
Central Valley Regional Water Quality Control Board

11 September 2020

Allison Knapp
Contra Costa County Flood Control Conservation District
255 Glacier Dr.
Martinez, CA 94553

CLEAN WATER ACT SECTION 401 TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION; CONTRA COSTA COUNTY FLOOD CONTROL, TREMBATH BASIN GEOTECHNICAL INVESTIGATION PROJECT (WDID#5B07CR00223), CONTRA COSTA COUNTY

This Order responds to the 11 June 2020 application submitted by Contra Costa County Flood Control (Applicant) for the Water Quality Certification of the Trembath Basin Geotechnical Investigation Project (Project), temporarily impacting 0.07 acre/62.23 linear feet of waters of the United States

This Order serves as certification of the United States Army Corps of Engineers' Regional General Permit 1 (SPK-2010-00664) under Section 401 of the Clean Water Act, and a Waste Discharge Requirement under the Porter-Cologne Water Quality Control Act and State Water Resources Control Board Order 2003-0017-DWQ.

WATER QUALITY CERTIFICATION STANDARD CONDITIONS:

- 1. This Water Quality Certification (Certification) is not valid until coverage under Section 404 of the Clean Water Act is obtained. If the Project, including the area of impact (as described) is modified through this process, this Certification will not be valid until amended by the Central Valley Regional Water Quality Control Board (Central Valley Water Board).**
2. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to Section 3855(b) of the California Code of Regulations, and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. The validity of any non-denial Certification action shall be conditioned upon total payment of the full fee required under Section 3860(c) of the California Code of Regulations.
4. This Certification is no longer valid if the Project (as described) is modified, or coverage under Section 404 of the Clean Water Act has expired.
5. All reports, notices, or other documents required by this Certification or requested by the Central Valley Water Board shall be signed by a person described below or by a duly authorized representative of that person.
 - (a) For a corporation: by a responsible corporate officer such as: 1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; 2) any other person who performs similar policy or decision-making functions for the corporation; or 3) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (b) For a partnership or sole proprietorship: by a general partner or the proprietor.
 - (c) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.
6. Any person signing a document under Standard Condition number 5 shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

TECHNICAL CERTIFICATION CONDITIONS:

In addition to the above standard conditions, the Applicant shall satisfy the following:

1. The Applicant shall notify the Central Valley Water Board in writing seven (7) days in advance of the start of any work within waters of the United States.
2. Except for activities permitted by the United States Army Corps of Engineers under Section 404 of the Clean Water Act, soil, silt, or other organic materials shall not be

placed where such materials could pass into surface water or surface water drainage courses.

3. The Applicant shall maintain a copy of this Certification and supporting documentation (Project Information Sheet) at the Project site during construction for review by site personnel and agencies. All personnel (employees, contractors, and subcontractors) performing work on the proposed Project shall be adequately informed and trained regarding the conditions of this Certification.
4. The Applicant shall perform surface water sampling¹:
 - a) when performing any in-water work;
 - b) in the event that Project activities result in any materials reaching surface waters; or
 - c) when any activities result in the creation of a visible plume in surface waters.

The sampling requirements in Table 1 shall be conducted upstream out of the influence of the Project, and 300 feet downstream of the work area. The sampling frequency may be modified for certain projects with written approval from Central Valley Water Board staff.

¹ Sampling is not required in wetlands, where the entire wetland is being permanently filled; provided there is no outflow connecting the wetland to surface waters.

Table 1: Sample Type and Frequency Requirements

Parameter	Unit	Type of Sample	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity	NTU	Grab ²	Every 4 hours during in-water work	3, 4
Visible construction related pollutants ⁵	Observations	Visual Inspections	Continuous throughout the construction period	NA
pH ⁶	Standard Units	Grab ²	Every 4 hours during in-water work	3, 4

Surface water sampling shall occur at mid-depth. A surface water monitoring report shall be submitted within two weeks of initiation of in-water construction, and every two weeks thereafter. In reporting the sampling data, the Applicant shall arrange the data in tabular form so that the sampling locations, date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the Project complies with Certification requirements. The report shall include surface water sampling results, visual observations, and identification of the turbidity increase in the receiving water applicable to the natural turbidity conditions specified in the turbidity criteria below. If no sampling is required, the Applicant shall submit a written statement stating, “No sampling was required” within two weeks of initiation of in-water construction, and every two weeks thereafter.

