



California Regional Water Quality Control Board Central Valley Region

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Protection

16 January 2009

John Bassett
Sacramento Area Flood Control Agency
700 7th Street, 7th Floor
Sacramento, CA 95814

**CLEAN WATER ACT §401 TECHNICALLY CONDITIONED WATER QUALITY
CERTIFICATION FOR DISCHARGE OF DREDGED AND/OR FILL MATERIALS FOR THE
SACRAMENTO AREA FLOOD CONTROL AGENCY' S NATOMAS LEVEE IMPROVEMENT
PROGRAM LANDSIDE IMPROVEMENT PROJECT - PHASE 2 (WDID#5A34CR00430)
SACRAMENTO/ SUTTER COUNTY**

WATER QUALITY CERTIFICATION STANDARD CONDITIONS:

1. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and §3867 of Title 23 of the California Code of Regulations (23 CCR).
2. 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 the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. The validity of any non-denial certification action shall be conditioned upon total payment of the full fee required under 23 CCR §3833, unless otherwise stated in writing by the certifying agency.
4. Certification is valid for the duration of the described project. Discharger shall notify the Regional Board on writing within 7 days of project completion.

ADDITIONAL TECHNICALLY CONDITIONED CERTIFICATION CONDITIONS:

In addition to the four standard conditions, the applicant shall satisfy the following:

1. Sacramento Area Flood Control Agency shall notify the Board in writing of the start of any in-water activities.
2. Except for activities permitted by the U.S. Army Corps under §404 of the Clean Water Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.

California Environmental Protection Agency

Landside Improvement Project - Phase 2

3. The discharge of petroleum products or other excavated materials to surface water is prohibited.
4. Activities shall not cause turbidity increases in surface water to exceed:
 - (a) where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), increases shall not exceed 1 NTU;
 - (b) where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;
 - (c) where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs;
 - (d) where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

Except that these limits will be eased during in-water working periods to allow a turbidity increase of 15 NTU over background turbidity as measured in surface waters 300 feet downstream from the working area. In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected.

5. Activities shall not cause settleable matter to exceed 0.1ml/l in surface waters as measured in surface waters 300 feet downstream from the project.
6. Activities shall not cause visible oil, grease, or foam in the work area or downstream.
7. All areas disturbed by project activities shall be protected from washout or erosion.
8. In the event that project activities result in the deposition of soil materials or creation of a visible plume in surface waters, the following monitoring shall be conducted immediately upstream and 300 feet downstream of the work site and the results reported to this office (contact person is indicated below) within two weeks:

Parameter	Unit	Type of Sample	Frequency of Sample
Turbidity	NTU	Grab	Every 4 hours during in water work
Settleable Material	ml/l	Grab	Same as above.

9. Sacramento Area Flood Control Agency shall notify the board immediately if the above criteria for turbidity, settleable matter, oil/grease, or foam are exceeded.
10. Sacramento Area Flood Control Agency shall notify the Board immediately of any spill of petroleum products or other organic or earthen materials.
11. Sacramento Area Flood Control Agency shall comply with all Department of Fish and Game 1600 requirements for the project.

Landside Improvement Project - Phase 2

12. Sacramento Area Flood Control Agency must obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activities issued by the State Water Resources Control Board.
13. Sacramento Area Flood Control Agency shall submit a copy of the final approved Mitigation and Monitoring Program.
14. The Conditions in this water quality certification are based on the information in the attached Project Information sheet. If the information in the attached Project Information sheet is modified or the project changes, this water quality certification will no longer be valid.

ADDITIONAL STORM WATER QUALITY CONDITIONS:

The applicant shall also satisfy the following additional storm water quality conditions:

1. During the construction phase, Sacramento Area Flood Control Agency must employ strategies to minimize erosion and the introduction of pollutants into storm water runoff. These strategies must include the following:
 - (a) the Storm Water Pollution Prevention Plan (SWPPP) must be prepared during the project planning and design phases and before construction.
 - (b) an effective combination of erosion and sediment control Best Management Practices (BMPs) must be implemented and adequately working prior to the rainy season and during all phases of construction.
2. Staff of the Regional Water Board has prepared total maximum daily load (TMDL) allocations that, if approved, would limit methylmercury in storm water discharges to the Sacramento-San Joaquin Delta. These proposed allocations are scheduled to be considered by the Regional Water Board for adoption. Should they be adopted by the Regional Water Board and eventually approved by the Environmental Protection Agency, they may limit the discharge of methylmercury from the proposed project. The purpose of this condition is to provide notice to the applicant that methylmercury discharge limitations and monitoring requirements may apply to this project at some time in the future and also to provide notice of the Regional Water Board's TMDL process and that elements of the planned construction may be subject to the proposed TMDL allocation.

