

Meeting of the Central Valley Flood Protection Board

June 22, 2012

Staff Report – Encroachment Permit

Department of Water Resources

Flow Monitoring Stations, Contra Costa and San Joaquin Counties

1.0 – ITEM

Consider approval of Permit No. 18707 (Attachment B)

2.0 – APPLICANT

Department of Water Resources

3.0 – LOCATION

The project is located along various waterways in Contra Costa and San Joaquin Counties.

(Middle River, Old River, Paradise Cut, Grantline Canal, San Joaquin River and the intake at Clifton Court Forebay, Contra Costa and San Joaquin Counties, see Attachment A)

4.0 – DESCRIPTION

Applicant proposes to install eight flow monitoring stations at separate sites throughout the southern Delta in Middle River, Old River, Paradise Cut, Grantline Canal, the San Joaquin River and the intake at Clifton Court Forebay. Each station consists of a 12-inch-diameter steel pile in the bed of the channel. At Site 8, rock rip-rap will be placed 25 feet upstream and downstream from the pile locations.

5.0 – PROJECT ANALYSIS

The proposed project is for gathering flow information in an effort to understand South Delta water circulation patterns and to help improve water quality as DWR tries to determine circulation patterns in order to develop an understanding of why salinity

standards are not being met at DWR's compliance station at Old River at Tracy Boulevard. The project is a pilot study that is scheduled to last approximately two years. There is a potential that some or all of the flow monitoring stations may become permanent. Staff analysis has considered that if all eight stations were to become permanent that there would be negligible impact to the adopted plan of flood control. All equipment for each station will be attached to the piles. The proposed project conforms to Title 23 standards Section 137(k).

5.1 – Hydraulic Analysis

A flowage block calculation was made for each of the proposed sites and all were less than 1% blockage so no further hydraulic analysis is needed.

5.2 – Geotechnical Analysis

A geotechnical analysis is not needed as the proposed project involves in-stream piling and concrete slabs on the waterside shoulder for power supply and data recording equipment.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- Reclamation District 544 has endorsed this project and has granted a Temporary Entry Permit to the Department of Water Resources.
- Reclamation District 2058 has endorsed this project with no conditions.
- Reclamation District 2089 has endorsed this project and has granted a Temporary Entry Permit to the Department of Water Resources.
- The U.S. Army Corps of Engineers 208.10 comment letter has not been received for this application. Staff anticipates receipt of a letter indicating that the USACE District Engineer has no objection to the project, subject to conditions. Upon receipt of the letter, staff will review to ensure conformity with the permit language and incorporate it into the permit as Exhibit A.

7.0 – CEQA ANALYSIS

Board staff has prepared the following CEQA determination:

The Board, acting as the CEQA lead agency, has determined the project is categorically exempt in accordance with CEQA under a Class 6 Categorical Exemption (CEQA Guidelines Section 15306) covering data collection.

8.0 – SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

The proposed project will have no effects on the entire State Plan of Flood Control.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

As this project is temporary in nature there should be no effects of reasonable projected future events.