² Grab samples shall not be collected at the same time each day to get a complete representation of variations in the receiving water.

³ Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136, where no methods are specified for a given pollutant, the method shall be approved by Central Valley Water Board staff.

⁴ A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer’s instructions. A calibration and maintenance log for each meter used for monitoring shall be maintained onsite.

⁵ Visible construction-related pollutants include oil, grease, foam, fuel, petroleum products, and construction-related, excavated, organic or earthen materials.

⁶ Sampling to be conducted if wet concrete or grout comes into contact with surface water.

5. The Central Valley Water Board adopted a *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fifth Edition, revised May 2018 (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Turbidity and pH limits are based on water quality objectives contained in the Basin Plan and are part of this Certification as follows:
 - a) Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
 - b) Activities shall not cause turbidity increases in surface water to exceed:
 - i. where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTUs;
 - ii. where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU;
 - iii. where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;
 - iv. where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs; and
 - v. where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior permission of the Central Valley Water Board Executive Officer.

For Delta waters, the general objectives for turbidity apply subject to the following: except for periods of storm runoff, the turbidity of Delta waters shall not exceed 50 NTUs in the waters of the Central Delta and 150 NTUs in other Delta waters.
 - c) Activities shall not cause pH to be depressed below 6.5 nor raised above 8.5 in surface water.
6. The Applicant shall notify the Central Valley Water Board immediately if the above criteria for turbidity, pH or other water quality objectives are exceeded.

7. In-water work shall occur during periods of no precipitation when the work area is naturally dry or after the work area has been completely dewatered.

The Applicant shall perform surface water sampling in accordance with Technical Certification Condition No. 4, if any of the following conditions occur: 1) in-water work is conducted during an unanticipated flow event; 2) Project activities result in any materials reaching surface waters; or 3) Project activities result in the creation of a visible plume in surface waters.

8. Activities shall not cause visible oil, grease, or foam in the receiving water.
9. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If critical equipment must be refueled within 300 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. Refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material. No hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related potentially hazardous substances should be stored within a floodplain or within 300 feet of a waterway. The Applicant must perform frequent inspections of construction equipment prior to utilizing it near surface waters to ensure leaks from the equipment are not occurring and are not a threat to water quality.
10. The Applicant shall develop and maintain onsite a project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the Project. The Plan must detail the Project elements, construction equipment types and location, access and staging and construction sequence.
11. Raw cement, concrete (or washing thereof), asphalt, drilling fluids, lubricants, paints, coating material, oil, petroleum products, or any other substances which could be hazardous to fish and wildlife resulting from or disturbed by project-related activities, shall be prevented from contaminating the soil and/or entering waters of the United States.
12. The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete, asphalt, paint, coating material, drilling fluids, or other construction-related potentially hazardous substances to surface water and/or soil is prohibited. In the event of a prohibited discharge, the Applicant shall notify the Central Valley Water Board Contact within 24-hours of the discharge.
13. Concrete must be completely cured before coming into contact with waters of the United States. Surface water that contacts wet concrete must be pumped out and disposed of at an appropriate off-site commercial facility, which is authorized to accept concrete wastes.

14. Hydroseeding shall be performed with California native seed mix.
15. If water is present, the area must be dewatered prior to the start of work.
16. When work in a flowing stream is unavoidable and any temporary dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream, to maintain beneficial uses of waters of the state below the dam. Construction, dewatering, and removal of temporary cofferdams shall not violate Technical Certification Condition 5 of this Certification.
17. If any temporary dam or other artificial obstruction is constructed, the temporary dam or other artificial obstruction shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel which will cause little or no siltation. Stream flow shall be temporarily diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.
18. The Applicant shall apply for a name change or amendment to this Certification should any of the following occur: a) a change in the ownership of all or any portion of the Project; b) any change in the Project description; c) any change involving discharge amounts, temporary impacts, or permanent impacts; or d) amendments, modifications, revisions, extensions, or changes to the United States Army Corps of Engineers' Regional General Permit 1, the United States Fish and Wildlife Service decision document(s), or the California Department of Fish and Wildlife Streambed
19. The Applicant shall submit a copy of the final, signed and dated Lake or Streambed Alteration Agreement to the Central Valley Water Board Contact within 14 days of issuance by the California Department of Fish and Wildlife.

