



San Francisco Bay Regional Water Quality Control Board

REISSUED CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER FOR THE

Walnut and Grayson Creeks Desilting Project Contra Costa County

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Table of Contents

Certification and Order Coverage 1

1. Project..... 1

 1.1 *Site Description & Background*..... 1

 1.2 *Project Description*..... 3

2. Impacts to Waters of the State 4

 2.1 *Fill and Discharge* 4

3. Mitigation 4

4. California EcoAtlas 6

5. CEQA Compliance 6

6. Conditions 6

 6.1 *Regulatory Compliance and Work Windows* 6

 6.2 *General Construction* 8

 6.3 *Pre-Construction Reporting and Other Requirements* 9

 6.4 *Active Construction and Post-Construction Reporting Requirements* 10

 6.5 *Mitigation and Monitoring Requirements* 11

 6.6 *Administrative and General Compliance* 12

 6.7 *Standard Conditions* 14

Certification and Order Coverage

This Clean Water Act (CWA) section 401 Water Quality Certification (Certification) and Order (Order) is issued to the Contra Costa County Flood Control and Water Conservation District (Permittee).

Pursuant to CWA section 404 (33 USC § 1344 et seq.) the Permittee requested authorization to fill and discharge to waters of the U.S. from the U.S. Army Corps of Engineers (Corps), Regulatory Branch. The Corps will issue an Individual Permit for the Walnut and Grayson Creeks Desilting Project (Project) (Corps File No. 2020-00385S).

The Permittee applied to the San Francisco Bay Regional Water Quality Control Board (Water Board) requesting Certification verifying the Project does not violate State water quality standards. The application for Certification was received on November 3, 2021 (Application). Supplemental information to support the Application was received on May 20, August 1 and 25, October 13 and 26, and November 23, 2022. The following sections are derived from the Application and supplemental information, including updated details regarding Project mitigation measures provided since the December 1, 2022, Certification.

1. Project

The Project will remove sediment that has accumulated in Grayson and Walnut creeks (Creeks) since the last desilting operation in 2007. This maintenance work is required by the Corps Readiness Branch to maintain a specified flood flow capacity. In their current state the hydraulic capacity of both channels is reduced due to siltation and the creeks may overtop their banks during the 1% annual chance storm. The function of these Creeks is critical to the operations of the flood control facilities and the Project will help increase the hydraulic capacity of both Creeks.

1.1 Site Description & Background

The Project sites are located in the Creeks in the general vicinity of the communities of Pacheco and Concord (lat. 38.001667, long. -122.062778). The Creeks consist of constructed earthen trapezoidal flood control channels with steep grassy banks, a level floodplain, and a low-flow channel. Within the Project area Grayson Creek is bordered by residential, commercial, and industrial development on all sides. Walnut Creek is bordered by industrial and commercial land uses. The Iron Horse Regional Trail runs along the east side of Walnut Creek north of Concord Avenue, and west of the creek south of Concord Avenue. Gravel access roads run along the majority of both creeks. The limits of tidal incursion are north of the Project site and generally located between Highway 4 and Imhoff Drive.

Grayson Creek drains an approximately 24 square mile sub-watershed and is contained in the 145 square mile Walnut Creek watershed. Walnut Creek is fed by several other major tributaries including San Ramon, Las Trampas, Lafayette, Murderer's, Pine, and Galindo creeks. Walnut Creek joins Pacheco Creek approximately 1.5 miles downstream of the confluence with Grayson Creek. From here it flows north 1.75 miles into the Suisun Bay. The width of Grayson Creek in the planned work area from the top of the levees on either side ranges from 100 to 200 feet. The Walnut Creek channel averages approximately 350-400 feet in width from the top of the levees on either side. Ruderal vegetation is located along both sides of the creeks on the levee banks and extends onto the flood plain where sediment has been deposited. Sediment deposits have resulted in elevated areas that no longer have seasonal wetland hydrology and are characterized by upland plant species. Grayson Creek is treeless to the north of 2nd Ave.,

and to the south of 2nd Ave. scattered trees are present that separate the creek from adjacent residential communities and commercial shopping centers. Walnut Creek is treeless for the entire length within the Project area, with the exception of scattered trees that are planted along the bike path adjacent to buildings.

Seasonal wetlands situated on the Creek floodplains support a combination of native and non-native plant species such as curly dock, western goldenrod, rabbitsfoot grass, creeping ryegrass, birdfoot trefoil, tall flat sedge, redtop, perennial pepperweed, fat hen, foxtail barley, knot grass, cocklebur, and hyssop loosestrife. Freshwater marsh is located in scattered areas along the Creeks adjacent to the low flow channel and in areas on the floodplain where water is near the surface. These areas are dominated by dense stands of narrow-leaved cattail and hardstem bulrush. In several areas the Walnut Creek channel includes some seasonal swales that parallel the low flow channel. The Creeks' perennial low flow channels are primarily unvegetated and contain open water.

