
San Francisco Bay Regional Water Quality Control Board

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February XX, 2015
CIWQS Place No. 757384 (SG)

San Francisco Creek Joint Powers Authority
615 B Menlo Avenue
Menlo Park, Ca 94025

Attention: Len Materman
Email: Len@sfcjpa.org

Subject: Conditional Water Quality Certification for the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, Cities of Palo Alto and East Palo Alto, Santa Clara and San Mateo Counties

Dear Mr. Materman:

Regional Water Board staff has reviewed the application materials submitted by the San Francisquito Creek Joint Powers Authority (JPA) for the proposed San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project (Project) located in Santa Clara and San Mateo counties. The Santa Clara Valley Water District (District) is the Project's local sponsor. The JPA has applied to the U.S. Army Corps of Engineers (Corps) Regulatory Branch for an Individual Permit to: (1) discharge dredge and fill materials to waters of the United States pursuant to section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344); and (2) place structures and work in navigable waters pursuant to section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 320.2). We have determined that the Project, as proposed, will not violate State water quality standards and accordingly issue a conditional CWA section 401 water quality certification (Certification) for the Project.

The JPA submitted an application for the Project dated July 31, 2014. The Regional Water Board issued an incomplete application letter and requested additional information on August 29, 2014. The JPA provided supplemental information, which was received October 10, and October 17, 2014. The application was determined to be complete on November 11, 2014. The Project description in Section A is summarized from the application materials received on July 31, 2014, as supplemented (collectively referred to as the Application).

As of the date of this Certification, aspects of the Project remain under discussion with other government agencies, and, as such, the Project design may be subject to change. Also as a result, the JPA has in some cases submitted application information that is not final or has not yet submitted information necessary for the Regional Water Board to accept final plans (e.g., for mitigation for impacts to creeks and wetlands, coffer dam construction and removal, creek

dewatering, utility line construction and abandonment, placement and stabilization of fill in levees and on wetlands, beneficial reuse of excavated sediment, and disposal of excess sediment/cut). Where that is the case, this Certification requires submittal of final plans, acceptable to the Executive Officer, prior to commencement of Project construction or commencement of construction for the relevant Project component.

A. Project Location and Site Description

The Project is located on San Francisquito Creek along a 1.5-mile stretch of the creek from San Francisco Bay to East Bayshore Road, a frontage road to U.S. Highway 101. This stretch of the creek is a managed earthen flood control channel. The Project is designed to increase the flow conveyance capacity of the creek channel for a combination of the 100-year flow event, the 100-year high tide event, and 26 inches of sea level rise.

This stretch of the creek is on the boundary between Santa Clara and San Mateo counties. The Project area is divided into three reaches. A reach is a continuous part of the creek between two specified points. The lower reach is from San Francisco Bay to Friendship Bridge, the middle reach from Friendship Bridge to Daphne Way, and the upper reach from Daphne Way to East Bayshore Road. We refer to the Project area south of the creek channel centerline as the “south bank” and the area north of the creek channel centerline as the “north bank.” The JPA refers to these areas as left and right banks, respectively, in its design plans and other documents. From the JPA naming scheme, the station numbers along the creek and levees are labeled “L-line” for station locations south of the creek channel, “R-line” for station locations north of the creek channel, and “C-line” for the creek channel centerline stations.

The City of Palo Alto, within Santa Clara County, borders the south bank in all three reaches. The Palo Alto Municipal Golf Course borders the majority of the south bank, with the Palo Alto airport bordering a 600-foot stretch of the eastern-most section of the south bank. The north bank of the Project area is bordered by San Mateo County, with the Faber Tract Marsh in the lower reach and the City of East Palo Alto in the middle and upper reach borders.

San Francisquito Creek provides important migration, spawning, and juvenile rearing habitat for winter-run steelhead. In addition, longfin smelt are known to inhabit the South Bay and its tidally-influenced tributaries. The Faber Tract and the Laumeister Tract (north of the Faber Tract) provide ideal habitat for special status species including Ridgway’s (formerly California clapper) rail, black rail, salt marsh harvest mouse, and salt marsh wandering shrew. Additionally, suitable habitat occurs along the San Francisquito Creek channel, and these species have the potential to occur in the Project area.

B. Project Purpose

The purpose of the Project is to improve channel capacity to accommodate the 100-year flood flow event for creek flows coupled with the influence of San Francisco Bay tides, including projected sea level rise, from the downstream face of East Bayshore Road down to the Bay. It would reduce local fluvial flood risks in the Project area during storm events, provide the capacity needed for future upstream improvements, and increase and improve ecological habitat and recreational opportunities.

C. Project Description

The JPA proposes to increase flood flow capacity to contain the one percent flood flow event through the following activities:

1. **Excavate in-channel sediments:** About 175,890 cubic yards of sediment (Murray, 2014a¹) will be removed from along 5,775 linear feet of the creek channel and associated channel expansion area to increase creek capacity and to maximize conveyance. In-channel sediment will not be reused because it is unlikely to provide suitable material for levee embankment use (Murray, 2014b).
2. **Rebuild and relocate levees:** The JPA will rebuild the East Palo Alto Levee (northern levee) and relocate the Palo Alto Levee/Palo Alto Municipal Golf Course Levee (southern levee) to widen the creek channel to reduce tidal influence and increase channel capacity through the following modifications :
 - a. East Palo Alto Levee: About 3,296 linear feet (Murray, 2014a) (station (STA) 30+00 to STA 55+00) of the levee will be raised to increase channel capacity. As shown in the draft 100 percent design plans², sheets X-7 through X-14 (JPA, August 2014), the elevation increase varies by up to 4 feet based on existing conditions and the necessary modifications along the levee. Approximately 55,000 cubic yards of fill will be used to increase the height of the levee (Murray, 2014b³).
 - b. Palo Alto/Golf Course Levee: About 2,728 linear feet (Murray, 2014a) (STA 23+00 to STA 54+00) will be relocated up to approximately 200 feet into the Palo Alto Municipal Golf Course and raised to increase channel capacity. The elevation increase varies by up to 4 feet (Murray, 2014b) based on existing conditions and the necessary modifications at each station as shown in sheets X-6 through X-14 in the draft 100 percent design plans (JPA, August 2014). Approximately 84,700 cubic yards of fill will be used for the levee relocation (Murray, 2014b).
3. **Construct levee maintenance roads:** About 10,176 linear feet (Murray, 2014a) of maintenance roads will be constructed on the newly raised and relocated levees. The maintenance roads will also serve as pedestrian/bicycle trails. The roads will be up to 16 feet wide and have a surface material of crushed granite, except for a section on the Palo Alto/Golf Course Levee that will be part of the Bay Trail, which will be asphalt (Murray, 2014b). The Bay Trail section will have up to 41,600 square feet of asphalt, based on 2,600 linear feet of pathway up to 16 feet wide as shown in the supplemental figures to the Application (JPA, 2014b⁴). The paved path can be viewed in the draft 100 percent design plans, L-line STA 28+00 through STA 54+00 on sheet G-3 in the draft 100 percent design plans on the south bank (JPA, August 2014). This Certification requires the JPA to submit a

¹ Murray, 2014a. Murray, K., Project Manager, San Francisquito Creek Joint Powers Authority (JPA). Personal communication (email), August 8, 2014. (See Attachment A)

² JPA, 2014a. *Map and Construction Plan for San Francisquito Creek, Flood Reduction, Ecosystem, Restoration, and Recreation Project*. August 2014. Prepared by HDR Engineering, Inc. Menlo Park, CA: JPA.

³ Murray, 2014b. Murray, K. Personal communication (email), December 23, 2014. (See Attachment B)

⁴ JPA, 2014b. *Supplemental Figures. January 16, 2014*. Prepared by ICF International. Menlo Park, CA: JPA.

Post-Construction Stormwater Management Plan to describe how stormwater runoff from the paved Bay Trail surface will be diverted away from the creek and other waters of the State, consistent with the Regional Water Board's Municipal Regional Stormwater Permit (Order No. R2-2009-0074, as amended by Order No. R2-2011-0083, and as may be subsequently amended or reissued) requirements for post-construction stormwater management for new or replacement impervious surfaces.