The Applicant shall comply with all California Department of Fish and Wildlife requirements, including those requirements described in the Lake or Streambed Alteration Agreement.
20. If the Project will involve land disturbance activities of one or more acres, or where the Project disturbs less than one acre but is part of a larger common plan of development that in total disturbs one or more acres, the Applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWQ for discharges to surface waters comprised of storm water associated with construction activity.
21. The Conditions in this Certification are based on the information in the attached "Project Information Sheet" and the application package. If the actual project, as described in the attached Project Information Sheet and application package, is modified or changed, this Certification is no longer valid until amended by the Central Valley Water Board.

22. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. The applicability of any state law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to ensure compliance with this Certification.
- (a) If the Applicant or a duly authorized representative of the Project fails or refuses to furnish technical or monitoring reports, as required under this Certification, or falsifies any information provided in the monitoring reports, the applicant is subject to civil liability, for each day of violation, and/or criminal liability.
 - (b) In response to a suspected violation of any condition of this Certification, the Central Valley Water Board may require the Applicant to furnish, under penalty of perjury, any technical or monitoring reports the Central Valley Water Board deems appropriate, provided that the burden, including cost of the reports, shall be in reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
 - (c) The Applicant shall allow the staff of the Central Valley Water Board, or an authorized representative(s), upon the presentation of credentials and other documents, as may be required by law, to enter the Project premises for inspection, including taking photographs and securing copies of project-related records, for the purpose of assuring compliance with this Certification and determining the ecological success of the Project.

NOTIFICATIONS AND REPORTS:

23. The Applicant shall provide a Notice of Completion (NOC) no later than 30 days after the Project completion. The NOC shall demonstrate that the Project has been carried out in accordance with the Project description in the Certification and in any approved amendments. The NOC shall include a map of the Project location(s), including final boundaries of any on-site restoration area(s), if appropriate, and representative pre and post construction photographs. Each photograph shall include a descriptive title, date taken, photographic site, and photographic orientation.
24. The Applicant shall submit all notifications, submissions, materials, data, correspondence, and reports in a searchable Portable Document Format (PDF). Documents less than 50 MB must be emailed to: centralvalleysacramento@waterboards.ca.gov. In the subject line of the email, include the Central Valley Water Board Contact, Project name, and WDID number as shown in the subject line above. Documents that are 50 MB or larger must be transferred to a disk and mailed to the Central Valley Water Board Contact.

CENTRAL VALLEY WATER BOARD CONTACT:

Angela Nguyen-Tan
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-8114
Angela.Nguyen-Tan@waterboards.ca.gov
916-464-0335

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

The Central Valley Water Board has determined that this project meets the Categorical Exemption under Section 15306 of the California Code of Regulations, which exempts basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource and may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.

WATER QUALITY CERTIFICATION:

I hereby issue an Order certifying that any discharge from the Contra Costa County Flood Control, Trembath Basin Geotechnical Investigation Project (WDID#5B07CR00223) will comply with the applicable provisions of Section 301 ("Effluent Limitations"), Section 302 ("Water Quality Related Effluent Limitations"), Section 303 ("Water Quality Standards and Implementation Plans"), Section 306 ("National Standards of Performance"), and Section 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. Through this Order, this discharge is also regulated under State Water Resources Control Board Water Quality Order No. 2003-0017 DWQ "Statewide General Waste Discharge Requirements For Dredged Or Fill Discharges That Have Received State Water Quality Certification (General WDRs)".

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on: a) the discharge being limited and all proposed mitigation being completed in compliance with the conditions of this Certification, Contra Costa County Flood Control's application package, and the attached Project Information Sheet; and b) compliance with all applicable requirements of the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fifth Edition, revised May 2018.