The Creeks' lower reaches contain habitat for both Central California Coast steelhead and Central Valley fall/late fall-run Chinook salmon. Both Creeks are degraded within the Project area due to past channelization and urbanization encroaching to the edge of the stream banks throughout much of the watershed. The channel bottoms are silty/muddy, lacking the gravelly substrate necessary for successful egg development in salmonids. The banks consist primarily of short grasses and ruderal vegetation which provides little if any complexity or cover to the Creek channels. A lack of trees or other tall riparian vegetation also exposes the water to continual sunlight, resulting in elevated water temperatures.

Although once abundant in Walnut Creek, self-sustaining anadromous salmonid populations are not currently present in the Project reach or in the upstream watersheds. It is presumed that Chinook salmon observed in the lower reach of the creek in recent years are not successfully reproducing in the area. Although successful spawning is not currently occurring, small numbers of steelhead still return to the watershed each year. Currently there are several constructed concrete passage barriers in Walnut Creek, including a 14-foot tall drop structure upstream of the Project area (Drop Structure 1), just south of the Willow Pass Road Bridge. No steelhead or salmon have been observed in Grayson Creek in recent years.

Lower Walnut Creek: In recent years after selective deauthorization from the Corps' flood control program, the lower 2.5 miles of Walnut Creek and 1.5 miles of Pacheco Creek were enhanced and restored as part of the Lower Walnut Creek Restoration Project. This project lowered and breached the flood protection levees along the creeks to restore tidal inundation to existing non-tidal wetlands. The project will result in improved habitat quality, diversity, and connectivity, which is expected to benefit native and special status species and provide for sustainable flood management.

Climate Change: Climate change is affecting and will continue to affect the San Francisco Bay Region, including parts of Contra Costa County. Current and future impacts include increasing frequency of extreme weather events, prolonged fire seasons, heat waves, and sea level rise that may change the flow dynamics at the fluvial/tidal interface. Changes in hydrology include more frequent and longer droughts, more frequent and more severe flooding, and changes in timing and volume of peak runoff. These changes may result in consequent impacts on water quality and beneficial uses of the Creeks, including but not limited to harmful algal blooms due to a combination of warm waters and the reduced ability of warm water to hold dissolved oxygen, nutrient pollution, and more erosion and sedimentation caused by intense rainfall events and increased velocity of stream flow. The precise rate and magnitude of future impacts

to the Creeks and associated aquatic habitat from climate change are uncertain, and thoughtful and deliberate interventions will be needed to optimize opportunities to protect existing and potential beneficial uses of creek habitats.

1.2 Project Description

Desilting will occur in Grayson Creek from Chilpancingo Parkway to Imhoff Drive, and in Walnut Creek between points approximately 1,200 feet downstream of Diamond Boulevard and approximately 1,300 feet downstream of Concord Avenue. These reaches were chosen due to their cost-effectiveness and ability to provide the most flood risk reduction in high-priority areas of Concord, Pleasant Hill, Pacheco, and Vine Hill. The Creeks in these reaches are divided into regions for desilting, termed sediment bars, which represent areas that are most beneficial to hydraulic capacity and least impactful to Environmentally Sensitive Areas (ESAs). The sediment bars total approximately 36 acres. The vertical limit of sediment removal will be to the Creeks' original geometry, derived from the as-built plans. An estimated depth of two to seven feet of sediment in Walnut Creek and one to six feet of sediment in Grayson Creek will be removed from each sediment bar for a total of approximately 172,300 cubic yards (cy) with 129,800 cy from Walnut Creek and 42,500 cy from Grayson Creek. Table 1 in Attachment A to the Application provides a summary of sediment excavation and temporary fill volumes and surface area.

The Project was designed to minimize environmental impacts by using site data including LiDAR data and the wetland delineation to identify ESAs and design the removal work to avoid them. The value of each sediment bar to the Project goal of increasing flow capacity was determined by three factors: total silt volume, slope of energy grade line (representing the increase to hydraulic capacity), and accessibility. Using these factors as a guide, several permutations of the sediment bars were modeled in HEC-RAS to determine simulated outcomes of different desilted locations. The sediment bars were assigned rankings according to the reduction in water surface elevation resulting from the different permutations. The Project currently has funding to desilt both Rank 1 and Rank 2 sediment bars.

The work will occur over a period of approximately three months during the dry season over two consecutive years, starting in 2023 such that only one side of each Creek is desilted each year, minimizing impacts to the ESAs. All ESAs will be separated from the work by a temporary fence or flagging, and the low flow channel will be buffered from excavation with the addition of a two-foot high berm. After desilting the excavated areas will be seeded with a native wetland seed mix. Before the start of the rainy season cuts will be made intermittently in the berm so that the flow of water will connect with the floodplain following desilting activities. Erosion and sediment control measures will be implemented to prevent the discharge of sediment to the Creeks during construction, and avoid and minimize the discharge of sediment to the Creeks under post-construction conditions.