4. **Raise and grade the Faber Tract Levee:** The JPA will raise and grade a portion of the currently unmaintained levee between the creek and the Faber Tract (Faber Tract Levee) closer to its original design elevation to stabilize the levee and reduce stormwater and creek flows to the Faber Tract Marsh. Fill will be added to the Faber Tract Levee along 350 linear feet (0.77 acres) (Murray, 2014a) (STA 21+00 to STA 24+00) to reduce concerns regarding levee erosion and the potential for mass wasting leading to levee failure. In addition, the JPA will raise the lowest levee crest elevation downstream of the Friendship Bridge from a minimum elevation of 11 feet to 13 feet and incorporate a 6H:1V levee side slope on the side sloping into the Faber Tract. The 6H:1V levee side slope will help protect the levee toe from erosion due to flow overtopping along a 400 foot distance as the levee transitions upstream to a higher elevation closer to the Friendship Bridge. The new area of impact from the existing levee toe to the proposed levee toe is approximately 0.42 acres (18,383 square feet). Approximately 12,000 cubic yards of clean imported fill will be used to increase the height of the levee (Murray, 2014b).
5. **Degrade Bay Levee:** The JPA will degrade a section of the levee north of the creek and east of the Faber Tract (Bay Levee) to restore the creek-Bay interface in the marsh area east of the Faber Tract, and to reduce water surface elevations in the creek between Friendship Bridge and the Bay. About 2,820 cubic yards (Murray, 2014a) of sediment/soil will be removed along 600 linear feet (0.73 acres) of the Bay Levee (STA 3+50 to 9+50), downstream of the Faber Tract in a marsh area that is already subject to daily tides from the San Francisco Bay. This will further connect the marsh to the creek, allow the channel to expand out over the marsh area at a point further upstream than under existing conditions, and decrease the water surface elevation during large flood events.
6. **Construct floodwalls:** The JPA will construct floodwalls in the upper reach to increase capacity and maintain consistency with Caltrans' enlargement of the U.S. 101/East Bayshore Road Bridge over San Francisquito Creek (Caltrans facility) as follows:
 - a. East Palo Alto Floodwall: Concrete floodwalls up to 4 feet above top of bank (up to 13 feet from channel bottom) will be constructed along approximately 2,350 linear feet (STA 52+00 to STA 77+50) of the East Palo Alto Levee.
 - b. Palo Alto Floodwall: Concrete floodwalls up to 4 feet above top of bank (up to 13 feet from channel bottom) will be constructed along approximately 2,879 linear feet (STA 51+00 to STA 77+50) of the Palo Alto/Golf Course Levee.
7. **Install rock slope protection:** The JPA will install approximately 4,735 linear feet (5.86 acres) of rock-slope levee protection (RSP) at various locations along the length of the Project to protect the levee against erosion. The RSP will be installed from the toe of the levee up the bank approximately 10 to 15 feet.

8. **Construct Friendship Bridge boardwalk extension:** The JPA will construct a boardwalk extension to the Friendship Bridge. The existing Friendship Bridge will be retained and a 202-linear foot boardwalk will be constructed from the retained eastern footing of the bridge and across the newly expanded creek to connect with the realigned Palo Alto/Golf Course Levee. The boardwalk will be the same width as the Friendship Bridge (140 feet long and 10 feet wide), constructed of timber deck and concrete piles, and require twenty 18-inch diameter concrete piles. The elevation of the low mark of the boardwalk will be set above the highest anticipated flood elevation, with the lowest point of the bridge a minimum of 5 feet above the marshplain terrace beneath it. This Certification contains a condition prohibiting the use of chemically-treated wood on top of and inboard of the levees (i.e., in a location where it could discharge to State waters or otherwise impact beneficial uses), which will apply to the boardwalk extension.
9. **Relocate portion of channel:** About 1,100 linear feet of the channel (C-line stations 43+00 to 54+00, as shown in the draft 100 percent design plans (JPA, August 2014), will be relocated up to 80 feet to the east due to its existing close proximity to the proposed inboard levee toe. The final low flow channel alignment will be roughly equidistant between the East Palo Alto Levee and the new Palo Alto/Golf Course Levee location and will have the same elevation as the existing channel elevation (Murray, 2014b).
10. **Relocate or remove utilities:** The JPA will remove, abandon, or replace several utility components for electricity, gas, water, sanitary sewer, and stormwater runoff present within the Project right-of-way. This Certification requires, prior to the beginning of work, the submittal of an acceptable utility relocation plan that identifies, for example, appropriate measures to prevent impacts during horizontal directional drilling, proposed disposal locations or methods for excess sediment, elevations of live and abandoned utilities, and related information. In addition, the plan shall document the locations of any utilities abandoned in place.
 - a. Electricity and gas systems. The JPA will coordinate with Pacific Gas and Electric (PG&E) to perform the following electricity and gas transmission system work before creek channel and levee construction work begins:
 - i. *Electricity transmission system.* PG&E will realign the existing electricity transmission system that currently crosses over the creek from L-line STA 52+00 (south bank) to R-line STA 48+00 (north bank). The new line will be shifted 250 feet south and cross over the creek at L-line STA 51+00 (south bank) to R-line STA 52+00 on the north bank. The Project will include removing a pole from both banks; replacing two existing poles, one on each bank; and adding two new poles on the north bank for the new line. In addition, PG&E will remove wires from six poles that run north to south along the far north bank right-of-way between R-line STA 30+00 to STA 56+00. Of these six poles, one will be raised by 15 feet. The realigned section will connect to the southern-most pole in this series. Any replacement poles will be made of light-duty steel, as discussed on page 2-14 of the Environmental Impact Report (JPA, October 2012).

PG&E will replace the foundation of an existing electric transmission tower located in the floodplain of the new channel alignment footprint at STA R-48+00, approximately 2,000 feet upstream of the Friendship Bridge. PG&E will demolish the existing

foundation, build a temporary shoo-fly support, and build a permanent concrete foundation at the existing foundation site. The electricity tower on the old foundation will be lifted and placed onto the permanent concrete foundation with an area of 625 square feet. An access ramp will be built on the inboard side of the levee for this tower. This Certification includes a condition for the JPA to submit a utility plan that shall include elevations for all the new utilities.

- ii. *Gas transmission system.* PG&E will abandon in place 3,000 linear feet of the gas transmission line located in the new channel realignment footprint and replace it with a new line. PG&E estimates that the old line is 4.7 feet below grade beneath the creek channel and will confirm the elevation during excavation activities (Springer, 2015⁵). This Certification includes a condition for the JPA to remove the section of the existing gas transmission line from beneath the creek channel, floodplain, and levees.

The new gas line will be aligned south to north in the golf course, then will cross east to west through the Project right-of-way upstream of the Friendship Bridge from L-line STA 32+00 (south bank) to R-line STA 34+00 (north bank), and will extend west to a connection in East Palo Alto. The pipeline tunnel under the creek will be bored by horizontal direction drilling at 25 feet below ground. The other portions of the pipeline will be installed by cut and fill at a minimum of 4 feet below ground surface.

PG&E will place three trench spoils piles equidistant from south to north along the south bank. Each pile is planned to be 100 feet by 100 feet. On the north bank, PG&E will place another 100 foot by 100 foot spoils pile next to the borehole site. The suitability of the spoils for reuse to cover the new pipeline will be determined after they are appropriately assessed during the utility activities, and any unused spoils will be hauled from the site and appropriately disposed of at an approved upland facility.

- b. Sanitary sewer. The JPA will realign a sanitary sewer that currently crosses the creek at the Friendship Bridge. As proposed, this task will involve open trenching with a minimum depth below ground surface of 3.5 feet for the new line. The sanitary sewer line would be encased in armored steel where it crosses the creek. The new alignment will cross the creek at L-line STA 27+50 (south bank) through the channel at C-line STA 29+90 to R-line STA 27+60 (north bank). This work would be concurrent with the levee construction work so will not have separate impacts to waters of the State. The JPA will remove about 960 linear feet of existing sanitary sewer line. This Certification includes a condition requiring the JPA to submit information demonstrating that the line cannot be constructed at a deeper depth below the creek channel bottom or otherwise that there is not a reasonably foreseeable chance that the line could constrain the creek channel in the future.
- c. Storm drains and stormwater outfall. The JPA will remove various storm drain pipelines existing within the golf course that will be under the setback levee (Palo Alto/Golf

⁵ Springer, 2015. Springer, B., Senior Engineer, Santa Clara Valley Water District. Personal communication (email), January 28, 2015. (See Attachment C)

Course Levee) and widened creek channel post project. This work will be concurrent with the levee and channel work so will not have separate impacts to waters of the State.

Caltrans plans to build a new stormwater outlet as part of its bridge expansion project adjacent to the east border of the Project area (east of STA L-76; sheet C-47). Should Caltrans complete its bridge project with the new outlet before the Project is completed, the JPA will construct walls to block the flow from entering the new storm drain outlet (any stormwater would flow through the existing storm outlets).

11. **Dewatering:** The full length of the Project from Highway 101 to the mouth of the creek will be dewatered, as discussed in the JPA's *Temporary Water Diversion Plan* (October 14, 2014), hereafter referred to the Dewatering Plan. The Dewatering Plan states that water diversion will include cofferdams upstream and downstream of the work site. The JPA will pump stream flows upstream of the work site, divert the flow through piping that bypasses the work site, and return the flow to the creek channel at a location downstream from the construction reach. The pumped flow will include groundwater seepage and stormwater discharges from storm drains around the active construction reach that may be part of stream flows. The JPA will implement best management practices (BMPs) to avoid and minimize impacts to water quality and will test and monitor the water being returned to the creek channel to ensure the effectiveness of the BMPs.

