

**Meeting of the Central Valley Flood Protection Board
November 16, 2012**

Staff Report – Encroachment Permit

**River Garden Farms
Fish Screen, Yolo County**

1.0 – ITEM

Consider approval of Permit No. 18799 (Attachment B)

2.0 – APPLICANT

River Garden Farms

3.0 – LOCATION

The project is located on the right (west) bank of the Sacramento River at approximately river mile 90.5.

(Sacramento River, Yolo County, see Attachment A)

4.0 – DESCRIPTION

Applicant proposes to install a self-cleaning, retractable Intake Systems, Inc., fish screen on an existing agricultural diversion.

5.0 – PROJECT ANALYSIS

The proposed project involves the installation of a self-cleaning fish screen on an existing, unscreened water diversion facility used to irrigate agricultural land in Yolo County. The existing facility has three vertical pumps drawing a combined flow of 62 CFS from the river. The existing pumps operate under both high and low water conditions between about Mid-April through Mid-October, but can deliver water during the winter months. The existing pumps are well supported; however, the existing piled support structure collects a significant amount of debris during high flow events and requires annual maintenance by divers and boats to remove it. The existing pump

platform deck and its supports will be modified for the fish screen system; however, the overall footprint of the facility will be unchanged.

The self-cleaning fish screen and retrieval system, as well as all related support structures, protection features, and structure modifications will be designed and installed by Intake Screens, Inc. (ISI). Two new pump wet wells will enclose the pumps so that all future diversions will draw water from a screened opening. The existing piles will be used to brace and support the new wet wells under the pumps. A new debris boom will be installed just upstream of the existing pumping plant to deflect some of the large floating debris away from the new facilities and the provide protection from possible damage. New piles will be added to support the retrieval track, screen, intake/docking inlet, and the new debris boom. The proposed project conforms to all Title 23 standards.

5.1 – Hydraulic Analysis

The MBK version of the Sacramento and San Joaquin River Basins Comprehensive Study (Comp Study) Sacramento River UNET model, which was originally developed by the United States Army Corps of Engineers (USACE) [USACE], was used for this analysis.

The computed pre-project and post-project maximum water surface elevations at and near the project site were shown to be 39.47 feet NGVD29 pre-project and 39.49 feet NGVD29 post-project. The results of the analysis show that the proposed project would have no measurable impact to the SRFCP design flood water surface.

5.2 – Geotechnical Analysis

A geotechnical analysis is not needed for this proposed project.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

- The Sacramento River West Side Levee District has endorsed the project in a letter dated March 2, 2012, which is attached to this permit as Exhibit A and is incorporated by reference.

- 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 B.

7.0 – CEQA ANALYSIS

Board staff has prepared the following California Environmental Quality Act (CEQA) determination:

The Board, acting as the CEQA lead agency has determined that the project is categorically exempt from CEQA under a Class 2 Categorical Exemption (CEQA Guidelines Section 15302) covering replacement or reconstruction of existing structures and under a Class 4 Categorical Exemption (CEQA Guidelines Section 15304) covering minor alterations to land.

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 on the facilities of the State Plan of Flood Control, and consistency of the proposed project with the Central Valley Flood Protection Plan as adopted by Board Resolution 2012-25 on June 29, 2012:

The project has insignificant effect on facilities of the State Plan of Flood Control and is consistent with the Central Valley Flood Protection Plan.

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

Effects to the proposed project from reasonable projected future events will be negligible.