Pre-construction surveys for all special status and common wildlife species will be conducted within the Project areas by a qualified biologist immediately prior to equipment or material staging, pruning/grubbing, or surface-disturbing activities. Dewatering activities are not expected to be required to implement the Project. Trucks will carry sediment from Walnut Creek to a storage site and for potential reuse at the Marathon Refinery for wetland establishment. A disposal site for the sediment from Grayson Creek is yet to be determined and will depend on sampling results for toxic constituents. Beneficial reuse will be included if determined to be feasible. Work along Grayson Creek, which has a rather narrow channel, is likely to be conducted with long arm excavators operating from the top of the bank. Along Walnut Creek

and in some areas of Grayson Creek loaders will likely enter the floodplain directly via access ramps where sediment bars are wide enough to allow equipment to operate. In these areas, temporary earthen ramps for equipment will be constructed down the banks and removed following Project completion. On-site material for the access ramps will be collected from non-wetland areas of the channels via long arm excavators. In total, 16 access points (three for Walnut and 13 for Grayson) and 14 temporary access ramps (three for Walnut, 11 for Grayson) are anticipated.

Post-Construction Monitoring: The Permittee will implement post-construction monitoring at the Project site to verify development of seasonal wetlands and adequate control of invasive plant species as part of the Project mitigation.

2. Impacts to Waters of the State

The Water Board has independently reviewed the Project record to analyze impacts to water quality and the environment and designated beneficial uses within the Project's watershed. The San Francisco Bay Basin Water Quality Control Plan (Basin Plan) defines the beneficial uses of waters of the State. The Project will impact the Creeks, which are tributary to the San Francisco Bay (Bay) via Suisun Bay and the Carquinez Strait. The Basin Plan assigns the following beneficial uses to the Bay: industrial service supply, industrial process supply, commercial and sport fishing, shellfish harvesting, estuarine habitat, fish migration, preservation of rare and endangered species, fish spawning, wildlife habitat, water contact and non-contact recreation, and navigation.

2.1 Fill and Discharge

The Project will temporarily impact 36.18 acres of floodplain habitat, which includes 12.91 acres of seasonal wetlands, 0.022 acres of freshwater marsh, and 23.24 acres of ruderal floodplain within the Creeks during sediment removal (approximately 23.26 acres (9.57 acres of wetlands) in Walnut Creek and 12.95 acres (3.35 acres of wetlands) in Grayson Creek). An additional 0.73 acres of levee bank and floodplain habitat will be temporarily impacted from fill for access ramps.

The seasonal wetland and upland sediment bars within the floodplain areas of the Creeks, and their adjacency to the perennial low flow channels, provides valuable habitat in support of a variety of wildlife species, including avian and insect populations. In addition to the various wildlife species that use the area, there are known western pond turtle populations in both Creeks. Also, as noted above both steelhead and Chinook salmon have potential to occur within the Project areas. Although direct impacts to fish are not likely to occur due to the limits of the work, the excavation of the floodplain areas will result in the direct temporary loss of the Creeks' seasonal wetland and upland wildlife habitat. Additionally, impacts to aquatic organisms, including fish, could occur as a result of short-term elevated turbidity in stream flows during post-construction storm events. Until vegetation becomes established in the excavated areas storm events may result in the discharge of sediment to the low flow channels and downstream reaches, particularly during heavy rainfall events when the floodplain is engaged. Sediment plumes caused by the Project could potentially affect water quality and downstream aquatic habitat.

3. Mitigation

Mitigation for the Project's temporary impacts is required and will be provided by the anticipated onsite temporary expansion of existing seasonal wetlands and freshwater marsh within the flood

control channels, removal and eradication of invasive plant species within the Project area as shown on *Figure 2, Overview of Invasive Weed Locations, High and Moderate Priority for Control in the Sediment Bars to be Desilted, Walnut and Grayson Creeks Desilting Project* (Nomad), funding to support development of a watershed restoration plan in coordination with the Walnut Creek Watershed Council, and submittal of information regarding channel design capacities and opportunities to improve creek habitat and water quality within the channels over the long term.

Habitat Return and Invasive Plant Removal: Removal of upland sediment bars from the Creeks is expected to improve and increase wetland habitat as the sediment is currently occupied by ruderal, upland vegetation. Up to 36.18 acres of wetlands could become established after construction, which would result in an increase in wetland acreage of approximately 23.24 acres. However, whether seasonal wetlands will be successfully established is uncertain and will depend on rainfall, Creek flows, and frequency of sediment deposition in the years following construction. If seasonal wetlands do establish, their longevity will be limited due to expected sediment deposition on the floodplain.

Watershed Restoration Plan: The restoration plan envisioned by the Walnut Creek Watershed Council (Watershed Council) would engage with local community stakeholders to identify potential creek enhancement and restoration sites in the Walnut Creek watershed. Potential sites will include those identified within natural or constructed channels that are maintained by the Permittee for flood conveyance. The costs to produce this plan have not been finalized and are expected to be around \$100,000. The Permittee has proposed to dedicate \$80,000 to support the development of the restoration plan, which is expected to comprise a portion of a wider-scale watershed planning effort currently underway by the Permittee. The Watershed Council anticipates obtaining additional funding as needed to complete the plan.