9.0 – STAFF RECOMMENDATION

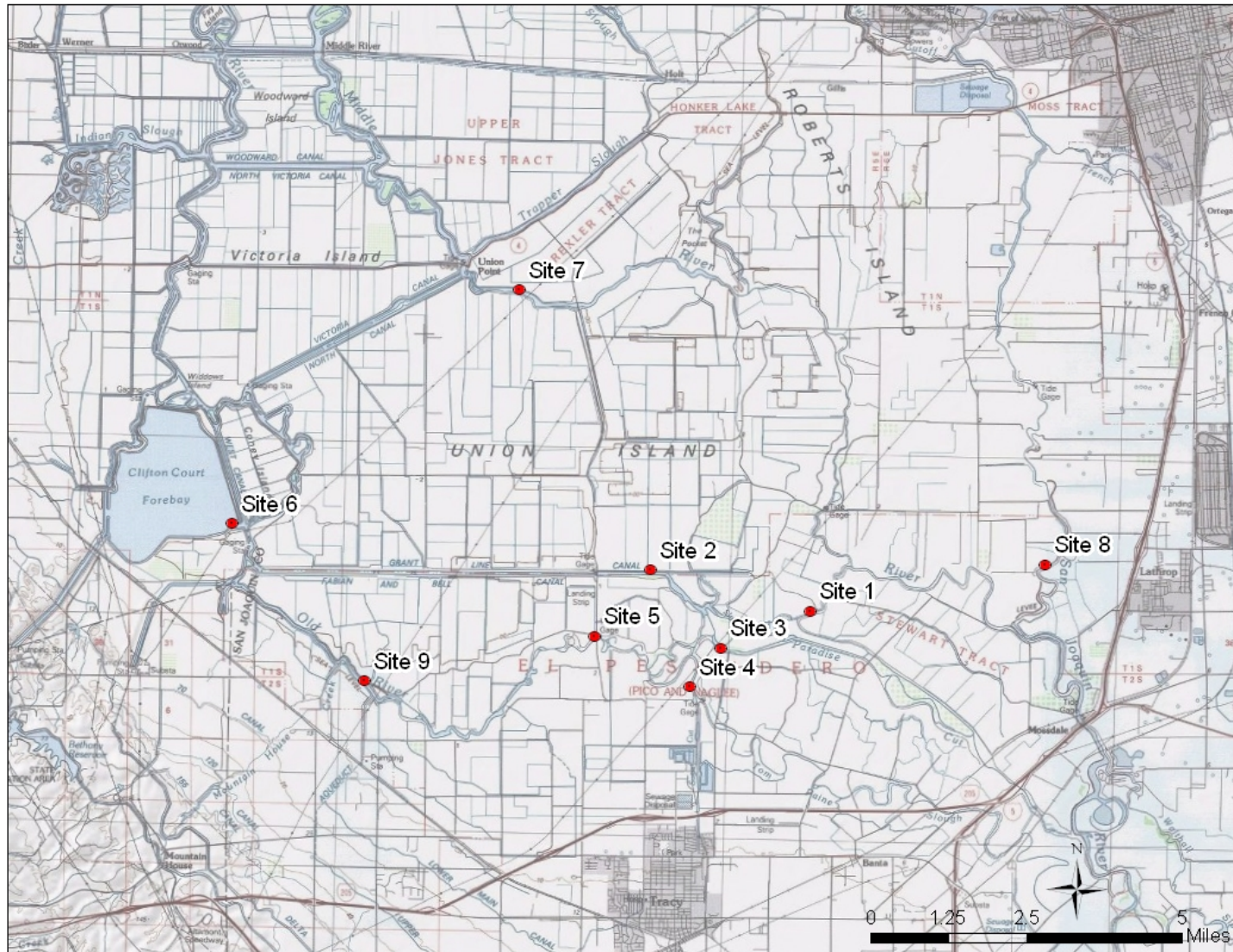
Staff recommends that the Board find the project exempt from CEQA and approve the permit, conditioned upon receipt of project endorsement letters from Reclamation District 544, Reclamation District 2058, Reclamation District 2089 and a U. S. Army Corps of Engineers comment letter indicating that the District Engineer has no objections to the project, subject to conditions, and direct staff to file a Notice of Exemption with the State Clearinghouse.

10.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No. 18707
- C. Typical Drawing

| | |
|-----------------------|-----------------------------------|
| Design Review: | Steve Dawson |
| Environmental Review: | Andrea Mauro, James Herota |
| Document Review: | Mitra Emami P.E., Len Marino P.E. |