Any person aggrieved by this action may petition the State Water Resources Control Board to review the action in accordance with California Water Code Section 13320 and California Code of Regulations, Title 23, Section 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this action, except that if the thirtieth day following the date of this action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the State Water Resources Control Board's [Water Quality Petitions webpage](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) (http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

Original Signed By James Marshall for:

Patrick Pulupa
Executive Officer

Enclosure: Project Information Sheet

Attachments: Figure 1 – Project Location Map
Figure 2—Impacts to Aquatic Resources

cc: Distribution List, page 15

PROJECT INFORMATION SHEET

Application Date: 11 June 2020

Applicant: Allison Knapp
Contra Costa County Flood Control
255 Glacier Dr.
Martinez, CA 94553

Applicant Representative: Alex Nattkemper
Contra Costa Flood Control
255 Glacier Dr.
Martinez, CA 94553

Project Name: Trembath Basin Geotechnical Investigation Project

Application Number: WDID#5B07CR00223

Date on Public Notice: 12 June 2020

Date Application Deemed Complete: 8 July 2020

Date All Information Received: 9 September 2020

Type of Project: Data Collection

Approved Months of Project Implementation: 11 September through 15 November

Project Location: Section 20, Township 2 North, Range 2 East, MDB&M.
Latitude: 38.002891° N and Longitude: 121.779570° W

County: Contra Costa County

Receiving Water(s) (hydrologic unit): East Antioch Creek, San Joaquin Hydrologic Basin, San Joaquin Delta Hydrologic Unit #544.00

Water Body Type: Wetland, Stream Channel

Designated Beneficial Uses: The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fifth Edition, revised May 2018 (Basin Plan) has designated beneficial uses for surface and ground waters within the region. Beneficial uses that could be impacted by the project include, but are not limited to: Municipal and Domestic Water Supply (MUN); Agricultural Supply (AGR); Industrial Supply (IND); Hydropower Generation (POW); Groundwater Recharge (GWR); Water Contact Recreation (REC-1); Non-Contact Water Recreation (REC-2); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Biological Habitats of Special Significance (BIOL); Rare, Threatened, or Endangered Species (RARE);

Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and Wildlife Habitat (WILD). A comprehensive and specific list of the beneficial uses applicable for the project area can be found on the Central Valley Water Board's [Basin Planning webpage](http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml) (http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml).

303(d) List of Water Quality Limited Segments: East Antioch Creek is the receiving water for the Trembath Basin Geotechnical Investigation Project. East Antioch Creek is not listed on the 303(d) list. The most recent list of approved water quality limited segments is found on the State Water Resources Control Board's [Impaired Water Bodies webpage](http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml) (http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml).

Project Description: The Trembath Basin Geotechnical Investigation Project (Project) is located adjacent to the eastern ends of Trembath Street and Yellowstone Drive in Antioch. The Project consists of a geotechnical investigation to characterize the subsurface conditions of the Trembath Detention Basin to support the design of the embankment dam across East Antioch Creek.

The Project includes subsurface exploration using four rotary wash borings (G): one of which will receive a vibrating wire piezometer, seven standard cone penetration tests (CPT), and one seismic CPT. Up to six test pits (TP) at locations to be determined after geologic field mapping, test borings, and CPTs have been completed. Test borings will be drilled using track or truck-mounted drilling equipment; CPTs will be advanced using track-mounted CPT equipment.

A rotary wash drilling method will be used and involves pumping water and/or drilling fluid down the drill rods and through the drill bit. The fluid is used to cool the bit during work. The cuttings generated by the drilling and excess drilling fluids are expelled into a storage tank. Cuttings are removed and fluids re-circulated within the closed drilling system. When the study is completed, some of the boreholes will be filled in bentonite and topped off with approximately 2 feet of native soil. Observed groundwater levels will be recorded for the borings prior to grouting the holes. Borings will be backfilled within 24 hours of Project completion. All completed borings will be staked for later surveying. No dewatering will occur within the Project area. Bentonite grout will be placed into the stream channel and wetland in dry conditions. No wet concrete will be placed into stream channel or wetland habitats. The Project will temporarily impact 0.07 acre /62.23 linear feet of waters of the United States.

