Date Posted: 12/15/2023

NORTH MARIN WATER DISTRICT
AGENDA - REGULAR MEETING
December 19, 2023 – 4:00 p.m.
Location: 100 Wood Hollow Dr., Suite 300
Novato, California

Information about and copies of supporting materials on agenda items are available for public review at the District Office, at the Reception Desk, by calling the District Secretary at (415) 897-4133 or on our website at nmwd.com. A fee may be charged for copies. District facilities and meetings comply with the Americans with Disabilities Act. If special accommodations are needed, please contact the District Secretary as soon as possible, but at least two days prior to the meeting.

Item	Subject

CALL TO ORDER

1. ***APPROVE MINUTES FROM REGULAR MEETING***, December 5, 2023
2. ***GENERAL MANAGER'S REPORT***
3. ***OPEN TIME: (Please observe a three-minute time limit)***

   This section of the agenda is provided so that the public may express comments on any issues not listed on the agenda that are of interest to the public and within the jurisdiction of the North Marin Water District. When comments are made about matters not on the agenda, Board members can ask questions for clarification, respond to statements or questions from members of the public, refer a matter to staff, or direct staff to place a matter of business on a future agenda. The public may also express comments on agenda items at the time of Board consideration.

4. ***STAFF/DIRECTORS REPORTS***
5. ***PUBLIC HEARING:*** Consider Changes to Regulations 15, 17, 18 and Adopting a New Regulation 19

ACTION CALENDAR

6. ***Approve:*** Revisions to District Water Conservation Regulations 15 and 17
7. ***Approve:*** Consider Approving the Updated Regulation 18 – Recycled Water Service
8. ***Approve:*** Consider Approving New District Regulation 19 – Enforcement for Recycled Water Use
9. ***Approve:*** Potter Valley Project Surrender and Decommissioning
10. ***Approve:*** Board of Directors Committee Appointments

INFORMATION ITEMS

11. NBWA Meeting – December 1, 2023
12. ***MISCELLANEOUS***
    Disbursements – Dated December 7, 2023
    Disbursements – Dated December 14, 2023
    Monthly Progress Report
    2024 WAC/TAC Meeting Schedule
    Eel-Russian Project Authority JPA Agreement
    SCWA Potter Valley Project PowerPoint

    News Articles:
    Marin IJ – Olompali park to reopen after nine-month closure - NOVATO

    Social Media Posts:
    NMWD Web and Social Media Report – November 2023

The Board of Directors may consider an item at a different time than set forth herein.

Date Posted: 12/15/2023

Item	Subject
13.	***CLOSED SESSION:*** Conference with Legal Counsel – Existing Litigation, pursuant to Gov. Code § 54956.9(d)(1): Federal Energy Regulatory Commission, Hydroelectric Proj. No. 77, Potter Valley Project, License Surrender Proceeding
14.	***CLOSED SESSION:*** Conference with Labor Negotiators (§ 54957.6) Agency designated representatives: Tony Williams, Eric Miller, Karen Clyde, Julie Blue and Christopher Boucher Employee organization: North Marin Water District Employee Association
15.	***CLOSED SESSION:*** Conference with Labor Negotiators (§ 54957.6) Agency designated representatives: Tony Williams, Eric Miller, Karen Clyde, Julie Blue and Christopher Boucher Unrepresented employee: Unrepresented Employees
16.	***ADJOURNMENT***

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DRAFT
NORTH MARIN WATER DISTRICT
MINUTES OF REGULAR MEETING
OF THE BOARD OF DIRECTORS
December 5, 2023

CALL TO ORDER

President Fraites called the regular meeting of the Board of Directors of North Marin Water District to order at 4:00 p.m. at the District Headquarters and the agenda was accepted as presented. Present were Directors Jack Baker, Ken Eichstaedt, Rick Fraites, Michael Joly, and Stephen Petterle. Also present were General Manager Tony Williams, District Secretary Eileen Mulliner, Assistant General Manager/Chief Engineer Eric Miller, and Auditor-Controller Julie Blue.

District employees Chris Kehoe, Construction Superintendent, Robert Clark, Operations and Maintenance Superintendent were also in attendance.

REORGANIZATION OF BOARD

Election of President

On motion of Director Joly, seconded by Director Petterle, the Board elected Director Baker as President of the Board for the ensuing year by the following vote:

AYES: Director(s) Baker, Fraites, Joly and Petterle
NOES: None
ABSENT: None
ABSTAIN: None

Director Fraites left the meeting.

Election of Vice-President

On motion of Director Petterle, seconded by Director Eichstaedt, Director Joly was elected Vice-President of the Board for the ensuing year by the following vote:

AYES: Director(s) Baker, Eichstaedt, Joly and Petterle
NOES: None
ABSENT: Director Fraites
ABSTAIN: None

Establishment of Meeting Times and Place

On motion of Director Joly on the condition that the September 3, 2024 meeting be added and made tentative, seconded by Director Petterle, the Board set the time and place of regular meeting to be generally the first and third Tuesday of each month at 4:00 p.m. at the District office by the following vote:

AYES: Director(s) Baker, Joly, Eichstaedt, and Petterle
NOES: None
ABSENT: Director Fraites

ABSTAIN: None

Establishes the Manner of Calling Special Meetings

On the motion of Director Petterle, seconded by Director Eichstaedt, the Board approved special meetings of the Board to be held as provided that in Section 54956 of the Government Code by the following vote:

AYES: Director(s) Baker, Joly, Eichstaedt and Petterle
NOES: None
ABSENT: Director Fraites
ABSTAIN: None

Appointment of District Officers

On the motion of Director Eichstaedt, seconded by Director Joly, the following District officers were appointed for the ensuing year: Tony Williams, General Manager; Eileen Mulliner, Executive Assistant/District Secretary; Julie Blue, Auditor-Controller; and Eric Miller, Assistant General Manager/Chief Engineer by the following vote:

AYES: Director(s) Baker, Joly, Eichstaedt and Petterle
NOES: None
ABSENT: Director Fraites
ABSTAIN: None

Confirm Board Meeting Schedule for 2024

On the motion of Director Joly, seconded by Director Petterle, the Board accepted the proposed meeting schedule for the 2024 calendar year, including the addition of September 3, 2024 as tentative and with the understanding that the calendar may be adjusted as needed by the following vote:

AYES: Director(s) Baker, Joly, Eichstaedt and Petterle
NOES: None
ABSENT: Director Fraites
ABSTAIN: None

Committee Appointments

President Baker asked to wait to vote until the next meeting until he receives confirmation from the other Directors for the proposed committee assignments. The other directors agreed.

MINUTES

On motion of Director Joly, seconded by Director Eichstaedt, the Board approved the minutes from the November 21, 2023 regular meeting as presented by the following vote:

AYES: Director(s) Baker, Eichstaedt, Joly and Petterle
NOES: None
ABSENT: Director Fraites

ABSTAIN: None

GENERAL MANAGER'S REPORT

Tony Williams reported to the Board in regards to the Potter Valley Project that an item was brought to the Sonoma County Board of Supervisors on this date for a new joint powers authority agreement that establishes the New Eel River Project Authority and allows the Proponents to negotiate with PG&E. He also said that the Round Valley Indian Tribe, which is a sovereign nation, will have a seat at the new Board.

Mr. Williams told the Board that Assemblymember Damon Connolly visited the Stafford Treatment Plant and Dam recently. He will also be visiting the Point Reyes Treatment Plant in the near future and he thanked Robert Clark, Brad Stompe and Eric Miller for helping with the Stafford tour.

Mr. Williams mentioned to the Board that at the December 19, 2023 meeting there will be a public hearing to consider changes to Regulations 15, 17, 18 and new Regulation 19. The notices in the Marin IJ and Pt. Reyes Light will be occur the week of the 11th.

Mr. Williams updated the Board on the District's customer survey and said that to date we have had 846 responses. Approximately 250 respondents will receive the 75th anniversary pint glasses as a thank you. He said that the survey is open until next week and he will bring back final findings at a future meeting, likely in January.

OPEN TIME

President Baker asked if anyone in the audience wished to bring up an item not on the agenda and there was no response.

STAFF/DIRECTORS REPORTS

President Baker asked if staff or Directors wished to bring up an item not on the agenda and there was no response.

ACTION CALENDAR

ACCEPT FY 22/23 ANNUAL COMPREHENSIVE FINANCIAL REPORT AND MANAGEMENT REPORT

Julie Blue informed the Board that the auditor from C.J. Brown & Company who was to give a presentation to the Board on the FY22/23 annual comprehensive financial report and management report was unable to attend the meeting so she would be giving the presentation in his place.

Ms. Blue said that the report was done in accordance with auditing standards generally accepted in the United States of America, and that the auditor's issued an unmodified opinion. She also noted that we again received the GFOA Certificate of Achievement for Excellence award in

2022. She noted that the auditors reviewed our accounting practices and there were no issues discovered.

Ms. Blue said that the current assets decreased by $7.7 million (M) and that our liabilities have increased approximately $4.4M. Overall, our net position has increased approximately $6M. She said that total operation revenue of $24.2M was an increase of $660 thousand, but is still lower than budgeted. She also said that we had a good investment year and that we earned $1.2 million in investment earnings, compared to a loss from last year. Ms. Blue said that total expenses decreased by $5.6M and that non-operating revenues increased by $1.2M. Director Joly said it was a good presentation and followed up with a question about pensions. Ms. Blue said that pension liabilities increased by $7.9M. The increase is due to a higher percent of the liability allocation from the CalPERS pool and is a factor of the change in discount rate used by CalPERS. She said that our pension funding status is in line with other agencies. Director Petterle asked if PEPRA has helped us in reducing our pension liability and she said that it has since our employee base is now greater than 50% PEPRA. Director Eichstaedt asked how many times C.J. Brown has done our audits and Ms. Blue said that for many years, including the six years that Ms. Blue has been in her role at NMWD. She also indicated that when their contract extension expires we will most likely go out for an RFP. She said that they do audits for quite a few other water districts and cities in California. Director Joly asked when she and Tony Williams look at the financials, if they see anything that raises any questions. Mr. Williams expressed concern that the recently introduced water conservation regulations might have an impact on both revenues and water rates, especially as our expenses continue to rise. Ms. Blue emphasized the importance of ongoing discussions about pensions. Director Joly thanked Ms. Blue and her staff and requested that the Directors receive hard copies of the audit when they are available.

On the motion of Director Joly, and seconded by Director Petterle, the Board approved by the following vote:

AYES: Director(s) Baker, Eichstaedt, Joly and Petterle

NOES: None

ABSENT: Director Fraites

ABSTAIN: None

MISCELLANEOUS

The Board received the following miscellaneous items: Disbursements dated November 22 and 30, 2023, Auditor-Controller's Monthly Report of Investments for October 2023,

The Board also received the following news article: Marin IJ – Water district to fortify basins for Dillon Beach – NORTH MARIN, Slippery Statistics – ENVIRONMENT, What we flush matters for health, safety – EDITORIAL, A better way to promote urban water conservation, MMWD unveils draft plan to manage watershed lands – FIVE OBJECTIVES, NBC News - The vision of El Nino as

producer of historic California storms may be outdated – CLIMATE IN CRISIS

ADJOURNMENT

President Baker adjourned the meeting at 4:51 p.m.

Submitted by

Eileen Mulliner
District Secretary

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ITEM #5

NORTH MARIN WATER DISTRICT

MEMORANDUM

To: Board of Directors Date: December 19, 2023

From: Tony Williams, General Manager
Ryan Grisso, Water Conservation and Communications Manager

Subject: Public Hearing to Consider Changes to Regulations 15, 17, and 18 and Adopting a New Regulation 19
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RECOMMENDED ACTION: That the Board Hold a Public Hearing to:
1) Consider Changes to Regulation 15 – Water Conservation-Novato Service Area; Regulation 17 – Water Conservation – West Marin Service Area; Regulation 18 Recycled Water
2) Consider a New Regulation 19 – Enforcement for Recycled Water Use

FINANCIAL IMPACT: None at this time

The North Marin Water District (District) as a public agency of the State of California established under the County Water District Law (Division 12 of the California Water Code) has developed various regulations pursuant to Water Code Section 31024. These regulations, each adopted by the Board of Directors of the District, establish the terms and conditions under which facilities will be installed and water (both potable and recycled) will be supplied to users, the charges and rates for such service as well as providing necessary water rules and restrictions, including those designed to eliminate water waste.

Staff have prepared changes to the following existing District Regulations: Regulation 15 Water Conservation – Novato Service Area; Regulation 17 Water Conservation - West Marin Service Area and Regulation 18 Recycled Water Service. In addition, as a companion to Regulation 18, staff is proposing a new Regulation 19 “Enforcement for Recycled Water Use.” This memorandum provides a summary of the proposed changes to Regulations 15, 17 and 18 as well as an overview of the proposed Regulation 19.

<u>Regulation 15 Water Conservation – Novato Service Area</u>

District Regulation 15 provides the framework for all water conservation related activities in the Novato Service area including both mandatory and voluntary water conservation programs. The proposed updates include adding in a water waste restriction for non-residential, non-functional turf (as to be mandated in the future and defined by the State Water Resources Control Board through the rulemaking process in response to the 2018 Legislation Making Conservation a California Way of Life), adding water conservation programs previously implemented under “pilot program” authority; and making some additional minor revisions to

remain current and appropriate with current times including a portion of Section E. to expand the applicability of the new development deposit. A draft amended version of Regulation 15 is provided as Attachment 1.

Regulation 17 Water Conservation – West Marin Service Area

District Regulation 17 provides the framework for all water conservation related activities in the West Marin service area, including both mandatory and voluntary water conservation programs. The proposed updates include adding in a water waste restriction for non-residential, non-functional turf (as to be mandated in the future and defined by the State Water Resources Control Board through the rulemaking process in response to the 2018 Legislation Making Conservation a California Way of Life), adding water conservation programs previously implemented under "pilot program" authority; and making some additional minor revisions to remain current and appropriate with current times including a portion of Section E. to expand the applicability of the new development deposit. A draft amended version of Regulation 17 is provided as Attachment 4.

Regulation 18 Recycled Water Service

District Regulation 18 describes the types and availability of recycled water as well as the requirements and procedures, including formal agreements and permits necessary for connection to, extensions of, or modifications to, the District's Recycled Water distribution system. These regulations generally apply to new development but can be applicable to a commercial property owner requesting new recycled water service for certain approved uses and where the District has determined a retrofit of the existing water service facilities is feasible to accommodate recycled water service.

Although Regulation 18 has generally met the needs of the District and satisfies state requirements, it has become evident that it lacks clarity on the definition of terms used, details on requirements, conditions and procedures for establishing recycled water service, and a clear understanding of responsibilities of both the District and the recycled water customers. The new draft Regulation 18 (Attachment 3) clarifies the intent and purpose of the regulation and provides a new section on the definition of terms used. The draft regulation also provides more clarity on exemption requests and determinations by the District for mandatory use exemptions as well as a new section on protection of public health.

Regulation 19 Enforcement for Recycled Water Use

The current Regulation 18 includes a short section that covers "penalties for non-compliance" of the requirements for recycled water use. Recycled water is highly regulated by the state and the District must comply with the numerous state rules and regulations and is subject

to fines for violating the requirements. Staff felt it was more effective to address compliance and subsequent enforcement of the recycled water use requirements via a stand-alone regulation, similar to how the District addresses compliance with wastewater rules and regulations in its Oceana Marin Sewer Service Area through Regulation 107 Enforcement. Using Regulation 107 as a template, a draft Regulation 19 is provided as Attachment 4.

Public Hearing

The purpose of the Public Hearing is to receive input from District customers and the public, as well as the Board of Directors on the proposed changes to the regulations and the proposed new regulation. At the beginning of the Public Hearing, the General Manager and the Water Conservation and Communications Manager will provide an overview of the proposed changes to the Board.

The formal consideration by the Board to adopt the proposed changes to the regulations described above and the adoption of a new regulation by resolutions will be addressed under separate and subsequent Agenda items. Therefore, the action recommended to the Board is to: open a Public Hearing; receive a presentation by staff; allow the Board time to provide comments or ask questions; receive public comment; and then close the Public Hearing.

Public Hearing notices with a brief summary list of changes was published in the Marin Independent Journal and the Point Reyes Light on December 13th and December 14th, respectively (Attachment 5). District legal counsel has reviewed the draft changes to Regulations 15 and 17; the new proposed Regulation 18; and the new Regulation 19.