There are two municipal storm drain pump stations that discharge into the Project reach. Discharges from the two pump stations will be pumped from their clear wells into the diversion piping. At the end of each construction season, the JPA will remove all cofferdams, re-water the dewatered creek areas, and restore the creek habitat.

This Certification requires the JPA to submit a coffer dam placement/removal plan to ensure cofferdam impacts are appropriately minimized and the creek is appropriately restored following removal and to submit revised dewatering plans to ensure the proposed discharges meet applicable water quality objectives.

12. **Sediment Disposal and Fill Import:** The JPA plans to excavate about 175,890 cubic yards of fill or sediment during the levee modification and channel widening activities (Murray, 2014a). As discussed in the EIR (JPA, October 2012), about 20 percent of this sediment will be hauled off site. The JPA anticipates placing the other 80 percent of sediment in the adjacent golf course for use in a future golf course reconfiguration project being managed by the City of Palo Alto. The EIR also states that about 190,800 cubic yards of fill will be imported for use to raise levee elevations (EIR page 2-13).

This Certification contains a condition for the JPA to characterize any sediment being hauled out of the Project area to determine the appropriately-permitted upland location for disposal or to determine if the sediment may be beneficially-reused for the Project or at another location. In addition, this Certification includes a condition for the JPA to characterize all imported fill material being used in the Project in accordance with the Dredged Material Management Office guidance document, *Guidelines for Implementing the Inland Testing Manual in the San Francisco Bay Region* (Corps Public Notice 01-01, or most current

version), and the Regional Water Board May 2000 staff report, *Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines*, or the most current revised version.

13. **Disposal of Materials Other than Sediment or Soil:** This Certification includes a condition for the JPA to dispose of any other waste materials in an appropriately-permitted upland location. This applies to materials such as, but not limited to, wooden utility poles, electric wires, and other utility components removed from the Project area.

14. **Staging, access, and haul routes:** The Project's staging, access, and haul routes are designated based on work on the north or south banks as follows:

a. North Bank

- i. Site access and a construction staging area will be located at the end of O'Connor Street near the intersection with Daisy Lane in East Palo Alto. The haul route will be along O'Connor Street to Pulgas Avenue, East Bayshore Road, and Embarcadero Road to U.S. 101. This is the designated route for large vehicles, including dump trucks and flatbed trucks, in the City of East Palo Alto.
- ii. Site access and a construction staging area will be located at the end of Daphne Way at Jasmine Way in East Palo Alto. The haul route will be along Jasmine Way to Camelia Drive, Pulgas Avenue, East Bayshore Road, and Embarcadero Road to U.S. 101. Large vehicles, including but not limited to dump trucks and flatbed trucks, will be prohibited on Daphne Way and Jasmine Way. Further vehicle restrictions on Daphne Way and Jasmine Way may be required by the City of East Palo Alto and will be determined during development of the Project Traffic Plan.
- iii. Site access and a construction staging area will be located at the end of Verbena Drive at Abelia Way. The haul route will be along Verbena Drive to Camelia Drive, Pulgas Avenue, East Bayshore Road, and Embarcadero Road to U.S. 101. Large vehicles, including but not limited to dump trucks and flatbed trucks, will be prohibited on Verbena Drive and Camelia Drive. Further vehicle restrictions on Verbena Drive and Camelia Drive may be required by the City of East Palo Alto and will be determined during development of the Project Traffic Plan.

b. South Bank

- i. Site access will be at the Palo Alto Pump Station, accessed from East Bayshore Road. The haul route will be along East Bayshore Road to Embarcadero Road and U.S. 101.
- ii. Site access will be at Geng Road between the Baylands Athletic Center and the Golf Course. The haul route will be along Geng Road to Embarcadero Road and U.S. 101.

D. Impacts

The San Francisco Bay Basin Water Quality Control Plan (Basin Plan) defines the beneficial uses of waters of the State. The Project will impact San Francisquito Creek. The Basin Plan assigns the following beneficial uses to San Francisquito Creek: Cold Freshwater Habitat (COLD), Fish Migration (MIGR), Fish Spawning (SPWN), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), Water Contact Recreation (REC-1), and Noncontact Water Recreation

(REC-2).

The Project will permanently fill 8.49 acres and temporarily disturb approximately 3.15 acres of waters of the State due to Project activities. These estimates are itemized by habitat in Table 1 based on sections 5.1 through 5.2 of the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Mitigation and Monitoring Plan (draft MMP, final draft in progress) (JPA, 2014c⁶). In addition, the Project will create a temporary impact to the creek channel by dewatering 1.5 miles of the channel. This Certification includes a condition for the JPA to revise the impact areas in the final MMP to include the area of RSP that will be placed in each habitat type and to specify the impacts that are associated with work on utilities (i.e., as in the draft MMP, Table 3).

Table 1. Impacted Areas by Habitat Type

Habitat Type	Permanent Impacts			Temporary Impacts ^[1]		TOTAL (acres)
	Area (acres)	Subtotal	Purpose of Impact	Area (acres)	Subtotal	
Diked Marsh	2.86	2.88	South levee alignment; channel widening	0.02	0.21	3.19
	0.02		North side loss at base of improved levee	0.19		
Freshwater Pond	1.13	1.13	South levee construction; channel realignment			1.13
Freshwater Marsh			Sediment stockpile storage	0.33	0.33	0.33
Tidal Salt Marsh	2.82	3.18	Sediment removal in creek channel	0.84	1.33	4.51
	0.35		Fill in low spot in Faber Tract Levee	0.16		
	0.01		Bay Levee degradation	0.13		
Tidal Channel/ Bay Waters	0.8	0.8	Channel realignment	1.59	1.61	2.41
Riparian	0.5	0.5	Channel widening; marsh plain creation			0.5
Project-wide Rock Slope Protection (RSP)		5.86	Levee stability; floodwall stability			
TOTAL		14.35			3.48	17.83

Notes:

^[1] All temporary impacts are attributed to construction access activities, except for the impacts to freshwater marsh habitat, which is due to sediment stockpile storage. The temporarily impacted areas may be revised to account for sediment spoils storage after the JPA prepares the final MMP.

⁶ JPA, 2014c. Draft Mitigation and Monitoring Plan (MMP). October 15, 2014. Prepared by ICF International. Palo Alto: JPA.

The following list shows the linear feet for Project activities (Murray, 2014b), where (P) is for permanent impact and (T) is for temporary impact. The JPA does not anticipate these numbers to change upon preparing the final MMP.

- 5,775 linear feet of sediment excavation (T)
- 3,296 linear feet of East Palo Alto Levee (P)
- 2,728 linear feet of Palo Alto/Gold Course Levee (P)
- 350 linear feet of Faber Tract Levee (P)
- 600 linear feet of Bay Levee (P)
- 1,100 linear feet of tidal channel relocation (P)
- 4,506 linear feet of RSP project-wide (P)

E. Mitigation

The JPA will be responsible for restoring permanently-affected riparian habitat onsite at a minimum mitigation-to-effect ratio of 2:1 and restoring temporarily-affected habitat onsite at a minimum mitigation-to-effect ratio of 1:1 to ensure no net loss of riparian habitat in the affected stream reach, as long as construction of mitigation is completed in the same calendar year as when impacts first occur for temporary impacts, and within one calendar year of the year in which impacts first occur for permanent impacts. Should construction of mitigation be delayed for any reason, this Certification requires the JPA to complete an additional 10 percent mitigation per year, on an aerial basis, for the portion of mitigation not timely completed.

The JPA will mitigate for permanent and temporary Project impacts in accordance with the final MMP. The JPA submitted the draft MMP to the Regional Water Board, the Corps, the California Department of Fish and Wildlife (CDFW), the U.S. Fish and Wildlife Service (USFWS), and the National Marine Fisheries Service (NMFS) in October 2014.

F. Maintenance

The JPA delegated operations and maintenance within the Project area to the District and the City of East Palo Alto on November 20, 2014 (JPA Resolution 14.11.20). The JPA is consulting with the District and the cities of East Palo Alto and Palo Alto to consider adding the City of Palo Alto to the operations and maintenance delegation agreement. Maintenance will be conducted in accordance with the San Francisquito Creek Flood Reduction, Ecosystems Restoration, and Recreation Project, San Francisco Bay to Highway 101, Operation & Maintenance Manual (October 2014, final document in progress) and be consistent with the District's Stream Maintenance Program. The final Operations and Maintenance Manual shall cover such work within the Project area as vegetation management, repair of animal damage to levees, repair of erosion sites, access and maintenance roads, and flood damage. This Certification includes a condition for the JPA to submit, or cause the operations and maintenance delegated entities to submit, a revised Operations and Maintenance Manual.

G. California Environmental Quality Act Compliance

On October 25, 2012, the JPA, as lead agency, certified an Environmental Impact Report (EIR) for the Project in accordance with the California Environmental Quality Act (CEQA) (JPA Resolution Number 12-10-25A). The JPA submitted an endorsed Notice of Determination, dated July 25, 2013, indicating that the EIR would carry out or approve the Project (JPA Resolution Number 13-07-25) in compliance with CEQA (Project State Clearinghouse Number 2010092048).

