Appendix A

Clean Water Act Section 404 and Rivers and Harbors Act, Section 10 Permit



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT 1325 J STREET SACRAMENTO CA 95814-2922

December 14, 2016

Regulatory Division (SPK-2016-00042)

Bureau of Reclamation Attn: Ms. Jennifer Lewis 1243 N Street Fresno, California 93720

Dear Ms. Lewis

We are responding to your January 8, 2016, request for a Department of the Army (DA) permit for the San Andreas Salinity Station Improvements project. The approximately 0.01-acre project site is located on the north side of the San Joaquin River, in Section 27, Township 4 North, Range 2 East, Mount Diablo Meridian, Latitude 38.10330°, Longitude -121.59132°, in Isleton, Sacramento County, California.

Based on the information you provided to this office, you are proposing to replace the San Andreas Salinity Station. The specific activities requiring DA authorization, under Section 10 of the Rivers and Harbors Act of 1899, is the removal and replacement of pilings below the Mean High Tide Line (MHTL) of the San Joaquin River, a Traditional Navigable Waterway.

We have determined that the proposed vibratory pile driving activities in navigable waters of the U.S. associated with the project are authorized by Nationwide Permit Number (NWP) 3, Maintenance. Furthermore, proposed activities associated with the construction and replacement of the existing walkway abutment would occur above the MHTL and therefore; does not require DA section 404 permit authorization.

You must comply with all of the terms and conditions of NWP 3, including the applicable regional conditions and project-specific special conditions. Information about the general conditions of NWP 3 and our regional conditions are available on our website at:

www.spk.usace.army.mil/Missions/Regulatory/Permitting/NationwidePermits.aspx. In addition, your work must comply with the following special conditions:

1. To ensure your project complies with the Federal Endangered Species Act, you must implement all of the mitigating measures proposed as part of your project description, which are identified in the enclosed U.S. Fish and Wildlife Service letter of concurrence (Number 08FBDT00-2016-I-0061, dated December 08, 2016) and National Marine Fisheries Service letter of concurrence (Number NMFS # WCR-20116-4359, dated March 24, 2016). If you are unable to implement any of the proposed measures,

you must immediately notify the Corps, the U.S. Fish and Wildlife Office, and the National Marine Fisheries Service so we may consult as appropriate, prior to initiating the work, in accordance with Federal law.

2. Within 30 days after completion of the authorized work, you must sign the enclosed Compliance Certification and return it to this office.

This verification is valid until March 18, 2017, when the existing NWPs are scheduled to be modified, reissued, or revoked. Furthermore, if you commence or are under contract to commence this activity before the date the NWP is modified, reissued, or revoked, you will have 12 months from the date of the modification, reissuance or revocation to complete the activity under the present terms and conditions. Failure to comply with the general and regional conditions of this NWP, or the project-specific special conditions of this authorization, may result in the suspension or revocation of your authorization.

We would appreciate your feedback on this permit action including your interaction with our staff. At your earliest convenience, please tell us how we are doing by completing the Corps' Regulatory Program national customer service survey found on our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx.*

Please refer to identification number SPK-2016-00042 in any correspondence concerning this project. If you have any questions, please contact Ms. Nicole Schleeter at 1325 J Street, Suite 1350, Sacramento, CA 95814, by email at Nicole.M.Schleeter@usace.army.mil, or telephone at 916-557-7889. For more information regarding our program, please visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

William H. Guthrie Chief, California Delta Branch Regulatory Division

Enclosures

cc: (w/o encls) Dr. Melanie Okoro, NMFS, Melanie.okoro@noaa.gov Ms. Kim Squires, Bay-Delta Office, USFWS, Kim_Squires@fws.gov Mr. Nicholas LaVoie, California State Lands Commission, Nicholas.LaVoie@slc.ca.gov



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT 1325 J STREET SACRAMENTO CA 95814-2922

December 14, 2016

Regulatory Division (SPK-2016-00043)

Bureau of Reclamation Attn: Ms. Jennifer Lewis 1243 N Street Fresno, California 93720

Dear Ms. Lewis

We are responding to your January 8, 2016, request for a Department of the Army (DA) permit for the Staten Island Salinity Station Improvements project. The approximately 0.01-acre project site is located on the North side of the Mokelumne River, in Section 11, Township 3 North, Range 5 East, Mount Diablo Meridian, Latitude 38.11693°, Longitude -121.49887°, in Isleton, Sacramento County, California.