RECOMMENDATION

That the Board hold a Public Hearing to consider changes to existing District Regulations 15 Water Conservation – Novato Service Area, 17 Water Conservation – West Marin Service Area, and 18 Recycled Water Service; and to consider adopting new District Regulation 19 Enforcement for Recycled Water Use. Consideration of final approval of these Regulations via Resolution is covered under separate action items.

ATTACHMENTS:

1. Draft Changes to Regulation 15
2. Draft changes to Regulation 17
3. Draft Changes to Regulation 18
4. Proposed Regulation 19
5. Copy of Public Notices

NORTH MARIN WATER DISTRICT

REGULATION 15

WATER CONSERVATION - NOVATO SERVICE AREA

A. Purpose

The purpose of this regulation is to assure that water resources available to the District are put to reasonable beneficial use, that the instream values of Novato Creek and the Russian River are preserved to the maximum possible extent and that the benefits of the District's water service extend to the largest number of persons.

B. Waste of Water Prohibited

(1) Customers shall not permit any water furnished by the District for the following nonessential uses:

(a) The washing of sidewalks, walkways, driveways, parking lots and other hard surfaced areas by direct hosing when runoff water directly flows to a gutter or storm drain, except as may be necessary to properly dispose of flammable or other dangerous liquids or substances, wash away spills that present a trip and fall hazard, or to prevent or eliminate materials dangerous to the public health and safety;

(b) The escape of water through breaks or leaks within the customers' plumbing or private distribution system for any substantial period of time within which such break or leak should reasonably have been discovered and corrected. It shall be presumed that a period of seventy-two (72) hours after the customer discovers such a break or leak or receives notice from the District, is a reasonable time within which to correct such break or leak, or, as a minimum, to stop the flow of water from such break or leak;

(c) Irrigation in a manner or to an extent which allows excessive run-off of water or unreasonable over-spray of the areas being watered. Every customer is deemed to have his/her water system under control at all times, to know the manner and extent of his/her water use and any run-off, and to employ available alternatives to apply irrigation water in a reasonably efficient manner;

(d) Washing cars, boats, trailers or other vehicles and machinery directly with a hose not equipped with a shutoff nozzle;

(e) Water for non-recycling decorative water fountains;

(f) Water for new non-recirculating conveyor car wash systems;

(g) Water for new non-recirculating industrial clothes wash systems;

(h) Water for single pass coolant systems;

(i) Potable water for outdoor landscaping during or within 48 hours of measurable rainfall;

(j) Potable water on ornamental turf in public street medians;

(k) Drinking water other than on request in eating or dining establishments;

(l) Water for the daily laundering of towels and linens in hotels and motels without offering guests the option of choosing not to have daily laundering;

(m) Water for non-functional turf as defined and determined by rulemaking of the State Water Resources Control Board of the State of California;

(2) Exempt Water Uses. All water use associated with the operation and maintenance of fire suppression equipment or employed by the District for water quality flushing and sanitation purposes shall be exempt from the provisions of this section. Use of water supplied by a private well or from a recycled water, gray water or rainwater utilization system is also exempt.

(3) Variances. Any customer of the District may make written application for a variance. Said application shall describe in detail why Applicant believes a variance is justified.

(a) The General Manager of the District may grant variances for use of water otherwise prohibited by this section upon finding and determining that failure to do so would cause an emergency condition affecting the health, sanitation, fire protection or safety of the Applicant or public; or, cause an unnecessary and undue hardship on Applicant or public, including but not limited to, adverse economic impacts, such as loss of production or jobs; or, for other reasons at the sole discretion of the General Manager.

(b) The decision of the General Manager of the District may be appealed to the Board of Directors by submitting a written appeal to the District within fifteen (15) calendar days of the day of the General Manager's decision. Upon granting any appeal, the Board of Directors may impose any conditions it determines to be just and proper. Variances granted by the Board of Directors shall be prepared in writing and the Board of Directors may require the variance be recorded at Applicant's expense.

(4) Enforcement. Depending on the extent of the water waste, the District may, after written or verbal notification to customer and after a reasonable time to correct the violation as solely determined by the District, take some or all of the following actions:

(a) Telephone the customer to inform of the water waste violation including a specified period of time to correct the violation;

(b) Personal contact with the customer at the address of the water service. If personal contact is unsuccessful, written notice of the violation including a date that the violation is to be corrected may be left on the premises with a copy of the notice sent by certified mail to the customer;

(c) The District may install a flow-restricting device on the service line;

(d) The District may cause termination of water service and the charge for same shall be billed to the customer. Except in cases of extreme emergency as solely determined by the General Manager of the District, service shall not be reinstated until verified by the District that the violation has been corrected and all outstanding charges have been paid.

(e) The District may impose a penalty, in an amount approved by the Board from time to time, to be assessed on the customer water bill.

C. Use of Water Saving Devices

Each customer of the District is urged to install water efficient devices that meet or exceed

EPA WaterSense standards, including but not limited to showerheads, sink aerators and toilets.

D. Water-Saving Fixtures/Devices/Equipment

The District will make available from time to time to customers the following devices and incentives:

(1) A device or devices for reducing shower and sink flow rates;

(2) A dye tablet or tablets for determining toilet leaks;

(3) Other devices from time to time approved by the District;

(4) Rebates from time to time for District qualified hot water recirculation systems, greywater systems, and rainwater catchment systems.

E. Water-Saving Devices and Restrictions for New Development

(1) Water service will not be furnished to any Applicant unless the water-saving devices hereinafter described are installed. Applicants for single service installations serving one dwelling unit (d.u.) or one d.u. and an accessory d.u. or Applicants for projects for which the District does not have final building permit sign off authority, shall pay a $1,000 deposit per d.u. to be refunded upon post inspection of the installation of the water-saving devices and restrictions and compliant water efficient landscape (section F) herein. All other projects, including developer projects requiring a water service agreement, may be subject to a water conservation deposit with amount and applicability determined by the General Manager and/or Chief Engineer on a case-by-case basis, not to exceed $1,000 per dwelling unit. Applicant shall have two years to complete the project, obtain District inspection approval and request a refund of the deposit. If after two years the project is not completed, the deposit will be forfeited to the District to be used for other Water Conservation Programs. If requested by the Applicant, the District may extend the time period for the project completion up to one additional year,

(2) All interior plumbing and appliances in new development shall meet the following requirements and be installed prior to occupancy approval or meter installation (whichever is the latter):

(a) Toilets and associated flush valves shall be High Efficiency Toilets (HETs), rated at not more than 1.28 gallons per flush on average; ~~, and shall be listed on the approved District HET list;~~

(b) Urinals and associated flush valves shall be rated at not more than 0.125 gallons per flush or be a District approved non-water using urinal;

(c) Shower heads shall have a rated flow of ~~2.0~~1.8 gallons per minute or less, and only one shower head will be allowed per bathroom;

(d) Lavatory faucets and hand-washing sinks shall have aerators or laminar flow devices together with flow control inserts, valves, devices or orifices that restrict flow to a maximum of 1.5 gallons per minute in residential construction and 0.5 gallons per minute in commercial or non-residential projects~~construction~~. Kitchen faucets shall have a maximum flow of 2.0 gallons per minute in all construction;

e) Laundry ~~facility~~ washing machines shall be District approved high-efficiency models with an integrated water factor of 4.5 or less;

(f) Dishwashers shall be high efficiency models with an Energy Star rating that use no more than 5 gallons per cycle;

F. Water Efficient Landscape Requirement

(1) Purpose. Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable method of use. This Regulation protects water supplies through the implementation of a whole systems approach to design, construction, installation and maintenance of the landscape resulting in water conserving climate-appropriate landscapes, improved water quality and the minimization of natural resource inputs.

(2) Applicability

a. Requirements stated herein shall apply to all of the following new and rehabilitated landscape projects associated with construction that requires a Building or Grading Permit, Plan Check, Design Review or water service upgrade for Commercial, industrial and institutional landscaping, park and greenbelt landscaping, multiple-family residential and single-family residential landscaping.

i. At District discretion, landscape requirements for applicable projects may be deferred to the State Model Water Efficient Landscape Ordinance (California Code of Regulations Title 23. Waters, Division 2. Department of Water Resources, Chapter 2.7. Model Water Efficient Landscape Ordinance).

ii. For projects with irrigated landscape area less than 2,500 square feet, the District may choose to select any or all of the requirements to the State Model Water Efficient Landscape Ordinance (Referenced above), Appendix D – Prescriptive Compliance Option.

b. Requirements stated herein shall not apply to:

i. Registered local, state or federal historical landscape area;

ii. Ecological restoration or mined-land reclamation projects that do not require a permanent irrigation system.

(3) Landscape Design Plan. For each landscape project subject to this Regulation, applicants shall submit a landscape design plan and install a landscape in accordance with the following:

a. Amendments, Mulching and Soil Conditioning

i. A minimum of 8” of non-mechanically compacted soil shall be available for water absorption and root growth in planted areas.

ii. Prior to incorporating compost or fertilizer and planting of any materials, compacted soils shall be transformed into a friable condition.

iii. Incorporate compost or natural fertilizer into the soil to a minimum depth of 8" at a minimum rate of 8 cubic yards per 1000 square feet and per specific amendment recommendations from a soils management report.

iv. A minimum 3” layer of District approved mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers or direct seeding applications. Mulch shall be made from recycled or post-consumer materials when possible.

b. Plants

i. Selected plants, other than the allowable turf areas in residential projects, shall be Water Use Classification of Landscape Species (WUCOLS) categorized "Very Low" or "Low" water use for the North-Central Coastal Region and not cause the Estimated Water Use (ETWU) to exceed the Maximum Applied Water Allowance (MAWA) using an evapotranspiration factor of 0.55 for residential and 0.45 for non-residential sites and a WUCOLS corresponding plant factor of 0.3 or less for Very Low or Low water use plants. (Special Landscape Areas including areas dedicated to edible plants, recreational areas, or areas irrigated solely with recycled water shall not be subjected to the plant selection requirements and shall use an evapotranspiration factor of 1.0 for the purposes of calculating ETWU and MAWA.)

ii. Plants with similar water use needs shall be grouped together in distinct hydrozones and where irrigation is required each distinct hydrozone shall be irrigated with a separate valve(s) and noted on the plans.

iii Moderate and High water use plants as classified by WUCOLS shall not be mixed with low water use plants.

iv. All non-turf plants shall be selected, spaced and planted appropriately based upon their adaptability to the climatic, soils, and topographical conditions of the project site.

v. Turf shall not be planted in the following conditions:

1. Slopes exceeding 10%.

2. Planting areas 10 feet wide (in any direction) or less unless irrigated by District approved subsurface irrigation or with recycled water.

3. Street medians, traffic islands, planter strips or bulb-outs of any size. Front yard landscaping of single-family residential homes where the backyard landscape is not developer installed.

vi. Total turf areas shall not exceed the following

1. Single Family: 25% of the total landscape area not to exceed 600 square feet.

2. Townhouse/Condominium (THC): 300 square feet.

3. Apartment (APT): 130 square feet.

4. Commercial and/or non-residential: 0 square feet.

5. Special Landscape Areas: The preceding turf limitations shall not apply to sites irrigated with recycled water or areas dedicated to District approved recreational uses.

vii. Invasive plants as listed by the California Invasive Plant Council are prohibited.

c. Water Features

i. Recirculating water systems shall be used for water features.

ii. Recycled water shall be used in water features when available onsite.

(4) Irrigation Design Plan. For each landscape project subject to this Regulation, applicants

shall submit an irrigation design plan that is designed and installed to meet the MAWA irrigation efficiency criteria and in accordance with the following:

a. Dedicated irrigation meter or private landscape water or submeter for residential must be specified for all non-residential irrigated landscapes and residential irrigated landscapes of 5,000 sq. ft. or greater.

b. Irrigation systems with meters 1 ½" or greater, or non-residential projects with irrigated landscapes over 5,000 square feet, require a high-flow sensor that can detect high-flow conditions and have the capabilities to shut off the system.

c. Isolation valves shall be installed at the point of connection and before each valve or valve manifold.

d. Weather-based or other sensor based self-adjusting irrigation controllers with non-volatile memory shall be required.

e. Rain sensors shall be installed for each irrigation controller.

f. Pressure regulation and/or booster pumps shall be installed so that all components of the irrigation system operate at the manufacturer's recommended optimal pressure.

g. Irrigation system shall be designed to prevent runoff or overspray onto non-targeted areas.

h. Point source irrigation is required where plant height at maturity will affect the uniformity of an overhead system.

i. Minimum 24" setback of overhead irrigation is required where turf is directly adjacent to a continuous hardscape that flows or could runoff into the curb and gutter.

j. Slopes greater than 10% shall be irrigated with point source or other low-volume irrigation technology.

k. A single valve shall not irrigate hydrozones that mix high water use plants with moderate or low water use plants.

l. Trees shall be placed on separate valves.

m. All non-turf landscape areas shall be irrigated with District approved drip irrigation systems or other alternative District approved point source irrigation.

n. Sprinkler heads, rotors and other emission devices on a valve shall have matched precipitation rates. All spray irrigation systems shall be a brake rotary type or be multi-stream, multi-trajectory, adjustable arc, rotating stream sprinkler with matched precipitation rates. All rotating stream sprinkler units shall be installed in a 40 psi pressure regulated spray head body and provide the highest potential distribution uniformity. All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher.

o. Head-to-head coverage is required unless otherwise directed by the manufacturer's specifications

p. Swing joints or other riser protection components are required on all risers.

q. Check valves shall be installed to prevent low-head drainage.

r. Master shut-off valves are required on all projects with irrigated landscapes over 5,000 square feet.

s. Irrigation efficiency factors of 0.75 for overhead spray devices and 0.81 for drip system devices shall be used for ETWU and MAWA calculations.

t. A diagram of the irrigation plan, including hydrozones and equipment locations, shall be provided and kept with the irrigation controller for subsequent management purposes.

(5) Irrigation Audit: Project applicants shall submit an irrigation audit report for all applicable projects.

a. The project applicant shall submit an irrigation audit report that includes inspection, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule, including configuring irrigation controllers with application rate, soil types, plant factors, slope, exposure and any other factors necessary for accurate programming

b. All landscape irrigation audits shall be conducted by a local agency landscape irrigation auditor or a third-party certified landscape irrigation auditor. Landscape audits shall not be conducted by the person who designed or installed the landscape.

c. In production home developments, audits of 15% of the landscapes shall be sufficient.

G. Rebate for High-Efficiency Washing Machines in Residences

District customers in the Novato Service area are eligible for rebate as available from time to time for District approved high-efficiency washing machines in existing residences. New construction in the District's Novato service area are required to be equipped with high-efficiency washing machines in accordance with Section E. (2) (e) of this regulation. District rebates are not available for high-efficiency washing machines required in new residential construction.

H. Rebate for Removing Irrigated Turf from Residential Properties

(1) The owner of property containing a formal lawn area or areas shall be eligible for a cash rebate from the District if said owner removes all or part of the formal lawn area(s) and replaces same with eligible plant materials and meets the qualification requirements. "Formal lawn area" means an existing lawn in good condition which is irrigated regularly, by an automatic inground irrigation system, with water furnished by the District and mowed regularly.

(2) Qualification requirements:

(a) Application for rebate must be made on District's form prior to removing the formal lawn area(s). All applicable information requested must be supplied;

(b) Application for rebate must include a landscape plan or sketch showing the size, in square feet, and location of all formal lawn area(s) on the Applicant's parcel and the location of formal lawn area(s) that will be removed and replaced;

(c) The Applicant must utilize only eligible replacement materials for the formal lawn area(s) removed which are to be considered in calculating the rebate. Eligible replacement materials are District approved water-conserving or low

water use California native plants;

(d) If the automatic in-ground irrigation system will continue to serve some remaining formal lawn area(s), Applicant must modify the system so that water is not served to the proposed replacement area;

(e) Formal lawn area(s) removed and replanted with eligible replacement materials shall be mulched with material suitably thick to prevent weed growth (minimum three inches) and reduce water loss. Areas shall not be irrigated except for limited supplemental hand-watering or temporary drip irrigation to establish the plant material;

(f) The owner of the property must sign a statement promising not to reinstall lawn in formal lawn area(s) where lawn has been removed as long as the owner holds property. The owner may be relieved of this promise at any time by returning the full amount of the District's rebate;

(g) The General Manager may at any time halt or suspend acceptance of applications for rebate if the District's funds appropriated for this purpose become exhausted.

(3) After reviewing the information supplied by the Applicant and making at least one site inspection to assure that qualification conditions have been met, District shall mail a rebate check.

(4) The amount of the rebate shall be determined by the Board from time-to-time.

