of dredged material from Bel Marin Keys, Port Sonoma Marina, and any other sources is subject to Executive Officer approval of the suitability of the material for use on the agricultural fields (Provision E.1.).
9. The Bel Marin Keys and Port Sonoma Marina dredging projects will be carried out using hydraulic dredging equipment. A slurry containing 70% water and 30% solids will be pumped through a flexible pipeline from the dredging location directly to ponds on the agricultural fields. Excess water will dry by evaporation and, if necessary, may be discharged from the ponds.
10. The disposal ponds will be constructed at the North West and North Central fields by building seven foot high berms using on-site material from the perimeter of the fields. The berms will be designed to contain the dredged material and associated water, and allowing for a minimum of two feet of freeboard at all times.
11. Each pond will have one weir box, through which decant water may be discharged into the adjacent drainage ditch (Figure 2). Weir boxes will be located as far from dredged material discharge locations to allow for maximum settling time before discharge.

Related Activities

12. Regional Board Order No. 98-012 authorized disposal of 320,000 cy of dredged material from Port Sonoma Marina at the North Central field. Dredging was carried out in the summer of 1998. The dredged material was allowed to dry for one year, then the field was plowed and

planted with a salt-tolerant barley crop, which grew successfully. In the following years oat hay and wheat were planted, both of which were successful. Post project monitoring has shown that soil conditions remain suitable for the subsequent agricultural use of the land. This project is complete; Order 98-012 is rescinded by Provision E.12 of this Order.

13. Regional Board Order 01-060 authorizes maintenance dredging at Port Sonoma Marina and regulates discharge from the four on-site drying ponds.
14. Regional Board Order No. R2-2003-0030 authorizes maintenance dredging of sediment from Bel Marin Keys and construction and use of an adjacent dredged material rehandling site.

Water Quality Concerns

15. Impacts to water quality resulting from dredged material placement at the rehandling/disposal site are expected to be minimal at worst and would be mostly related to the potential for suspended solids in the decant water to cause excess turbidity in the vicinity of the discharge point in the Petaluma River.
16. Impacts to water quality from possible contamination in dredged sediments are expected to be negligible because the suitability of dredged sediments for placement on agricultural fields will be evaluated prior to placement at the project site
17. Monitoring of shallow groundwater in the vicinity of the 1998 dredged material placement does not show impacts from the placement.
18. The disposal site does not contain viable habitat for any species identified as a candidate, sensitive, or special status species in local/regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.

Beneficial Uses

19. The North West and North Central fields are drained by ditches which in turn drain (via pumping station) to the Petaluma River, a tributary of San Francisco Bay. Decant water generated during dredged material drying will be discharged directly to the drainage ditch then to the Petaluma River. The beneficial uses of the waters of the Petaluma River near the North West and North Central fields, as set forth in the Basin Plan, are as follows:
 - a. Cold Freshwater Habitat
 - b. Marine Habitat
 - c. Fish Migration
 - d. Navigation
 - e. Preservation of Rare and Endangered Species
 - f. Water Contact Recreation
 - g. Non-Contact Water Recreation
 - h. Fish Spawning
 - i. Warm Freshwater Habitat
 - j. Wildlife Habitat

California Environmental Quality Act (CEQA) Compliance

20. The Regional Board has prepared a Negative Declaration for this project which has been circulated for public comment.. The Board has considered the Negative Declaration, which reflects the independent judgment and analysis of the Board, and finds based on substantial evidence in the record that the project will not result in significant environmental impacts. The

Negative Declaration, all supporting documentation and record are available at the Board's office.

Additional Findings

20. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20 and November 13, 1995, respectively. USEPA approved this Plan and a subsequent amendment in May 2000. A summary of regulatory provisions is contained in Title 23 of the California Code of Regulations, section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters. This Order is in compliance with the Basin Plan.
21. The specifications and limitations in these requirements are based on the plans, policies, and water quality objectives of the Basin Plan, Quality Criteria for Water (EPA440/5-86-001, 1986; Gold Book and 63 Federal Register 68354, December 10, 1998), Applicable Federal Regulations (40 CFR Parts 122 and 131), the National Toxics Rule (57 FR 60848, 22 December, 1992; NTR), California Toxics Rule (40 CFR Parts 131), and Best Professional Judgment.
22. The Discharger has applied for USACE individual permits, USACE File Nos. 22397N and 27202N.
23. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the CWC and Section 3867 of Title 23 of the California Code of Regulations (23 CCR).
24. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
25. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for this discharge.
26. The Regional Board, in a public meeting on August 20, 2003, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Regional Board adopts the Negative Declaration and that Carneros River Ranch, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, shall comply with the following:

A. DISCHARGE PROHIBITIONS:

1. The direct discharge of wastes to surface waters or surface water drainage courses is prohibited, except as authorized in this Order.
2. The discharge shall not cause degradation of any water supply.
3. The dredged material shall remain within all the designated disposal areas at all times.

4. The activities subject to these requirements shall not cause a condition of pollution or nuisance as defined in Sections 13050 (l) and (m), respectively, of the California Water Code.