FIGURE 1: Doughty Cut Flow Monitoring Project-Locations



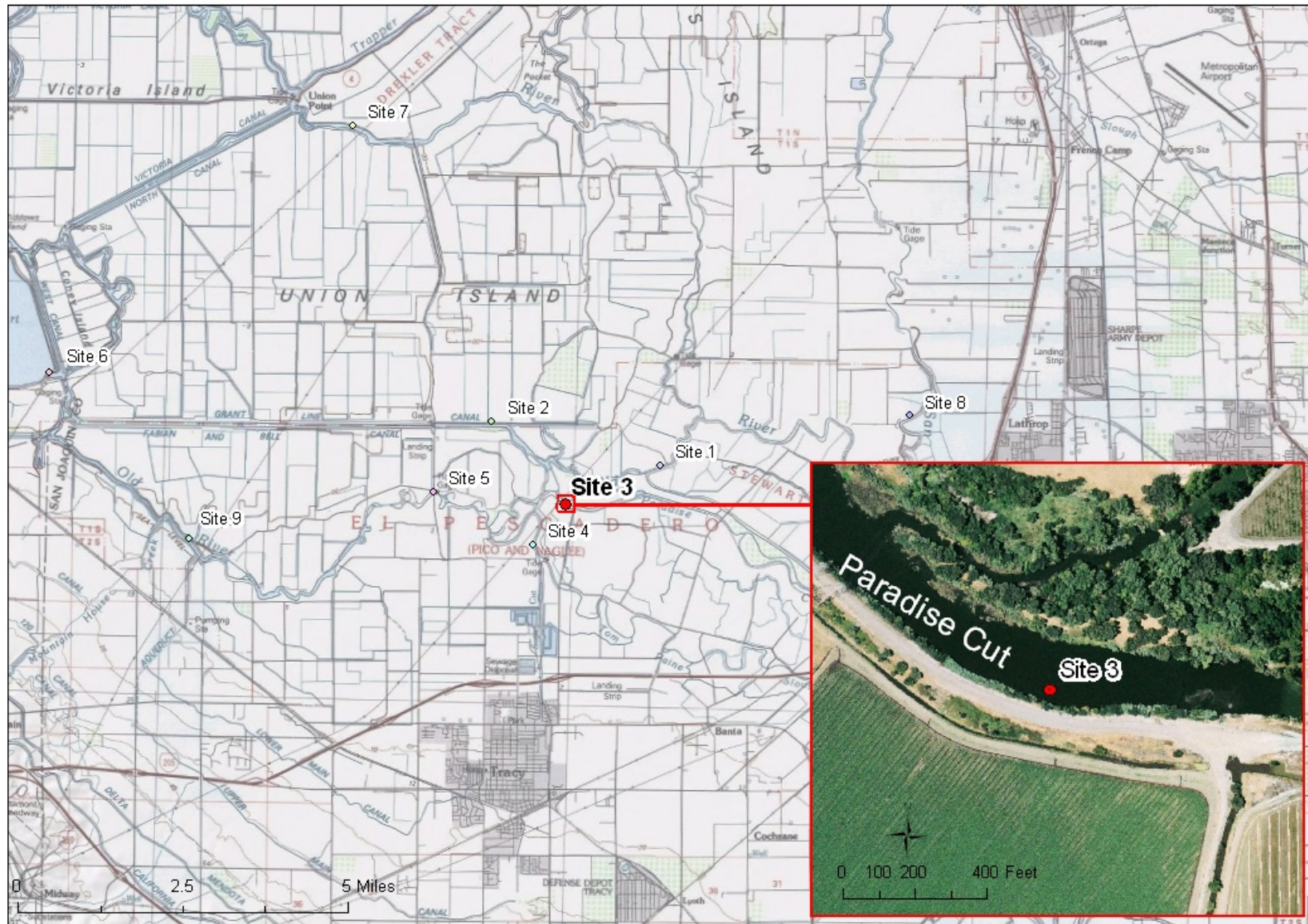