(5) Rebates may be available for non-residential property or for hotels, motels, hospitals, government housing or a senior citizen complex on a parcel which is separately owned and assessed. Maximum rebate amount for a non-residential property shall be determined by General Manager on a case-by-case basis.

I. ~~Landscape Rebate Alternatives~~Rebate for Removal of Pool

(1) ~~The District will consider, and may approve, requests to substitute for any of the requirements in section H, well-designed alternatives or innovations that will affect similar significant and continuing reductions of water requirements. Determination of eligibility shall be at the sole discretion of the General Manager or designated staff.~~The District will rebate the permitted removal of an existing pool. The rebate shall be on a square foot basis with maximum level equivalent to the amounts set forth in Section H. The amount of the rebate shall be determined by the Board from time-to-time.

J. High Efficiency Toilet Replacement Program(s)

(1) A High Efficiency Toilet (HET) is defined as any toilet with an average flush volume of 1.28 gallons per flush or less. Ultra High Efficiency Toilet (UHET) is defined as any toilet with an average flush volume of 1.1 gallons per flush or less.

(2) Any qualifying customer of the District who removes and recycles all toilets rated to use more than 1.6 gallons per flush and replaces same with a District approved HET or UHET may request a cash rebate or bill credit in an amount established by the Board of Directors from time to time for each such toilet replaced.

(3) To qualify for a rebate(s) hereunder, application shall be made on a form available from the District and person signing application shall:

(a) Request District make a brief inspection of customer's structure at a time

and date approved in advance by customer to identify water conservation measures appropriate and effective for the customer to implement or be pre-qualified by District staff via other communication means. Should customer refuse access for an inspection or not receive pre-qualification, District shall not be under any obligation to make a rebate. Inspection requirements are subject to available staff time;

(b) Be a customer of the District and the customer's structure in which the replaced toilet(s) is located shall be served water in the District's Novato Service Area and replacing a toilet installed prior to January 1, 1992, and manufactured to flush more than 1.6 gallons per flush;

(c) Provide District with bill of sale or original receipt of sale within the current fiscal year and made out to said customer by person or vendor selling customer the HET or UHET or, in lieu thereof, provide District with letter addressed to said customer signed by a licensed plumber or contractor stating that a HET(s) or UHET(s) has been installed by said plumber or contractor at the customer's address;

(4) If the customer is renting the structure, a rebate will be made provided customer includes with the application a letter from the owner of the property consenting to District making rebate payment to customer for the replacement of a non-water conserving toilet(s).

(5) Rebates are not available for toilets installed in buildings constructed after January 1, 1992 or for replacement of toilets rated to use 1.6 gallons per flush or less.

(6) Free or subsidized UHET giveaways may be available to customers from time to time. Eligibility requirements listed in J (3) (a) to (d) apply to this program should it become available.

K. Landscape Water Efficiency Rebate

(1) Landscape water efficient rebates are available to customers who install District qualified water efficient landscape equipment including:

(a) Drip irrigation systems

(b) Water pressure-regulating devices

(c) Check valves

(d) Multi-stream rotating sprinkler nozzles (lawn areas only)

(e) Rain shut-off devices

(f) Mulch

(g) Soil conditioner/amendment

(2) Rebate amounts will be established by the Board of Directors from time to time depending on customer classification and water savings potential. Customers are allowed only up to the maximum rebate level for the life of the program.

(3) Applicant shall request and agree to a brief District pre-inspection of customer's property to identify water efficient landscape actions to be taken. District will pre-approve and post inspect to confirm the retrofit installations. Inspections are subject to available staff time.

(4) Applicant shall provide District with a complete bill of sale or original receipt of sale within the current fiscal year, clearly showing the purchase of the landscape water efficiency installed items noted in the pre-inspection.

(5) Free or subsidized water efficient landscape items such as rain sensors, and mulch may be available to customers. Eligibility requirements listed in K (1) through (3) apply should items become available.

L. Rebate~~s~~ for District Approved Swimming Pool Covers

District customers are eligible for rebates as available from time to time for purchasing District approved swimming pool covers. Eligible pool covers must be a solar or safety cover with non-netted type material and~~,~~ at least 12 mil in thickness~~, and at least 450 square feet area~~.

M. Requirement for Installation of Water Conserving Plumbing Fixtures Upon Change of Property Ownership

(1) Definitions.

(a) "Water Conserving Plumbing Fixtures" means any toilet rated at 1.6 gallons of water per flush or less, urinals that that are rated at 1.0 gallons of water per flush, showerheads with a flow rated at 2.0 gallons of water per minute or lavatory faucets that can emit no more than 1.5 gallons of water per minute;

(b) "Change in Property Ownership" means a transfer of present interest of real property, or a transfer of the right to beneficial use thereof, the value of which is substantially equal to the proportion of ownership interest transferred.

(c) "Retrofit" means replacing "Existing Plumbing Fixtures" with "Water-Conserving Plumbing Fixtures;"

(d) "Existing Plumbing Fixtures" means any toilet using more than 1.6 gallons of water per flush, urinals using more than 1.0 gallons of water or more per flush, showerheads with a flow rated more than 2.0 gallons of water per minute or lavatory faucets that emit more than 1.5 gallons of water per minute.

(e) "Existing Structure" means any structure built and available for use or occupancy on or before January 1, 1992, which is equipped with a toilet using more than 1.6 gallons of water per flush or a urinal using more than 1.0 gallons of water per flush.

(2) Retrofit Upon Change of Property Ownership.

All existing plumbing fixtures in existing structures receiving water from the District's water system shall, at the time of change of ownership, be retrofitted, if not already done, exclusively with water conserving plumbing fixtures as defined in Section M(1) of this regulation.

(3) Compliance and Penalties

Compliance shall be by the honor system. It shall be the Seller's responsibility to obtain from the District, in addition to any normal permits required by agencies other than the District, a Certificate of Compliance acknowledging that the Seller or title holder has stated that the retrofit installation required by this Regulation has been

completed. If the District later determines or finds that the work was not done or was not completed or that water conserving plumbing fixtures are no longer present, the District may assess an annual fee of 20% of the estimated annual water bill as determined by the District until the owner of the property demonstrates that the required retrofit work has in fact been done. A site inspection shall be required in such cases and the owner shall be charged $35 for each such site inspection as an added fee on the owner's water bill.

(4) Alternative Compliance Procedure for Transfers of Residential Property

At Seller's option, Seller shall pay the District $315 per bathroom that does not fully comply with Regulation 15 M. Half bathrooms shall count as one bathroom. The District shall thereupon immediately provide a Certificate of Compliance to Seller. Buyer shall then be responsible for installation of the water conserving plumbing fixtures and Seller shall provide Buyer with a copy of District Regulation 15 M. and shall notify Buyer of this requirement in writing before close of escrow. Buyer shall have one year from the date of close of escrow to install such fixtures. Upon being notified that said fixtures have been installed and making a brief inspection confirming installation, the District shall pay the Buyer an amount equal to the payment made to District by Seller. If after one year, the water conserving plumbing fixtures have not been installed, the District shall use this money for any other Board approved water conservation program and shall be under no obligation to pay said money to Buyer.

(5) Responsibility for Compliance Negotiable

The Seller is responsible for compliance with Regulation 15 M, however responsibility for payment of the deposit specified in Section M(4) may be assumed by the Buyer so long as the agreement is not otherwise inconsistent with the terms of Regulation 15 M. Any such agreement shall be evidenced in a writing signed by both the Buyer and Seller.

N. Weather Based Irrigation Controller Installation Program

(1) A weather-based irrigation controller is defined as any irrigation controller using weather data to create the actual irrigation schedule and which schedule is automatically adjusted by the controller to meet the applied water demand based on actual weather data. Weather based irrigation controllers may either receive “real time” weather data or generate their weather data using an integrated solar radiation sensor.

(2) District customers using more than an average of 600 gallons per day are eligible for rebates or vouchers as available from time to time for purchasing District approved weather-based irrigation controllers. Directly installed weather-based irrigation controllers may be available from time to time. Customers receiving weather-based irrigation controller rebates or vouchers may be subject to a pre and post installation inspection.

O. Rebate for Rainwater Harvesting and Greywater Systems

The District will rebate the installation of District approved rainwater harvesting and greywater systems in an amount approved by the Board from time-to-time.

P. Rebate for Hot Water recirculating systems

The District will rebate the installation of District approved hot water recirculation systems in an amount approved by the Board from time-to-time.

QO. Exemptions from Provisions Set Forth in Regulation 15 (A. through PN.)

(1) Retrofit Exemptions

The District's General Manager may grant an exemption from Section M in the following instances:

(a) Unavailability of Water Conserving Plumbing Fixtures to either match a well-defined historic architectural style fitted with authentic plumbing fixtures or accommodate existing house plumbing without bathroom alteration;

(b) Special health circumstances upon submittal of reasonable evidence that demonstrates that specific plumbing fixtures are required by the user that may not meet the Water Conserving Plumbing Fixture criteria defined by this regulation.

(c) Faucets at kitchen sinks or antique faucets which do not have standard threaded openings for aerators.

(2) Other Exemptions

The District's General Manager may grant exemptions from Section A. through NP.. for purposes of health, safety and sanitation or if Applicant demonstrates an "at least as effective as" water efficiency alternative. The District's General Manager shall have the sole decision of determining whether Applicant has demonstrated an "at least as effective as" water efficiency alternative.

NORTH MARIN WATER DISTRICT

REGULATION 17

WATER CONSERVATION - WEST MARIN SERVICE AREA

A. Purpose

The purpose of this regulation is to assure that water resources available to the District are put to reasonable beneficial use, that the in-stream values of Lagunitas Creek are preserved to the maximum possible extent and that the benefits of the District's water service extend to the largest number of persons.

B. Waste of Water Prohibited

(1) Customers shall not permit any water furnished by the District for the following nonessential uses:

(a) The washing of sidewalks, walkways, driveways, parking lots and other hard surfaced areas by direct hosing when runoff water directly flows to a gutter or storm drain, except as may be necessary to properly dispose of flammable or other dangerous liquids or substances, wash away spills that present a trip and fall hazard, or to prevent or eliminate materials dangerous to the public health and safety;

(b) The escape of water through breaks or leaks within the customers plumbing or private distribution system for any substantial period of time within which such break or leak should reasonably have been discovered and corrected. It shall be presumed that a period of seventy-two (72) hours after the customer discovers such a break or leak or receives notice from the District, is a reasonable time within which to correct such break or leak, or, as a minimum, to stop the flow of water from such break or leak;

(c) Irrigation in a manner or to an extent which allows excessive run off of water or unreasonable over spray of the areas being watered. Every customer is deemed to have his water system under control at all times, to know the manner and extent of his water use and any run off, and to employ available alternatives to apply irrigation water in a reasonably efficient manner;

(d) Washing cars, boats, trailers or other vehicles and machinery directly with a hose not equipped with a shutoff nozzle; and

(e) Water for non-recycling decorative water fountains.

(f) Water for new non-recirculating conveyor car wash systems; and

(g) Water for new non-recirculating industrial clothes wash systems.

(h) Water for single pass coolant systems.

(i) Potable water for outdoor landscaping during or within 48 hours of measurable rainfall;

(j) Potable water on ornamental turf in public street medians;

(k) Drinking water other than on request in eating or dining establishments;

(l) Water for the daily laundering of towels and linens in hotels and motels without offering guests the option of choosing not to have daily laundering;

(m) Water for non-functional turf as defined and determined by rulemaking of the State Water Resources Control Board of the State of California;

(2) Exempt Water Uses. All water use associated with the operation and maintenance of fire suppression equipment or employed by the District for water quality flushing and sanitation purposes shall be exempt from the provisions of this section. Use of water supplied by a private well or from a recycled water, gray water or rainwater utilization system is also exempt.

(3) Variances. Any customer of the District may make written application for a variance. Said application shall describe in detail why applicant believes a variance is justified.

(a) The General Manager of the District may grant variances for use of water otherwise prohibited by this section upon finding and determining that failure to do so would cause an emergency condition affecting the health, sanitation, fire protection or safety of the applicant or public; or, cause an unnecessary and undue hardship on applicant or public, including but not limited to, adverse economic impacts, such as loss of production or jobs~~.~~ ; or, for other reasons at the sole discretion of the General Manager.

(b) The decision of the General Manager of the District may be appealed to the Board of Directors by submitting a written appeal to the District within fifteen (15) calendar days of the day of the General Manager's decision. Upon granting any appeal, the Board of Directors may impose any conditions it determines to be just and proper. Variances granted by the Board of Directors shall be prepared in writing and the Board of Directors may require the variance be recorded at applicant's expense.

(4) Enforcement. Depending on the extent of the water waste the District may take some or all of the following actions:

(a) Telephone the customer to inform of the water waste violation including a specified period of time to correct the violation;

(b) Personally contact the customer at the address of the water service. If personal contact is unsuccessful, written notice of the violation including a date that the violation is to be corrected will be sent by certified mail to the customer;

(c) Install a flow-restricting device on the service line;

(d) Cause termination of water service and the charge for same shall be billed to the customer. Except in cases of extreme emergency as solely determined by the General Manager of the District, service shall not be reinstated until verified by the District that the violation has been corrected and all outstanding charges have been paid.

(e) Any customer who fails to repair a significant leak or otherwise eliminate waste of water within twenty days after becoming aware of it or receiving written notice from the District shall pay a penalty charge equal to ten times the commodity charge for the amount of water estimated by the District to have been wasted or $50 whichever is greater.

(f) The District may impose penalty, in an amount approved by the Board from time to time, to be assessed on the customer water bill.

C Use of Water Saving Devices

Each customer of the District is urged to install water efficient devices that meet or exceed EPA WaterSense standards, including but not limited to showerheads, sink aerators, and toilets.

D. Water-Saving Kits

The District will periodically make available from time to time to customers the following devices and incentives:

(1) A device or devices for reducing shower and sink flow rate;

(2) Dye tablets for determining toilet leaks;

(3) Other devices from time to time approved by the District;

(4) Rebates from time to time for District qualified hot water recirculation systems, greywater systems, and rainwater catchment systems.

E. Water-Saving Devices and Restrictions for New Development

(1) Water service will not be furnished to any Applicant for new or expanded service unless the water-saving devices hereinafter described are installed. Applicants for single service installations serving one dwelling unit (d.u.) or one d.u. and an accessory d.u. or applicants for projects for which the District does not have a building permit final sign off, shall pay a $1,000 deposit per d.u. to be refunded upon post inspection of the installation of the water-saving devices and restrictions and compliant water efficient landscape (section F) herein. All other projects, including developer projects requiring a water service agreement, may be subject to a water conservation deposit with amount and applicability determined by the General Manager and/or Chief Engineer on a case-by-case basis, not to exceed $1,000 per dwelling unit. Applicant shall have two years to complete the project, obtain District inspection approval and request a refund of the deposit. If after two years the project is not completed, the deposit will be forfeited to the District to be used for other Water Conservation programs. If requested by the Applicant, the District may extend the time period for project completion up to one additional year.

(2) All interior plumbing in new development shall meet the following requirements and be installed prior to occupancy approval or meter installation (whichever is the latter):

(a) Toilets and associated flush valves shall be High Efficiency Toilets (HETs), rated at not more than 1.28 gallons per flush on average ~~and shall be listed on the approved District HET list;~~ ;

(b) Urinals and associated flush valves shall be rated at not more than 0.125 gallons per flush or be a District approved non-water using urinal;

(c) Showerheads shall have a rated flow of ~~2.0~~1.8 gallons per minute or less, and only one showerhead will be allowed per bathroom;

(d) Lavatory faucets and hand-washing sinks shall have aerators or laminar flow devices with flow control inserts, orifices or other devices that restrict flow to a maximum of 1.5 gallons per minute in residential construction and 0.5 gallons per minute in commercial ~~construction~~or non-residential projects. Kitchen faucets shall have a maximum flow of 2.0 gallons per minutes in all construction;

(e) Laundry ~~facility~~ washing machines shall be District approved high-efficiency models with an integrated water factor of 4.5 or less;

(f) Dishwashers shall be high efficiency models with an Energy Star rating that use

no more than 5 gallons per cycle.

F. Water Efficient Landscape Requirement

(1) Purpose. Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable method of use. This Regulation protects water supplies through the implementation of a whole systems approach to design, construction, installation and maintenance of the landscape resulting in water conserving climate-appropriate landscapes, improved water quality and the minimization of natural resource inputs.