Flood Control Channel Study Information/Documentation: To inform discussions relative to future sediment removal projects and opportunities to improve water quality and support for beneficial uses within the Creeks, this Certification requires the Permittee to prepare and submit channel studies that provide information on the hydraulic capacity of the Creeks within the sediment removal reaches, and analysis of opportunities to enhance water quality. Information to be provided will include the established objectives for flood damage reduction, the discharge and estimated stages for these flows, and the flow efficiency at lower and higher flows and permissible channel roughness. The submittal will include an analysis of opportunities and constraints related to potential enhancements within and upstream or downstream of the Project reaches. Potential enhancements to explore include planting trees along the active channel to improve water temperature, analysis of a channel shape within the levees that could more efficiently transport sediment and/or reduce the required frequency of removal, and removal of Drop Structure 1.

Implementation of erosion and sediment control best management practices (BMPs) will reduce the potential for discharge of sediment from disturbed areas into the low flow channels of the Creeks. All soil fills for access ramps will be removed by the end of the work in each Project reach. All temporarily impacted areas will be restored to pre-Project contours (or design grades) and seeded with a native wetland mix or planted with salvaged vegetation. A restoration biologist will monitor the site for restoration success two times per year for up to five years after seeding/planting has occurred.

4. California EcoAtlas

Regional, state, and national studies have determined that tracking of mitigation and restoration projects must be improved to better assess the performance of these projects, following monitoring periods that last several years. To effectively carry out the State's Wetlands Conservation Policy of no net loss to wetlands, the State needs to closely track both losses and successes of mitigation and restoration projects affecting wetlands and other waters of the State. The Water Board must also track project performance in Bay Area creeks subject to routine repair and maintenance activities, such as recurring instabilities. Therefore, we adopted the digital interactive mapping tool called *EcoAtlas*.^[1] *EcoAtlas* is a web-based tool that integrates maps, project plans, site conditions, restoration efforts, and other elements on a project-by-project basis based on data inputs. Accordingly, we require the Permittee to upload their Project information to *EcoAtlas* with the *Project Tracker* tool at <https://ptrack.ecoatlas.org> (see Condition 13). The San Francisco Estuary Institute developed *EcoAtlas* and maintains detailed instructions for *Project Tracker* on its website at <https://ptrack.ecoatlas.org/instructions>.

5. CEQA Compliance

Pursuant to the California Environmental Quality Act (CEQA), as lead agency the Contra Costa County Department of Conservation and Development prepared an Initial Study and Mitigated Negative Declaration (IS/MND) for the Project. The IS/MND was circulated for public comment in October 2021. The IS/MND was adopted by the Contra Costa County Board of Supervisors on May 17, 2022, and a Notice of Determination was filed on May 19, 2022 (State Clearinghouse Number 2021100347). The Water Board, as a responsible agency under CEQA, determined the IS/MND, in combination with the requirements in this Order, appropriately addresses the Project's potentially significant impacts under the Water Board's purview.

6. Conditions

I, Eileen White, Executive Officer, do hereby issue this Order certifying that any discharge from the proposed Project will comply with the applicable provisions of 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) of the Clean Water Act, 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 Order, including the following:

6.1 Regulatory Compliance and Work Windows

1. **Design Conformance**. The Project shall be constructed in conformance with the Project description provided in the Application and supplemental information described in this Certification. The Permittee shall fully comply with engineering plans, specifications, and technical reports submitted in the Application or supplemental materials required as part of this Certification. Any changes to information provided in the Application must be submitted to the Water Board and receive Executive Officer approval before the changes are implemented;

^[1] Source: California Wetlands Monitoring Workgroup (CWMW). *EcoAtlas*. Accessed March 12, 2019. <https://www.ecoatlas.org>. CWMW includes SFEI, the State Water Board, U.S. EPA Region IX, and other agencies with similar goals to track effects of projects in wetlands and other aquatic habitats.

Rationale: *This condition is necessary to ensure compliance with the permit and applicable conditions and to ensure that the proposed work and final restoration work has been conducted in accordance with the permit and all applicable conditions. (California Water Code (CWC) section 13264).*

2. **Corps Compliance.** The Permittee shall adhere to the conditions of the Individual Permit issued by the Corps and all requirements associated with the authorization;
3. **CDFW Compliance.** The Permittee shall adhere to all terms set forth in the Streambed Alteration Agreement Issued by California Department of Fish & Wildlife (CDFW) (EPMIS Notification No. CCA-15375-R3);
4. **Special Status Species.** This Certification does not allow for the take, or incidental take, of any special status species. The Permittee shall use the appropriate protocols, as approved by CDFW to ensure that Project activities do not impact the Beneficial Use of the Preservation of Rare and Endangered Species;

Rationale: *Conditions 2 through 4 are required pursuant to California Code of Regulations Title 23 (23 CCR) section 3856(e), which requires that copies be provided to the Water Boards of "any final and signed federal, state, and local licenses, permits, and agreements (or copies of the draft documents, if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity."*

5. **Work Window.** To protect water in the Creeks from sediment generation or debris associated with construction activity and to minimize potential impacts to aquatic species, construction in waters of the State is restricted to the April 15 to October 31 dry season or to the end of any extension granted by Water Board staff on the basis of five-day weather forecasts;

Rationale: *This condition is necessary to ensure compliance with the permit and applicable conditions and to ensure that the proposed work and final restoration work has been conducted in accordance with the permit and all applicable conditions. (CWC section 13264).*