B. DISCHARGE SPECIFICATIONS

1. Appropriate soil erosion control measures shall be undertaken and maintained to prevent discharge of sediment to surface waters or surface water drainage courses. Appropriate erosion control measures shall be taken to stabilize and prevent erosion from the outsides of the containment berms. Dredged material shall be fully contained to prevent any wind transport, surface runoff or erosion into waters of the state. At no point within the containment area shall the elevation of sediment exceed that of the containment levees.
2. The integrity of the dredged material transport pipeline shall be maintained from the intake at the connection point with the Bel Marin Keys Community Services District pipeline on the northwest side of the Port Sonoma Marina Entrance Channel as shown in Figure 2, to the point of discharge at the project site. At no point other than the designated discharge point shall water or sediment be allowed to leak from or be intentionally released from the pipeline.
3. In accordance with Section 13260 of the California Water Code, the Discharger shall file a report with this Regional Board of any material change or proposed change in the character, location, or volume of the discharge. Any proposed material change in the operation shall be reported to the Executive Officer at least 7 days in advance of implementation of any such proposal.
4. The responsible representative of the Discharger shall immediately notify the Regional Board staff by telephone whenever an adverse condition occurs as a result of this discharge. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this Order, significant spill of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance. Pursuant to Section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Regional Board within 30 days of occurrence. The written notification shall identify the adverse condition, describe the actions necessary to remedy the condition, and specify a timetable, subject to the modifications of the Regional Board, for the remedial actions.

C. EFFLUENT LIMITATIONS

Dredged material effluent (decant water) discharged from any point within the disposal site shall not exceed the following limits at any time:

1. pH 6.5 – 8.5
2. Dissolved Sulfide 0.1 mg/L
3. Total Suspended Solids 100 mg/L

D. RECEIVING WATER LIMITATIONS

1. The placement of sediments and/or decant water shall not cause the following conditions to exist in waters of the State at any place:

- a. Floating, suspended or deposited macroscopic particulate matter or foam;
 - b. Visible floating, suspended, or deposited oil or other products of petroleum origin;
 - c. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses; and
 - d. Alteration of temperature, turbidity, or apparent color beyond present natural background levels.
2. The placement of dredge material shall not cause the following limits to be exceeded in waters of the State at any point:

- a. Dissolved Oxygen 5.0 mg/l minimum.
When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
- b. Dissolved sulfide 0.1 mg/l maximum
- c. pH Variation from natural ambient pH by more than 0.5 pH units.
- d. Un-ionized ammonia 0.025 mg/l as N Annual Median
0.16 mg/l as N Maximum
- e. Toxic or other deleterious substances None shall be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.
- f. Total Dissolved Solids The project shall not increase total dissolved solids or salinity to adversely affect beneficial uses.

3. Turbidity shall not exceed background of the Waters of the State, as measured in NTU, as follows:

Receiving Water Background	Incremental Increase
< 50 units	5 units, maximum
50-100 units	10 units maximum
>100 units	10% of background, maximum

4. The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Board or the State Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

E. PROVISIONS

1. Data characterizing the quality of dredged sediments proposed for placement at the North West and North Central fields shall be submitted for Regional Board staff review and approval prior to placement. This review should be coordinated through the multi-agency Dredged Material Management Office, of which the Regional Board is a member. Sediment characterization shall follow the protocols specified in U.S. Army Corps of Engineers Public Notice 01-01 (or most current guidance), unless explicitly exempted in writing by the Executive Officer. Sediment characterization shall also include testing for leachable metals using the Title 22 Waste Extraction Test (WET) procedure (California Code of Regulations, Title 22, Division 4.5, Article 5, Section 66261.126, Appendix II: Waste Extraction Test Procedures). The WET procedure may be modified to use deionized water in place of the citrate buffer. Other extraction procedures may be used, with approval by Regional Board staff. Modifications to these procedures may be approved on a case-by-case basis.
2. The Discharger shall conduct monitoring activities according to the Self-Monitoring and Reporting Program (SMP) attached to this Order and as may be amended by the Executive Officer. At any time after adoption of this Order, the Discharger may file a written request proposing modifications to the attached SMP. If the proposed modifications are acceptable, the Executive Officer may issue a letter of approval incorporating the revisions into the SMP.
3. The Discharger shall notify the Regional Board immediately whenever violations of this Order are detected.
4. All reports following these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.
5. The discharge of any hazardous waste, as defined in Title 23, Chapter 15 of the California Administrative Code, to the disposal site is prohibited.
6. Only dredged material that has been demonstrated to be non-hazardous and meets the applicable guidelines and criteria specified in this Order may be discharged at the North West and North Central fields.
7. The Discharger shall remove and relocate any wastes that are discharged at this site in violation of these Requirements.
8. The Discharger shall file with the Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.
9. The Discharger shall maintain a copy of this Order at the site to be available at all times to site operating personnel.
10. The Discharger shall permit the Board or its authorized representative, upon presentation of credentials:
 - Entry on to the premises on which wastes are located or in which records are kept.
 - Access to copy any records required to be kept under the terms and conditions of this Order.