(2) Applicability

a. Requirements stated herein shall apply to all of the following new and rehabilitated landscape projects associated with construction that require a Building or Grading Permit, Plan Check, Design Review or water service upgrade for:

Commercial, industrial and institutional landscaping, park and greenbelt landscaping, multiple-family residential and single-family residential landscaping.

i. At District Discretion, landscape requirements for applicable projects may be deferred to the State Model Water Efficient Landscape Ordinance (California Code of Regulations Title 23. Waters, Division 2. Department of Water Resources, Chapter 2.7. Model Water Efficient Landscape Ordinance)

ii. For projects with irrigated landscape area less than 2,500 square feet, the District may choose to select any or all of the requirements to the State Model Water Efficient Landscape Ordinance (referenced above), Appendix D – Prescriptive Compliance Option.

b. Requirements stated herein shall not apply to:

i. Registered local, state or federal historical landscape area;

ii. Ecological restoration or mined-land reclamation projects that do not require a permanent irrigation system.

(3) Landscape Design Plan. For each landscape project subject to this Regulation, applicants shall submit a landscape design plan and install a landscape in accordance with the following:

a. Amendments, Mulching and Soil Conditioning

i. A minimum of 8” of non-mechanically compacted soil shall be available for water absorption and root growth in planted areas.

ii. Prior to incorporating compost or fertilizer and planting of any materials, compacted soils shall be transformed into friable condition.

iii. Incorporate compost or natural fertilizer into the soil to a minimum depth of 8" at a minimum rate of 8 cubic yards per 1000 square feet and per specific amendment recommendations from a soils management report.

iv. A minimum 3” layer of District approved mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers or direct seeding applications. Mulch shall be made from recycled or post-consumer products when possible.

b. Plants

i. Selected plants, other than allowable turf in residential projects, shall be Water Use Classifications of Landscape Species (WUCOLS) categorized “Very Low” or “Low” water use from the North-Central Coastal Region and shall not cause the Estimated Water Use (ETWU) to exceed the Maximum Applied Water Allowance (MAWA) using and evapotranspiration factor of 0.55 for residential and 0.45 for non-residential sites and a WUCOLS corresponding plant factor of 0.3 or less for Very Low or Low water plants. (Special Landscape Area including areas dedicated to edible plants, recreational uses, or areas irrigated solely with recycled water shall not be subjected to the plant selection requirements and shall use an evapotranspiration factor of 1.0 for the purposes of calculating ETWU and MAWA).

ii. Plants with similar water use needs shall be grouped together in distinct hydrozones and where irrigation is required each distinct hydrozone shall be irrigated with a separate valve(s) and noted on the plans.

iii. Moderate and High water use plants as categorized by WUCOLS, shall not be mixed with low or moderate water use plants.

iv. All non-turf plants shall be selected, spaced and planted appropriately based upon their adaptability to the climatic, soils, and topographical conditions of the project site.

v. Turf shall not be planted in the following conditions:

1. Slopes exceeding 10%.

2. Planting areas 10 feet wide (in any direction) or less unless irrigated with District approved subsurface irrigation or with recycled water.

3. Street medians, traffic islands, planter strips or bulbouts of any size

4. Front yard landscaping of single-family houses where the backyard landscape is not developer installed.

vi. Total turf areas shall not exceed the following

1. Single Family: 25% of the total landscape area not to exceed 400 square feet.

2. Townhouse/Condominium (THC): 100 square feet.

3. Apartment (APT): 50 square feet.

4. Commercial and/or non-residential: 0 square feet.

Special Landscape Areas: The preceding turf limitations shal not apply to sites irrigated with recycled water or areas dedicated to District approved recreational uses.

vii. Invasive plants as listed by the California Invasive Plant Council are prohibited.

c. Water Features

i. Recirculating water systems shall be used for water features

ii. Recycled water shall be used in water features when available onsite.

(4) Irrigation Design Plan. For each landscape project subject to this Regulation, applicants shall submit an irrigation design plan that is designed and installed to meet the MAWA irrigation efficiency criteria and in accordance with the following:

a. Dedicated irrigation meter or for private landscape water submeter for residential must be specified for all non-residential irrigated landscapes and residential irrigated landscapes of 5,000 square feet or greater.

b. Irrigation systems with meters 1 ½" or greater or non-residential landscapes with irrigated landscapes over 5,000 square feet, require a high-flow sensor that can detect high-flow conditions and have the capabilities to shut off the system.

c. Isolation valves shall be installed at the point of connection and before each valve or valve manifold.

d. Weather-based or other sensor based self-adjusting irrigation controllers, with non-volatile memory, shall be required.

e. Rain sensors shall be installed for each irrigation controller.

f. Pressure regulation and/or booster pumps shall be installed so that all components of the irrigation system operate at the manufacturer's recommended optimal pressure.

g. Irrigation system shall be designed to prevent runoff or overspray onto non-targeted areas.

h. Point source irrigation is required where plant height at maturity will affect the uniformity of an overhead system.

i. Minimum 24" setback of overhead irrigation is required where turf is directly adjacent to a continuous hardscape that flows or could runoff into the curb and gutter.

j. Slopes greater than 10% shall be irrigated with point source or other low-volume irrigation technology.

k. A single valve shall not irrigate hydrozones that mix high water use plants with moderate or low water use plants.

l. Trees shall be placed on separate valves.

m. All non-turf landscape areas shall be irrigated with District approved drip irrigation systems or other alternative District approved point source irrigation equipment.

n. Sprinkler heads, rotors and other emission devices on a valve shall have matched precipitation rates. All spray irrigation systems shall be a brake rotary type or be multi-stream, multi-trajectory, adjustable arc, rotating stream sprinkler with matched precipitation rates. All rotating stream sprinkler units shall be installed in a 40 psi pressure regulated spray head body and provide the highest potential distribution uniformity. All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher.

o. Head-to-head coverage is required unless otherwise directed by the manufacturer's specifications

p. Swing joints or other riser protection components are required on all risers.

q. Check valves shall be installed to prevent low-head drainage.

r. Master shut-off valves are required on all projects with irrigated landscapes over

5,000 square feet.

s. Irrigation efficiency factors of 0.75 for overhead spray devices and 0.81 for drip system devices shall be used for ETWU and MAWA calculations.

t. A diagram of the irrigation plan, including hydrozones and equipment locations, shall be provided and kept with the irrigation controller for subsequent management purposes.

(5) Irrigation Audit: Project applicants shall submit an irrigation audit report for all applicable projects.

a. The project applicant shall submit an irrigation audit report that includes inspection, system tune-up, system test with distribution uniformity, reporting overspray and runoff that causes overland flow, and precipitation of an irrigation schedule, including configuring irrigation controllers with application rate, soil types, plant factors, slope, exposure and other factors necessary for accurate programming.

b. All landscape irrigation audits shall be conducted by a local agency landscape irrigation auditor or a third-party certified landscape irrigation auditor. Landscape audits shall not be conducted by the person who designed or installed the landscape.

c. In production home developments, audits of 15% of the landscapes shall be sufficient.

G. Rebate for High-Efficiency Washing Machines in Residences

District customers in the West Marin Service area are eligible for rebate as available from time to time for District approved high-efficiency washing machines in existing residences. New construction in the District's West Marin service area are required to be equipped with high-efficiency washing machines in accordance with Section E. (2) (e) of this regulation. District rebates are not available for high-efficiency washing machines required in new residential construction.

H. Rebate for Removing Irrigated Turf from Residential Properties

(1) The owner of property containing a formal lawn area or areas shall be eligible for a cash rebate from the District if said owner removes all or part of the formal lawn area(s) and replaces same with eligible plant materials and meets the qualification requirements. "Formal lawn area" means an existing lawn in good condition which is irrigated regularly, by an automatic inground irrigation system, with water furnished by the District and mowed regularly.

(2) Qualification requirements:

(a) Application for rebate must be made on District's form prior to removing the formal lawn area(s). All applicable information requested must be supplied.

(b) Application for rebate must include a landscape plan or sketch showing the size, in square feet, and location of all formal lawn area(s) on the Applicant's parcel and the location of formal lawn area(s) that will be removed and replaced.

(c) The Applicant must utilize only eligible replacement materials for the formal lawn area(s) removed which are to be considered in calculating the rebate. Eligible replacement materials are District-approved water-conserving and low water use California native plants or District-approved synthetic turf.

(d) If the automatic inground irrigation system will continue to serve some remaining formal lawn area(s), Applicant must modify the system so that water is not served to the proposed replacement area.

(e) Formal lawn area(s) removed and replanted with eligible replacement materials shall be mulched with material suitably thick to prevent weed growth (minimum three inches) and reduce water loss. Areas shall not be irrigated except for limited hand-watering or temporary drip irrigation to establish the plant material.

(f) The owner of the property must sign a statement promising not to reinstall lawn in formal lawn area(s) where lawn has been removed as long as the owner holds property. The owner may be relieved of this promise at any time by returning the full amount of the District's rebate.

(g) The General Manager may at any time halt or suspend acceptance of applications for rebate if the District's funds appropriated for this purpose become exhausted.

(3) After reviewing the information supplied by the Applicant and making at least one site inspection to assure that qualification conditions have been met, District shall mail a rebate check.

(4) The amount of the rebate shall be determined by the Board from time to time.

(5) Rebates may be available for non-residential property or for hotels, motels, hospitals, government housing or a senior citizen complex on a parcel which is separately owned and assessed. Maximum rebate amount for a non-residential property shall be determined by General Manager on a case-by-case basis.

I. ~~Landscape Rebate Alternatives~~Rebate for Removal of Pool

(1) The District will rebate the permitted removal of an existing pool. The rebate shall be on a square foot basis with maximum level equivalent to the amounts set forth in Section H. The amount of the rebate shall be determined by the Board from time-to-time.~~The District will consider, and may approve, requests to substitute for any of the requirements in section F., well-designed alternatives or innovations that will effect similar significant and continuing reductions of water requirements. Determination of eligibility shall be at the sole discretion of the General Manager or designated staff.~~

J. Requirement for Installation of Water Conserving Plumbing Fixtures Upon Change of Property Ownership or Upon Bathroom Alteration

(1) Definitions.

(a) "Water-Conserving Plumbing Fixtures" means any toilet rated at 1.6 gallons of water per flush or less, urinals rated at 1.0 gallons of water per flush, showerheads with a flow rated at 2.0 gallons of water per minute or lavatory faucets that can emit no more than 1.5 gallons of water per minute.

(b) "Change in Property Ownership" means a transfer of present interest of real property, or a transfer of the right to beneficial use thereof, the value of which is substantially equal to the proportion of ownership interest transferred.

(c) "Bathroom Alteration" means any alteration or addition of a bathroom that includes replacement or addition of any toilet(s).

(d) "Retrofit" means replacing "Existing Plumbing Fixtures" with "Water-Conserving Plumbing Fixtures."

(e) "Existing Plumbing Fixtures" means any toilet using more than 1.6 gallons of water per flush, urinals using more than 1.0 gallons of water per flush, showerheads with a flow rated more than 2.0 gallons of water per minute or lavatory faucets that emit more than 1.5 gallons of water per minute.

(f) "Existing Structure" means any structure built and available for use or occupancy on or before March 1, 1992, which is equipped with a toilet using more than 1.6 gallons of water per flush or a urinal using more than 1.0 gallons of water per flush.

(2) Retrofit Upon Change of Property Ownership.

All Existing Plumbing Fixtures in Existing Structures receiving water from the District's water system, including residential, commercial, industrial and government structures, shall, at the time of Change of Ownership, be Retrofitted, if not already done, exclusively with Water-Conserving Plumbing Fixtures. This requirement shall affect all escrow accounts involving transfer of property opened after February 29, 1992. Escrow accounts opened before March 1, 1992 which close after March 1, 1992 shall not be affected by this requirement.

(3) Retrofit Upon Bathroom Alteration.

Effective March 1, 1992, all structures receiving water from the District's water system, including residential, commercial, industrial and government, shall, upon Bathroom Alteration, be Retrofitted exclusively with Water-Conserving Plumbing Fixtures.

(4) Retrofit Exemptions.

The District's General Manager may grant an exemption in the following instances:

(a) Unavailability of Water-Conserving Plumbing Fixtures to either match a well-defined historic architectural style fitted with authentic plumbing fixtures or accommodates existing house plumbing without Bathroom Alteration.

(b) Special health circumstances upon submittal of reasonable evidence that demonstrates that specific plumbing fixtures are required by the user that may not meet the Water Conserving Plumbing Fixture criteria defined by this regulation.

(c) Faucets at kitchen sinks or antique faucets which do not have standard threaded openings for aerators.

(5) Compliance and Penalties.

Compliance shall be by the honor system. It shall be the Seller's responsibility (in the case of Change of Property Ownership) and the title holder's responsibility (in the case of Bathroom Alteration) to obtain, in addition to any normal permits required by agencies other than the District, to apply for and obtain from the District a Certificate of Compliance acknowledging that the Seller or title holder has stated that the Retrofit installation required by this regulation has been completed. If the District later determines or finds that the work was not done or was not completed or that Water Conserving Plumbing Fixtures are no longer present, the District may assess an annual fee of 20% of the estimated annual water bill as determined by the District until the owner of the property demonstrates that the required Retrofit work has in fact been done. A site inspection shall be required in such cases and the owner shall be charged $35 for each such site inspection as an added fee on the owner's

water bill.

(6) Alternative Compliance Procedure for Transfers of Residential Property

At Seller's option, Seller shall pay the District $315 per bathroom that does not fully comply with Regulation 17 H. Half bathrooms shall count as one bathroom. The District shall thereupon immediately provide a Certificate of Compliance to Seller. Buyer shall then be responsible for installation of the Water Conserving Plumbing Fixtures and Seller shall provide Buyer with a copy of District Regulation 17 H. and shall notify Buyer of this requirement in writing before close of escrow. Buyer shall have one year from the date of close of escrow to install such fixtures. Upon being notified that said fixtures have been installed and making a brief inspection confirming installation, the District shall pay the Buyer an amount equal to the payment made to District by Seller. If after one year, the Water Conserving Plumbing Fixtures have not been installed, the District shall use this money for any other Board approved water conservation program and shall be under no obligation to pay said money to Buyer.

(7) Responsibility for Compliance Negotiable

The Seller is responsible for compliance with Regulation 17 J, however responsibility for payment of the deposit specified in Section J (6) may be assumed by the Buyer so long as the agreement is not otherwise inconsistent with the terms of Regulation 17 J. Any such agreement shall be evidenced in a writing signed by both the Buyer and Seller.

K. High Efficiency Toilet Replacement Program(s)

(1) A High Efficiency Toilet (HET) is defined as any toilet with an average flush volume of 1.28 gallons per flush or less. An Ultra High-Efficiency Toilet (UHET) also known as a MaP Premium toilet is defined as any toilet with an average flush volume less than1.1 gallons per flush.

(2) Any qualifying customer of the District who removes and recycles all toilets rated to use more than 1.6 gallons per flush and replaces same with a District approved HET or UHET may request a cash rebate or bill credit in an amount established by the Board of Directors from time to time for each such toilet replaced.

(3) To qualify for a rebate(s) hereunder, application shall be made on a form available from the District and person signing application shall:

(a) Request District make a brief inspection of customer's structure at a time and date approved in advance by customer to identify water conservation measures appropriate and effective for the customer to implement or be pre-qualified by District staff via other communications means. Should customer refuse access for an inspection or not receive pre-qualification, District shall not be under any obligation to make a rebate. Inspection requirements are subject to available staff time.

(b) Be a customer of the District and the customer's structure in which the replaced toilet(s) is located shall be served water in the District's West Marin Service Area and replacing a toilet installed prior to January 1, 1992, and manufactured to flush more than 1.6 gallons per flush; and

(c) Provide District with bill of sale or original receipt of sale within the current fiscal year and made out to said customer by person or vendor selling customer the HET or UHET or, in lieu thereof, provide District with letter

addressed to said customer signed by a licensed plumber or contractor stating that a HET(s) or UHET(s) has been installed by said plumber or contractor at the customer's address; and

(4) If the customer is renting the structure, a rebate will be made provided customer includes with the application a letter from the owner of the property consenting to District making rebate payment to customer for the replacement of a non-water conserving toilet(s).

(5) Rebates are not available for toilets installed in buildings constructed after January 1, 1992 or for replacement of toilets rated to use 1.6 gallons per flush or less.

(6) Free or subsidized UHET giveaways may be available to customers from time to time. Eligibility requirements listed in K (3) (a) to (d) apply to this program should it become available.

L. Rebates for District Approved Swimming Pool Covers

District customers are eligible for rebates as available from time to time for purchasing District approved swimming pool covers. Eligible pool covers must be a solar or safety cover with non-netted type material and, at least 12 mil in thickness, and at least 450 square feet..