6. **Precipitation and Construction Planning.** Precipitation forecasts shall be considered when planning construction activities. The Permittee shall monitor the 72-hour forecast from the National Weather Service at <http://www.nws.noaa.gov>. When there is a forecast of more than 40% chance of rain, or at the onset of unanticipated precipitation, the Permittee shall implement all measures necessary to prevent discharge of stormwater runoff containing sediment to State waters. If any construction activities will occur after October 31, a Winterization Plan shall be submitted to the Executive Officer for review and acceptance and contain, but not be limited to, the following:
 - a) Activities and Timeline Description – for any proposed activity that will begin or end after October 31, the activity and its respective construction timeline, from start to finish, shall be described in detail.
 - b) Erosion Control Measures – all erosion control measures shall be described in detail, including, but not limited to, the type of erosion control measure and its

material, implementation timeline, and best management practices to be used during and after implementation;

Rationale: *This condition is necessary to ensure avoidance and minimization of impacts to waters of the State and Beneficial Uses from construction activities (CWC section 13376 et seq.). These conditions are also necessary to minimize adverse impacts to water quality from construction activities to the maximum extent practicable (State Board Resolution No. 68-16; 40 CFR Part 131.12 (a)(1); CWC section 13369; Basin Plan section 2.1.14).*

6.2 General Construction

7. **Discharge Prohibition.** No unauthorized construction-related materials or wastes (e.g., debris, soil, silt, excessive bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life) shall be allowed to enter into or be placed where they may be washed by rainfall or runoff into waters of the State. When construction is completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be discharged to waters of the State;
8. **Construction Stormwater Management.** The Permittee shall obtain coverage under and comply with the Statewide NPDES Construction Stormwater General Permit (State Water Resources Control Board Order No. 2009-0009-DWQ; NPDES Permit No. CAS000002) (Construction General Permit), and any reissuances thereof, including the permit adopted by the State Water Board on September 8, 2022, which will become effective on September 1, 2023. The Permittee shall prepare and implement a site-specific Stormwater Pollution Prevention Plan (SWPPP) for the construction of each phase of the Project, in accordance with the requirements, provisions, limitations, and prohibitions of the Construction General Permit;

Rationale: *Conditions 7-8 are necessary to ensure that contaminated material is not placed within waters of the State (Basin Plan sections 3.3.12, 3.3.19, and 4.19) and to ensure avoidance and minimization of impacts to waters of the State from construction activities (CWC section 13376 et seq.).*

9. **Erosion & Sediment Controls.** The Permittee shall implement effective erosion and sediment control BMPs in any Project areas where soil disturbance occurs during construction;
10. **Sediment Management.** During sediment removal activities debris, piles, and other removed materials shall be fully contained to prevent any transport by wind, surface runoff, or other means into waters of the State. The Permittee shall implement all avoidance and minimization measures described in the Application;
11. **Equipment Maintenance Prohibition.** No fueling, cleaning, or maintenance of vehicles or equipment shall take place within waters of the State, or within any areas where an accidental discharge to waters of the State may occur; and construction materials and heavy equipment must be stored outside of waters of the State. When work within waters of the State is necessary, best management practices shall be implemented to prevent accidental discharges;

Rationale: Conditions 9-11 are necessary to ensure avoidance and minimization of impacts to waters of the State from construction activities (CWC section 13376 et seq.). These conditions are also necessary to minimize adverse impacts to water quality from construction activities to the maximum extent practicable (State Board Resolution No. 68-16; 40 CFR Part 131.12 (a)(1); CWC section 13369; Basin Plan section 2.1.14).

12. **Beneficial Use Impacts.** All work performed within waters of the State shall be completed in a manner that minimizes impacts to beneficial uses and habitat; measures shall be employed to minimize disturbances along waters of the State that will adversely impact the water quality of waters of the State. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete Project implementation;

Rationale: This condition is necessary to ensure that Project implementation does not impact water quality in ways that impair the designated beneficial uses of waters of the State (Basin Plan Chs. 3 and 4) and to ensure minimization of impacts to waters of the State and, as well as to ensure successful restoration of all temporary impacts authorized (State Board Resolution No. 68-16; 40 CFR Part 131.12 (a)(1); CWC sections 13264 and 13369; Basin Plan Chs. 3 and 4).

6.3 Pre-Construction Reporting and Other Requirements

13. **EcoAtlas Form.** The Permittee shall input Project information into *EcoAtlas* no later than 14 days from this Certification's issuance date, consistent with Section 4 herein. The Project information shall be added to the *Project Tracker* tool in *EcoAtlas* online at <https://ptrack.ecoatlas.org>. Instructions for adding information to *EcoAtlas* are available at <https://ptrack.ecoatlas.org/instructions>, or by contacting the Water Board staff listed on the cover page of this Certification. The Permittee shall notify the Water Board and submit documentation demonstrating the Project has been successfully added to Eco Atlas via email to RB2-401Reports@waterboards.ca.gov, or by mail to the attention of 401 Certifications Reports (see address on the letterhead), and include **EcoAtlas_445630_Walnut Grayson Desilt Project**;

Rationale: This condition is necessary to ensure compliance with the permit and applicable conditions (CWC section 13267).

