



Central Valley Regional Water Quality Control Board

20 November 2023

Erik Helseth
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NOTICE OF APPLICABILITY; GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2022-0052 FOR MAINTENANCE DREDGING OPERATIONS; TWAIN HARTE LAKE ASSOCIATION, TWAIN HARTE LAKE DREDGING PROJECT, TUOLUMNE COUNTY

Our office received a Notice of Intent on 20 June 2023 from the Twain Harte Lake Association (hereinafter Discharger), for the Twain Harte Lake Dredging Project (Project). Based on the application packet and subsequent information submitted by the Discharger, staff has determined that the Project meets the required conditions for approval under the General Order for Maintenance Dredging Operations, Order R5-2002-0052 (Dredging General Order) as a Category 3 project. This project is hereby assigned Dredging General Order number R5-2022-0052-001. Please reference your Dredging General Order number, **R5-2022-0052-001**, in your correspondence and submitted documents.

The project activities shall be operated in accordance with the requirements contained in the Dredging General Order and as specified in this Notice of Applicability (NOA). You are urged to familiarize yourself with the entire contents of the enclosed [Dredging General Order](#) (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2022-0052.pdf).

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

PROJECT DESCRIPTION

The proposed maintenance dredging will remove up to 70,000 cubic yards of accumulated sediment from Twain Harte Lake in Tuolumne County. The Project is located at 18175 Lakeview Drive in Twain Harte, approximately latitude 38.02883°N and longitude -120.24250°. Maintenance dredging is required in order to maintain critical dam equipment, water storage capacity, and beneficial uses.

Dredging operations will be completed in annual phases during seasonal low water (September through April) to reduce impact to water quality. The following phase sequence is anticipated to be implemented:

1. Phase 1 – Remove up to 5 acre-ft (8,067 cubic yards) of sediment from the area immediately adjacent to the dam.
2. Phase 2 – Remove any migrated sediment from the Phase 1 area and up to 5 acre-ft of sediment from the Phase 2 area.
3. Phase 3 – Remove migrated sediment from Phase 1 & 2 areas and up to 5 acre-ft of sediment from the Phase 3 area.
4. Phase 4 – Remove migrated sediment from Phase 1, 2, & 3 areas and up to 5 acres-ft of sediment from the Phase 4 area.
5. Phase 5 (if necessary) - Remove migrated sediment from Phase 1, 2, 3, & 4 areas and up to 5 acre-ft of sediment from the Phase 5 area.

The dredging sequence during each project phase will be generally performed as follows:

1. Lower reservoir surface elevation to near empty conditions;
2. Remove sediment in the reservoir bottom using an excavator, front loader, and/or dozer;
3. Place sediment into a haul truck via front loader or skid-steer;
4. Move sediment to the dredge material placement site (DMPS) in the parking lot for dewatering, evaporation and dispersion;
5. Move sediment from the DMPS directly to highway transport truck(s);
6. Transport sediment to the reuse site;
7. Refill the reservoir to available capacity prior to testing turbidity; and
8. Release water from the reservoir at a rate to sustain water surface elevation.

Dredged sediment will be temporarily placed at the DMPS located at the onsite paved parking lot for dewatering. The DMPS has an impervious surface with curbing to contain dredged sediment while liquids evaporate. Any water present at the time of sediment placement will gravity-drain into the curbed area to allow for water separation. The separated water will be immediately transferred to 10,000-gallon mobile storage tanks for application/dispersion in the parking lot area or fire suppression. The DMPS will prevent return water from entering surface waters or groundwater.

The Discharger will transport the dried sediment to Cover's Apple Ranch at 19211 Cherokee Road in Tuolumne for placement and reuse. Final reuse will consist of using the sediment for compost mixing, overlaying wood chips, and land application in orchard areas.

The Discharger shall comply with the Discharge Prohibitions (section IV) and Discharge to Land and Reuse Specifications (section V) of the Dredging General Order. The DMPS is a new site. The Discharger has demonstrated the use of the site is authorized by the applicable federal and state regulatory agencies. Therefore, use of the sites is exempt from the California Environmental Quality Act pursuant to California Code of Regulations, title 14, section 15304(g).

DREDGE OPERATION PLAN

The Discharger submitted a Dredge Operation Plan with the NOI in accordance with Attachment E of the Dredging General Order. The Dredge Operation Plan includes site-specific Best Management Practices (BMPs) to be implemented at the active dredge site, during dredge material transfer, at the dredge material placement site, and at the reuse site for compliance with the Dredging General Order and this NOA. The Dredge Operation Plan meets the requirements of the Dredging General Order and shall be implemented during the term of the Project. Any changes to the Dredge Operation Plan must be submitted for approval by Central Valley Water Board staff and this NOA may be updated to incorporate the revised Dredge Operation Plan.