Preliminary Water Quality Concerns: Construction activities may impact surface waters with increased turbidity.

Proposed Mitigation to Address Concerns: The Applicant will implement Best Management Practices to control sedimentation and erosion. The Applicant will conduct

turbidity testing during in-water work, stopping work if Basin Plan criteria are exceeded or observations indicate an exceedance of a water quality objective.

All temporary affected areas will be restored to pre-construction contours and conditions upon completion of construction activities to provide 1:1 mitigation for temporary impacts.

Excavation/Fill Area: Approximately 625 cubic yards of soil will be excavated from 0.07 acres of waters of the United States. Approximately 4.4 cubic yards of bentonite and 553 cubic yards of soil will be placed into 0.07 acre of waters of the United States.

Dredge Volume: None

California Integrated Water Quality System Impact Data: The Project will temporarily impact 0.05 acre/ 0.03 linear feet of stream channel habitat 0.02 acre/62.2 linear feet of wetland from excavation and fill activities.

Table 2: Total Project Fill/Excavation Temporary Impact⁷ Quantity

Aquatic Resource Type	Acres	Cubic Yards	Linear Feet
Stream Channel	0.05	1	0.03
Wetland	0.02	557	62.2

United States Army Corps of Engineers File Number: SPK-2010-00664

United States Army Corps of Engineers Permit Type: Regional General Permit 1

California Department of Fish and Wildlife Lake or Streambed Alteration

Agreement: The Applicant applied for a Lake or Streambed Alteration Agreement on 9 June 2020

Possible Listed Species: White-tailed kite, Golden eagle, California red-legged frog, Western burrowing owl, Swainson's hawk, and San Joaquin kit fox.

Status of CEQA Compliance: The Central Valley Water Board has determined that this project meets the Categorical Exemption, under Section 15306 of the California Code of Regulations, which exempts basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource and may be strictly for information

⁷ Includes only temporary direct impacts to waters of the state and does not include area of temporary disturbance which could result in a discharge to waters of the state. Temporary impacts, by definition, are restored to pre-project conditions and therefore do not include a physical loss of area or degradation of ecological condition.

gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.

The Central Valley Water Board will file a Notice of Exemption with the State Clearinghouse within five (5) days of the date of this Certification. .

Compensatory Mitigation: The Central Valley Water Board is not requesting compensatory mitigation for the temporary impacts to 0.07 acre of waters of the United States.

Application Fee Provided: \$1,949.00 was received on 11 June 2020. The fee amount was determined as required by California Code of Regulations, title 23, sections 3833(b)(3) and 2200(a)(3) and was calculated as category A - Fill & Excavation Discharges (fee code 84) with the dredge and fill fee calculator.

DISTRIBUTION LIST

Peck Ha
United States Army Corps of Engineers
Sacramento District Headquarters
Regulatory Division
SPKRegulatoryMailbox@usace.army.mil

Joanne Chiu (Electronic Copy Only)
United States Fish & Wildlife Service
Joanne.Chiu@fws.gov

Department of Fish and Wildlife, Region 2 (Electronic Copy Only)
R2LSA@wildlife.ca.gov