Based on the information you provided to this office, you are proposing to replace the Staten Island Salinity Station. The specific activities requiring DA authorization, under Section 10 of the Rivers and Harbors Act of 1899, is the removal and replacement of pilings below the Mean High Tide Line (MHTL) of the Mokelumne River, a Traditional Navigable Waterway.

We have determined that the proposed vibratory pile driving activities in navigable waters of the U.S. associated with the project are authorized by Nationwide Permit Number (NWP) 3, Maintenance. Furthermore, proposed activities associated with the construction and replacement of the existing walkway abutment would occur above the MHTL and therefore; do not require DA section 404 permit authorization.

You must comply with all of the terms and conditions of NWP 3, including the applicable regional conditions and project-specific special conditions. Information about the general conditions of NWP 3 and our regional conditions are available on our website at:

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1. To ensure your project complies with the Federal Endangered Species Act, you must implement all of the mitigating measures proposed as part of your project description, which are identified in the enclosed U.S. Fish and Wildlife Service letter of concurrence (Number 08FBDT00-2016-I-0061, dated December 08, 2016) and National Marine Fisheries Service letter of concurrence (Number NMFS # WCR-20116-4359, dated March 24, 2016). If you are unable to implement any of the proposed measures, you must immediately notify the Corps, the U.S. Fish and Wildlife Office, and the

you must immediately notify the Corps, the U.S. Fish and Wildlife Office, and the National Marine Fisheries Service so we may consult as appropriate, prior to initiating the work, in accordance with Federal law.

2. Within 30 days after completion of the authorized work, you must sign the enclosed Compliance Certification and return it to this office.

This verification is valid until March 18, 2017, when the existing NWPs are scheduled to be modified, reissued, or revoked. Furthermore, if you commence or are under contract to commence this activity before the date the NWP is modified, reissued, or revoked, you will have 12 months from the date of the modification, reissuance or revocation to complete the activity under the present terms and conditions. Failure to comply with the general and regional conditions of this NWP, or the project-specific special conditions of this authorization, may result in the suspension or revocation of your authorization.

We would appreciate your feedback on this permit action including your interaction with our staff. At your earliest convenience, please tell us how we are doing by completing the Corps' Regulatory Program national customer service survey found on our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx.*

Please refer to identification number SPK-2016-00043 in any correspondence concerning this project. If you have any questions, please contact Ms. Nicole Schleeter at 1325 J Street, Suite 1350, Sacramento, CA 95814, by email at Nicole.M.Schleeter@usace.army.mil, or telephone at 916-557-7889. For more information regarding our program, please visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

William H. Guthrie Chief, California Delta Branch Regulatory Division

Enclosures

cc: (w/o encls) Dr. Melanie Okoro, NMFS, Melanie.okoro@noaa.gov Ms. Kim Squires, Bay-Delta Office, USFWS, Kim_Squires@fws.gov Mr. Nicholas LaVoie, California State Lands Commission, Nicholas.LaVoie@slc.ca.gov

Appendix B

Encroachment Permit from the Central Valley Flood Protection Board

EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD 3310 El Camino Ave., Ste. 170 SACRAMENTO, CA 95821

SACRAMENTO, CA 95821 (916) 574-0609 FAX: (916) 574-0682



November 10, 2016

Bureau of Reclamation 1243 N Street Fresno, California 93721

Subject: Permit No. 19097 BD

Enclosed is your approved Central Valley Flood Protection Board (Board) Permit No. 19097 BD. Under General Condition Four (4) of the permit, you are required to accomplish the work under direction and supervision of the Department of Water Resources (DWR) who provide construction inspection services for the Board. You must notify the Board at (916) 574-0609 and mail the enclosed postcard at least ten days prior to commencing work or your project could be delayed. You will be contacted by a DWR inspector to schedule a preconstruction meeting.