Annual Dredge Operation Plan Update – The Project is expected to occur for multiple years. Prior to each dredging season, the Discharger shall submit an updated Dredge Operation Plan by **1 February** for each calendar year the Project is scheduled to conduct maintenance dredging. The updated Dredge Operation Plan shall include information per Attachment E, Section I.D of the Dredging General Order.

PRE-DREDGE SEDIMENT ANALYSES

The Discharger submitted a Pre-Dredge Sampling and Analysis Plan on 2 November 2022 that was reviewed and approved by Central Valley Water Board staff on 21 November 2022. The NOI includes a Pre-Dredge Sediment Evaluation Report that summarizes the pre-dredge sediment analyses conducted in accordance with the approved Pre-Dredge Sampling and Analysis Plan. Representative samples of dredge sediment were collected from the lakebed sediments. Seven (7) sediment samples were taken from the sediments at Twain Harte Lake.

The following analyses were conducted per Table D-1 of the Dredging General Order:

- Solid phase metals analysis

Based on the pre-dredge sediment analyses the average results do not exceed the screening levels specified in Table D-2 Dredging General Order.

RECEIVING WATER LIMITATIONS

Receiving water limitations are specified in Section VI.A of the Dredging General Order. The following receiving water limitations are applicable to the Project:

- Bacteria (VI.A.2);
- Biostimulatory Substances (VI.A.3);
- Chemical Constituents (VI.A.4);
- Color (VI.A.5);
- Dissolved Oxygen (VI.A.6.a.i, ii, iii, iv);
- Floating Material (VI.A.7);
- Oil and Grease (VI.A.8);
- pH (VI.A.9.a);
- Pesticides (VI.A.10);
- Radioactivity (VI.A.11);
- Suspended Sediments (VI.A.12);
- Settleable Substances (VI.A.13);
- Suspended Material (VI.A.14);
- Taste and Odors (VI.A.15);
- Temperature (VI.A.16.);
- Toxicity (VI.A.17); and
- Turbidity (VI.A.18.a);

MONITORING AND REPORTING

The Discharger is required to comply with the following specific monitoring and reporting requirements in accordance with the Dredging General Order, Monitoring and Reporting Program, Attachment B.

Monitoring Locations – The Discharger shall monitor at the specified location as follows in Table 1:

Table 1. Monitoring Station Locations

Station	Location Description
RSW-001	Surface water monitoring location within 3,000 feet up-current of the dredging location. For waterbodies with no current, monitoring shall be conducted in ambient conditions undisturbed by the dredging operation.
RSW-002	Surface water monitoring location within 300 feet down-current of the dredging location. For waterbodies with no current, monitoring shall be conducted within 150 feet of the dredging location.
DMPS-001	Dredge material placement site accepting sediment from dredge operation.

Dredge Site Monitoring – The Discharger shall monitor the surface water at monitoring locations RSW-001 and RSW-002, as specified in Table 2 using the Table 2 testing requirements described below:

Table 2. Dredge Site Monitoring (RSW-001 and RSW-002)

Parameter	Unit	Sampling Frequency	Sample Type
Dissolved Oxygen	Milligram/liter (mg/L)	Every 4 hours	Grab
pH	Standard Unit (SU)	Every 4 hours	Grab
Temperature	Degrees Fahrenheit (°F)	Every 4 hours	Grab
Turbidity	Nephelometric Turbidity Unit (NTU)	Every 4 hours	Grab

Table 2 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table 2:

- a. Monitoring shall be completed at both one-third (1/3) of the water depth and at two-thirds (2/3) of the water depth.
- b. A handheld field meter may be used for **dissolved oxygen, pH, temperature, and turbidity**, provided the meter utilizes a U.S. EPA-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 required by this Monitoring and Reporting Program shall be maintained.

- c. In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001 and RSW-002. Attention shall be given to the presence or absence of:
 - i. Floating or suspended matter
 - ii. Discoloration
 - iii. Bottom deposits
 - iv. Aquatic life
 - v. Visible films, sheens, or coatings
 - vi. Fungi, slimes, or objectionable growths
 - vii. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the Monitoring Report.