9.0 – STAFF RECOMMENDATION

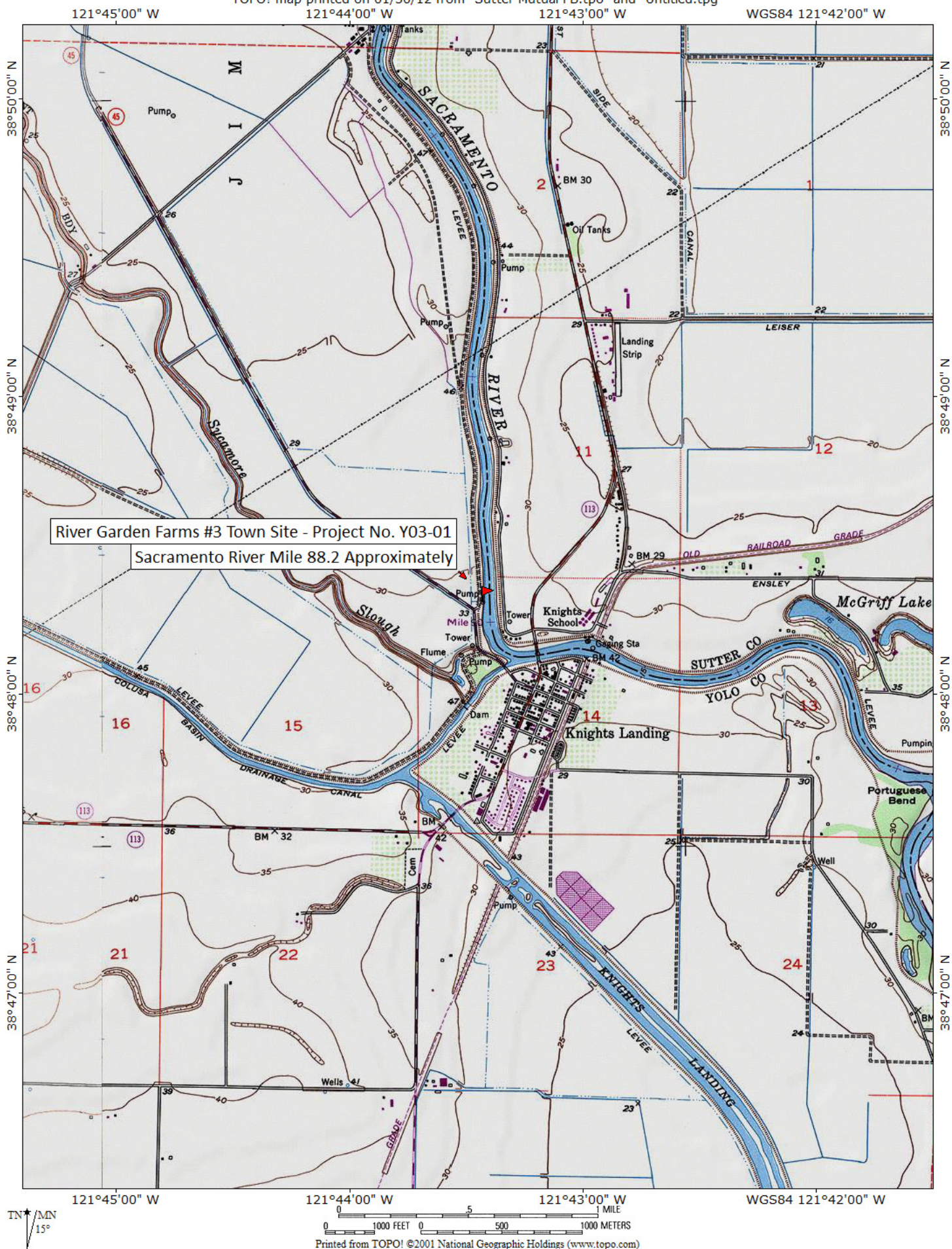
Staff recommends that the Board find the project exempt from CEQA, approve the permit conditioned upon receipt of a favorable U.S. Army Corps of Engineers comment letter) and direct staff to file a Notice of Exemption with the State Clearinghouse.