As directed by CEQA and the State CEQA Guidelines (PRC sections 211002.1(d), 21080.1, 21167.2; 15 CCR sections 15096(e),(f), 15231), the Regional Water Board, as a responsible agency under CEQA, has considered the EIR and finds that the Project, with the conditions in this Certification, has appropriately addressed its reasonably foreseeable potential environmental impacts.

H. EcoAtlas

It has been determined through regional, State, and national studies that tracking of mitigation/restoration projects must be improved to better assess the performance of these projects, following monitoring periods that last several years. In addition, to effectively carry out the State's Wetlands Conservation Policy of no net loss to wetlands, the State needs to closely track both wetland losses and mitigation/restoration project success. Therefore, this Certification requires that the JPA use the California Wetlands Form to provide Project information related to impacts and mitigation/restoration measures (see Condition 24 of this Certification). An electronic copy of the form and instructions can be downloaded at: <http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml>. Project information concerning impacts and mitigation/restoration will be made available at the web link: <http://www.ecoatlas.org/regions/ecoregion/bay-delta/projects>.

Certification and General Waste Discharge Requirements: I hereby issue an order certifying that any discharge from the Project will comply with the applicable provisions of CWA sections 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) and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this Certification. The following conditions are associated with this Certification:

1. The JPA shall construct the Project in conformance with the Project description provided in the Application. Any changes to Project design must receive Regional Water Board Executive Officer (Executive Officer) approval before the changes are implemented.
2. All technical reports, plans, and related information required by this Certification shall be submitted acceptable to the Executive Officer. Any changes to plans accepted by the Executive Officer must be accepted in writing prior to implementation of the change(s).
3. Construction shall not commence on any phase of the Project until all required documents, reports, plans, and studies required in this Certification associated with that phase of the Project have been submitted to the Executive Officer or the Regional Water Board and found acceptable by the Executive Officer or the Regional Water Board.
4. During construction activities, the JPA shall minimize disturbance or removal of vegetation in accordance with the Application's Box 16: Avoidance of Impacts. The JPA shall stabilize the Project area through incorporating appropriate BMPs, including the successful reestablishment of native vegetation, to enhance wildlife habitat values and to prevent and control erosion and sedimentation.
5. No debris, soil, chemically-treated wood, cement, concrete, or washings thereof, oil or other petroleum products, or any other unauthorized construction related materials or wastes shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, the JPA shall remove any excess material from the work area and any areas adjacent to the work area where such material may be washed into waters of the State.
6. The use of chemically-treated wood on or anywhere between the Project's levees, such as for boardwalks, utility line supports, and signposts, is prohibited, unless the JPA submits a report acceptable to the Executive Officer prior to such use demonstrating that no feasible alternative exists. Additionally, to avoid the leaching of copper and other chemicals toxic to aquatic species into the water column and sediment, only piles consisting of inert materials shall be installed. These materials may include steel, concrete, untreated wood, composite, or reinforced plastic. The use of marine paints containing copper and/or tributyltin is prohibited, without exception.
7. The JPA shall not operate any equipment in stream channels or other waters where there is flowing or standing water. No fueling, cleaning, or maintenance of vehicles or equipment

shall take place within any areas where an accidental discharge to waters of the State may occur.

8. All work performed within waters of the State shall be completed in a manner that minimizes impacts to water quality, beneficial uses, and wetland and riparian habitat along San Francisquito Creek and the Bay.
9. This Certification does not allow for the take, or incidental take, of any special status species. The JPA shall use appropriate protocols, as approved by CDFW, USFWS, and/or NMFS, to ensure that Project activities do not impact the beneficial uses of COLD, MIGR, WARM, WILD, and the Preservation of Rare and Endangered Species.
10. The JPA shall adhere to the Terms and Conditions and the Reasonable and Prudent Measures in the most current *Endangered Species Consultation* issued for the Project by NMFS and the *Conservation Recommendations in the Essential Fish Habitat Consultation* also issued for the Project by NMFS.
11. The JPA shall adhere to the Terms and Conditions and the Reasonable and Prudent Measures in the most current *Biological Opinion* issued for the Project by USFWS.
12. The JPA shall adhere to the following work windows:
 - a. Construction is restricted to the period of June 15 to October 15. Temporary extensions of this work period may be granted after October 15 contingent upon favorable weather forecasts and approval by the Executive Officer, with the concurrence of the applicable resource agencies.
 - b. No in-channel construction may occur during the steelhead migration period, from October 1 to May 30.
 - c. Construction work associated with the Faber Tract Levee shall be limited to the work windows established by CDFW, NMFS, and USFWS in the most current *Biological Opinion* or permit from each agency unless written authorization by the appropriate agencies to work outside these windows is provided to Regional Water Board staff.
13. Concrete used in the Project shall be allowed to completely cure (a minimum of 28 days) or be treated with a CDFW-approved sealant before it comes into contact with flowing water.
14. Not later than 30 days prior to the commencement of dewatering activities, including the placement of coffer dams or any other diversion structures, the JPA shall submit and implement a final Temporary Water Diversion Plan (Plan), acceptable to the Executive Officer. The Plan shall describe how the JPA will implement dewatering and rewatering activities for each creek reach and shall be consistent with the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, Temporary Water Diversion Plan, dated October 14, 2014. The Plan shall include coffer dam locations and design details, diversion pipe plans and design details, and shall correctly cite applicable water quality objectives as listed in the Basin Plan and as expressed in this Certification, including, but not limited to, turbidity, pH, temperature, dissolved sulfide, and dissolved oxygen. The Plan shall

ensure that all temporary dewatering methods have been designed to have the minimum necessary impacts to waters of the State to isolate the immediate work area. All dewatering methods shall be installed such that natural flow is maintained upstream and downstream of the Project area. Any temporary dams or diversions shall be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the Project area. All dewatering methods shall be removed immediately upon completion of Project activities.

15. Prior to placing any imported fill material at the Project area, including all placement of fill in areas below the top of bank, on levees, and at any other location where the fill is a discharge to or has the potential to discharge to waters of the State, the JPA shall submit a technical report, acceptable to the Executive Officer, that the chemical concentrations in the imported fill soil are in compliance with the protocols specified in the following documents:
 - a. The Dredged Material Management Office (DMMO) guidance document, *Guidelines for Implementing the Inland Testing Manual in the San Francisco Bay Region* (Corps Public Notice 01-01, or most current version) (Inland Testing Manual) with the exception that the water column bioassay simulating in-bay unconfined aquatic disposal shall be replaced with the modified effluent elutriate test, as described in Appendix B of the Inland Testing Manual, for both water column toxicity and chemistry (DMMO suite of metals only); and,
 - b. Regional Water Board May 2000 staff report, *Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines*, or the most current revised version. Regional Water Board staff shall review and approve data characterizing the quality of all material proposed for use as fill prior to placement of fill at any of the levee, marsh, or channel areas at the Project Site. Modifications to these procedures may be approved on a case-by-case basis, pending the JPA's ability to demonstrate that the imported fill material is unlikely to adversely impact beneficial uses.
16. Prior to reusing any sediment spoils, the JPA shall characterize the material to ensure the chemical concentrations are in compliance with the guidance documents from the DMMO and Regional Water Board discussed above in Condition 15. The JPA shall characterize any unused spoils to determine the appropriate disposal of the material at an approved upland facility. The JPA shall maintain hauling receipts for all sediment hauled from the Project area.
17. Not less than 60 days prior to commencing the proposed relocation of the sanitary sewer line or abandonment of the PG&E gas transmission line—whichever is scheduled first—the JPA shall submit a technical report, acceptable to the Executive Officer, that (1) identifies the depth below the channel at which the sanitary sewer line is to be relocated, and demonstrates that the line cannot be constructed at a deeper depth below the creek channel bottom or otherwise that there is not a reasonably foreseeable chance that the line could constrain the creek channel in the future; and (2) includes plans to remove the section of the PG&E gas line to be abandoned that runs below the Project's levees, floodplain, and creek channel. The JPA shall complete the utility line relocations and removals, or cause them to be completed, consistent with the accepted report.