Dredge Material Placement Site Monitoring – The Discharger shall begin monitoring at each dredge material placement site immediately when placement of dredge materials at the site commences. Monitoring shall continue until the dredge material placement site is completely empty of water. The dredge material placement site shall be sampled for the parameters and at the frequency specified in Table 3 and the Table 3 testing requirements described below:

Table 3. Dredge Material Placement Site Monitoring (DMPS-001)

Parameter	Unit	Sampling Frequency	Sample Type
Freeboard	0.1 feet	1/Day	Measurement
Dissolved Oxygen	mg/L	1/Week	Grab
pH	SU	1/Week	Grab

Table 3 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table 3:

- a. A handheld field meter may be used for **dissolved oxygen and pH** provided the meter utilizes a U.S. EPA-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 required by this Monitoring and Reporting Program shall be maintained.

- b. Dissolved oxygen samples shall be collected opposite the inlet location within one (1) foot from the surface for each pond or other containment facility in use. Monitoring for dissolved oxygen may cease when the water depth in the containment facility is less than 0.5 feet.
- c. If dissolved oxygen is measured below 1 mg/L, then daily monitoring for dissolved oxygen shall be conducted until dissolved oxygen levels increase to 1 mg/L or greater, at which time weekly monitoring may resume.

Monthly Monitoring Report Submittals - Monitoring in accordance with this NOA shall begin upon following submittal of the Notice of Commencement per the Dredging General Order (Attachment B, Section III.B.1). Thereafter, monthly monitoring reports shall be submitted to the Central Valley Water Board on the first (1st) day of the second month after monitoring (e.g., January monitoring results shall be included with the monthly report by March 1). Monthly Monitoring Reports must be submitted from the date of the Notice of Commencement until coverage is formally terminated in accordance with the Dredging General Order, even if there is no dredge activity and/or discharge during the reporting month.

In addition to reporting the results of monitoring described above, the monthly monitoring reports shall describe the dredging activities conducted, including work schedule, dredging sites operated, dredging methods, dredge material placement sites used, dredge material that has been beneficially reused, dredge material placement site and reuse site management for all dredge material placement sites and reuse sites (not just those sites used during the reporting period), and the implementation status of all Best Management Practices (BMPs) implemented at each dredge material placement site and reuse site. In addition, the monthly monitoring report shall describe all non-dredging activities during the month, including but not limited to BMP maintenance, compliance monitoring, environmental monitoring, surveys, and inspections. Describe all occurrences during the month, including but not limited to non-compliance, problems encountered, and steps taken to address non-compliance and problems encountered.

Annual Report Submittals – The Discharger shall submit annual reports by the first (1st) day of September, annually, until coverage is formally terminated in accordance with the Dredging General Order. The annual report shall include the following:

- a. Map(s) showing dredge progress and footprint of area dredged.
- b. Quantity (cubic yards) of material dredged during the previous State Fiscal Year (July 1- June 30) for which the project was authorized.

GENERAL INFORMATION AND REQUIREMENTS

The Discharger must notify Central Valley Water Board staff within 24 hours of having knowledge of 1) the start of each new discharge, 2) noncompliance, and 3) when the discharge ceases. The Central Valley Water Board shall be notified immediately if any receiving water limit violation is observed during implementation of the project.

Upon cessation of project activities and discharges, the Discharger shall submit a Notice of Project Completion per the Dredging General Order (Attachment B, Section III.B.2) to request official termination of coverage under the Dredging General Order. The Discharger is subject to the terms and conditions of this NOA and the Dredging General Order and is responsible for submitting the associated annual fee and monitoring reports until the Discharger receives a Notice of Termination (NOT) from the Executive Officer. Upon receipt of the NOT, the Discharger will no longer be authorized to perform the maintenance dredging covered by this NOA and Dredging General Order.

Please review this NOA carefully to ensure that it completely and accurately reflects the Project. Discharge of wastes other than those described in this NOA is prohibited. Failure to comply with the requirements of the Dredging General Order or to submit the annual fee and/or monitoring reports may subject the Discharger to an enforcement action as authorized by provisions of the California Water Code.

DOCUMENT SUBMITTAL AND COMMUNICATION

Please convert all documents to a searchable Portable Document Format (pdf). All documents, including Monitoring Reports, written notifications, and documents submitted to comply with this NOA and the Dredging General Order, should be submitted to the Water Quality Certification and Dredging Unit, Attention: Jenna Yang at centralvalleysacramento@waterboards.ca.gov and Jenna.Yang@waterboards.ca.gov. Jenna Yang may also be reached by phone at (916) 464-4764.