Please note that this permit authorizes only the proposed work that was submitted and reviewed by Board staff. This permit includes twelve (12) General Conditions and several Special Conditions that may place limitations on or require modifications to your proposed work. You are advised to read all conditions prior to starting work. Commencing any work under this permit shall constitute an acceptance of the provisions of the permit and an agreement to perform the work in accordance with the approved permit. This permit does not relieve you from the responsibility, when required by law, to secure the written order or consent from all other State, local, or federal agencies having jurisdiction.

Please contact llene Wellman-Barbree of my staff at (916) 574-0375 or by e-mail at ilenewb@CVFlood.ca.gov if you have any questions.

Sincerely,

Gary Lemon, Chief Permitting Section Central Valley Flood Protection Board

Enclosure

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

PERMIT NO. 19097 BD

This Permit is issued to:

Bureau of Reclamation 1243 N Street Fresno, California 93721

To remove and replace the San Andreas Salinity Station: remove an existing wood deck, station building, conduits, and 5 piles and replace them with weathering steel bridges, guardrails, 4 12-inch diameter piles with caps and bracing, a new station building, gate, and conduit.

The project is located on West Brannan Island Road approximately 4.16 miles southeast of Isleton, at 38.10342°N -121.59134°W, Brannan-Andrus Levee Maintenance District, San Joaquin River, Sacramento County, CA.

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

(SEAL)

NOV 1 0 2916

Dated:

Executive Officer

Page 1 of 4

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. 19097 BD

LIABILITY AND INDEMNIFICATION

THIRTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board (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 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.

FOURTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Board and 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.

FIFTEEN: The Board and the Department of Water Resources shall not be held liable for damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

AGENCY CONDITIONS

SIXTEEN: Board staff received a letter, dated October 4, 2016, from the U.S. Army Corps of Engineers (USACE) District Engineer stating that the District Engineer has no comments or

recommendations regarding flood control because the proposed work does not affect a federally constructed project. This letter is attached to this permit as Exhibit A and is incorporated by reference.

SEVENTEEN: Permittee shall pay to the Board, an inspection fee(s) to cover inspection cost(s), including staff and/or consultant time and expenses, for any inspections before, during, post-construction, and regularly thereafter as deemed necessary by the Board.

EIGHTEEN: The Board reserves the right to add additional, or modify existing, conditions when there is a change in ownership and/or maintenance responsibility of the work authorized under this permit.

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

PRE-CONSTRUCTION

TWENTY: The permittee shall contact the Board by telephone at (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.

CONSTRUCTION

TWENTY-ONE: All work approved by this permit shall be in accordance with the submitted drawings dated March 15, 2012, and specifications except as modified by special permit conditions herein. No work, other than that approved by this permit, shall be done in the project area without prior approval of the Board.

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

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 Board.

TWENTY-FOUR: No material stockpiles, temporary buildings, access ramps, or equipment shall remain in the floodway during the flood season from November 1 to July 15.

TWENTY-FIVE: Piers being dismantled shall be removed to at least one (1) foot below the natural ground line and at least three (3) feet below the bottom of the low water channel.

POST-CONSTRUCTION

TWENTY-SIX: The work area shall be restored to the condition that existed prior to start of work.

TWENTY-SEVEN: 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 Board, to prevent further erosion.

PROJECT ABANDONMENT, CHANGE IN PLAN OF FLOOD CONTROL

TWENTY-EIGHT: If the project works, or any portion thereof, is to be abandoned in the future, the permittee shall abandon the project under direction of the Board at the permittee's cost and expense.

TWENTY-NINE: The permittee may be required, at the permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted project works if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with implementation of the Central Valley Flood Protection Plan or other future flood control plan or project, or if damaged by any cause. If the permittee does not comply, the Board may perform this work at the permittee's expense.