18. At least 30 days prior to commencing any drilling activity, the JPA shall submit boring plans, acceptable to the Executive Officer. At a minimum, the boring plans shall include: a sketch of the approximate locations of drill entry and exit points; the proposed depth of bore(s) and a statement of streambed conditions that supports the proposed depth of the bore; the approximate length of the proposed bores; type and size of boring equipment to be used; the estimated time to complete the bore; a list of lubricants and muds to be used; the name of the contractor and cell phone numbers of its construction supervisor and monitor; name of the environmental and biological monitor; site-specific monitoring conditions; monitoring protocols; and a containment and cleanup plan in the event of a discharge of drilling muds or other materials to a receiving water, or to a location where they could be discharged to a receiving water.
- a. The JPA shall monitor drill mud pressure and volume at all times during drilling to ensure that hydrofracture or other loss of drill muds has not occurred. In the event of a sudden loss in pressure or volume, the JPA shall take appropriate steps, including immediately halting the drilling operation, to ensure that drilling muds are not discharged to waters of the State.
 - b. Drilling within 50 feet of the creek channel shall only be performed when it is possible to visually monitor the creek bed for any indications of hydrofracture within the creek channel. In the event of any visual indication of hydrofracture, the JPA shall take appropriate steps, including immediately halting the drilling operation, to ensure that drilling muds are not discharged to waters of the State.
 - c. All drilling muds, slurries, oils, oil-contaminated water, and other waste materials removed from the bore hole or otherwise used during the Project shall be disposed of at a permitted landfill, another appropriately-permitted site, or at an upland site approved in advance by the Executive Officer.
19. The JPA shall obtain coverage under and comply with the statewide NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Order No. DWQ-2009-0009, as amended by Order Nos. 2010-0014-DWQ and 2012-006-DWQ) (Construction Stormwater Permit). As part of its compliance, the JPA shall:
- a. Submit, at least 30 days before starting Project construction activities, a Storm Water Pollution Prevention Plan (SWPPP), prepared consistent with the requirements of the Construction Stormwater Permit and acceptable to the Executive Officer;
 - b. Stabilize all exposed/disturbed areas within the Project area, including using effective erosion and sediment control BMPs throughout all phases of construction to prevent the discharge of sediment-laden runoff to waters of the State. At no time shall sediment-laden runoff be allowed to enter wetlands or other waters of the State. Erosion and sediment control BMPs shall be monitored before, during, and after each storm event. Repairs and improvements to erosion and sediment control BMPs shall be implemented as necessary to prevent erosion and the discharge of sediment to waters of the State;
 - c. Ensure that, prior to the start of the rainy season, disturbed areas of waters of the State and disturbed areas that drain to waters of the State are protected with correctly installed

erosion control BMPs (e.g., jute, straw, coconut fiber erosion control fabric, coir logs, straw) and are revegetated with propagules (seeds, cuttings, divisions) of locally-collected native plants; and

- d. Where areas of bare soil are exposed during the rainy season, use silt control measures where silt and/or earthen fill threaten to enter waters of the State. Silt control structures shall be monitored for effectiveness and shall be repaired or replaced as needed. Buildup of soil behind silt fences shall be removed promptly, and any breaches or undermined areas repaired immediately.
20. Creek dewatering discharges, accumulated groundwater or stormwater removed during dewatering of excavations, and diverted creek and stormwater flows shall not be discharged to waters of the State without meeting the following discharge and receiving water limitations:
- a. Discharge pH - the instantaneous discharge pH shall be in the range of 6.5 to 8.5 and shall not vary from ambient pH by more than 0.5 pH units.
 - b. Discharge Dissolved Oxygen - the discharge dissolved oxygen concentration shall be no less than 5.0 milligrams per liter (mg/L) as an hourly average for discharging into tidal water and 7.0 mg/L (hourly average) for discharging into non-tidal receiving waters.
 - c. Discharge Dissolved Sulfide shall not be greater than 0.1 mg/L.
 - d. Receiving Water Turbidity - the receiving water turbidity measured as nephelometric turbidity units (NTU) shall not be greater than 10 percent of natural conditions in areas where natural turbidity is greater than 50 NTU (daily average). All Project discharge plans shall identify an acceptable location or locations at which to measure background turbidity. The JPA shall monitor receiving water and discharge turbidity at least every 8 hours on days when discharges from excavations may occur.
 - e. Nutrients - the receiving waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
 - f. There shall be no violation of any water quality standard for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board.

Compensatory Mitigation

21. Within 60 days of receiving all necessary permits from the Corps, CDFW, and the Regional Water Board, the JPA shall submit a final MMP, acceptable to the Executive Officer, that incorporates all modifications to the draft MMP that were necessitated by comments on the October 2014 draft MMP by the Regional Water Board, the Corps, CDFW, USFWS, and NMFS, and by conditions of the Corps, CDFW, and Regional Water Board permits for the Project.

The JPA shall restore permanently-affected riparian and wetland/marsh habitat and other

waters of the State onsite at an area-based mitigation-to-effect ratio of 2:1 and shall restore temporarily-affected habitat at a minimum area-based mitigation-to-effect ratio of 1:1 to ensure the Project results in no net loss and a long-term net gain in wetland area, function, and value. These ratios shall apply as long as construction of mitigation is completed in the same calendar year as when impacts first occur (for temporary impacts) and within one calendar year of the year in which impacts first occur (for permanent impacts) (e.g., if temporary impacts first occur in June 2015, the construction of mitigation for those temporary impacts shall be completed by December 31, 2015; if permanent impacts first occur in June 2015, construction of the mitigation for all permanent impacts shall be completed by not later than December 31, 2016). Should completion of mitigation construction be delayed for any reason beyond those deadlines, the JPA shall complete an additional 10 percent mitigation per year, on an areal or linear foot basis, as appropriate, on or adjacent to the Project site, for the portion of mitigation not timely completed. If additional mitigation on or adjacent to the Project site is not available, the JPA shall propose mitigation at an alternate site.

Consistent with the California Wetlands Conservation Policy, the Executive Officer shall require amounts of mitigation greater than the 10 percent per year addition as the mitigation is further offsite or out-of-kind relative to Project impacts. The additional mitigation shall be proposed, acceptable to the Executive Officer, as part of a revised MMP. As of the date of this Certification, the following are the minimum required amounts of mitigation for proposed Project impacts. Where noted (e.g., for placement of rock slope protection), the JPA shall provide additional information to identify the specific area of impact and, thus, the required mitigation.

Minimum Mitigation Area Required Based on Impacts^[1]

Habitat Type	Permanent Impacts			Temporary Impacts		
	Area (acres)	Subtotal	Mitigation Area Required	Area (acres)	Subtotal	Mitigation Area Required
Diked Marsh	2.86	2.88	5.76	0.02	0.21	0.21
	0.02			0.19		
Freshwater Pond	1.13	1.13	2.26			
Tidal Salt Marsh	2.82	3.18	6.36	0.84	1.33	1.33
	0.35			0.16		
	0.01			0.13		
Tidal Channel/ Bay Waters	0.8	0.8	1.6	1.59	1.61	1.61
Riparian	0.5	0.5	1.0			
Rock Slope Protection, Project-Wide	5.86	5.86	11.72			
TOTAL	14.35	14.35	28.70		3.48	3.48

Notes:

^[1] The minimum mitigation areas are based on a mitigation-to-effect ratio of 2:1 for permanent impacts and 1:1 for temporary impacts. These figures may change as noted in Condition 21.

22. Mitigation areas shall be monitored for a minimum of five years, or longer if necessary, until the mitigation performance and success criteria as specified in the MMP approved pursuant to Condition 21 have been achieved. The JPA shall submit Annual Reports, acceptable to the Executive Officer, no later than January 31 following each year in which mitigation is monitored, until the mitigation habitat has been successfully established. The Annual Reports shall describe each year's monitoring results, compare these results to the previous years' monitoring results and annual performance and success criteria, and describe progress made towards meeting the approved final success criteria. If annual performance criteria are not met, the Annual Reports shall identify remedial actions that will be implemented to achieve the mitigation success criteria, acceptable to the Executive Officer. The annual mitigation monitoring and reporting activities, and remedial actions as necessary, shall continue until the approved mitigation success criteria have been achieved. In the event it is determined that the proposed success criteria cannot be achieved in a mitigation area, an alternative mitigation plan shall be proposed acceptable to the Executive Officer to supplement and/or compensate for the failed mitigation.
23. Once the mitigation is successfully established and has achieved the final mitigation success criteria, a comprehensive final mitigation monitoring report shall be submitted, acceptable to the Executive Officer, along with a letter notice of completion, documenting that the mitigation habitat has achieved the final mitigation success criteria.
24. The JPA shall use the standard California Wetlands Form to provide Project information describing impacts and restoration measures within 14 days from the date of this Certification. An electronic copy of the form can be downloaded at: <http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml>. The completed form shall be submitted electronically to habitatdata@waterboards.ca.gov or shall be submitted as a hard copy to both (1) the Regional Water Board (see the address on the letterhead), to the attention of EcoAtlas, and (2) the San Francisco Estuary Institute, 4911 Central Avenue, Richmond, CA 94804, to the attention of EcoAtlas.
25. The JPA shall coordinate the development of final construction plans with the Corps, USFWS, NMFS, CDFW, and the Regional Water Board that are consistent with a joint approval of design features for all threatened and endangered species including Central Coast steelhead, salt mouse harvest mouse, and Ridgway's rail. The final plans shall include the approved MMP and specifications for marsh restoration. The marsh restoration specifications shall include elevations of marsh and floodplain terraces and associated plant species, channel stability treatments, and habitat treatments for each elevation as specified by a coordinated agreement among the above five agencies. Project construction shall be subject to a letter of final approval by the Executive Officer contingent upon his/her receipt of letters from the above named agencies that the Project's final construction plans meet their joint requirements.
26. At least 60 days prior to construction, JPA shall submit, acceptable to the Executive Officer, a Post-Construction Stormwater Management Plan to show how stormwater runoff from

newly-created impervious surfaces will be diverted away from any water of the State in the Project area and not result in water quality impacts downgradient of the impervious surfaces. The Post-Construction Stormwater Management Plan shall be consistent with the Regional Water Board's Municipal Regional Stormwater Permit (Order No. R2-2009-0074, as amended by Order No. R2-2011-0083, and as may be subsequently amended or reissued) requirements for post-construction stormwater management for new or replacement impervious surfaces.