REGIONAL WATER QUALITY CONTROL BOARD CONTACT PERSON:

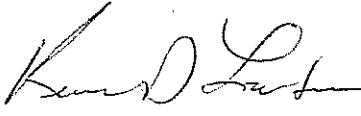
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Landside Improvement Project - Phase 2

WATER QUALITY CERTIFICATION:

I hereby issue an order certifying that any discharge from Sacramento Area Flood Control Agency's Natomas Levee Improvement Program Landside Improvement Project - Phase 2 (WDID#5A34CR00430) will comply with the applicable provisions of §301 ("Effluent Limitations"), §302 ("Water Quality Related Effluent Limitations"), §303 ("Water Quality Standards and Implementation Plans"), §306 ("National Standards of Performance"), and §307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Resources Control Board Water Quality Order No. 2003-0017 DWQ "Statewide General Waste Discharge Requirements For Dredged Or Fill Discharges That Have Received State Water Quality Certification (General WDRs)".

Except insofar as may be modified by any preceding conditions, all certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the applicant's project description and the attached Project Information Sheet, and (b) compliance with all applicable requirements of the Regional Water Quality Control Board's Water Quality Control Plan (Basin Plan).


for PAMELA C. CREEDON
Executive Officer

Enclosure: Project Information

cc: U.S. Army Corps of Engineers, Sacramento
Dave Smith, Wetlands Section Chief (WTR-8), U.S. Environmental Protection Agency,
Region 9, San Francisco
U.S. Fish & Wildlife Service, Sacramento
Bill Orme, 401 Certification and Wetlands Unit Chief, State Water Resources Control Board,
Sacramento
Jeff Drongesen, Department of Fish and Game, Sacramento
Bill Jennings, CA Sportfishing Protection Alliance, Stockton
Eric Htain, EDAW, Inc., Sacramento

PROJECT INFORMATION

Application Date: 18 September 2008

Applicant: John Bassett
Sacramento Area Flood Control Agency
700 7th Street, 7th Floor
Sacramento, CA 95814

Applicant Representatives: Eric Htain
EDAW, Inc.
2022 J Street
Sacramento, CA 95811

Project Name: Natomas Levee Improvement Program Phase 2- Landside Improvement Project

Application Number: WDID#5A34CR00430

U.S. Army Corps File Number: SPK-2007-00211

Type of Project: Levee enhancement

Project Location: Township 9, 10, 11 North, Range 3, 4 East, MDB&M. Latitude: 38.780° and Longitude: 121.603°.

County: Sacramento and Sutter

Receiving Water(s) (hydrologic unit): Natomas Cross Canal and Sacramento River, Sacramento Hydrologic Basin, Valley- American Hydrologic Unit #519.22, Pleasant Grove HSA

Water Body Type: Wetlands, Streambed, and Stream bank

Designated Beneficial Uses: The Basin Plan for the Central Valley Regional Board has designated beneficial uses for surface and ground waters within the region. Beneficial uses that could be impacted by the project include: Municipal and Domestic Water Supply (MUN); Agricultural Supply (AGR); Industrial Supply (IND), Hydropower Generation (POW); Groundwater Recharge, Water Contact Recreation (REC-1); Non-contact Water Recreation (REC-2); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); and Wildlife Habitat (WILD).