M. Weather Based Irrigation Controller Installation Program

(1) A Weather Based Irrigation Controller is defined as any irrigation controller using weather data to create the actual irrigation schedule and which schedule is automatically adjusted by the controller to meet the applied water demand based on actual weather data. Weather Based Irrigation Controllers may either receive "real time" weather data or generate the weather data using an integrated solar radiation sensor.

(2) District customers using more than an average of 400 gallons per day are eligible for rebates or vouchers as available from time to time for purchasing District approved Weather Based Irrigation Controllers. Directly installed Weather Based Irrigation Controllers may be available from time to time. Customers receiving Weather Based Irrigation Controller rebates or vouchers may be subject to a pre and post installation inspection.

N. Landscape Water Efficiency Rebate

(1) Landscape water efficient rebates are available to customers who install District qualified water efficient landscape equipment including:

(a) Drip irrigation systems

(b) Water pressure-regulating devices

(c) Check valves

(d) Multi-stream rotating sprinkler nozzles (lawn areas only)

(e) Rain shut-off devices

(f) Mulch

(g) Soil conditioner/amendment

(2) Rebate amounts will be established by the Board of Directors from time to time depending on customer classification and water savings potential. Customers are allowed only up to the maximum rebate level for the life of the program.

(3) Applicant shall request and agree to a brief District pre-inspection of customer's property to identify water efficient landscape actions to be taken. District will pre-approve and post-inspect to confirm the retrofit installations. Inspections are subject to available staff time.

(4) Applicant shall provide District with a complete bill of sale or original receipt of sale within the current fiscal year, clearly showing the purchase of the landscape water efficiency installed items noted in the pre-inspection.

(5) Free or subsidized water efficient landscape items such as rain sensors, and mulch may be available to customers. Eligibility requirements listed in N(1) through (3) apply should items become available.

O. Rebate for Rainwater Harvesting and Greywater Systems

The District will rebate the installation of District approved rainwater harvesting and greywater systems in an amount approved by the Board from time-to-time.

P. Rebate for Hot Water recirculating systems

The District will rebate the installation of District approved hot water recirculation systems in an amount approved by the Board from time-to-time.

Q. Exemptions from Provisions Set Forth in Regulation 17 (A. through PM.)

(1) Retrofit Exemptions

The District's General Manager may grant an exemption from Section M. in the following instances:

(a) Unavailability of Water-Conserving Plumbing Fixtures to either match a well-defined historic architectural style fitted with authentic plumbing fixtures or accommodate existing house plumbing without Bathroom Alteration;

(b) Special health circumstances upon submittal of reasonable evidence that demonstrates that specific plumbing fixtures are required by the user that may not meet the Water Conserving Plumbing Fixture criteria defined by this regulation.

(c) Faucets at kitchen sinks or antique faucets which do not have standard threaded openings for aerators.

(2) Other Exemptions

The District's General Manager may grant exemptions from Section A. through NP. only for purposes of health, safety and sanitation or if applicant demonstrates an "at least as effective as" water efficiency alternative. The District's General Manager shall have the sole decision of determining whether applicant has demonstrated an "at least as effective as" water efficiency alternative.

NORTH MARIN WATER DISTRICT

REGULATION 18

RECYCLED WATER SERVICE

a. Intent and Purpose

The purpose of this Regulation is to set forth uniform requirements for the use of water furnished from the District's recycled water system. This regulation shall govern all use of recycled water furnished by the District and shall apply to all consumers thereof. The objectives of this regulation are to:

(1) Prevent a public hazard, public nuisance or other condition detrimental to the public health, welfare and safety, or detrimental to the environment, from developing from or in connection with the distribution of recycled water.

(2) Maintain conformance to State regulatory requirements regarding recycled water use.

(3) Provide for the setting of rates, charges, and fees that equitably distribute the cost of operation, maintenance, and improvement of the District's water system to those who benefit.

(4) Provide for monitoring, compliance, and enforcement activities resulting from or in connection with the use of recycled water furnished by the District.

b. Recycled Water Use

Recycled water is a valuable resource that extends the District's water supply. Recycled water available to and purveyed by the District shall be used only for uses as are permitted under set in Title 22 of the California Code of Regulations and with the general water reuse order (State General Order) from the State Water Resources Control Board (SWRCB, State Water Board) and approved by the District Board of Directors. Recycled water shall be used in accordance with the District's Recycled Water Users Manual (Recycled Water Manual) as may be amended from time to time.

c. Definitions

As used in this Regulation 18, the following terms have the meaning stated below.

(1) Applicant
Shall mean a person who applies for recycled water service (under Regulation 1) or seeks an extension agreement (under Regulation 25).

(2) Consumer
Shall mean any person, persons, or firm including any public body or institution with an account with the District for service. The consumer may be the owner, tenant, or property manager, as appropriate. The consumer may be a different person than the applicant.

(3) District
Shall mean the North Marin Water District.

(4) Chief Engineer
Shall mean the Chief Engineer of the North Marin Water District, appointed by the Board of Directors, or his or her authorized representative acting within the scope of assigned duties. The Chief Engineer as so appointed shall be a professional engineer registered by the State of California. Notwithstanding the two preceding sentences, the General Manager, if so registered, may act directly as Chief Engineer.

(5) Distribution Infrastructure
Shall mean the recycled water facilities owned, operated, and maintained by the District to provide recycled water services to the public in general. With respect to the facilities that provide recycled water service, District facilities comprise the primary water meter and all facilities upstream thereof, including pipelines, pumps and other appurtenances used to transport and distribute recycled water, water meters, and reservoirs and other storage and treatment facilities.

(6) General Manager
Shall mean the General Manager of the North Marin Water District, appointed by the Board of Directors, or his or her authorized representative acting within the scope of assigned duties.

(7) Offsite Facilities
Shall mean all recycled water pipelines, water meters, and connecting service lines on the upstream (street) side of the water meter. Offsite facilities are owned by the District and are part of the public recycled water distribution system.

(8) Onsite Facilities
Shall mean all recycled water distribution facilities on private property, downstream of the water meter. Onsite facilities are privately owned by the owner of the property which they serve.

(9) Recycled Water
Shall mean reclaimed water from wastewater, treated and disinfected for beneficial non-potable reuse within the District's service area. Recycled water shall be produced by further treatment of secondary effluent as defined in Title 22, California Code of Regulations, Division 4, Environmental Health, Chapter 3, Reclamation Criteria, as it may be amended from time to time.

(10) Recycled Water Service Area
Shall mean the area within the District water service area, as defined by the Chief Engineer, where recycled water pipelines allow for connections for recycled water service, and the area which will receive recycled water service within a reasonable time.

d. District Responsibilities

The primary responsibility of the District related to recycled water service is to protect public health and safety and the environment by maintaining compliance with the State General Order and State laws and regulations associated with recycled water use. The authority for enforcement of this Regulation is vested in the District's General Manager, or designee. A field inspector or other designated employee of the District is authorized to act as an agent of the District on behalf of the General Manager, with the power to inspect and issue notices of violations of this chapter.

The Chief Engineer or designee shall prepare, maintain, and update from time to time the District Standard Specifications for Potable Water, Recycled Water and Sewer Facilities (Standard Specifications) and the District Recycled Water Manual to implement this Regulation.

The District shall be responsible for the review and approval of plans, the inspection of recycled water facilities for off-site and on-site construction, and the issuance of a Recycled Water Use Permit in accordance with Regulation 18.f. The District shall also be responsible for submitting site-specific engineering reports, as may be required for on-site recycled water improvements, to the SWRCB Division of Drinking Water (DDW).

e. Requirements, Conditions and Procedure for Establishment of Recycled Water Service

(1) Recycled Water Service Area

The Recycled Water Service Area shall be determined by the Chief Engineer.

(2) Conditions for Recycled Water Service Eligibility

Recycled water service connections shall be considered subject to:

(a) The property location within the District's Recycled Water Service Area;
(b) Close proximity to the recycled water distribution system such that an extension of the distribution system is deemed reasonable by the Chief Engineer;
(c) The availability of recycled water supply and system capacity;
(d) The proposed use consistent with approved uses within the District Recycled Water Manual;
(e) The connection to recycled water service at the existing consumer and/or existing development's property is determined to not pose a potential threat to public health, safety and welfare, and/or the protection of the environment; and
(f) Approval by the Chief Engineer.

(3) Mandatory Use

The District reserves the right to require new development and existing consumers within the Recycled Water Service Area to apply for a permit and use recycled water in-lieu of potable water for all approved non-potable uses, upon determination by the District that the site is eligible under the criteria in Regulation 18.e(2). If the District determines that recycled water service is required, written notification shall be provided to the development project representative or existing consumer (Applicant) that recycled water use is required. The notification shall include information regarding:

(a) District water service connection application procedures,
(b) a description of any recycled water facilities that must be constructed to extend service to the Applicant's property, including on-site improvements,
(c) a date by which the Applicant site must connect to recycled water service,
(d) the Facilities Reserve Charge and other fees associated with connection to the District recycled water distribution system, and
(e) the rate for recycled water in effect at the time of connection.

The Applicant shall apply for recycled water use permit in accordance with Regulation 18.f. The planning, design, installation, and cost of connection to the District's recycled water system, including District fees and charges, extension of recycled water facilities to the Applicant's property and any on-site improvements for recycled water use shall be the responsibility of the Applicant.

The Applicant may request exemption from required use in accordance with Regulation 18.e(5).

(4) Voluntary Use

Applicants for new, expanded, or retrofit water service within the Recycled Water Service Area may voluntarily connect to recycled water service at their cost, upon determination by the District that the site is eligible under the criteria in Regulation 18.e(2). The Applicant shall apply for recycled water use permit in accordance with Regulation 18.f.

The planning, design, installation, and cost of connection to the District's recycled water system, including extension of recycled water facilities to the Applicant's property and any on-site improvements for recycled water use shall be the responsibility of the

Applicant. The Applicant shall be responsible for any District fees and charges associated with the recycled water connection.

(5) Exemption

(a) Exemption Requests. Existing consumers or Applicants may request exemption from mandatory use of recycled water. A written request for an exemption shall be submitted to the District and shall include specific reasons that constitute the necessity of an exemption. The request for exemption shall include sufficient supporting information for at least one of the following criteria:

(i) Connection to the recycled water system and use of recycled water is determined not economical for the consumer, applicant, or the District. Recycled water service that is not economical, as used herein, shall be as reasonably determined by the Chief Engineer.

(ii) Anticipated or existing recycled water demands are minor compared to overall water demands.

(iii) Inadequate recycled water supply is available to service the demand.

(iv) Conversion to recycled water service at the existing consumer and/or existing development's property is determined to pose a potential threat to public health, safety and welfare, and/or the protection of the environment.

(v) The current or planned use(s) of recycled water is/are not among the list of allowable uses as specified under State law, and/or are not included in the permitted uses as issued within the District's recycled water distribution permit from the SWRCB.

After receipt of such request for exemption, the District may ask for additional written information from the consumer/applicant. The General Manager shall make a determination on all requests for exemptions within thirty (30) calendar days. Denial of a request for an exemption can be appealed to the District Board of Directors. Appeals shall be in writing, and filed with the District within ten (10) business days after the General Manager's decision and shall state the specific grounds for appeal. The Board of Directors will hear the appeal within sixty (60) calendar days after the appeal has been filed and will issue its decision within thirty (30) days after the appeal is heard. The Board's decision shall be final.

(b) Mandatory Use Exemptions. New development and existing consumers shall be exempt from mandatory use of recycled water should the District determine at least one of the following criteria:

(i) Existing or proposed residential use will contain no landscape areas owned in common requiring irrigation.

(ii) Existing or proposed development of single-family, detached residences for which no common-area association or entity will have responsibility for irrigation system maintenance and operations.

(iii) Existing or proposed development for which recycled water service is determined by the Chief Engineer not to be economical because of its distance from available or planned recycled water sources; and/or because anticipated or existing recycled water demands are minor compared to overall water demands.

(iv) Existing distribution infrastructure capacity is insufficient to meet the anticipated recycled water demands.

(v) Recycled water supply is insufficient to meet the anticipated recycled water demands.

(vi) Recycled water service at the existing consumer and/or existing development's property is determined to pose a potential threat to public health, safety and welfare, and/or the protection of the environment.

f. Recycled Water Use Permits

(1) Applicants for recycled water service shall submit to the District an application for service as prescribed in Regulation 1 or Regulation 3, and in the District Recycled Water Manual.

(2) After review and acceptance of the application, the District will issue a Recycled Water Use Permit that will specify the requirements for the Applicant's onsite water distribution facilities, the portions of the premises where recycled water will be applied, and other matters as determined by the District. Recycled water service will not commence until the District verifies compliance with the permit requirements.

(3) Recycled water consumers shall maintain a Recycled Water Use Permit. Consumers shall comply with all permitting, tracking, record keeping, monitoring, and inspection procedures that may be established by the District from time to time for such permit holders. The Recycled Water Use Permit grants the consumer permission to use recycled water in conformance with District recycled water standards, manuals, guidelines, codes, ordinances, and policies, including any special site-specific requirements that may be identified.

(4) Any proposed changes to the consumer-owned recycled water facilities, including areas and types of recycled water use, shall be submitted for approval by the District in advance of making such modifications.

g. Recycled Water Service and Facilities Reserve Charges

Fees and charges for recycled water shall be in accordance with the amount specified in a resolution establishing fees and charges and approved by the Board of Directors, and in accordance with Regulations 1 and 54.

h. Design and Construction

The Applicant shall be responsible for the planning, design, and construction of offsite and onsite facilities in accordance with District Regulations, Standard Specifications, and the District Recycled Water Manual, and all associated costs and District fees and charges.

The Applicant shall apply for recycled water service with the District in accordance with Regulation 1 and the District Recycled Water Manual. Planning for recycled water service shall be in accordance with Regulation 24. Extension of recycled water to the Applicant's site shall be conducted in accordance with Regulation 28.

Design and construction of recycled water facilities shall conform with the District Standard Specifications. Retrofit of onsite facilities and installation of onsite facilities shall conform to the District Recycled Water Manual.

Design plans shall be approved by the District and fees collected prior to construction. Construction of offsite and onsite recycled water facilities shall be inspected by a District inspector or designee, and in accordance with Regulation 28. Upon satisfactory inspection and testing of

offsite and onsite facilities, the District shall issue a Recycled Water Permit and commence recycled water delivery to the Applicant's site.

i. Installation and Maintenance Responsibilities

Applicants for new or expanded water service, or those consumers requesting conversion to recycled service, shall be responsible to pay the full cost of facilities necessary to deliver recycled water to the premises, including but not limited to the planning, design, and construction costs of any required onsite and offsite facilities, and in accordance with Regulation 25. Applicants shall be responsible for all District fees and charges associated with connection to the District's recycled water facilities.

All offsite recycled water facilities constructed up to the meter shall become the property of the District for operation and maintenance upon satisfactory inspection, testing and closeout in accordance with the water service agreement executed in accordance with Regulation 1. All privately owned facilities, onsite facilities, shall be installed, owned, and operated by the consumer in accordance with Regulation 10.

j. Consumer Responsibilities

Consumers shall comply with all of the provisions of this Regulation relative to the use of recycled water during the entire time that recycled water is delivered to the consumer. In addition, consumers shall comply with all applicable provisions contained in the District Recycled Water Manual, permit conditions, and other laws, regulations, agreements, orders, guidelines, and/or standards, and any amending or superseding requirements thereof.

The consumer shall bear all costs incurred to remedy the noncompliance with any such provisions, and shall pay any monetary penalties or fines imposed for the violation of or noncompliance with such provisions. The omissions or acts by the District shall not relieve the consumer of responsibility to comply with the provisions of this Regulation. Without limiting the generality of the foregoing, consumers shall comply with the following requirements:

(1) Consumer-Owned Facilities.

Consumer-owned facilities include all onsite recycled water distribution facilities within the property, downstream of the water meter. Consumers shall design and construct consumer-owned recycled water facilities in accordance with District Standard Specifications and Recycled Water Manual. Consumers shall maintain such facilities in good working order as to achieve compliance with all District requirements applicable to the use of recycled water, including Regulation 10. The consumer shall be responsible for all costs of operating and maintaining the water service facilities on the consumers' side of the water service meter(s).

(2) Use of Recycled Water.

Consumers shall be responsible for application of recycled water on their use areas and the associated operations and maintenance of the consumer-owned facilities as approved in their Recycled Water Use Permit. Use of recycled water beyond the areas and uses in the approved permit requires a permit modification application to be submitted to the District, payment of applicable fees and charges, and written District approval.