APPENDIX 2 – PHOTOS



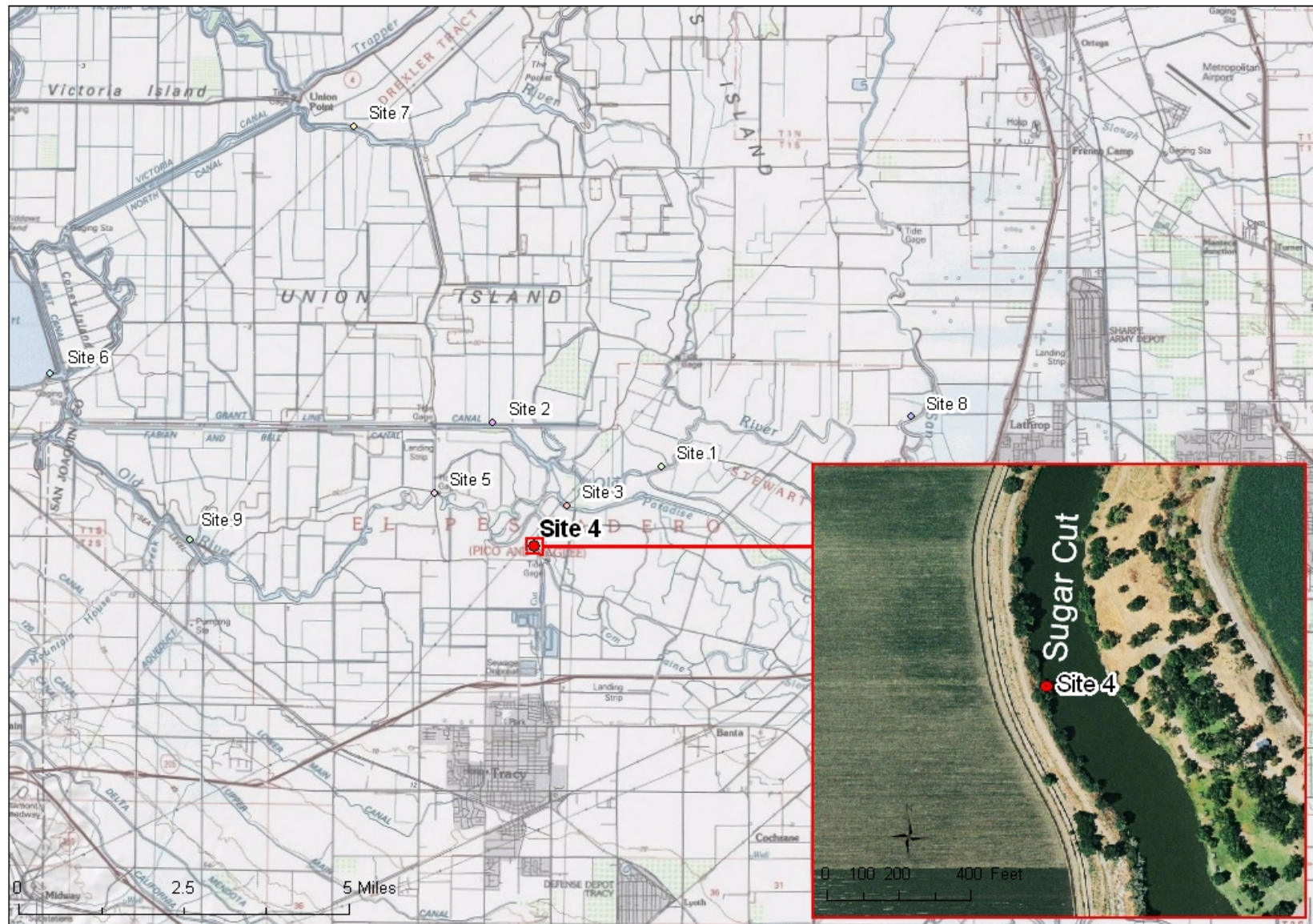
Site 1- Old River Upstream of Doughty Cut