14. **Beaver Protection.** The Permittee shall manage the sediment removal work in the vicinity of Chilpancingo Parkway in a manner that is protective of a beaver population that may be present at this location. No later than 60 days prior to the start of construction the Permittee shall submit, acceptable to the Executive Officer, documentation of adequate protection measures (such as initiating the ground disturbance some distance downstream of the beaver area, etc.);

Rationale: This condition is necessary to ensure that Project implementation does not impact water quality in ways that impair the designated beneficial uses of waters of the State (Basin Plan Chs. 3 and 4).

15. **Walnut Creek Restoration Plan Funding & Progress Report.** No later than 60 days prior to the start of construction the Permittee shall submit, acceptable to the Executive Officer, documentation that funding has been provided to the Walnut Creek Watershed Council and/or Contra Costa Resource Conservation District to support

the development of a watershed restoration plan as outlined in the *Overview of the Walnut Creek Watershed Restoration Plan* (Walnut Creek Watershed Council, September 2022). The Permittee shall dedicate \$80,000 to the development of the restoration plan, an amount that is expected to provide for the initial identification of high and medium priority restoration and enhancement opportunities within the watershed. Construction shall not begin until the funding dedication has been approved by the Executive Officer. The Permittee shall provide updates to the Water Board during preparation of the watershed plan to document progress towards plan completion. The identification of priority restoration opportunities is expected to be complete within an approximate two-year time frame. The Permittee shall submit, acceptable to the Executive Officer and no later than July 1 and December 1, 2023, and July 1 and December 1, 2024, reports on the progress of the plan development;

Rationale: *This condition is necessary to minimize adverse impacts to water quality (CWC sections 13385 and 13267).*

16. **Commencement of Construction.** The Permittee shall submit a Commencement of Construction Report acceptable to the Executive Officer. The Commencement of Construction Report shall be submitted no later than seven days prior to the start of initial construction activities. The report shall reference **SOC_445630_Walnut Grayson Desilt Project** and shall be sent via email to RB2-401Reports@waterboards.ca.gov or by mail to the attention of 401 Certifications Reports (see address on the letterhead). The Commencement of Construction shall be submitted in same timeframe specified herein for multiple construction seasons, if necessary;

Rationale: *This condition is necessary to assist in scheduling compliance inspections to ensure compliance with the permit and applicable conditions (CWC section 13267).*

17. **Photo-Documentation Points.** Prior to the start of construction, the Permittee shall establish a minimum of 25 photo-documentation points to provide representative views of the Project sites. These points shall be located approximately every 500 feet along the work areas. The photo-documentation points shall be used to track the Project's pre- and post-construction conditions. The Permittee shall prepare a site map with the photo-documentation points clearly marked. Prior to, and following construction, the Permittee shall photographically document the pre- and post-construction conditions. These post-construction photographs and map shall be submitted, along with the as-built report described below;

Rationale: *This condition is necessary to ensure compliance with the permit and applicable conditions and to ensure that the proposed work has been conducted in accordance with the permit and all applicable conditions (CWC section 13267).*

6.4 Active Construction and Post-Construction Reporting Requirements

18. **As-Built Report.** The Permittee shall prepare and submit an as-built report acceptable to the Executive Officer within 60 days of completing the work each year, including the implementation of site restoration activities. The report shall include a description of the areas of actual disturbance during Project construction and the photographs and map specified in Condition 17. The report(s) shall clearly identify and illustrate the Project activities that occurred and the locations where impacts to waters of the State occurred. The as-built report shall include the 100 percent

construction plans marked with the contractor's field notes that clearly depict any deviations made during construction from the designs reviewed by the Water Board. The as-built report shall be submitted via email to (1) the Water Board staff responsible for certifications in Contra Costa County and (2) RB2-401Reports@waterboards.ca.gov. This report shall reference **As Built_445630_Walnut Grayson Desilt Project**, and the date of Project completion;

19. **Project Construction Completion Report.** The Permittee shall submit a Notice of Project Construction Completion (NOC) acceptable to the Executive Officer to notify the Water Board that the Project has been completed. The Completion Notice shall be submitted to the Water Board no later than 60 days after completing Project construction and mitigation work and shall reference **NOC_445630_Walnut Grayson Desilt Project**. The Notice may be combined with the Notice of Mitigation Monitoring Completion (Condition 23) and shall be sent via email to RB2-401Reports@waterboards.ca.gov, or by mail to the attention of 401 Certifications Reports (see address on the letterhead);

***Rationale:** Conditions 18 and 19 are necessary to ensure compliance with the permit and applicable conditions and to ensure that the Project has been conducted in accordance with the permit and all applicable conditions (CWC section 13267).*