Please include the following information in the body of the email:

- Attention: Water Quality Certification and Dredging Unit
- Discharger: Twain Harte Lake Association
- Project: Twain Harte Lake Dredging Project
- County: Tuolumne County
- CIWQS place ID: 888920

Documents that are 50 megabytes or larger must be transferred to a DVD, or flash drive and mailed to our office, attention "ECM Mailroom – Water Quality Certification and Dredging Unit".

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Links to the law and regulations applicable to filing petitions may be found on the [Petitions Home Page](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 Anne Walters for:
Patrick Pulupa
Executive Officer

Enclosures (2): Dredging General Order R5-2022-0052
 Enclosure A - Project Maps

cc: Distribution List, with enclosure(s):

United States Environmental Protection Agency
R9CWA401@epa.gov

California Department of Fish and Wildlife, Region 2
R2LSA@wildlife.ca.gov

CWA Section 401 WQC Program
Division of Water Quality
State Water Resources Control Board
StateBoard401@waterboards.ca.gov

ENCLOSURE A – PROJECT LOCATION MAP

Figure 1: Project Vicinity Map

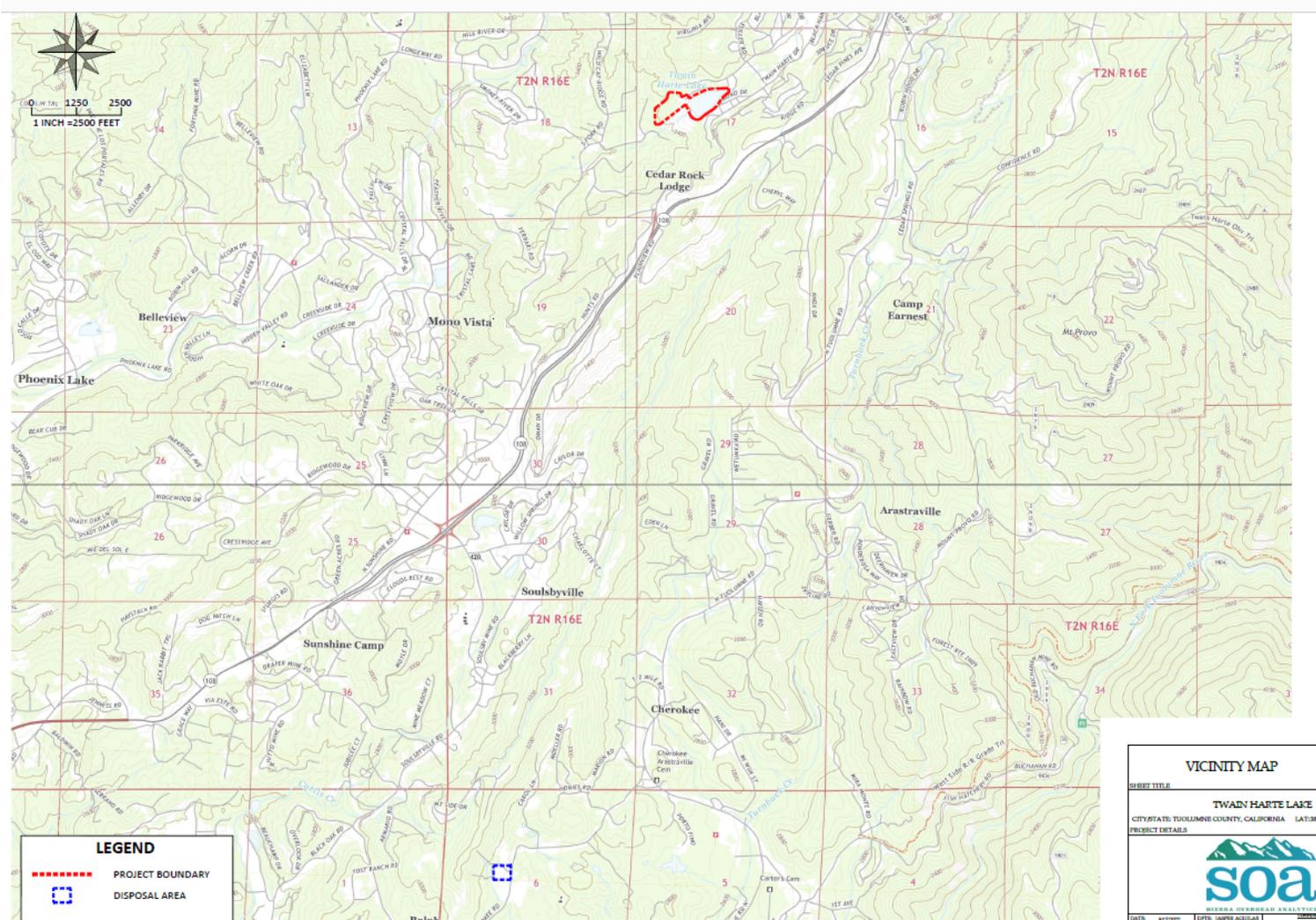


Figure 2: Map of Project Dredging Phases

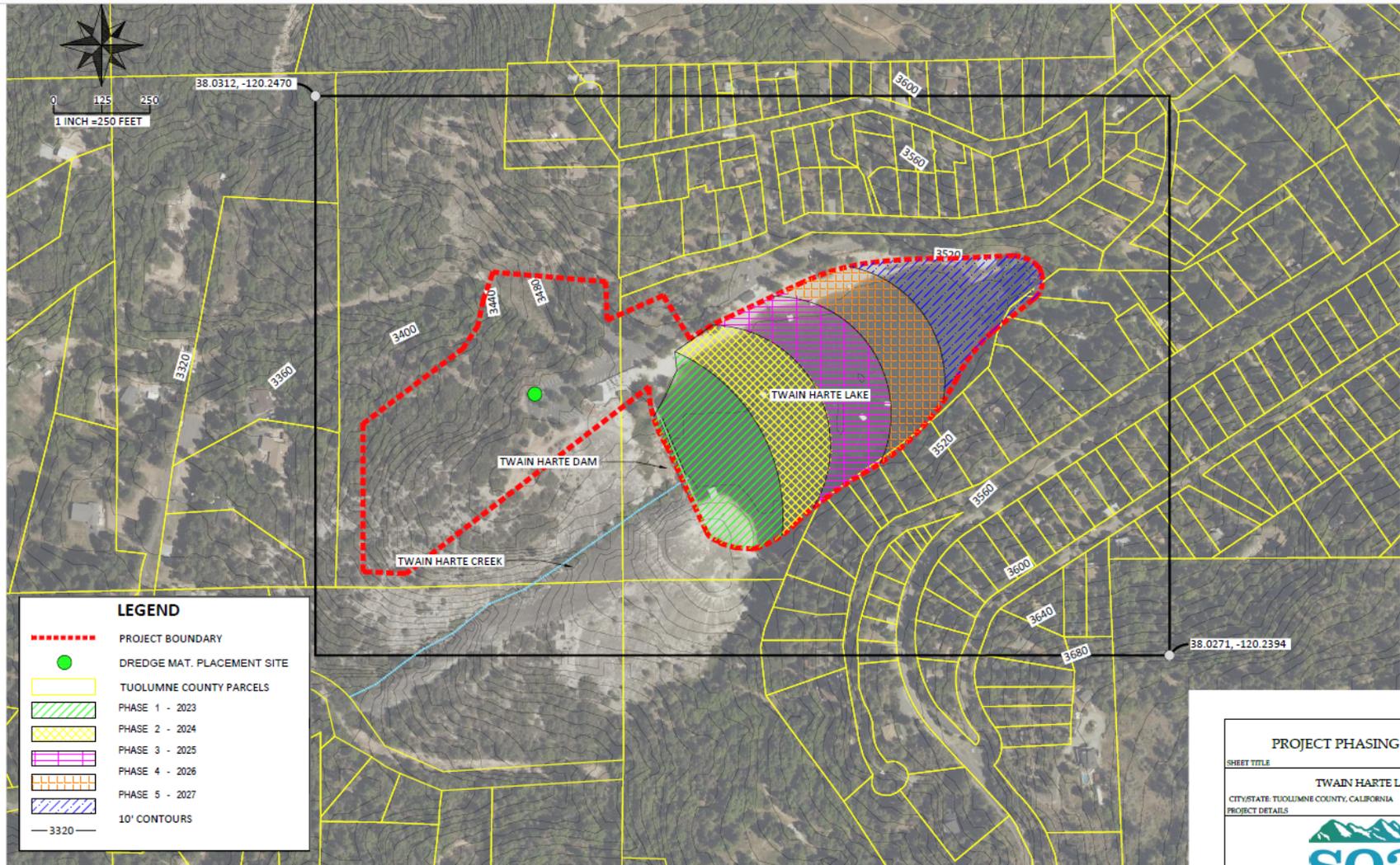


Figure 3: Map of Dredge Material Reuse Site