- Inspection of any treatment equipment, monitoring equipment or monitoring method.
 - Sampling of any discharge or surface water covered by this Order.
11. These Requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws, regulations or rules of other programs and agencies nor do these Requirements authorize the discharge of wastes without appropriate permits from other agencies or organizations.
 12. This Order supersedes Order 98-012. Order No. 98-012 is hereby rescinded.
 13. This Order expires ten years from the date of issuance.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on August 20, 2003.



LORETTA K. BARSAMIAN

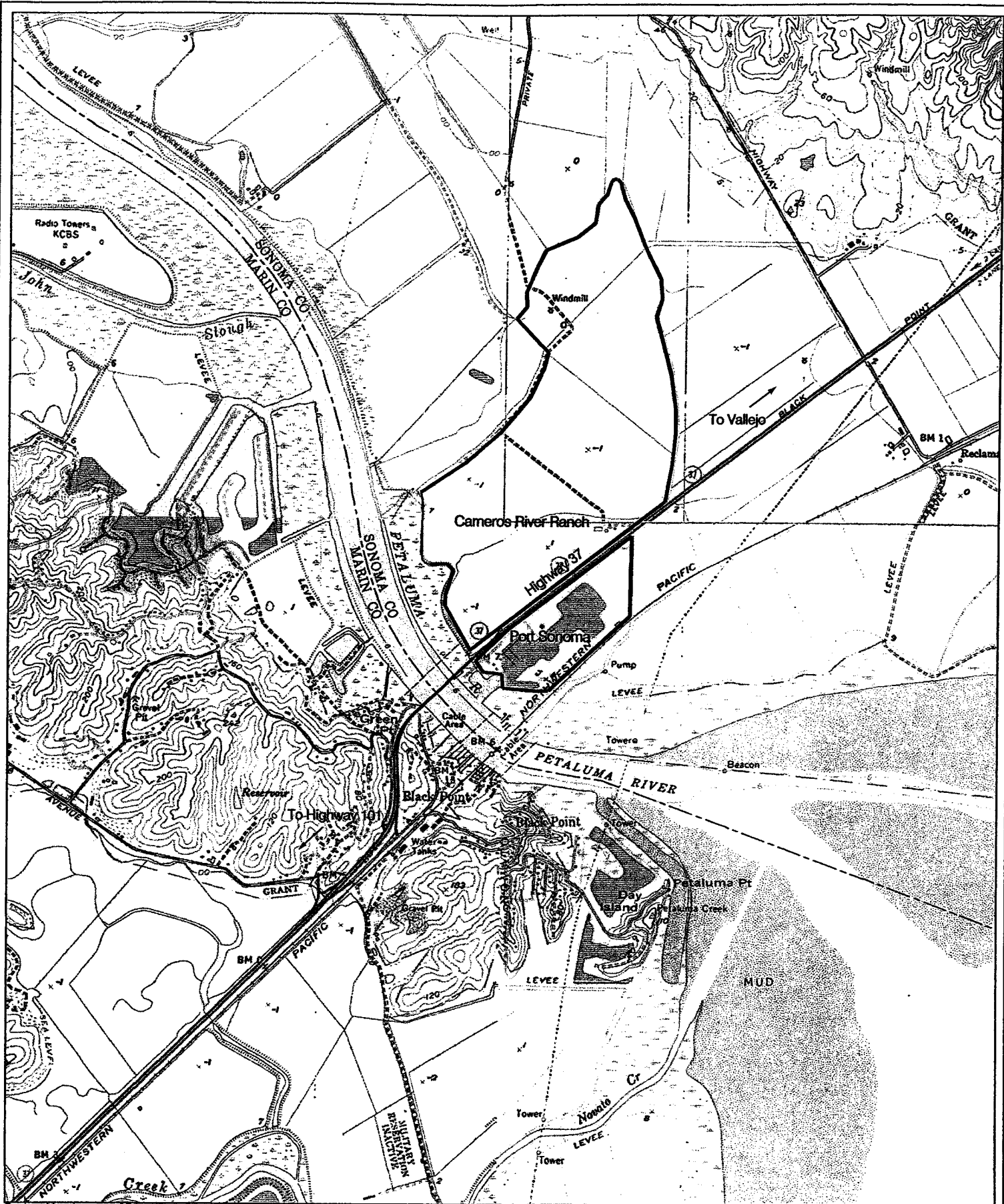
Executive Officer

Attachment:

Figure 1 – Project Location Map

Figure 2 – Carneros River Ranch Site Map

Self Monitoring and Reporting Program



Project Number: 755 SBA
 Topo Source: USGS 7.5 min.
 Quad: Petaluma
 Date: 5/14/03



Approximate Scale

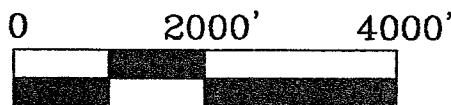


Figure 1. Project Location Map