6.5 Mitigation and Monitoring Requirements

20. **Mitigation & Monitoring and Maintenance.** The Permittee shall conduct the sediment removal work in a manner that optimizes the establishment of seasonal wetlands within the excavation areas. All disturbed areas shall be seeded with the native seed mix described in the *Vegetation Baseline Survey, Walnut and Grayson Creeks Desilting Project* (Nomad, August 1, 2022), or in accordance with a modified plan submitted, acceptable to the Executive Officer, before construction. The excavation areas shall be monitored for a five-year period following construction to assess the nature and extent of vegetative cover and to verify whether seasonal wetlands have become established. Cover by invasive plant species removed as part of the Project shall be maintained at less than 10% over the long term and any new invasive weed species not recorded during baseline surveys shall be controlled. Adaptive management measures shall be implemented to ensure successful restoration of the temporarily impacted areas;
21. **Annual Monitoring Reports.** The Permittee shall submit annual monitoring reports, acceptable to the Executive Officer, by January 31 following each monitoring year. The first monitoring year commences in the calendar year after completing the restoration of temporarily impacted areas. At the time of this Certification the restoration completion is anticipated in 2023 for one side of the channel and 2024 for the other side. Therefore, monitoring of mitigation areas shall begin in 2024 and the first annual monitoring report shall be due on January 31, 2025, unless the Project is completed at a different time. The annual reports shall summarize each year's monitoring results and include detailed information on the hydrology and vegetation cover types. The approximate percent cover of plant species and their wetland indicator status shall be provided. The annual reports shall compare data to previous monitoring years and describe evidence of sediment deposition on the floodplain. After three years of monitoring a wetland delineation shall be conducted to determine the extent of jurisdictional wetlands. If adverse impacts to waters of the State are

observed during the monitoring period, or if seasonal wetlands are not developing as anticipated, additional mitigation may be required by the Executive Officer. The annual report shall reference **AMR_445630_Walnut Grayson Desilt Project** and shall be submitted via email to RB2-401Reports@waterboards.ca.gov and the Water Board staff responsible for 401 certifications in Contra Costa County. Annual reports may also be submitted in hard copy to the attention of 401 Certifications Reports (see the address on the letterhead);

22. **Channel Study Information**. The Permittee shall submit, acceptable to the Executive Officer and no later than May 1, 2024, a report that includes information on the hydraulic capacity of the Creeks within the sediment removal reaches, and analysis of opportunities to enhance water quality and beneficial uses of waters of the State. The report shall include the established objectives for flood damage reduction, the discharge and estimated stages for these flows, and the flow efficiency at lower and higher flows and permissible channel roughness (i.e., how calculated Manning's n values may vary depending on depth of flow). The submittal shall include an analysis of opportunities and constraints related to potential enhancements within and upstream and downstream of the Project reaches. Potential enhancements to explore shall include planting trees along the active channel to improve water temperature, analysis of a channel shape within the levees that could more efficiently transport sediment and/or reduce the required frequency of removal, and removal of Drop Structure 1;
23. **Notice of Mitigation Monitoring Completion**. Within 30 days of confirming that the Project's mitigation has been completed, the Permittee shall submit, acceptable to the Executive Officer, a Notice of Mitigation Monitoring Completion that references **NMMC_445630_Walnut Grayson Desilt Project**. This report shall be submitted via email to RB2-401Reports@waterboards.ca.gov and to the Water Board staff responsible for 401 certifications in Contra Costa County. Hard copies may also be submitted to the address on the letterhead, to the attention of 401 Certifications;

***Rationale:** Conditions 20-23 are necessary to ensure compliance with the permit and applicable conditions and to ensure that the Project and restoration work have been conducted in accordance with the permit and all applicable conditions (CWC section 13267).*

24. **Climate Change Preparation**. The Permittee shall submit, acceptable to the Executive Officer and no later than May 1, 2024, a status report on the development of climate change policies and plans as they relate to anticipated changes in rainfall runoff patterns and the Creeks original flood control design parameters. Understanding the reasonably foreseeable influence of climate change is important to adequately assess the impacts of future maintenance activities within the Creeks;

***Rationale:** This condition is necessary to ensure compliance with the Water Board policies for protection of wetlands and waters (Basin Plan Ch. 4).*

6.6 Administrative and General Compliance

25. **Site Access**. The Permittee shall grant Water Board staff or an authorized representative, upon presentation of credentials and other documents as may be required by law, permission to: (1) enter upon the Project site or compensatory mitigation site(s) where a regulated facility or activity is located or conducted, or

where records are kept; (2) have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order; (3) inspect any facilities, equipment, practices, or operations regulated or required under this Order; and (4) sample or monitor for the purposes of assuring Order compliance;

Rationale: *This condition is necessary to assist in scheduling compliance inspections and to ensure compliance with the permit and applicable conditions (CWC section 13267).*

26. **Certification and Order at Site.** A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors;

Rationale: *This condition is necessary to ensure compliance with the permit and applicable conditions (CWC sections 13170 and 13245).*

27. **Water Quality Violations Notification.** The Permittee shall notify the Water Board of any violations of water quality standards, along with the cause of such violations, as soon as practicable (ideally within 24 hours). Notification may be via telephone, email, delivered written notice, or other verifiable means;

Rationale: *This condition is necessary to minimize adverse impacts to water quality (CWC sections 13385 and 13267).*