(3) Designation of Recycled Water User Supervisor.

Each Consumer shall designate a Recycled Water User Supervisor (User Supervisor), a natural person who operates or maintains customer-owned recycled water facilities, for each site covered by a Recycled Water Use Permit. The User

Supervisor shall serve as a liaison with the District, and shall have the authority to carry out the requirements of the Recycled Water Manual and Recycled Water Use Permit, including the operations and maintenance of the onsite recycled water system and prevention of potential hazards.

The User Supervisor shall attend periodic recycled water use training courses offered by the District. At the end of each such course, the District shall issue a certificate to each such person who satisfactorily completes the course. Such certificate shall provide that, in the absence of violations of the provisions of this Regulation, it shall be effective until the commencement of the next training course or until the rules, regulations, permits or orders applicable to recycled water use within the District are changed, whichever is later. Such certificates are not transferable in any manner.

(4) Monitoring.

Consumers shall regularly monitor consumer-owned facilities and submit accurate monitoring reports to the District on a timely basis in accordance with the reporting requirements outlined in the Recycled Water Use Permit issued by the District to the Consumer. The Consumer shall notify the District immediately if any unauthorized use or discharge of recycled water occurs, or if other conditions occur, which impact or threaten to impact the public health.

(5) Access to Site.

All recycled water consumers shall permit the officers, employees, and agents of the District, the State or Regional Water Quality Control Board, Marin County, and other entities with jurisdiction over recycled water or public health, access to the site where recycled water supplied by the District is used, or where records relative to recycled water use are kept, for the purposes of:

(a) inspection, testing, and repair of facilities, equipment, practices, or operations regulated pursuant to the Recycled Water Manual, and State General Order; and

(b) sampling or monitoring to assure compliance with the Recycled Water Manual and State General Order.

Access may be scheduled outside typical business hours to effectively conduct testing and inspection, and minimize impact to the public.

In addition, consumers shall supply access to, or copies of, records relative to recycled water use to representatives of the above-named entities upon request.

k. Penalties for Noncompliance

Any consumer who fails to timely submit accurate monitoring reports to the District in accordance with its recycled water use permit, who fails to comply with this regulation and/or the Recycled Water Manual, or who uses water or discharges wastewater in any manner which is contrary to the laws, regulations, agreements, permits, orders, guidelines, and/or standards relative to the use of water is subject to citation pursuant to Regulation 19, as well as other remedies in law or equity. Continued noncompliance with this regulation may result in the discontinuation of recycled water service supplied for irrigation purposes.

l. Protection of Public Health

(1) Connection between recycled water and potable water lines is prohibited. If both recycled water and potable water lines are present at the consumer's facilities, the

consumer shall install a backflow prevention device downstream of the water meter, on the potable water system in accordance with Regulation 6, at the expense of the customer.

Recycled water service may be terminated if the District determines that the consumer has failed to install and appropriately maintain the required backflow prevention devices to protect the District's facilities, and that a substantial risk of damage exists, whether or not the consumer's failure was willful or negligent.

(2) Notwithstanding compliance by a consumer with these rules and regulations, the District reserves the right and has the authority to terminate recycled water service immediately, without notice, in the interest of protecting a threat to the public health if at any time during construction or operation of the recycled water system, real or potential hazards are evidenced, such as cross-connections with the potable system, failure to conform to monitoring and reporting requirements, improper tagging, signing, or marking, improper construction, or unapproved/prohibited uses.

NORTH MARIN WATER DISTRICT

REGULATION 19

ENFORCEMENT FOR RECYCLED WATER USE

a. Violation

Any person found to be violating any provision of the District's Regulation 18 shall be served by the General Manager or other authorized person with written notice stating the nature of the violation and providing a reasonable time limit for satisfactory correction thereof. The violating party shall within the period of time stated in such notice permanently cease the violation.

b. Public Nuisance

Continued operation of any facility in violation of the provisions of these regulations or the continued recycled water use that causes or contributes to a condition of pollution as defined in Water Code section 13050(l) or nuisance as defined in Water Code section 13050(m) is hereby declared to be a public nuisance. The District may cause proceedings to be brought for the abatement of the nuisance during the period of such violation.

c. Liability for Violation

Any person violating any of the provisions of this regulation shall become liable to and shall indemnify the District for any expense, loss or damage occasioned by the District by reason of such violation.

Costs associated with the discovery and correction of an illegal connection to the District's potable or recycled water systems are the responsibility of the property owner to which the illegal connection was made. The property owner shall reimburse the District for its said costs including:

(1) all District costs to investigate the illegal connection, and

(2) all District costs as described in Regulation 1, 6, and 18, to correct the connection.

Costs associated with the discovery and correction of an illegal or non-permitted use of the District's recycled water system are the responsibility of the property owner on which property the illegal use occurred. The property owner shall reimburse the District for its said costs including:

(1) all District costs to investigate the illegal use, and

(2) all District costs as described in Regulation 1, 6, 18, and 55, to correct the condition of illegal or non-permitted use.

d. Non-Compliance

If a customer fails to comply with this regulation by failure to install, test or correct deficiencies or by removal, tampering with or modifying a requirement device, facility or component; or by unauthorized use of potable or recycled water; the District shall have the right to refuse or terminate water service in accordance with Regulation 55, and, if it deems necessary, physically disconnect the customer's piping from the District's distribution system.

The District may also impose a penalty, in an amount approved by the Board from time to time, to be assessed on the customer water bill.

e. Mandatory Use Assurance

In the event of extended non-use of available and approved recycled water at a property, the consumer shall pay for all potable water used plus a penalty in the amount of 100% of the then current potable water rate. Continued non-use may result in the discontinuation of potable water service supplied for irrigation purposes.

PUBLIC HEARING NOTICES
MARIN IJ 12/13/23
PT. REYES LIGHT 12/14/23

ATTACHMENT 5

PUBLIC HEARING NOTICE
Sponsor: North Marin Water District
Purpose: Consider Proposed Changes to District Regulation 15 – Water Conservation Novato Service Area and Regulation 17 – Water Conservation West Marin Service Area
Impact: Greater Novato and West Marin Service Areas
Date: December 19, 2023
Time: 4:00 p.m.
Place: 100 Wood Hollow Dr., Novato
(Temporary District Headquarters)
Summary of Proposed Changes:
1. Adding language to the water waste prohibitions to address the State's impending order to prohibit irrigation on non-functional turf.
2. Updated language to the restriction for new development.
3. Formally adding various rebate programs to the water conservation program.
4. Updated language to various rebate programs.
5. Other minor changes and updates.
For More Information Please
Call the District's Water Conservation office at:(415) 761-8933
or email waterconserve@nmwd.com

0006796854 December 13, 2023

PUBLIC HEARING NOTICE
Sponsor: North Marin Water District
Purpose: Consider Proposed Changes to District Regulation 18 – Recycled Water Service
Impact: Novato Recycled Water Service Area
Date: December 19, 2023
Time: 4:00 p.m.
Place: 100 Wood Hollow Dr., Novato
(Temporary District Headquarters)
Summary of Proposed Changes:
1. Adding a new definition of terms used in the regulation section.
2. Clarifying the District's and recycled water customer's responsibilities.
3. Clarifying exemption of use requests and mandatory use exemptions.
4. New language to address protection of public health through backflow prevention and the District's right to terminate use if such devices aren't properly used and maintained.
For More Information Please
Call the District's office at:
(415) 761-8933 or email info@nmwd.com

0006796787 December 13, 2023

PUBLIC HEARING NOTICE
Sponsor: North Marin Water District
Purpose: Consider Proposed New District Regulation 19 – Enforcement for Recycled Water Use
Impact: Novato Recycled Water Service Area
Date: December 19, 2023
Time: 4:00 p.m.
Place: 100 Wood Hollow Dr., Novato
(Temporary District Headquarters)
Summary of Proposed New Regulation:
1. Provides a stand-alone regulation for enforcement of required recycled water use restrictions and regulations covered in Regulation 18 and other District regulations.
2. The proposed regulation includes the following sections: Violation, Public Nuisance, Liability for Violation, Non-compliance and Mandatory Use Assurance.
3. The proposed regulation is similar to the District's enforcement regulation for its sewer system (wastewater).
4. The proposed regulation cross-references existing District Regulations 1, 6, 18 and 55 for clarity.
For More Information Please
Call the District's office at:
(415) 761-8933 or email info@nmwd.com

0006796847 December 13, 2023

PUBLIC HEARING NOTICES
MARIN IJ 12/13/23
PT. REYES LIGHT 12/14/23

ATTACHMENT 5

PUBLIC HEARING NOTICE

Sponsor:	**North Marin Water District**
Purpose:	**Consider Proposed Changes to District Regulation 15 – Water Conservation Novato Service Area and Regulation 17 – Water Conservation West Marin Service Area**
Impact:	**Greater Novato and West Marin Service Areas**
Date:	**December 19, 2023**
Time:	**4:00 p.m.**
Place:	**100 Wood Hollow Dr., Novato (Temporary District Headquarters)**

Summary of Proposed Changes:

1. Adding language to the water waste prohibitions to address the State's impending order to prohibit irrigation on non-functional turf.
2. Updated language to the restriction for new development.
3. Formally adding various rebate programs to the water conservation program.
4. Updated language to various rebate programs.
5. Other minor changes and updates.

For More Information Please
Call the District's Water Conservation office at:
(415) 761-8933 or email waterconserve@nmwd.com

6

ITEM #6

NORTH MARIN WATER DISTRICT

MEMORANDUM

To: Board of Directors December 19, 2023

From: Ryan Grisso, Water Conservation and Communications Manager RG

Subject: Revisions to District Water Conservation Regulations 15 and 17
v:\memos to board\regulation 15 and 17 revisions final.doc

RECOMMENDED ACTION: Consider Adopting Resolution No. 23-XX and No. 23-XX Amending District Regulation 15 and Regulation 17

FINANCIAL IMPACT: None at this time

Background

District Regulations 15 and 17 provide the framework for all water conservation related activities in the Novato and West Marin service areas including both mandatory and voluntary water conservation programs. These Regulations go back to 1976 for Regulation 15, and 1989 for Regulation 17, with many updates and additions along the way to keep the Regulations innovative and current. Some of the highlights include the first turf removal rebate program (Cash for Grass) enacted ever, strict new development requirements both indoor and outdoor, retrofit on resale for both service areas, and permanent water waste and non-essential use prohibitions.

In 2016, the Board last updated Regulations 15 and 17 to include major updates due to when the State Water Resources Control Board updated the State's Model Water Efficient Landscape Ordinance (MWELO) with more restrictive requirements for applicable new and rehabilitated landscapes. The District's version approved at the time was a bit more restrictive and also more prescriptive to make sure there were no loopholes when approving landscape in new development. In addition, the Board approved other minor changes to the Regulations at that time.

Proposed Update

This year, staff is requesting revisions to these regulations to 1) add in a water waste restriction for non-residential non-functional turf (as to be mandated in the future and defined by the State Water Resources Control Board through the rulemaking process in response to the 2018 Legislation Making Conservation a California Way of Life); 2) add in water conservation programs previously implemented under "pilot program" authority; and 3) make some additional minor revisions to remain current and appropriate with current times including a portion of Section E. to expand the applicability of the new development deposit. The draft changes to Regulations 15 and 17 as noted in Attachments 1 and 2, in underline/strikeout format for review.

The formal rule prohibiting irrigation on commercial non-functional turf has not been approved yet by the State Board, but that approval is imminent in 2024. To prohibit the use of water for commercial non-functional turf at this time is an advisable "good faith" effort and action to take for

future compliance reference, although additional NMWD Board action may be required in the future. The water conservation programs to be included in the revised Regulations 15 and 17 include the Rainwater, Greywater and Hot Water Recirculation Rebate, all previously approved under pilot status, and a new rebate program to rebate the removal of pools at an equivalent per square foot rebate amount to that of Cash for Grass. The District received many requests for an incentive to address the removal of pools over the last two droughts, as this is a costly endeavor. Other minor changes include some minor text updates in various areas and an adjustment to the water conservation compliance deposit in Section E. to include developer project at the District staff's discretion.

RECOMMENDATION

That the Board adopt Resolutions No. 23-XX and No. 23-XX (Attachments 3 and 4), amending Regulations 15 and 17 (as shown in Attachments 1 and 2).

ATTACHMENTS:

1. Draft Revised Regulation 15
2. Draft Revised Regulation 17
3. Resolution No. 23-XX Amending Regulation 15 (without exhibit)
4. Resolution No. 23-XX Amending Regulation 17 (without exhibit)

NORTH MARIN WATER DISTRICT

REGULATION 15

WATER CONSERVATION - NOVATO SERVICE AREA

A. Purpose

The purpose of this regulation is to assure that water resources available to the District are put to reasonable beneficial use, that the instream values of Novato Creek and the Russian River are preserved to the maximum possible extent and that the benefits of the District's water service extend to the largest number of persons.

B. Waste of Water Prohibited

(1) Customers shall not permit any water furnished by the District for the following nonessential uses:

(a) The washing of sidewalks, walkways, driveways, parking lots and other hard surfaced areas by direct hosing when runoff water directly flows to a gutter or storm drain, except as may be necessary to properly dispose of flammable or other dangerous liquids or substances, wash away spills that present a trip and fall hazard, or to prevent or eliminate materials dangerous to the public health and safety;

(b) The escape of water through breaks or leaks within the customers' plumbing or private distribution system for any substantial period of time within which such break or leak should reasonably have been discovered and corrected. It shall be presumed that a period of seventy-two (72) hours after the customer discovers such a break or leak or receives notice from the District, is a reasonable time within which to correct such break or leak, or, as a minimum, to stop the flow of water from such break or leak;

(c) Irrigation in a manner or to an extent which allows excessive run-off of water or unreasonable over-spray of the areas being watered. Every customer is deemed to have his/her water system under control at all times, to know the manner and extent of his/her water use and any run-off, and to employ available alternatives to apply irrigation water in a reasonably efficient manner;

(d) Washing cars, boats, trailers or other vehicles and machinery directly with a hose not equipped with a shutoff nozzle;

(e) Water for non-recycling decorative water fountains;

(f) Water for new non-recirculating conveyor car wash systems;

(g) Water for new non-recirculating industrial clothes wash systems;

(h) Water for single pass coolant systems;

(i) Potable water for outdoor landscaping during or within 48 hours of measurable rainfall;

(j) Potable water on ornamental turf in public street medians;

(k) Drinking water other than on request in eating or dining establishments;

(l) Water for the daily laundering of towels and linens in hotels and motels without offering guests the option of choosing not to have daily laundering;

(m) Water for non-functional turf as defined and determined by rulemaking of the State Water Resources Control Board of the State of California;

(2) Exempt Water Uses. All water use associated with the operation and maintenance of fire suppression equipment or employed by the District for water quality flushing and sanitation purposes shall be exempt from the provisions of this section. Use of water supplied by a private well or from a recycled water, gray water or rainwater utilization system is also exempt.

(3) Variances. Any customer of the District may make written application for a variance. Said application shall describe in detail why Applicant believes a variance is justified.

(a) The General Manager of the District may grant variances for use of water otherwise prohibited by this section upon finding and determining that failure to do so would cause an emergency condition affecting the health, sanitation, fire protection or safety of the Applicant or public; or, cause an unnecessary and undue hardship on Applicant or public, including but not limited to, adverse economic impacts, such as loss of production or jobs; or, for other reasons at the sole discretion of the General Manager.

(b) The decision of the General Manager of the District may be appealed to the Board of Directors by submitting a written appeal to the District within fifteen (15) calendar days of the day of the General Manager's decision. Upon granting any appeal, the Board of Directors may impose any conditions it determines to be just and proper. Variances granted by the Board of Directors shall be prepared in writing and the Board of Directors may require the variance be recorded at Applicant's expense.

(4) Enforcement. Depending on the extent of the water waste, the District may, after written or verbal notification to customer and after a reasonable time to correct the violation as solely determined by the District, take some or all of the following actions:

(a) Telephone the customer to inform of the water waste violation including a specified period of time to correct the violation;

(b) Personal contact with the customer at the address of the water service. If personal contact is unsuccessful, written notice of the violation including a date that the violation is to be corrected may be left on the premises with a copy of the notice sent by certified mail to the customer;

(c) The District may install a flow-restricting device on the service line;

(d) The District may cause termination of water service and the charge for same shall be billed to the customer. Except in cases of extreme emergency as solely determined by the General Manager of the District, service shall not be reinstated until verified by the District that the violation has been corrected and all outstanding charges have been paid.

(e) The District may impose a penalty, in an amount approved by the Board from time to time, to be assessed on the customer water bill.