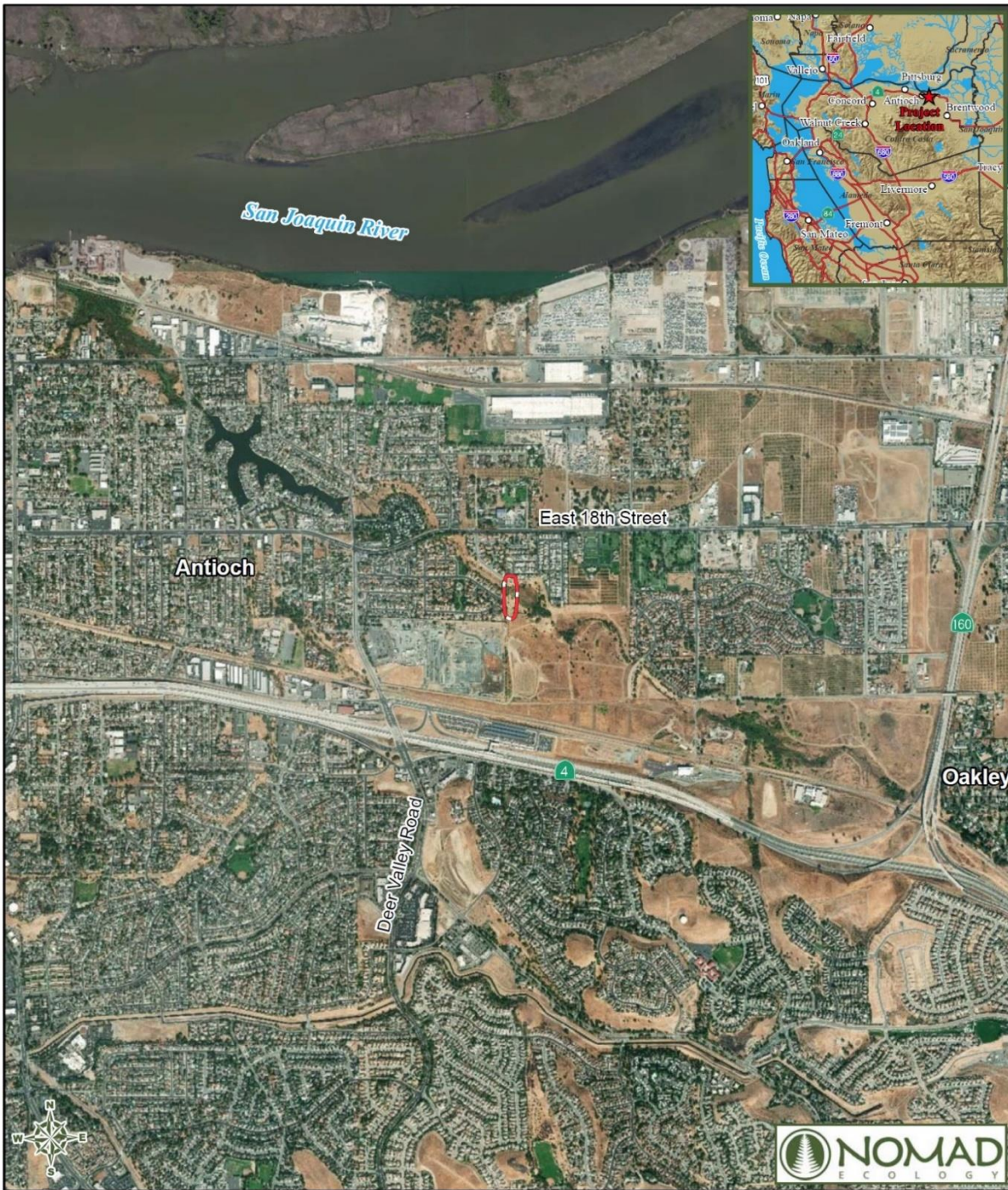
Stephanie Tadlock
Unit Supervisor
Central Valley Regional Water Quality Control Board, Sacramento Office
Stephanie.Tadlock@waterboards.ca.gov

Bill Jennings
CA Sportfishing Protection Alliance
DeltaKeep@me.com

CWA Section 401 WQC Program
Division of Water Quality
State Water Resources Control Board
Stateboard401@waterboards.ca.gov

Sam Ziegler (Electronic Copy Only)
United States Environmental Protection Agency
Ziegler.Sam@epa.gov