Project Description (purpose/goal): This certification is for Phase 2 of the Sacramento Area Flood Control Agency's (SAFCA's) Natomas Levee Improvement Program (NLIP) Landside Improvement Project. The project description is based on information contained in the following documents:

- a) Applications for water quality certification, U.S. Army Corps (Corps) Section 404 Permit, and Department of Fish and Game (DFG) Stream Alteration Agreement

Landside Improvement Project - Phase 2

- b) Draft Environmental Impact Report (DEIR) on the NLIP Landside Improvement Project - Phase 2, 14 September 2007.
- c) Supplement to the Environmental Impact Report on the NLIP Landside Improvements Project – Phase 2, November 2008.
- d) NLIP Landside Improvements Project – Phase 2 Administrative Mitigation and Monitoring Program, December 2008.
- e) DFG draft Streambed Alteration Agreement for the NLIP Landside Improvement Project Phase 2, Notification No. 1600-2008-0259-R2
- f) U.S. Fish and Wildlife Service (USFWS) Biological Opinion for the NLIP Landside Improvements Project 9 October 2008 (Ref # 81420-2008-F-0195-5).
- g) NOAA National Marine Fisheries Service (NMFS) Letter of Concurrence under Section 7 of the ESA for the NLIP, 22 December 2008 (Ref # 2008/05035).
- h) Five wetland delineations conducted within Landside Improvements Project area during different times and for different projects. The five wetland delineations have been verified by the Corp.
- i) Maps of impacts to state waters, EDAW Inc., 2008.

SAFCA's NLIP Landside Improvement Project consists of the landside components of the NLIP. The purpose of the NLIP is to improve the levee system that protects the 53,000-acre Natomas Basin with at least 100-year level flood protection by the end of 2012 and 200-year level of protection over time. The Landside Improvements Project involves four phases of work to correct levee height deficiencies and seepage potential along the Natomas Cross Canal Levee (NCC) south levee, Sacramento River east levee, Pleasant Grove Creek Canal (PGCC) west levee, and related landside components. This certification only applies to the Phase 2 components of the project. Phase 1 was initiated as a separate project called the NCC South Levee Phase 1 Improvements Project, which was completed in 2008. Phase 1 involved installation of a cutoff wall along half of the NCC South Levee. A certification was issued for Phase 1 in 2007. Phase 2 construction will occur within State and Federal waters beginning in 2009 and will be completed in 2010. Phase 3 will overlap Phase 2 construction in the middle of 2009 and will be completed in 2010, and Phase 4 will begin after the completion of Phase 3 and will be completed by 2012. Phases 3 and 4 will be part of separate water quality certifications.

The proposed project will permanently impact 16.34 acres of state waters, of which 16.18 acres of waters are waters of the U.S., and will temporarily impact 69.30 acres of waters of the U.S.

Phase 2 consists of the following construction:

- Improvements will occur along the 5.3-mile long NCC south levee (levee slopes modified and cutoff wall installed within second half of the levee), and the Sacramento River east levee from the NCC south levee to 2,000 feet south of the North Drainage Canal. Depending on where the levee is in the project area, the main improvements are construction of a cutoff wall, enlargement of seepage berms, levee slope modification, and construction of an adjacent setback levee.
- Creation of a new Elkhorn Main Irrigation Canal

Landside Improvement Project - Phase 2

- Construction of a new canal designed to provide drainage and associated giant garter snake habitat between the North Drainage Canal and the Elkhorn Reservoir
- Culvert removal under Garden Highway adjacent to the former RD 1000 pumping plant No. 2 site
- Other construction activities associated with Phase 2

Preliminary Water Quality Concerns: The construction activities may impact surface waters with increased turbidity and settleable matter.

Proposed Mitigation to Address Concerns: Sacramento Area Flood Control Agency will implement Best Management Practices (BMPs) to control sedimentation and erosion. All temporary affected areas will be restored to pre-construction contours and conditions upon completion of construction activities. Sacramento Area Flood Control Agency will conduct turbidity and settleable matter testing during in water work, stopping work if Basin Plan criteria are exceeded or are observed.

Fill/Excavation Area: Approximately 248,000 cubic yards of fill and excavation will occur within 85.69 acres of waters of the state. Fill will consist of clean soil, gravel/cobble mix, clean riprap fill, and engineered fill (mix different types and quantities of native soils together (e.g. ½ top soil and ½ clay) for engineering purposes). 16.39 acres of state waters will be permanently filled and/or excavated, and 69.30 acres of waters will be temporarily filled and/or excavated.