END OF CONDITIONS

Appendix C

Concurrence Memo from the U.S. Fish and Wildlife Service



United States Department of the Interior

FISH AND WILDLIFE SERVICE San Francisco Bay-Delta Fish and Wildlife Office 650 Capitol Mall, Suite 8-300 Sacramento, California 95814



In reply refer to: 08FBDT00-2016-I-0061

DEC 08 2016

MEMORANDUM

То:	Resource Management Division Chief, U.S. Bureau of Reclamation, South- Central California Area Office
From:	Acting Assistant Field Supervisor, U.S. Fish and Wildlife Service, San Francisco Bay- Delta Fish and Wildlife Office, Sacramento, California
Subject:	Informal Section 7 Consultation for the San Andreas and Staten Island Salinity Stations Refurbishment Project, Sacramento and San Joaquin Counties, California (U.S. Bureau of Reclamation File Number: EA-12-027)

This letter is in response to the U.S. Bureau of Reclamation's (Reclamation) January 21, 2016, request to initiate informal consultation with the U.S. Fish and Wildlife Service (Service) for the San Andreas and Staten Island Salinity Stations Refurbishment Project (Project), respectively located on stretches of the San Joaquin and Mokelumne Rivers bordering Sacramento and San Joaquin Counties, California. Reclamation's consultation initiation letter was received by the Service on February 1, 2016. Reclamation has determined that this project may affect, but is not likely to adversely affect the threatened giant garter snake (*Thamnophis gigas*) or delta smelt (*Hypomesus transpacificus*) and its designated critical habitat. This response is in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

In reviewing this project, the Service has relied upon: (1) Reclamation's January 21, 2016, letter requesting informal consultation; (2) Reclamation's January 2016, *San Andreas and Staten Island Salinity Stations Refurbishments: Biological Evaluation for U.S. Fish and Wildlife Service*; (3) the National Marine Fisheries Service's (NMFS) May 24, 2016, concurrence letter; (4) electronic mail (email) between the Service and Reclamation from September 27, 2016 to November 8, 2016; (5) a telephone conference call between the Service and Reclamation on September 26, 2016; and (6) other information available to the Service.

The San Andreas and Staten Island Salinity Stations were originally built in the early 1960s and 1985, respectively, to monitor water quality metrics for the Central Valley Project and inform management decisions. These stations have deteriorated structurally and require refurbishment to

ensure safe working environments for employees monitoring data produced by the stations. Reclamation proposes to replace both stations with higher quality materials. The proposed work would include: (1) demolishing and disposal of the two existing water quality monitoring stations; and (2) construction of new water quality monitoring stations.

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Demolition of the two existing water quality monitoring stations will involve removing and disposing of all existing structural components, including: wood bridges, bridge decks, bridge abutments, piles (5 for San Andreas and 8 for Staten Island), monitoring stations, portions of conduit, equipment, and appurtenances inside of buildings. All materials from the removed station will be disposed of at an approved off-site location. Construction of new water quality stations will include installation of the following: new weathering steel bridges (*e.g.*, Cor-Ten[™]), bridge decks, bridge abutments, connections and structural components secured to piles, stainless steel pipe or safety cable guardrails, 12-inch diameter piles with caps and bracing (4 for San Andreas and 6 for Staten Island), new buildings including hardware and appurtenances, marine gate on access bridge, and electrical components (*e.g.*, conduit, conductors, pull boxes, panelboards, power outlets, luminaires, thermostats, fans, switches, breaker switches, marine warning lights, hardware).

Total disturbance resulting from the proposed activities is not expected to exceed 400 square feet (200 square feet per station). The proposed action is anticipated to require up to two weeks for each of the two salinity stations. All construction work will take place between August 1 and October 1, encompassing both the Service's recommended work windows for delta smelt and giant garter snake. Equipment required for each station replacement will include a barge, barge crane, pile driver, truck crane, haul truck, and pick-up trucks.