Alex Nattkemper
Contra Costa Flood Control
Alex.Nattkemper@pw.cccounty.us



March 2020

Planning Survey Report

Legend
Study Area Boundary

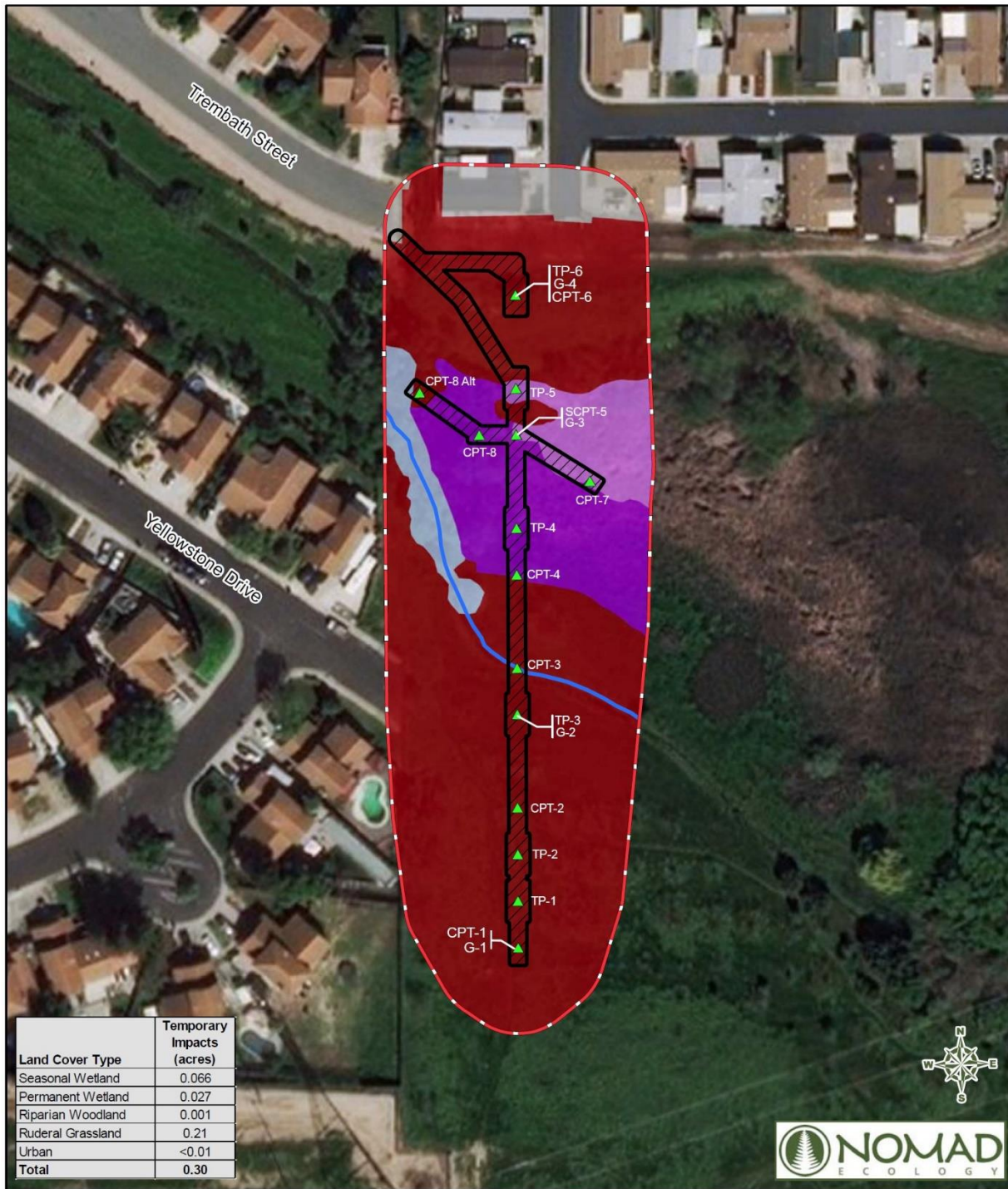
Figure 1
Study Area Location
Trembath Basin Geotechnical Investigations Project
Contra Costa County Public Works Department

1:24,000
0 1,000 2,000
Feet

Source: ESRI

Contra Costa County, California

Figure 1 – Project Location Map



May 2020

Planning Survey Report

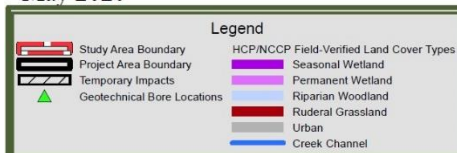


Figure 3
 Land Cover Types and Project Impacts
 Trembath Basin Geotechnical Investigations Project
 Contra Costa County Public Works Department



Source: ESRI

Contra Costa County, California

Figure 2 – Project Impacts