C. Use of Water Saving Devices

Each customer of the District is urged to install water efficient devices that meet or exceed

EPA WaterSense standards, including but not limited to showerheads, sink aerators and toilets.

D. Water-Saving Fixtures/Devices/Equipment

The District will make available from time to time to customers the following devices and incentives:

(1) A device or devices for reducing shower and sink flow rates;

(2) A dye tablet or tablets for determining toilet leaks;

(3) Other devices from time to time approved by the District;

(4) Rebates from time to time for District qualified hot water recirculation systems, greywater systems, and rainwater catchment systems.

E. Water-Saving Devices and Restrictions for New Development

(1) Water service will not be furnished to any Applicant unless the water-saving devices hereinafter described are installed. Applicants for single service installations serving one dwelling unit (d.u.) or one d.u. and an accessory d.u. or Applicants for projects for which the District does not have final building permit sign off authority, shall pay a $1,000 deposit per d.u. to be refunded upon post inspection of the installation of the water-saving devices and restrictions and compliant water efficient landscape (section F) herein. All other projects, including developer projects requiring a water service agreement, may be subject to a water conservation deposit with amount and applicability determined by the General Manager and/or Chief Engineer on a case-by-case basis, not to exceed $1,000 per dwelling unit. Applicant shall have two years to complete the project, obtain District inspection approval and request a refund of the deposit. If after two years the project is not completed, the deposit will be forfeited to the District to be used for other Water Conservation Programs. If requested by the Applicant, the District may extend the time period for the project completion up to one additional year,

(2) All interior plumbing and appliances in new development shall meet the following requirements and be installed prior to occupancy approval or meter installation (whichever is the latter):

(a) Toilets and associated flush valves shall be High Efficiency Toilets (HETs), rated at not more than 1.28 gallons per flush on average; ~~, and shall be listed on the approved District HET list;~~

(b) Urinals and associated flush valves shall be rated at not more than 0.125 gallons per flush or be a District approved non-water using urinal;

(c) Shower heads shall have a rated flow of ~~2.0~~1.8 gallons per minute or less, and only one shower head will be allowed per bathroom;

(d) Lavatory faucets and hand-washing sinks shall have aerators or laminar flow devices together with flow control inserts, valves, devices or orifices that restrict flow to a maximum of 1.5 gallons per minute in residential construction and 0.5 gallons per minute in commercial or non-residential projects~~construction~~. Kitchen faucets shall have a maximum flow of 2.0 gallons per minute in all construction;

e) Laundry ~~facility~~ washing machines shall be District approved high-efficiency models with an integrated water factor of 4.5 or less;

(f) Dishwashers shall be high efficiency models with an Energy Star rating that use no more than 5 gallons per cycle;

F. Water Efficient Landscape Requirement

(1) Purpose. Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable method of use. This Regulation protects water supplies through the implementation of a whole systems approach to design, construction, installation and maintenance of the landscape resulting in water conserving climate-appropriate landscapes, improved water quality and the minimization of natural resource inputs.

(2) Applicability

a. Requirements stated herein shall apply to all of the following new and rehabilitated landscape projects associated with construction that requires a Building or Grading Permit, Plan Check, Design Review or water service upgrade for Commercial, industrial and institutional landscaping, park and greenbelt landscaping, multiple-family residential and single-family residential landscaping.

i. At District discretion, landscape requirements for applicable projects may be deferred to the State Model Water Efficient Landscape Ordinance (California Code of Regulations Title 23. Waters, Division 2. Department of Water Resources, Chapter 2.7. Model Water Efficient Landscape Ordinance).

ii. For projects with irrigated landscape area less than 2,500 square feet, the District may choose to select any or all of the requirements to the State Model Water Efficient Landscape Ordinance (Referenced above), Appendix D – Prescriptive Compliance Option.

b. Requirements stated herein shall not apply to:

i. Registered local, state or federal historical landscape area;

ii. Ecological restoration or mined-land reclamation projects that do not require a permanent irrigation system.

(3) Landscape Design Plan. For each landscape project subject to this Regulation, applicants shall submit a landscape design plan and install a landscape in accordance with the following:

a. Amendments, Mulching and Soil Conditioning

i. A minimum of 8” of non-mechanically compacted soil shall be available for water absorption and root growth in planted areas.

ii. Prior to incorporating compost or fertilizer and planting of any materials, compacted soils shall be transformed into a friable condition.

iii. Incorporate compost or natural fertilizer into the soil to a minimum depth of 8" at a minimum rate of 8 cubic yards per 1000 square feet and per specific amendment recommendations from a soils management report.

iv. A minimum 3” layer of District approved mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers or direct seeding applications. Mulch shall be made from recycled or post-consumer materials when possible.

b. Plants

i. Selected plants, other than the allowable turf areas in residential projects, shall be Water Use Classification of Landscape Species (WUCOLS) categorized "Very Low" or "Low" water use for the North-Central Coastal Region and not cause the Estimated Water Use (ETWU) to exceed the Maximum Applied Water Allowance (MAWA) using an evapotranspiration factor of 0.55 for residential and 0.45 for non-residential sites and a WUCOLS corresponding plant factor of 0.3 or less for Very Low or Low water use plants. (Special Landscape Areas including areas dedicated to edible plants, recreational areas, or areas irrigated solely with recycled water shall not be subjected to the plant selection requirements and shall use an evapotranspiration factor of 1.0 for the purposes of calculating ETWU and MAWA.)

ii. Plants with similar water use needs shall be grouped together in distinct hydrozones and where irrigation is required each distinct hydrozone shall be irrigated with a separate valve(s) and noted on the plans.

iii Moderate and High water use plants as classified by WUCOLS shall not be mixed with low water use plants.

iv. All non-turf plants shall be selected, spaced and planted appropriately based upon their adaptability to the climatic, soils, and topographical conditions of the project site.

v. Turf shall not be planted in the following conditions:

1. Slopes exceeding 10%.

2. Planting areas 10 feet wide (in any direction) or less unless irrigated by District approved subsurface irrigation or with recycled water.

3. Street medians, traffic islands, planter strips or bulb-outs of any size. Front yard landscaping of single-family residential homes where the backyard landscape is not developer installed.

vi. Total turf areas shall not exceed the following

1. Single Family: 25% of the total landscape area not to exceed 600 square feet.

2. Townhouse/Condominium (THC): 300 square feet.

3. Apartment (APT): 130 square feet.

4. Commercial and/or non-residential: 0 square feet.

5. Special Landscape Areas: The preceding turf limitations shall not apply to sites irrigated with recycled water or areas dedicated to District approved recreational uses.

vii. Invasive plants as listed by the California Invasive Plant Council are prohibited.

c. Water Features

i. Recirculating water systems shall be used for water features.

ii. Recycled water shall be used in water features when available onsite.

(4) Irrigation Design Plan. For each landscape project subject to this Regulation, applicants

shall submit an irrigation design plan that is designed and installed to meet the MAWA irrigation efficiency criteria and in accordance with the following:

a. Dedicated irrigation meter or private landscape water or submeter for residential must be specified for all non-residential irrigated landscapes and residential irrigated landscapes of 5,000 sq. ft. or greater.

b. Irrigation systems with meters 1 ½" or greater, or non-residential projects with irrigated landscapes over 5,000 square feet, require a high-flow sensor that can detect high-flow conditions and have the capabilities to shut off the system.

c. Isolation valves shall be installed at the point of connection and before each valve or valve manifold.

d. Weather-based or other sensor based self-adjusting irrigation controllers with non-volatile memory shall be required.

e. Rain sensors shall be installed for each irrigation controller.

f. Pressure regulation and/or booster pumps shall be installed so that all components of the irrigation system operate at the manufacturer's recommended optimal pressure.

g. Irrigation system shall be designed to prevent runoff or overspray onto non-targeted areas.

h. Point source irrigation is required where plant height at maturity will affect the uniformity of an overhead system.

i. Minimum 24" setback of overhead irrigation is required where turf is directly adjacent to a continuous hardscape that flows or could runoff into the curb and gutter.

j. Slopes greater than 10% shall be irrigated with point source or other low-volume irrigation technology.

k. A single valve shall not irrigate hydrozones that mix high water use plants with moderate or low water use plants.

l. Trees shall be placed on separate valves.

m. All non-turf landscape areas shall be irrigated with District approved drip irrigation systems or other alternative District approved point source irrigation.

n. Sprinkler heads, rotors and other emission devices on a valve shall have matched precipitation rates. All spray irrigation systems shall be a brake rotary type or be multi-stream, multi-trajectory, adjustable arc, rotating stream sprinkler with matched precipitation rates. All rotating stream sprinkler units shall be installed in a 40 psi pressure regulated spray head body and provide the highest potential distribution uniformity. All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher.

o. Head-to-head coverage is required unless otherwise directed by the manufacturer's specifications

p. Swing joints or other riser protection components are required on all risers.

q. Check valves shall be installed to prevent low-head drainage.

r. Master shut-off valves are required on all projects with irrigated landscapes over 5,000 square feet.

s. Irrigation efficiency factors of 0.75 for overhead spray devices and 0.81 for drip system devices shall be used for ETWU and MAWA calculations.

t. A diagram of the irrigation plan, including hydrozones and equipment locations, shall be provided and kept with the irrigation controller for subsequent management purposes.

(5) Irrigation Audit: Project applicants shall submit an irrigation audit report for all applicable projects.

a. The project applicant shall submit an irrigation audit report that includes inspection, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule, including configuring irrigation controllers with application rate, soil types, plant factors, slope, exposure and any other factors necessary for accurate programming

b. All landscape irrigation audits shall be conducted by a local agency landscape irrigation auditor or a third-party certified landscape irrigation auditor. Landscape audits shall not be conducted by the person who designed or installed the landscape.

c. In production home developments, audits of 15% of the landscapes shall be sufficient.

G. Rebate for High-Efficiency Washing Machines in Residences

District customers in the Novato Service area are eligible for rebate as available from time to time for District approved high-efficiency washing machines in existing residences. New construction in the District's Novato service area are required to be equipped with high-efficiency washing machines in accordance with Section E. (2) (e) of this regulation. District rebates are not available for high-efficiency washing machines required in new residential construction.

H. Rebate for Removing Irrigated Turf from Residential Properties

(1) The owner of property containing a formal lawn area or areas shall be eligible for a cash rebate from the District if said owner removes all or part of the formal lawn area(s) and replaces same with eligible plant materials and meets the qualification requirements. "Formal lawn area" means an existing lawn in good condition which is irrigated regularly, by an automatic inground irrigation system, with water furnished by the District and mowed regularly.

(2) Qualification requirements:

(a) Application for rebate must be made on District's form prior to removing the formal lawn area(s). All applicable information requested must be supplied;

(b) Application for rebate must include a landscape plan or sketch showing the size, in square feet, and location of all formal lawn area(s) on the Applicant's parcel and the location of formal lawn area(s) that will be removed and replaced;

(c) The Applicant must utilize only eligible replacement materials for the formal lawn area(s) removed which are to be considered in calculating the rebate. Eligible replacement materials are District approved water-conserving or low

water use California native plants;

(d) If the automatic in-ground irrigation system will continue to serve some remaining formal lawn area(s), Applicant must modify the system so that water is not served to the proposed replacement area;

(e) Formal lawn area(s) removed and replanted with eligible replacement materials shall be mulched with material suitably thick to prevent weed growth (minimum three inches) and reduce water loss. Areas shall not be irrigated except for limited supplemental hand-watering or temporary drip irrigation to establish the plant material;

(f) The owner of the property must sign a statement promising not to reinstall lawn in formal lawn area(s) where lawn has been removed as long as the owner holds property. The owner may be relieved of this promise at any time by returning the full amount of the District's rebate;

(g) The General Manager may at any time halt or suspend acceptance of applications for rebate if the District's funds appropriated for this purpose become exhausted.

(3) After reviewing the information supplied by the Applicant and making at least one site inspection to assure that qualification conditions have been met, District shall mail a rebate check.

(4) The amount of the rebate shall be determined by the Board from time-to-time.

(5) Rebates may be available for non-residential property or for hotels, motels, hospitals, government housing or a senior citizen complex on a parcel which is separately owned and assessed. Maximum rebate amount for a non-residential property shall be determined by General Manager on a case-by-case basis.

I. ~~Landscape Rebate Alternatives~~Rebate for Removal of Pool

(1) ~~The District will consider, and may approve, requests to substitute for any of the requirements in section H, well-designed alternatives or innovations that will affect similar significant and continuing reductions of water requirements. Determination of eligibility shall be at the sole discretion of the General Manager or designated staff.~~The District will rebate the permitted removal of an existing pool. The rebate shall be on a square foot basis with maximum level equivalent to the amounts set forth in Section H. The amount of the rebate shall be determined by the Board from time-to-time.

J. High Efficiency Toilet Replacement Program(s)

(1) A High Efficiency Toilet (HET) is defined as any toilet with an average flush volume of 1.28 gallons per flush or less. Ultra High Efficiency Toilet (UHET) is defined as any toilet with an average flush volume of 1.1 gallons per flush or less.

(2) Any qualifying customer of the District who removes and recycles all toilets rated to use more than 1.6 gallons per flush and replaces same with a District approved HET or UHET may request a cash rebate or bill credit in an amount established by the Board of Directors from time to time for each such toilet replaced.

(3) To qualify for a rebate(s) hereunder, application shall be made on a form available from the District and person signing application shall:

(a) Request District make a brief inspection of customer's structure at a time

and date approved in advance by customer to identify water conservation measures appropriate and effective for the customer to implement or be pre-qualified by District staff via other communication means. Should customer refuse access for an inspection or not receive pre-qualification, District shall not be under any obligation to make a rebate. Inspection requirements are subject to available staff time;

(b) Be a customer of the District and the customer's structure in which the replaced toilet(s) is located shall be served water in the District's Novato Service Area and replacing a toilet installed prior to January 1, 1992, and manufactured to flush more than 1.6 gallons per flush;

(c) Provide District with bill of sale or original receipt of sale within the current fiscal year and made out to said customer by person or vendor selling customer the HET or UHET or, in lieu thereof, provide District with letter addressed to said customer signed by a licensed plumber or contractor stating that a HET(s) or UHET(s) has been installed by said plumber or contractor at the customer's address;

(4) If the customer is renting the structure, a rebate will be made provided customer includes with the application a letter from the owner of the property consenting to District making rebate payment to customer for the replacement of a non-water conserving toilet(s).

(5) Rebates are not available for toilets installed in buildings constructed after January 1, 1992 or for replacement of toilets rated to use 1.6 gallons per flush or less.

(6) Free or subsidized UHET giveaways may be available to customers from time to time. Eligibility requirements listed in J (3) (a) to (d) apply to this program should it become available.

K. Landscape Water Efficiency Rebate

(1) Landscape water efficient rebates are available to customers who install District qualified water efficient landscape equipment including:

(a) Drip irrigation systems

(b) Water pressure-regulating devices

(c) Check valves

(d) Multi-stream rotating sprinkler nozzles (lawn areas only)

(e) Rain shut-off devices

(f) Mulch

(g) Soil conditioner/amendment

(2) Rebate amounts will be established by the Board of Directors from time to time depending on customer classification and water savings potential. Customers are allowed only up to the maximum rebate level for the life of the program.

(3) Applicant shall request and agree to a brief District pre-inspection of customer's property to identify water efficient landscape actions to be taken. District will pre-approve and post inspect to confirm the retrofit installations. Inspections are subject to available staff time.

(4) Applicant shall provide District with a complete bill of sale or original receipt of sale within the current fiscal year, clearly showing the purchase of the landscape water efficiency installed items noted in the pre-inspection.

(5) Free or subsidized water efficient landscape items such as rain sensors, and mulch may be available to customers. Eligibility requirements listed in K (1) through (3) apply should items become available.

L. Rebate~~s~~ for District Approved Swimming Pool Covers

District customers are eligible for rebates as available from time to time for purchasing District approved swimming pool covers. Eligible pool covers must be a solar or safety cover with non-netted type material and~~,~~ at least 12 mil in thickness~~, and at least 450 square feet area~~.

M. Requirement for Installation of Water Conserving Plumbing Fixtures Upon Change of Property Ownership

(1) Definitions.

(a) "Water Conserving Plumbing Fixtures" means any toilet rated at 1.6 gallons of water per flush or less, urinals that that are rated at 1.0 gallons of water per flush, showerheads with a flow rated at 2.0 gallons of water per minute or lavatory faucets that can emit no more than 1.5 gallons of water per minute;

(b) "Change in Property Ownership" means a transfer of present interest of real property, or a transfer of the right to beneficial use thereof, the value of which is substantially equal to the proportion of ownership interest transferred.