A barge will be utilized to remove and replace piles with a vibratory hammer. This has the potential to increase turbidity and underwater sound levels in the project area. Increases in turbidity and sound pressure can affect feeding behavior, growth rates, stress levels, and respiratory abilities which could result in physical injury to delta smelt. The increases in turbidity, however, can be discounted by rapid dispersal caused by tidal circulation, the short-term duration of work and elevated background turbidity levels produced by wind and wave actions. By utilizing a vibratory hammer, peak sound pressure levels (SPL) generated during this project are not expected to exceed thresholds which have been established by regulatory agencies as 187 decibels² referenced to 1 micro Pascal. However, adult delta smelt present within the project area during the increased turbidity and sound levels could be exhibit behavioral effects resulting from the rise in SPL. Delta smelt are expected to move to more suitable habitat in response to localized increases in continuous SPLs within 300 feet from the noise source. Delta smelt larvae and eggs are not expected to be adversely affected by the increase in turbidity because it will occur outside of their spawning period during the Service's recommended work window.

Upland work will include replacing the existing concrete abutments and riprap on the levee slopes where the stations are. The replacement bridges will have new concrete abutments and be replaced within the exact same location as the existing abutments. The area will be cleared and existing bridges and abutments will be removed before new concrete and riprap are placed. The footprint of the abutments is less than 50 square feet. The maintenance of these existing in-water structures will not change the footprint or use, and should not alter long-term functional value of the Project area habitat for delta smelt and giant garter snake or diminish quality of primary constituent elements essential to designated critical habitat.

Conservation Measures

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- 1) All in-water work will be completed during the Service's recommended work window for delta smelt, from August 1 to November 30.
- 2) All upland work will be completed during the Service's recommended work window for giant garter snake, from May 1 to October 1.
- 3) Implementation of best management practices (BMPs) for minimization and control of sedimentation and contamination into the waterways (*e.g.*, silt curtain).
- 4) Twenty four (24) hours prior to construction activities a qualified biologist will survey the project area for giant garter snakes that may be utilizing the rip-rap areas and immediately surrounding upland area where bridge abutment work is expected to take place. If a snake is encountered during construction, activities shall cease until appropriate corrective measures have been completed. Any sightings should be reported to the Service immediately at 916-930-5603. If a lapse greater than 2 weeks occurs in construction activities, the aforementioned pre-construction survey should be repeated as-needed.
- 5) Driving to/from the immediate project area, including equipment staging, should be restricted to 25 mph or less, and drivers should be instructed by the qualified biologist to closely examine the levee road area for snakes, as roadkill incidences have occurred within the region. If not possible to observe slow driving speeds on main access roads, driving and heavy equipment movement should be restricted to established roadways.

The Service concurs with Reclamation's determination that the project may affect but is not likely to adversely affect the giant garter snake or delta smelt and its critical habitat. The concurrence is based on the relatively small scope of the proposed project (200 square feet per station) and duration (two weeks per each station), discountable and minimal water quality degradation, no net change in the footprint of the existing structure, and the implementation of the recommended work windows and BMPs.

Unless new information reveals effects of the proposed action may affect listed species to an extent not considered or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary. Any actions or proposed actions that are modified in a manner that causes an effect to listed species or critical habitat that was not considered in this consultation will require reinitiation.

cc:

This concludes informal consultation for the San Andreas and Staten Island Salinity Stations Refurbishment Project. Please address any question or concern regarding this response by contacting Elden Holldorf, Fish and Wildlife Biologist by telephone at 916-930-5614 or via email at Elden_Holldorf@fws.gov or Kim Squires, Section 7 Coordinator, via email at Kim_Squires@fws.gov. Please refer to Service file number: 08FBDT00-2016-I-0061 in any future correspondence regarding this project.

Ms. Jennifer Lewis, U.S. Bureau of Reclamation, Fresno, California Ms. Chandra Jenkins, U.S. Army Corps of Engineers, Sacramento, California Ms. Maria Rea, National Marine Fisheries Service, Sacramento, California 4