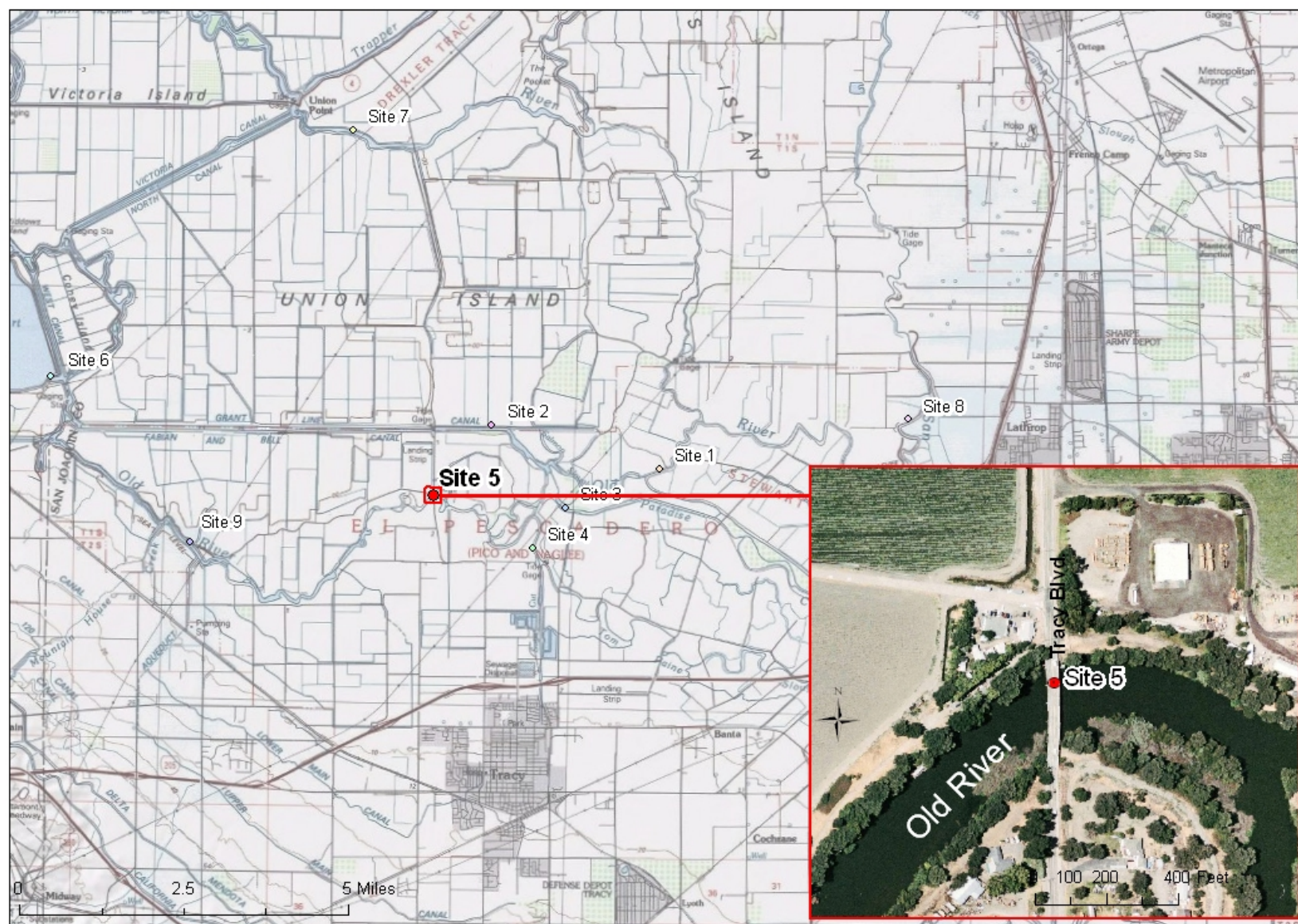
Site 2- Grant Line Canal at Doughty Cut



Site 3- Paradise Cut at Old River



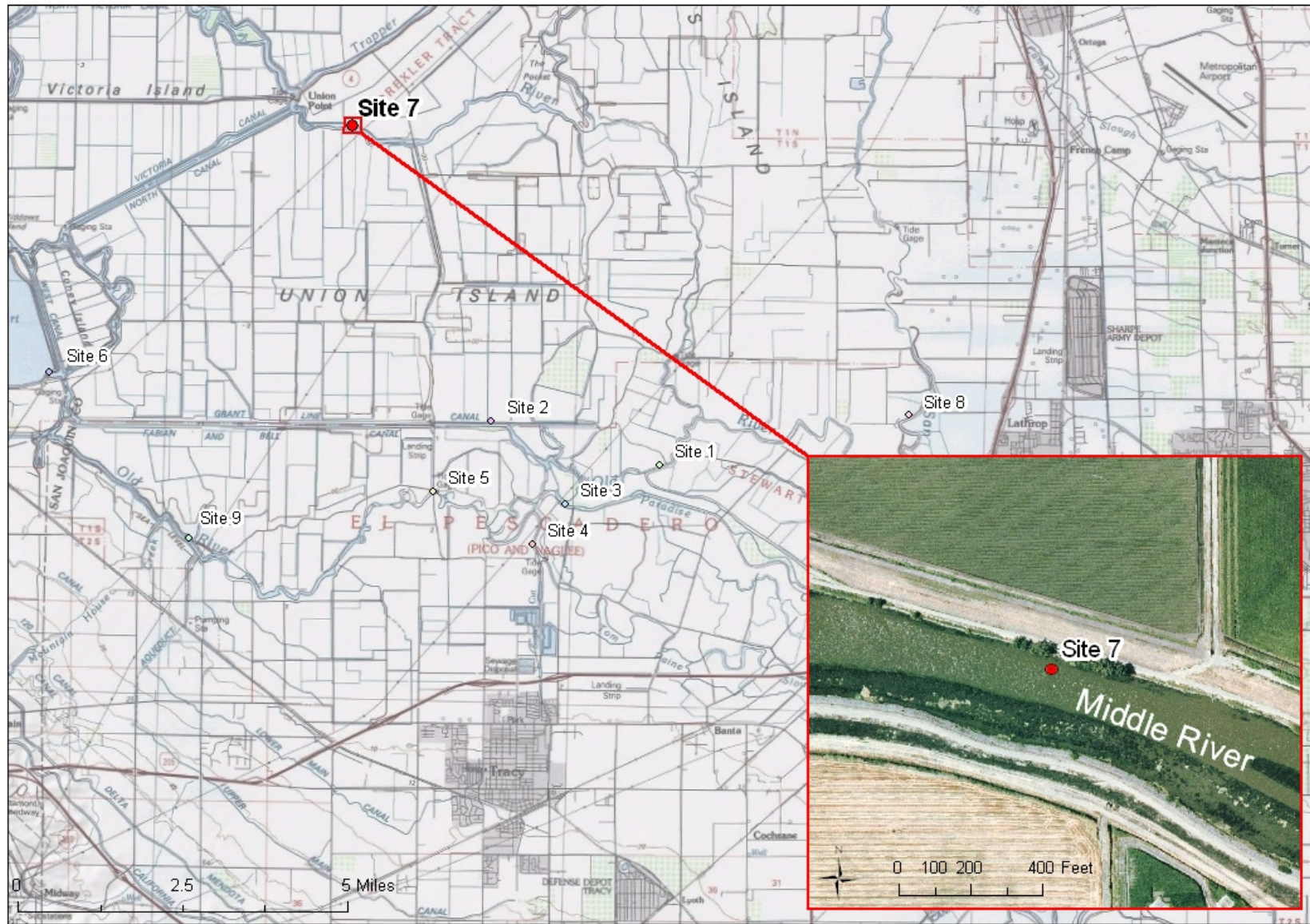
Site 4- Sugar Cut at Old River



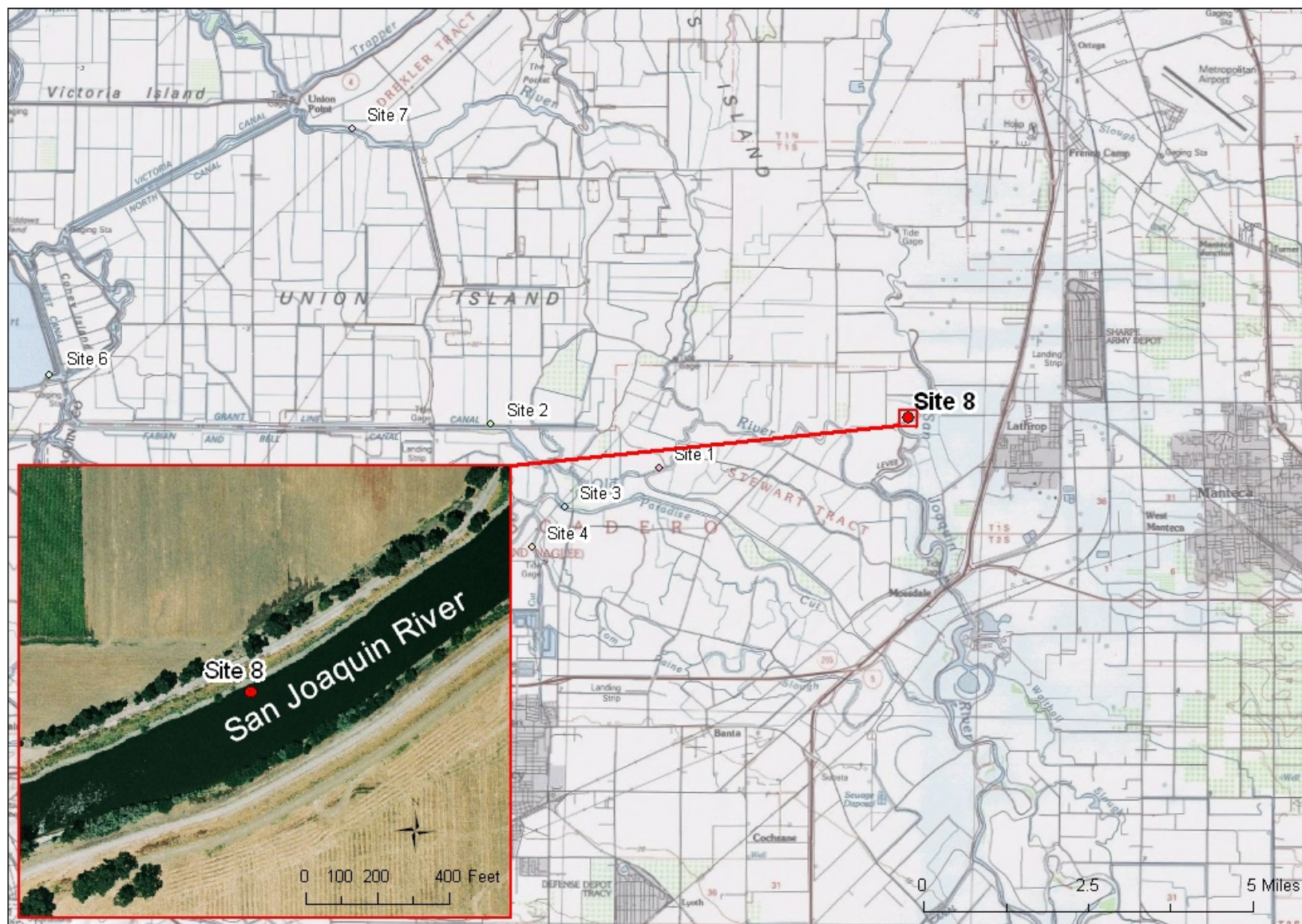
Site 5- Old River at Tracy Blvd.



Site 6- Clifton Court Intake



Site 7- Middle River at Tracy Blvd.



Site 8- San Joaquin River Near Lathrop



Site 9- Old River Above Delta Mendota Canal

DRAFT

STATE OF CALIFORNIA
THE RESOURCES AGENCY
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18707 BD

This Permit is issued to:

Department of Water Resources
3500 Industrial Boulevard
West Sacramento, California 95691

To install eight flow monitoring stations at separate sites throughout the southern Delta in Middle River, Old River, Paradise Cut, Grantline Canal, the San Joaquin River, and the intake at Clifton Court Forebay. Each station consists of a 12-inch steel pile in the bed of the channel. At Site 8, rock rip-rap will be placed 25 feet upstream and 25 feet downstream from the pile locations. Project sites are in San Joaquin and Contra Costa Counties (Section , T , R , MDB&M, Reclamation Districts 17, 2058, and 2089, .Not Specified, San Joaquin County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: _____

Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection

Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18707 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FOURTEEN: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources, Reclamation District 17, Reclamation District 2058, Reclamation District 2089 or any other agency responsible for maintenance.

FIFTEEN: Upon receipt of a signed copy of the issued (not approved only) permit the permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

SIXTEEN: The Central Valley Flood Protection Board, Reclamation District 17, Reclamation District 2058 and Reclamation District 2089 shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

SEVENTEEN: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

EIGHTEEN: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District,

Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

NINETEEN: The permittee shall be responsible for repair of any damages to the project levees and other flood control facilities due to construction, operation, or maintenance of the proposed project.

TWENTY: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

TWENTY-ONE: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

TWENTY-TWO: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

TWENTY-THREE: No construction work of any kind shall be done during the flood season from November 1 to July 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-FOUR: The top of driven piles shall be as shown on the submitted drawings.

TWENTY-FIVE: Revetment shall be uniformly placed and properly transitioned into the bank, levee slope, or adjacent revetment and in a manner which avoids segregation.