27. Should any levee or floodwall settle more than the design projections, the JPA shall expeditiously repair the structure(s) and provide repair reports describing elevation differences from the design and re-evaluate with the resource agencies how to address short term protection needs and long term structural improvements required to maintain public safety.
28. Within 60 days of completing construction of the Project, the JPA shall submit an as-built report of the Project to the Regional Water Board, acceptable to the Executive Officer. The as-built report shall include revised Project plans showing the actual areas of temporary disturbance and permanent fill. The as-built report shall also describe fill removal activities undertaken to restore temporarily-impacted sites to their original condition. The as-built report shall be submitted either by email to staff or by uploading it to the Regional Water Board's FTP internet site. Instructions for uploading documents to the FTP internet site are available at http://www.waterboards.ca.gov/sanfranciscobay/publications_forms/documents/FTP_Discharger_Guide-12-2010.pdf. If the as-built report is submitted by uploading it to the FTP internet site, JPA shall notify the Regional Water Board case manager via email.
29. Within 60 days of receiving all necessary permits, agreements, or other approvals (e.g., a NMFS Biological Opinion) from the Corps, CDFW, NMFS, USFWS, and the Regional Water Board, the JPA shall submit a revised Operations and Maintenance Manual, acceptable to the Executive Officer, that incorporates all modifications to the MMP that were necessitated by conditions of those permits, agreements, or other approvals. The revised manual shall be consistent with the District's Stream Maintenance Program. The revised manual may cover regular operations and maintenance of the creek in the Project area for up to five years after the date of this Certification. The revised manual shall clearly specify the responsibilities of the JPA and its delegates for operations and maintenance in accordance with Resolution 14.11.20. In addition, the revised manual will clearly specify any mitigations that may be necessary for operations and maintenance activities, which may include, but not be limited to addressing potential sedimentation and erosion and other impacts to ensure: (1) long-term habitat protection and enhancement; (2) flood protection performance; and (3) long-term sustainability of the creek channel and the Faber Tract Marsh in face of sea level rise. Within five years after the date of this Certification, the JPA shall seek coverage under a separate certification for future operations and maintenance beyond the maximum five-year period this Certification covers.
30. Five years after completion of project construction, as determined by Executive Officer acceptance of the as-built reported required under Condition 28, the JPA shall submit, acceptable to the Executive Officer, a report, including actions proposed and a schedule for

implementing such actions, on the long-term management needs and adaptive management strategies for the continued healthy functioning of the creek channel within the Project area and the Faber Tract Marsh. The report shall address the best balance for sediment and hydrology and landscape conditions for the creek channel and marsh in the context of sea level rise for the primary purpose of implementing long-term protection strategies for the endangered species dependent on the creek channel and marsh. This report shall be prepared with the direct involvement of key stakeholders representing both government agencies and citizen interest groups.

31. 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 Title 23 of the California Code of Regulations (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;
32. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 and section 3867 of the California Water Code (CWC) and 23 CCR.
33. Certification is conditioned upon total payment of the full fee required in State regulations (23 CCR §3833). Payment of the full fee amount of \$59,000 was received on March 12, 2013.

Please be aware that any violation of this Certification's conditions is a violation of State law and subject to administrative civil liability pursuant to CWC section 13350. Failure to meet any condition of a certification may subject the JPA to civil liability imposed by the Regional Water Board to a maximum of \$5,000 per day of violation or \$10 for each gallon of waste discharged in violation of this action. Any requirement for a report made as a condition to this action (e.g., Conditions 14, 15, 17, 18, 19, 21, 22, 23, 24, 25, 26, 28, 29, and 30) is a formal requirement pursuant to CWC section 13267, and failure or refusal to provide, or falsification of, such required report is subject to civil liability as described in CWC section 13268. We anticipate no further action on this Application. However, should new information come to our attention that indicates a water quality problem with this Project, the Regional Water Board may issue Waste Discharge Requirements pursuant to 23 CCR section 3857.

Finally, the Regional Water Board recognizes that the JPA plans additional phases of flood management project work on San Francisquito Creek. The Regional Water Board will not certify any subsequent phases unless the JPA develops and implements, in a timely manner acceptable to the Executive Officer, plans for using a stakeholder coordination team approach to project permitting. Such a team should be jointly formed by the JPA and State and federal regulatory and resource agencies and include interested public stakeholders. The goal of using such a stakeholder coordination approach would be to help ensure the timely development and implementation of a multi-objective project supported by local, State, and federal stakeholders. The JPA should consider facilitating meetings of such a team by a mutually-agreed upon neutral facilitator. Regional Water Board staff is available to assist the JPA in developing and implementing this permitting approach.

If you have any questions, please contact Susan Glendening at (510) 622-2462 or via email to sglending@waterboards.ca.gov.

Sincerely,

Bruce H. Wolfe
Executive Officer

Attachments:

1. Attachment A–Project Excavation Information, August 8, 2014 (Email)
2. Attachment B–Project Information, December 23, 2014 (Email)
3. Attachment C–Existing Gas Pipeline Depth Information, January 28, 2015 (Email)

Cc: Kevin Murray, JPA, kmurray@JPA.org
Greg Stepanicich, Esq., JPA, gstepanicich@rwglaw.com
Melanie Richardson, SCVWD, MRichardson@valleywater.org
Bill Springer, SCVWD, bspringer@valleywater.org
Luisa Valiela, U.S. EPA, valiela.luisa@epamail.epa.gov
Melissa Scianni, U.S. EPA, Scianni.Melissa@epa.gov
Jason Brush, U.S. EPA, R9-WTR8-Mailbox@epa.gov
Lisa Mangione, Corps, Lisa.Mangione@usace.army.mil
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Tami Schane, CDFW, Tami.Schane@wildlife.ca.gov
SWRCB-DWQ, Bill Orme Stateboard401@waterboards.ca.gov
Bob Batha, BCDC, bobb@bcdca.gov
Brad McCrea, BCDC, bradm@bcdca.gov

Attachment A

Project Excavation Information, August 8, 2014 (Email)

Beth, Margarete@Waterboards

From: kmurray@sfcjpa.org
Sent: Friday, August 08, 2014 3:02 PM
To: Beth, Margarete@Waterboards
Subject: RE: [FWD: RE: SF Creek Bay to 101 - Response to WB 401 Comments]

I'll have the riparian acreage prepared next week as the CAD person we're working with is out today. We did make accommodations for impacts to existing mitigation area, which I believe is in the MMP. If, when you get there you need some guidance or if the information needs to be updated please let me know. I also now have numbers for your other requests, below. The total LF for any project feature is the total of the R-Line plus the L-Line. For example, the limit of earthwork is the length of the right top of bank plus the length of the left top of bank, not a single linear measure down the middle of the creek.

1. LENGTH OF EARTHWORK = 11,550 LINEAR FEET.
 - a. TOTAL EARTHWORK CUT = 175,890 CUBIC YARDS
2. FLOOD WALLS = 5,584 LINEAR FEET
3. RAISE LEVEE IN PLACE = 3,296 LINEAR FEET
 - a. SETBACK LEVEE = 2,728 LINEAR FEET
4. FILLING IN THE LOW SPOT OCCURS FROM STA 24+50 TO 21+00 = 350 LINEAR FEET
5. BAY LEVEE DEGRADE = 600 LINEAR FEET, 2,820 CUBIC YARDS
6. ROCK SLOPE PROTECTION
 - a. R-LINE STA 24+50 – 33+07 = 857 LINEAR FEET
 - b. C-LINE STA 27+50 – 32+50 = 500 LINEAR FEET
 - c. R-LINE STA 52+50 – 55+00 = 250 LINEAR FEET
 - d. L-LINE STA 26+50 – 29+50 = 300 LINEAR FEET
 - e. L-LINE STA 46+75 – 50+00 = 325 LINEAR FEET
 - f. R-LINE STA 68+80 – 75+54 = 674 LINEAR FEET
 - g. L-LINE STA 50+00 – 58+50 = 850 LINEAR FEET
 - h. L-LINE STA 62+88 – 67+93 = 505 LINEAR FEET
 - i. L-LINE STA 73+74 – 76+19 = 245 LINEAR FEET

TOTAL LENGTH = 4,506 LINEAR FEET

7. MAINTENANCE ROADS = 10,176 LINEAR FEET

Kevin Murray
Project Manager
San Francisquito Creek Joint Powers Authority
650-324-1972

----- Original Message -----

Subject: RE: [FWD: RE: SF Creek Bay to 101 - Response to WB 401 Comments]
From: "Beth, Margarete@Waterboards" <Margarete.Beth@waterboards.ca.gov>
Date: Fri, August 08, 2014 1:51 pm
To: "kmurray@sfcjpa.org" <kmurray@sfcjpa.org>

Hi Kevin,

Thanks for the info. Can you also provide riparian impacts in acres since all other impacts are identified in acres?