Dredge Volume: None

U.S. Army Corps of Engineers Permit Number: Individual Permit

Department of Fish and Game Streambed Alteration Agreement: Sacramento Area Flood Control Agency applied for a Streambed Alteration Agreement on 16 September 2008 and currently has a draft Streambed Alteration Agreement with DFG.

Possible Listed Species: Central Valley steelhead, Central Valley Spring-run Chinook salmon, Sacramento River Winter-run Chinook salmon, North American Green Sturgeon, giant garter snake, and valley elderberry longhorn beetle.

Status of CEQA Compliance: The Sacramento Area Flood Control Agency approved the Final Environmental Impact Report for this project on 30 November 2007 (State Clearinghouse Number 2007062016).

Compensatory Mitigation: A Mitigation and Monitoring Program (MMP) (administrative draft) has been prepared for Phase 2 of the Landside Improvements Project. The MMP has been developed to address the compensatory mitigation requirements of the Corps, USFWS, DFG, and Central Valley Water Board.

As previously indicated, the project will permanently impact 16.34 acres of state waters (of which 16.18 acres are waters of the U.S) and will temporarily impact 69.30 acres of waters of the U.S.. Compensatory mitigation for the project will result in the creation of 24.46 acres of state waters (1.5:1 ratio of mitigation to impacts) (See table on page 8).

Landside Improvement Project - Phase 2

The MMP includes the following mitigation:

- construction of an 11,800-foot segment of a new giant garter snake(GGS)/Drainage canal
- relocation of an 11,950-foot segment of the Elkhorn Irrigation canal
- preservation of up to 175 acres of rice, including approximately 15 acres of irrigated wetlands
- preservation of approximately 84 acres of field crops,
- creation of approximately 310 acres of managed perennial grasslands
- preservation of approximately 25 acres of existing landside woodlands, and
- creation of approximately 50 acres of new landside woodlands.

Permanent Impacts and Corresponding Mitigation for State Waters within the Landside Improvements Project – Phase 2		
Waters	Permanent Impacts for Phase 2	Phase 2 Mitigation
Seasonal wetlands	7.81 ac	
Irrigated wetlands	0.24 ac	
Canals, ditches, and streams	8.29 ac	
GGS Open water canal (managed in perpetuity by USFWS)		12.46 ac
Elkhorn Canal Relocation/Creation	0.5 ac of Elk Horn Canal is included under impacts to Canals, ditches, and streams	12 ac
Total	16.34 ac state waters	24.46 ac state waters

The creation of the GGS/Drainage Canal will provide compensatory mitigation for impacts to low-quality habitat for GGS, degraded secondary canals, ditches, and wetlands. The GGS/Drainage Canal will provide high-quality habitat for GGS and local drainage and minor irrigation water conveyance for a portion of the Natomas Basin. Under the ultimate design (at full construction of the project in Phase 4), the GGS canal would connect GGS populations in the south portion of the Natomas Basin (Fisherman's Lake) with populations in the north portion of the basin (Natomas Cross Canal). The canal and adjacent upland habitat will be protected in perpetuity.

USFWS issued a Biological Opinion, NMFS issued a letter of concurrence, and DFG has issued a draft SAA for the project. USFWS's Biological Opinion determined that the proposed project is not likely to jeopardize the continued existence of GGS or valley elderberry longhorn beetle (VELB). The Biological Opinion contains an Incidental Take Statement with conditions and measures to avoid and minimize impacts on GGS and VELB. NMFS's letter of concurrence determined that the proposed project is not likely to adversely affect federally listed fish species, which include Central Valley steelhead, Central Valley Spring-run Chinook salmon, Sacramento River Winter-run Chinook salmon, and North American Green Sturgeon. The draft SAA states that the project could result in the incidental take of a State listed species which are giant garter snake, Central Valley spring-run Chinook salmon, Sacramento River winter-run Chinook salmon, and Swainson's hawk. SAFCA has applied for an incidental take permit under Fish and Game Code Section 2081.

Application Fee Provided: Total fees of \$34,534.50 have been submitted as required by 23 CCR §3833b(3)(A) and by 23 CCR §2200(e).

DISTRIBUTION LIST

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