28. **Ownership Change Notification.** The Permittee shall provide a signed and dated notification to the Water Board of any change in ownership or interest in ownership of any Project area at least 10 days prior to the transfer of ownership. The purchaser shall also submit a written request to the Water Board to be named as the permittee in an amended order. Until this Order has been modified to name the purchaser as the permittee, the Permittee shall continue to be responsible for all requirements set forth in this Order;

29. **Discharge Change Notification.** In accordance with CWC section 13260, the Permittee shall file with the Water board a report of any material change or proposed change in the ownership, character, location, or quantity of this waste discharge. Any proposed material change in operation shall be reported to the Executive Officer at least 30 days in advance of the proposed implementation of any change. Changes to discharges include, but are not to be limited to, significant new soil disturbances, proposed expansions of development, or any change in drainage characteristics at the Project site. For the purpose of this Order, this includes any proposed change in the boundaries of the area of wetland/waters of the State to be impacted;

Rationale: *Conditions 28 and 29 are necessary to ensure compliance with the permit and applicable conditions (CWC section 13264).*

30. **Submittal of Reports.** Where this Certification requires submittal of reports, including plans, reports, or related information, the submitted reports shall be acceptable to the Executive Officer;

Rationale: *This condition is necessary to ensure compliance with the permit and applicable conditions (CWC section 13267).*

31. **Individual Waste Discharge Requirements**. Should new information come to our attention that indicates a water quality problem with this Project, the Water Board may issue Waste Discharge Requirements pursuant to CWC sections 13263 and/or 13377 and 23 CCR section 3857;
32. **Expiration**. This Order shall continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project;

6.7 Standard Conditions

33. **Certification and Order Modification**. This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to CWC sections 13320 and 13330 and 23 CCR section 3867;
34. **Hydroelectric Facilities**. This Order does not apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to 23 CCR subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought;
35. **Application Fee**. This Certification and Order is conditioned upon full payment of the required fee, including annual fees, as set forth in 23 CCR section 3833. The Project's Application and Project fee of \$2,066 was received by the Water Board on November 4, 2021. The remaining Project fee of \$177,179, calculated using the 2020-2021 Water Quality Certification Dredge and Fill Application Fee Calculator, Category A – Fill & Excavation Discharges is due within 10 days of the date of this Certification;
36. **Annual Fee Invoice**. In accordance with 23 CCR section 2200, the Permittee shall pay an annual fee to the Water Board each fiscal year (July 1 – June 30) until Project construction and mitigation activities are completed and an acceptable Notice of Project Mitigation Completion is received by the Water Board (Note: the Annual Fee may be changed by the State Water Board; at the time of Certification it was \$2,031 per year). Annual fees will be automatically invoiced to the Permittee. The Permittee must notify the Water Board when mitigation is complete with a final report in order to request termination of annual billing.

Rationale: *Conditions 33-36 are standard conditions that "shall be included as conditions of all water quality certification actions" (23 CCR section 3860(a)).*

In addition to the information noted above, these conditions are individually required to ensure compliance with narrative water quality objectives in the Basin Plan, the state anti-degradation policy (State Water Board Resolution No. 68-16), the California Wetlands Conservation Policy (Executive Order W-59-93, Basin Plan Chs. 4 and 5), and Water Board policies for the protection of wetlands and waters (Basin Plan Ch. 4, including Ch. 4.23).

The conditions above are individually authorized as noted above and by 23 CCR sections 3838 and 3859 and CWC Div. 7, Ch. 4, Article 4, Waste Discharge Requirements.

This Order applies to the Project as proposed in the application materials and designs referenced above in the conditions of Certification. Be advised that failure to implement the Project in conformance with this Order is a violation of this Certification. Any violation of Certification conditions is a violation of State law and subject to administrative civil liability pursuant to CWC section 13350. Failure to meet any condition of this Certification may subject the Permittee to civil liability imposed by the 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 Certification 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. The burden, including costs, of these reports bears a reasonable relationship to the need for the report and the benefits to be obtained. Should new information come to our attention that indicates a water quality problem with this Project, the Water Board may issue Waste Discharge Requirements.

If you have any questions concerning this Order, please contact Kathryn Hart of my staff via email to Kathryn.hart@waterboards.ca.gov or by phone at (510) 622-2356. All future correspondence regarding this Project should reference the RM No. indicated at the top of this letter.

Sincerely,



Digitally signed by
Keith H. Lichten,
Division Manager
Date: 2023.02.16

 00:12:23 -08'00'

for Eileen White
Executive Officer

cc: SWRCB, DWQ, stateboard401@waterboards.ca.gov
Water Board, Victor Aelion, victor.aelion@waterboards.ca.gov
CDFW, Andrew Chambers, Andrew.Chambers@Wildlife.ca.gov
U.S. EPA, Region 9:
EPA Mailbox: r9cwa401@epa.gov
Jennifer Siu, siu.jennifer@epa.gov
Corps, SF Regulatory Branch:
Katerina Galacatos, katerina.galacatos@usace.army.mil
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Contra Costa County:
Claudia Gemberling, claudia.gemberling@pw.cccounty.us
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