Attachment B

Project Information, December 23, 2014 (Email)

Glendening, Susan@Waterboards

From: Glendening, Susan@Waterboards
Sent: Tuesday, January 27, 2015 4:22 PM
To: 'kmurray@sfcjpa.org'
Subject: RE: S.F. Creek Project

Kevin,

Thank you for information for certain project details. I will cite this information and include the email as an attachment for the certification.

Regards, Susan

Susan Glendening

Environmental Specialist
San Francisco Estuary Partnership/
San Francisco Regional Water Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
510.622.2462
SGlendening@waterboards.ca.gov

From: kmurray@sfcjpa.org [<mailto:kmurray@sfcjpa.org>]
Sent: Tuesday, December 23, 2014 1:49 PM
To: Glendening, Susan@Waterboards; Hurley, Bill@Waterboards
Cc: Len Materman; Bill Springer; Michael Martin
Subject: RE: S.F. Creek Project

Susan and Bill,

As you may be aware, on December 18, 2014 the Corps of Engineers posted the Public Notice of the San Francisquito Creek, Bay-101 Project in response to the SFCJPA's application for a 404 federal permit for the Project. As you are also aware, on October 31, 2014 SFBRWQCB Executive Officer Bruce Wolfe determined that the SFCJPA's application for 401 certification was complete, and that no additional technical information was needed for the SFBRWQCB to issue 401 certification on the project. He also committed to issuing 401 certification for the project 2 weeks after the Corps of Engineers posted the Public Notice. He also agreed on October 31, 2014 to provide to the SFCJPA a letter of complete application, stating that no additional technical information was needed, which we received on November 11, 2014. Notwithstanding the above, in order to gather the final information needed to author the certification, on October 27, 2014 Maggie Beth requested that we respond to the following questions, which we have below in [blue](#).

1. How many cubic yards of sediment will be reused for the project and where?
[In-channel sediment is unlikely to provide suitable material for levee embankment use.](#)

How many cubic yards of sediment/soil/fill will be used for the following:

- a. East Palo Alto levee height increase [55,000 cy](#)
 - b. Golf course levee relocation [84,700 cy](#)
 - c. Faber Tract levee [12,000 cy](#)
2. How many inches/feet will each levee be raised above the existing top elevation?
[Varies, maximum increase is 4 feet.](#)
 3. What is the proposed height of each floodwall?
[The maximum height of each floodwall is 4 feet above top of bank. Measuring from the channel bottom, maximum is 13 feet.](#)
 4. Please confirm that the JPA is not proposing to plant vegetation of any kind within the proposed riprap. Installing riprap constitutes fill and is a permanent impact.

The project will not actively plant vegetation on the proposed rip-rap and has not included any rip-rap vegetation in the calculations of project mitigations

5. Provide the station locations related to the channel relocation feature:
C-Line 43+00 to 54+00, C-6 and C-7
6. Provide a revised impact table per October 22, 2014 meeting
Impacts to wetlands and waters of the state is based on the certified wetland delineation and will not change. From the October 22, 2014 meeting we are currently developing vegetation mapping that is specifically to map available habitat for SMHM and Ridgeway rail using the definitions provided by USFWS for their BO, which is separate from the 401 Cert.
7. Provide a copy of the CEQA Notice of Determination.
Attached
8. What is the width of each maintenance road?
Maximum 16 ft
9. What is the surface material of each maintenance road?
Crushed granite, except for the portion of the setback levee that will be part of the Bay Trail, which will be asphalt.
10. How many feet from the toe to top of bank will RSP be installed?
10 to 15
11. Can you provide more details about relocating 1,100 feet of the channel:
 - a. Where C-Line stations 43+00 to 54+00, C-6 and C-7
 - b. How trench of low-flow channel only
 - c. Why to move low-flow channel away from toe of levee
 - d. Elevation change? none
 - e. Which direction east
12. What is the proposed instream construction work window?
June 15 to October 15

Kevin Murray
Project Manager
San Francisquito Creek Joint Powers Authority
650-324-1972

Attachment C

Existing Gas Pipeline Depth Information, January 28, 2015 (Email)

Glendening, Susan@Waterboards

From: Bill Springer <BSpringer@valleywater.org>
Sent: Wednesday, January 28, 2015 2:31 PM
To: Glendening, Susan@Waterboards
Cc: kmurray@sfcjpa.org; Michael Martin
Subject: RE: The very last descriptive clarification

Susan,

PGE came through with a depth at the time of their construction in 1959. Using historical channel information and converting elevations into NAVD88, we arrive at the to-be-abandoned gas line lying at a depth of 4.7 ft below the low point of the new channel.

Bill

From: Glendening, Susan@Waterboards [mailto:susan.glendening@waterboards.ca.gov]
Sent: Wednesday, January 28, 2015 9:13 AM
To: Bill Springer
Cc: kmurray@sfcjpa.org; Michael Martin
Subject: RE: The very last descriptive clarification

I'll ask Keith if we will need this information in the utility plan that we will require before construction begins.
Thanks, Susan

From: Bill Springer [mailto:BSpringer@valleywater.org]
Sent: Wednesday, January 28, 2015 7:36 AM
To: Glendening, Susan@Waterboards
Cc: kmurray@sfcjpa.org; Michael Martin
Subject: RE: The very last descriptive clarification

'Morning, Susan,

Got me. We'll check with what we can. Based on their previously disclosed lack of information on old pipelines, PGE may not know, either. This one was installed around 1959. Their signage doesn't have depth on it, as far as I can remember.

To abandon the line, they evacuate the gas, clean and cap it, so there's no inherent hazard. PGE hates it when things go boom.

It would be fine with us if you have us provide it later. During construction it will be exposed and can be measured.

Bill

From: Glendening, Susan@Waterboards [mailto:susan.glendening@waterboards.ca.gov]
Sent: Tuesday, January 27, 2015 5:34 PM
To: Bill Springer
Subject: RE: The very last descriptive clarification

Bill, Could you tell me the existing depth of the gas line being abandoned in place? We need to document this because if there is ever any work in the creek in the future, we won't be surprised by it.

Thank you. -Susan

Susan Glendening

Environmental Specialist
San Francisco Estuary Partnership/
San Francisco Regional Water Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
510.622.2462
SGlendening@waterboards.ca.gov

From: Bill Springer [<mailto:BSpringer@valleywater.org>]
Sent: Tuesday, January 27, 2015 3:22 PM
To: Glendening, Susan@Waterboards
Cc: Michael Martin; kmurray@sfcjpa.org; Len Materman; Melanie Richardson
Subject: The very last descriptive clarification

Susan, here's what we just discussed. Do not hesitate to contact me for any clarifications. Per your comment today, I understand you won't be asking for additional information that was not previously provided.

And, we'll cancel Thursday's meeting. Good luck on the cert!

Bill

-
2. Station location where new sanitary sewer line crosses the creek channel. **C-line sta 29+90; L-line sta 27+50; R-line sta 27+60.**
 3. Alignment of the new sanitary sewer line **See the attached C-4 and C-12---** where will it be (station locations) **as in Question 2, above,** how many linear feet? **From landside manhole to landside manhole 505 ft. Floodwall to outboard toe of levee 455 ft.** How deep? How deep below the creek channel and elsewhere? **Minimum depth as shown on EPASD plans provided previously. Exhibit based on Project pan sheet X-7, cross-section at C-line sta 29+00 can be provided if necessary.**

From: Glendening, Susan@Waterboards [<mailto:susan.glendening@waterboards.ca.gov>]
Sent: Tuesday, January 27, 2015 12:14 PM
To: Bill Springer
Cc: Michael Martin; kmurray@sfcjpa.org; Len Materman; Melanie Richardson
Subject: RE: Last question

Thanks Bill.

I still need answers to question numbers 2 & 3.

You will have time to insert the correct data at the time you review the administrative draft certification, if you are not able to get it to me within the next few hours before I wrap up edits I have received from Keith.

Susan

Susan Glendening

Environmental Specialist
San Francisco Estuary Partnership/
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1515 Clay Street, Suite 1400
Oakland, CA 94612
510.622.2462
SGlendening@waterboards.ca.gov

From: Bill Springer [<mailto:BSpringer@valleywater.org>]
Sent: Tuesday, January 27, 2015 11:48 AM

To: Glendening, Susan@Waterboards
Cc: Michael Martin; kmurray@sfcjpa.org; Len Materman; Melanie Richardson
Subject: Last question

Hi, Susan,

Revisiting Question 1: PGE provided information on their likely electric tower foundation. The existing foundation and the new foundation are expected to be the same and each cover 625 square feet of area. The old foundation will be removed as part of the project, so there will be no net change in covered area.