TWENTY-SIX: Revetment shall be quarry stone and shall meet the following grading:

Quarry Stone

| Stone Size | Percent Passing |
|------------|-----------------|
| 15 inches; | 100 |
| 8 inches; | 80-95 |
| 6 inches; | 45-80 |
| 4 inches; | 15-45 |
| 2 inches; | 0-15 |

TWENTY-SEVEN: The revetment shall not contain any reinforcing steel, floatable, or objectionable material. Asphalt or other petroleum-based products may not be used as fill or erosion protection on the levee section or within the floodway.

TWENTY-EIGHT: In the event existing revetment on the channel bank or levee slope is disturbed or displaced, it shall be restored to its original condition upon completion of the proposed installation.

TWENTY-NINE: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to July 15.

THIRTY: Any additional encroachment(s) in the floodway, on or in the channel bank or the levee section, require an approved permit from the Central Valley Flood Protection Board and shall be in compliance with the Central Valley Flood Protection Board's regulations (Title 23 California Code of Regulations).

THIRTY-ONE: The project sites shall be restored to at least the condition that existed prior to commencement of work.

THIRTY-TWO: The permittee shall replant or reseed the levee slopes to restore sod, grass, or other non-woody ground covers if damaged during project work.

THIRTY-THREE: All debris generated by this project shall be disposed of outside the floodway and off the levee sections.

THIRTY-FOUR: Debris that may accumulate on the permitted encroachment(s) and related facilities shall be cleared off and disposed of outside the floodway after each period of high water.

THIRTY-FIVE: If the permitted encroachments result(s) in an adverse hydraulic impact, the permittee shall provide appropriate mitigation measures, to be approved by the Central Valley Flood Protection Board, prior to implementation of mitigation measures.

THIRTY-SIX: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated June XX, 2012, which is attached to this permit as Exhibit A and is incorporated by reference.



FIGURE 2: Typical Acoustic Doppler Current Profiler Monitoring Station.

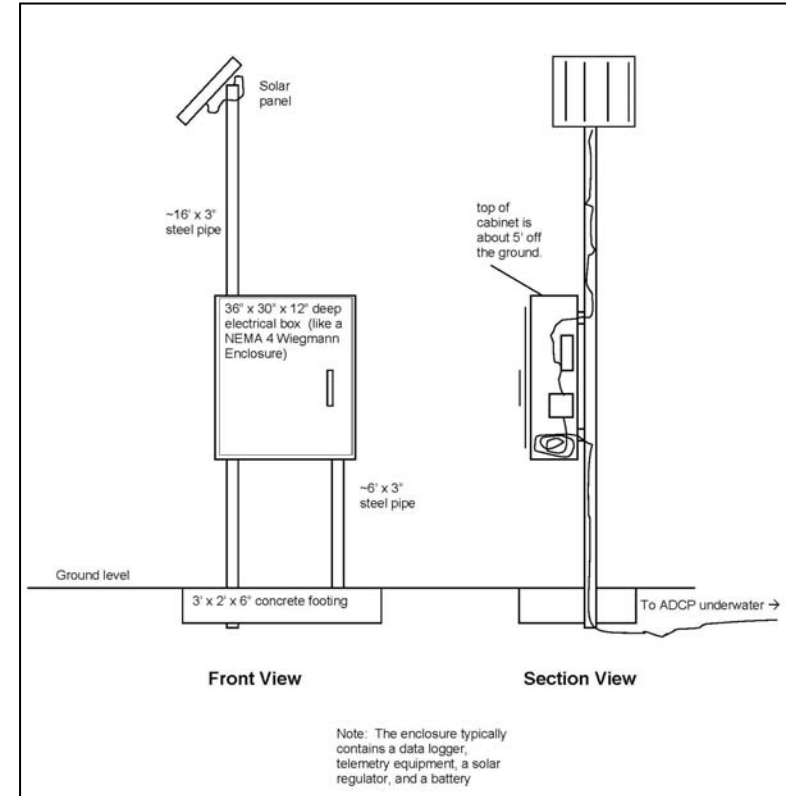


FIGURE 3: Typical Land Based Electrical Equipment Set-up.