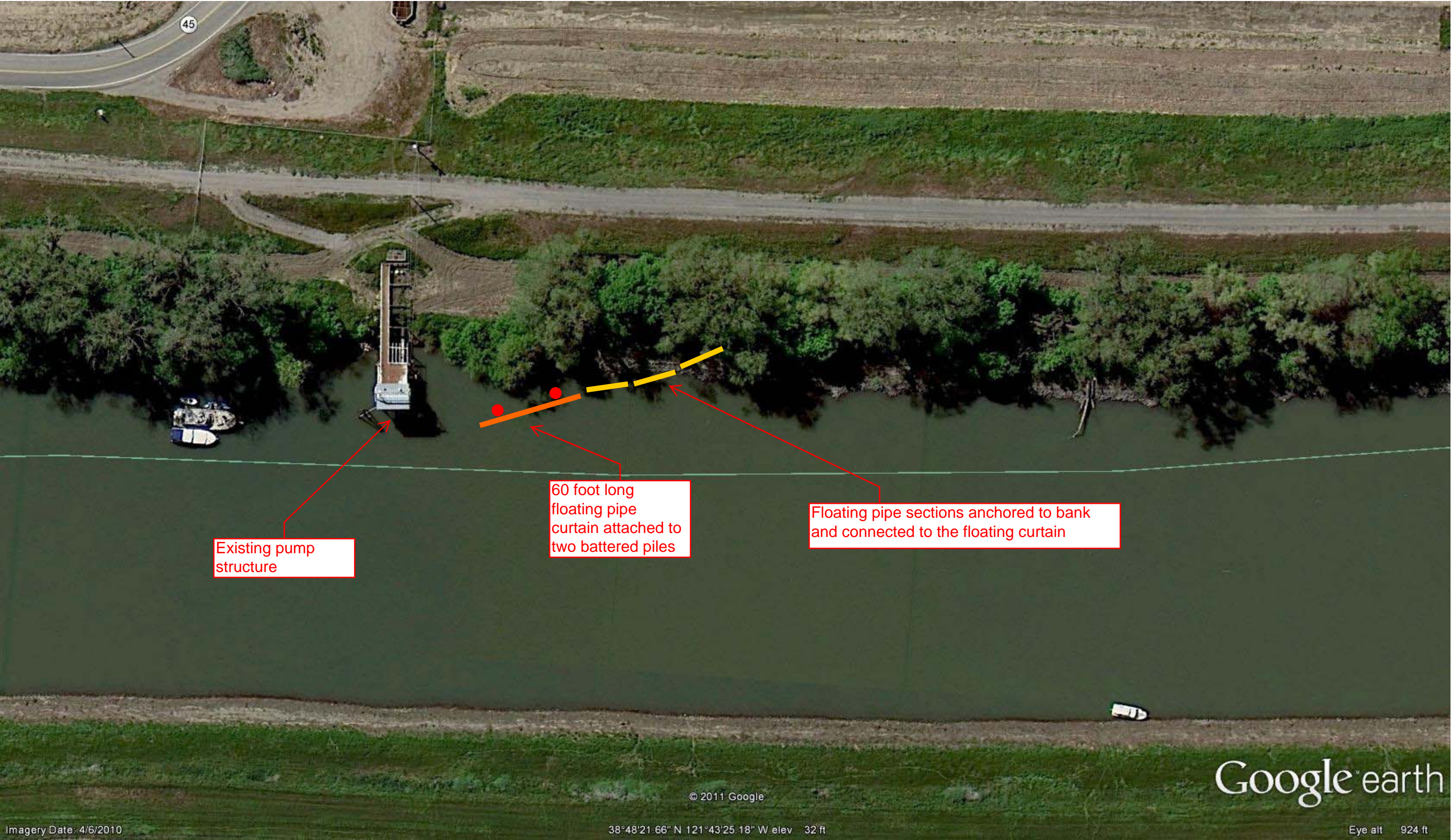
10.0 – LIST OF ATTACHMENTS

- A. Location Maps and photos
- B. Draft Permit No. 18799
- C. Project Drawings

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

TOPO! map printed on 01/30/12 from "Sutter Mutual PB.tpo" and "Untitled.tpg"





River Garden Farms #3 - Town Site
Pre-Construction Site Pictures
Project No. Y03-01



River Garden Farms #3 - Town Site
Pre-Construction Site Pictures
Project No. Y03-01



DRAFT

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

PERMIT NO. 18799 BD

This Permit is issued to:

River Garden Farms
41758 County Road 112
Knights Landing, California 95645

To install a self-cleaning, retractable Intake Screens, Inc. fish screen system on an existing agricultural diversion. The project is located on the right (west) bank of the Sacramento River at approximate river mile 90.5 (Section 15, T11N, R2E, MDB&M, Sacramento River West Side Levee District, Sacramento River, Yolo 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

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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. 18799 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, Sacramento River West Side Levee District 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, Department of Water Resources, and the Sacramento River West Side Levee District 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 levee 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 April 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-FOUR: The top of driven piles shall be a minimum distance of 2 feet above the design flood plane elevation of 39.47 feet, NGV Datum.

TWENTY-FIVE: The proposed floating facilities shall be properly anchored to prevent detachment from the anchoring system during periods of high water.

TWENTY-SIX: No materials or equipment shall be stored on the levee section.

TWENTY-SEVEN: 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.

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

TWENTY-NINE: In the event that levee or bank erosion injurious to the adopted plan of flood control occurs at or adjacent to the permitted encroachment(s), the permittee shall repair the eroded area and propose measures, to be approved by the Central Valley Flood Protection Board, to prevent further erosion.

THIRTY: 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 April 15.

THIRTY-ONE: At all times during construction, at least one lane of the levee crown roadway shall be kept clear for vehicular access.

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

THIRTY-THREE: 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-FOUR: During construction of the project, any and all anticipated or unanticipated conditions encountered which may impact levee integrity or flood control shall be brought to the attention of the Flood Project Inspector immediately and prior to continuation. Any encountered abandoned encroachments shall be completely removed or properly abandoned under the direction of the Flood Project Integrity and Inspection Branch Inspector.

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 Sacramento River West Side Levee District dated March 2, 2012, which is attached to this permit as Exhibit A and is incorporated by reference.

THIRTY-SEVEN: The permittee shall comply with all conditions set forth in the letter from the Department of the Army (U.S. Army Corps of Engineers, Sacramento District) dated November XX, 2012, which is attached to this permit as Exhibit B and is incorporated by reference.

DATE 5/01/12

RM 90.75 - River Gardens
Cross Section