Could you confirm for us that we've answered all of these questions? If not, please let us know as soon as possible; we want to be complete.

And if you'd like me to clarify anything in the plans on Thursday, please let me know.

Thanks, Bill

From: Bill Springer
Sent: Friday, January 23, 2015 3:28 PM
To: 'Glendening, Susan@Waterboards'
Cc: Michael Martin; 'kmurray@sfcjpa.org'; Len Materman; Melanie Richardson
Subject: RE: Utilities table attached / New stormwater outfall

Good afternoon, Susan,

Thanks for speaking with me today. I hope that I've answered all the questions (except one as stated below) in sufficient detail.

1. We don't have a detailed plan of the tower foundation yet. Both PGE and EPASD do their own work to their own designs. We just pay them for it. The PGE plans haven't been done yet. Our plan sheet C-14 shows the existing tower location right at the bottom of the new access ramp (which was designed for PGE). The PGE relocation will be very close; they will just build the new foundation about 25 ft north and move the tower to it by helicopter. The foundation will be a pier for each of the four legs of the tower. We're trying to get a pier diameter now.

I want to be clear that the tower is only being moved incrementally to allow it to be placed on a new foundation adequate to be in the creek. It is the levee that's being moved outboard of the tower to create a wider channel.

2. And 3. I've attached some sheets from the 50% plans for the sanitary sewer from more than a year ago. Details have been changed, but the alignment hasn't. EPASD Sheet 5 shows both existing and proposed alignments at the creek. Sheet 2 shows all the work Our utility Sheet C-43 shows the existing line running just a bit u/s of Friendship bridge, crossing the creel at approx C-line sta 30+40. The new one crosses just d/s the bridge about C-line sta 29+90. Length within our project is approximately 500 ft. Minimum depth is about 3¼ ft at the very lowest creek invert. The pipe is armored. The profile on Sheet 5 should make all the depths clear.

Additionally:

We spoke of the Caltrans project. I've attached Layout, showing a lot, but for our purposes, the creek access for them is in hatched. The General Plan is for a clearer view. The storm drain outfall design. And Retaining Wall which shows the blocking walls for the 4th cell.

In a subsequent e-mail you asked the following:

"Any work to install irrigation lines, which constitutes the work for new potable water lines according to Kevin's response, needs to be accounted for, including the locations, depth, and method for installing (e.g., open trenching, etc.)"

Any buried lines will be installed by open trench.

On sheet L-17 under Manufacturer/Notes column Detail Reference 7/L-19 Mainline "IRRIGATION MAINLINE,...INSTALL ON-GRADE ON LEVEE SLOPES... 18" MINIMUM BURIAL ELSEWHERE."

The existing plans are on our sheets L-20 to L-26. There is some additional work to be done by HDR and ICF to complete the irrigation plans.

From: Bill Springer
Sent: Wednesday, January 21, 2015 1:59 PM
To: 'Glendening, Susan@Waterboards'
Cc: Michael Martin; kmurray@sfcjpa.org
Subject: RE: Utilities table attached / New stormwater outfall

Hi, Susan,

I'm a bit tied up for the rest of today. I can answer some of these off the top of my head. As for the gas line under the creek, the official term is Horizontal Directional Drilling or HDD, and yes, what you said is correct.

4. Open trench, both.

5. Shall I assume you refer to SD outfalls? I will send you those sheets of the plan set with them noted. Generally, the existing outfalls will be cut back to the new channel configuration. Two 12" diam will be replaced by 30" diam to meet Corps standards. The outfall at about 74+00 I-line will be completely removed since the entire system is within the new channel. Any removal or replacement will be done by trenching a part of channel excavation and reconstruction.

6. The SD outlet is in the abutment, so will be cast in during the Caltrans construction. Our information from Caltrans is that they expect their constriction to begin the season and last 3 years. The phasing is in their control, and I don't know when they will be constructing this abutment. I was told that they have their 401 Cert, so the information should be in that.

Bill Springer, P.E., CFM, QSD
Senior Engineer
Watersheds Capital Division
Santa Clara Valley Water District
(408) 630-2259

From: Glendening, Susan@Waterboards [<mailto:susan.glendening@waterboards.ca.gov>]
Sent: Wednesday, January 21, 2015 6:56 AM
To: kmurray@sfcjpa.org
Cc: Michael Martin; Bill Springer
Subject: RE: Utilities table attached / New stormwater outfall

Kevin, Since you will be tied up today with the interview panel perhaps I can speak directly to Michael Martin and/or Bill Springer regarding the utility work that involves excavating or other soil disturbance that has potential to affect aquatic, riparian, and/or wetland habitat.

I believe the EIR and draft MMP describe the gas line work pretty well and you defined the stations where the new gas line will cross the creek, and the boring hole for the gas line would be done by direct drilling (I forget the term you used), at 25 feet below the creek channel. Please correct me if this not correct.

Pending issues are:

1. Area (square feet) of the new concrete foundation for tower in the future channel alignment (T3 in the EIR)
2. Station location where new sanitary sewer line crosses the creek channel.
3. Alignment of the new sanitary sewer line --- where will it be (station locations), how many linear feet? How deep? How deep below the creek channel and elsewhere?
4. Method for installing the sanitary sewer line: (1) under the creek channel; (2) other sections not crossing the creek.
5. Any other new utility infrastructure not discussed in the EIR: where (station numbers); methods for installing; depth.

6. Data for the new storm drain outlet that's part of the Cal Trans bridge project - when will the outlet be built, what is the location (station number), depth, methods of construction (trenching, etc.), etc.

I am not at my desk yet; I should be in around 9:00 today.
Thank you.
Susan

From: kmurray@sfcjpa.org [kmurray@sfcjpa.org]
Sent: Tuesday, January 20, 2015 7:09 PM
To: Glendening, Susan@Waterboards
Cc: Michael Martin; Bill Springer
Subject: RE: Utilities table attached / New stormwater outfall

Bill, can you help with this one?

Kevin Murray
Project Manager
San Francisquito Creek Joint Powers Authority
650-324-1972

----- Original Message -----

Subject: RE: Utilities table attached / New stormwater outfall
From: "Glendening, Susan@Waterboards"
<susan.glendening@waterboards.ca.gov>
Date: Tue, January 20, 2015 4:24 pm
To: "kmurray@sfcjpa.org" <kmurray@sfcjpa.org>
Cc: Michael Martin <MichaelMartin@valleywater.org>, Bill Springer
<BSpringer@valleywater.org>

Thanks Kevin... Will the irrigation lines require any excavating to place new lines, and/or, to remove old lines? If so, please provide details. Thanks. Susan

From: kmurray@sfcjpa.org [kmurray@sfcjpa.org]
Sent: Tuesday, January 20, 2015 4:17 PM
To: Glendening, Susan@Waterboards
Cc: Michael Martin; Bill Springer
Subject: RE: Utilities table attached / New stormwater outfall

Forgot to mention - not potable water lines will be touched, just some minor irrigation work.

Kevin Murray
Project Manager
San Francisquito Creek Joint Powers Authority
650-324-1972

----- Original Message -----

Subject: RE: Utilities table attached / New stormwater outfall
From: <kmurray@sfcjpa.org>
Date: Tue, January 20, 2015 4:14 pm
To: "Glendening, Susan@Waterboards"
<susan.glendening@waterboards.ca.gov>

Cc: "Michael Martin" <MichaelMartin@valleywater.org>, "Bill Springer" <BSpringer@valleywater.org>

Hi Susan,

I've requested information on the gas and sewer lines. The project will not relocate stormdrains; it will eliminate sections of existing stormdrain within the golf course that will be under the setback levee and widened creek channel post project. I'm not aware of any new stormdrain outfall, as you mentioned in another email.

Kevin Murray
Project Manager
San Francisquito Creek Joint Powers Authority
650-324-1972

----- Original Message -----

Subject: RE: Utilities table attached / New stormwater outfall

From: "Glendening, Susan@Waterboards"

<susan.glendening@waterboards.ca.gov>

Date: Tue, January 20, 2015 3:23 pm

To: "'kmurray@sfcjpa.org'" <kmurray@sfcjpa.org>

Hi Kevin,

Could you send me an update for the status responding to the utility questions I send you?

I also need the boring and/or trenching depths for these utility projects if they are under the creek. I believe you said the gas line will be 25 ft below grade; I don't have information for the sanitary sewer realignment or storm drain and stormwater outfall realignment/relocation.

The design plans include water line relocations (minor sections) but the EIR does not mention potable water. Could you send me information about any water line replacements and realignments? (I see the hydrant relocation on the design plans but other than that, no other post-project conditions for potable water).

Thank you.
Susan

Susan Glendening
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