(c) "Retrofit" means replacing "Existing Plumbing Fixtures" with "Water-Conserving Plumbing Fixtures;"

(d) "Existing Plumbing Fixtures" means any toilet using more than 1.6 gallons of water per flush, urinals using more than 1.0 gallons of water or more per flush, showerheads with a flow rated more than 2.0 gallons of water per minute or lavatory faucets that emit more than 1.5 gallons of water per minute.

(e) "Existing Structure" means any structure built and available for use or occupancy on or before January 1, 1992, which is equipped with a toilet using more than 1.6 gallons of water per flush or a urinal using more than 1.0 gallons of water per flush.

(2) Retrofit Upon Change of Property Ownership.

All existing plumbing fixtures in existing structures receiving water from the District's water system shall, at the time of change of ownership, be retrofitted, if not already done, exclusively with water conserving plumbing fixtures as defined in Section M(1) of this regulation.

(3) Compliance and Penalties

Compliance shall be by the honor system. It shall be the Seller's responsibility to obtain from the District, in addition to any normal permits required by agencies other than the District, a Certificate of Compliance acknowledging that the Seller or title holder has stated that the retrofit installation required by this Regulation has been

completed. If the District later determines or finds that the work was not done or was not completed or that water conserving plumbing fixtures are no longer present, the District may assess an annual fee of 20% of the estimated annual water bill as determined by the District until the owner of the property demonstrates that the required retrofit work has in fact been done. A site inspection shall be required in such cases and the owner shall be charged $35 for each such site inspection as an added fee on the owner's water bill.

(4) Alternative Compliance Procedure for Transfers of Residential Property

At Seller's option, Seller shall pay the District $315 per bathroom that does not fully comply with Regulation 15 M. Half bathrooms shall count as one bathroom. The District shall thereupon immediately provide a Certificate of Compliance to Seller. Buyer shall then be responsible for installation of the water conserving plumbing fixtures and Seller shall provide Buyer with a copy of District Regulation 15 M. and shall notify Buyer of this requirement in writing before close of escrow. Buyer shall have one year from the date of close of escrow to install such fixtures. Upon being notified that said fixtures have been installed and making a brief inspection confirming installation, the District shall pay the Buyer an amount equal to the payment made to District by Seller. If after one year, the water conserving plumbing fixtures have not been installed, the District shall use this money for any other Board approved water conservation program and shall be under no obligation to pay said money to Buyer.

(5) Responsibility for Compliance Negotiable

The Seller is responsible for compliance with Regulation 15 M, however responsibility for payment of the deposit specified in Section M(4) may be assumed by the Buyer so long as the agreement is not otherwise inconsistent with the terms of Regulation 15 M. Any such agreement shall be evidenced in a writing signed by both the Buyer and Seller.

N. Weather Based Irrigation Controller Installation Program

(1) A weather-based irrigation controller is defined as any irrigation controller using weather data to create the actual irrigation schedule and which schedule is automatically adjusted by the controller to meet the applied water demand based on actual weather data. Weather based irrigation controllers may either receive “real time” weather data or generate their weather data using an integrated solar radiation sensor.

(2) District customers using more than an average of 600 gallons per day are eligible for rebates or vouchers as available from time to time for purchasing District approved weather-based irrigation controllers. Directly installed weather-based irrigation controllers may be available from time to time. Customers receiving weather-based irrigation controller rebates or vouchers may be subject to a pre and post installation inspection.

O. Rebate for Rainwater Harvesting and Greywater Systems

The District will rebate the installation of District approved rainwater harvesting and greywater systems in an amount approved by the Board from time-to-time.

P. Rebate for Hot Water recirculating systems

The District will rebate the installation of District approved hot water recirculation systems in an amount approved by the Board from time-to-time.

QO. Exemptions from Provisions Set Forth in Regulation 15 (A. through PN.)

(1) Retrofit Exemptions

The District's General Manager may grant an exemption from Section M in the following instances:

(a) Unavailability of Water Conserving Plumbing Fixtures to either match a well-defined historic architectural style fitted with authentic plumbing fixtures or accommodate existing house plumbing without bathroom alteration;

(b) Special health circumstances upon submittal of reasonable evidence that demonstrates that specific plumbing fixtures are required by the user that may not meet the Water Conserving Plumbing Fixture criteria defined by this regulation.

(c) Faucets at kitchen sinks or antique faucets which do not have standard threaded openings for aerators.

(2) Other Exemptions

The District's General Manager may grant exemptions from Section A. through NP.. for purposes of health, safety and sanitation or if Applicant demonstrates an "at least as effective as" water efficiency alternative. The District's General Manager shall have the sole decision of determining whether Applicant has demonstrated an "at least as effective as" water efficiency alternative.

NORTH MARIN WATER DISTRICT

REGULATION 17

WATER CONSERVATION - WEST MARIN SERVICE AREA

A. Purpose

The purpose of this regulation is to assure that water resources available to the District are put to reasonable beneficial use, that the in-stream values of Lagunitas Creek are preserved to the maximum possible extent and that the benefits of the District's water service extend to the largest number of persons.

B. Waste of Water Prohibited

(1) Customers shall not permit any water furnished by the District for the following nonessential uses:

(a) The washing of sidewalks, walkways, driveways, parking lots and other hard surfaced areas by direct hosing when runoff water directly flows to a gutter or storm drain, except as may be necessary to properly dispose of flammable or other dangerous liquids or substances, wash away spills that present a trip and fall hazard, or to prevent or eliminate materials dangerous to the public health and safety;

(b) The escape of water through breaks or leaks within the customers plumbing or private distribution system for any substantial period of time within which such break or leak should reasonably have been discovered and corrected. It shall be presumed that a period of seventy-two (72) hours after the customer discovers such a break or leak or receives notice from the District, is a reasonable time within which to correct such break or leak, or, as a minimum, to stop the flow of water from such break or leak;

(c) Irrigation in a manner or to an extent which allows excessive run off of water or unreasonable over spray of the areas being watered. Every customer is deemed to have his water system under control at all times, to know the manner and extent of his water use and any run off, and to employ available alternatives to apply irrigation water in a reasonably efficient manner;

(d) Washing cars, boats, trailers or other vehicles and machinery directly with a hose not equipped with a shutoff nozzle; and

(e) Water for non-recycling decorative water fountains.

(f) Water for new non-recirculating conveyor car wash systems; and

(g) Water for new non-recirculating industrial clothes wash systems.

(h) Water for single pass coolant systems.

(i) Potable water for outdoor landscaping during or within 48 hours of measurable rainfall;

(j) Potable water on ornamental turf in public street medians;

(k) Drinking water other than on request in eating or dining establishments;

(l) Water for the daily laundering of towels and linens in hotels and motels without offering guests the option of choosing not to have daily laundering;

(m) Water for non-functional turf as defined and determined by rulemaking of the State Water Resources Control Board of the State of California;

(2) Exempt Water Uses. All water use associated with the operation and maintenance of fire suppression equipment or employed by the District for water quality flushing and sanitation purposes shall be exempt from the provisions of this section. Use of water supplied by a private well or from a recycled water, gray water or rainwater utilization system is also exempt.

(3) Variances. Any customer of the District may make written application for a variance. Said application shall describe in detail why applicant believes a variance is justified.

(a) The General Manager of the District may grant variances for use of water otherwise prohibited by this section upon finding and determining that failure to do so would cause an emergency condition affecting the health, sanitation, fire protection or safety of the applicant or public; or, cause an unnecessary and undue hardship on applicant or public, including but not limited to, adverse economic impacts, such as loss of production or jobs~~.~~ ; or, for other reasons at the sole discretion of the General Manager.

(b) The decision of the General Manager of the District may be appealed to the Board of Directors by submitting a written appeal to the District within fifteen (15) calendar days of the day of the General Manager's decision. Upon granting any appeal, the Board of Directors may impose any conditions it determines to be just and proper. Variances granted by the Board of Directors shall be prepared in writing and the Board of Directors may require the variance be recorded at applicant's expense.

(4) Enforcement. Depending on the extent of the water waste the District may take some or all of the following actions:

(a) Telephone the customer to inform of the water waste violation including a specified period of time to correct the violation;

(b) Personally contact the customer at the address of the water service. If personal contact is unsuccessful, written notice of the violation including a date that the violation is to be corrected will be sent by certified mail to the customer;

(c) Install a flow-restricting device on the service line;

(d) Cause termination of water service and the charge for same shall be billed to the customer. Except in cases of extreme emergency as solely determined by the General Manager of the District, service shall not be reinstated until verified by the District that the violation has been corrected and all outstanding charges have been paid.

(e) Any customer who fails to repair a significant leak or otherwise eliminate waste of water within twenty days after becoming aware of it or receiving written notice from the District shall pay a penalty charge equal to ten times the commodity charge for the amount of water estimated by the District to have been wasted or $50 whichever is greater.

(f) The District may impose penalty, in an amount approved by the Board from time to time, to be assessed on the customer water bill.

C Use of Water Saving Devices

Each customer of the District is urged to install water efficient devices that meet or exceed EPA WaterSense standards, including but not limited to showerheads, sink aerators, and toilets.

D. Water-Saving Kits

The District will periodically make available from time to time to customers the following devices and incentives:

(1) A device or devices for reducing shower and sink flow rate;

(2) Dye tablets for determining toilet leaks;

(3) Other devices from time to time approved by the District;

(4) Rebates from time to time for District qualified hot water recirculation systems, greywater systems, and rainwater catchment systems.

E. Water-Saving Devices and Restrictions for New Development

(1) Water service will not be furnished to any Applicant for new or expanded service unless the water-saving devices hereinafter described are installed. Applicants for single service installations serving one dwelling unit (d.u.) or one d.u. and an accessory d.u. or applicants for projects for which the District does not have a building permit final sign off, shall pay a $1,000 deposit per d.u. to be refunded upon post inspection of the installation of the water-saving devices and restrictions and compliant water efficient landscape (section F) herein. All other projects, including developer projects requiring a water service agreement, may be subject to a water conservation deposit with amount and applicability determined by the General Manager and/or Chief Engineer on a case-by-case basis, not to exceed $1,000 per dwelling unit. Applicant shall have two years to complete the project, obtain District inspection approval and request a refund of the deposit. If after two years the project is not completed, the deposit will be forfeited to the District to be used for other Water Conservation programs. If requested by the Applicant, the District may extend the time period for project completion up to one additional year.

(2) All interior plumbing in new development shall meet the following requirements and be installed prior to occupancy approval or meter installation (whichever is the latter):

(a) Toilets and associated flush valves shall be High Efficiency Toilets (HETs), rated at not more than 1.28 gallons per flush on average ~~and shall be listed on the approved District HET list;~~ ;

(b) Urinals and associated flush valves shall be rated at not more than 0.125 gallons per flush or be a District approved non-water using urinal;

(c) Showerheads shall have a rated flow of ~~2.0~~1.8 gallons per minute or less, and only one showerhead will be allowed per bathroom;

(d) Lavatory faucets and hand-washing sinks shall have aerators or laminar flow devices with flow control inserts, orifices or other devices that restrict flow to a maximum of 1.5 gallons per minute in residential construction and 0.5 gallons per minute in commercial ~~construction~~or non-residential projects. Kitchen faucets shall have a maximum flow of 2.0 gallons per minutes in all construction;

(e) Laundry ~~facility~~ washing machines shall be District approved high-efficiency models with an integrated water factor of 4.5 or less;

(f) Dishwashers shall be high efficiency models with an Energy Star rating that use

no more than 5 gallons per cycle.

F. Water Efficient Landscape Requirement

(1) Purpose. Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable method of use. This Regulation protects water supplies through the implementation of a whole systems approach to design, construction, installation and maintenance of the landscape resulting in water conserving climate-appropriate landscapes, improved water quality and the minimization of natural resource inputs.

(2) Applicability

a. Requirements stated herein shall apply to all of the following new and rehabilitated landscape projects associated with construction that require a Building or Grading Permit, Plan Check, Design Review or water service upgrade for:

Commercial, industrial and institutional landscaping, park and greenbelt landscaping, multiple-family residential and single-family residential landscaping.

i. At District Discretion, landscape requirements for applicable projects may be deferred to the State Model Water Efficient Landscape Ordinance (California Code of Regulations Title 23. Waters, Division 2. Department of Water Resources, Chapter 2.7. Model Water Efficient Landscape Ordinance)

ii. For projects with irrigated landscape area less than 2,500 square feet, the District may choose to select any or all of the requirements to the State Model Water Efficient Landscape Ordinance (referenced above), Appendix D – Prescriptive Compliance Option.

b. Requirements stated herein shall not apply to:

i. Registered local, state or federal historical landscape area;

ii. Ecological restoration or mined-land reclamation projects that do not require a permanent irrigation system.

(3) Landscape Design Plan. For each landscape project subject to this Regulation, applicants shall submit a landscape design plan and install a landscape in accordance with the following:

a. Amendments, Mulching and Soil Conditioning

i. A minimum of 8” of non-mechanically compacted soil shall be available for water absorption and root growth in planted areas.

ii. Prior to incorporating compost or fertilizer and planting of any materials, compacted soils shall be transformed into friable condition.

iii. Incorporate compost or natural fertilizer into the soil to a minimum depth of 8" at a minimum rate of 8 cubic yards per 1000 square feet and per specific amendment recommendations from a soils management report.

iv. A minimum 3” layer of District approved mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers or direct seeding applications. Mulch shall be made from recycled or post-consumer products when possible.

b. Plants

i. Selected plants, other than allowable turf in residential projects, shall be Water Use Classifications of Landscape Species (WUCOLS) categorized “Very Low” or “Low” water use from the North-Central Coastal Region and shall not cause the Estimated Water Use (ETWU) to exceed the Maximum Applied Water Allowance (MAWA) using and evapotranspiration factor of 0.55 for residential and 0.45 for non-residential sites and a WUCOLS corresponding plant factor of 0.3 or less for Very Low or Low water plants. (Special Landscape Area including areas dedicated to edible plants, recreational uses, or areas irrigated solely with recycled water shall not be subjected to the plant selection requirements and shall use an evapotranspiration factor of 1.0 for the purposes of calculating ETWU and MAWA).

ii. Plants with similar water use needs shall be grouped together in distinct hydrozones and where irrigation is required each distinct hydrozone shall be irrigated with a separate valve(s) and noted on the plans.

iii. Moderate and High water use plants as categorized by WUCOLS, shall not be mixed with low or moderate water use plants.

iv. All non-turf plants shall be selected, spaced and planted appropriately based upon their adaptability to the climatic, soils, and topographical conditions of the project site.

v. Turf shall not be planted in the following conditions:

1. Slopes exceeding 10%.

2. Planting areas 10 feet wide (in any direction) or less unless irrigated with District approved subsurface irrigation or with recycled water.

3. Street medians, traffic islands, planter strips or bulbouts of any size

4. Front yard landscaping of single-family houses where the backyard landscape is not developer installed.

vi. Total turf areas shall not exceed the following

1. Single Family: 25% of the total landscape area not to exceed 400 square feet.

2. Townhouse/Condominium (THC): 100 square feet.

3. Apartment (APT): 50 square feet.

4. Commercial and/or non-residential: 0 square feet.

Special Landscape Areas: The preceding turf limitations shal not apply to sites irrigated with recycled water or areas dedicated to District approved recreational uses.

vii. Invasive plants as listed by the California Invasive Plant Council are prohibited.

c. Water Features

i. Recirculating water systems shall be used for water features

ii. Recycled water shall be used in water features when available onsite.

(4) Irrigation Design Plan. For each landscape project subject to this Regulation, applicants shall submit an irrigation design plan that is designed and installed to meet the MAWA irrigation efficiency criteria and in accordance with the following:

a. Dedicated irrigation meter or for private landscape water submeter for residential must be specified for all non-residential irrigated landscapes and residential irrigated landscapes of 5,000 square feet or greater.

b. Irrigation systems with meters 1 ½" or greater or non-residential landscapes with irrigated landscapes over 5,000 square feet, require a high-flow sensor that can detect high-flow conditions and have the capabilities to shut off the system.

c. Isolation valves shall be installed at the point of connection and before each valve or valve manifold.

d. Weather-based or other sensor based self-adjusting irrigation controllers, with non-volatile memory, shall be required.

e. Rain sensors shall be installed for each irrigation controller.

f. Pressure regulation and/or booster pumps shall be installed so that all components of the irrigation system operate at the manufacturer's recommended optimal pressure.

g. Irrigation system shall be designed to prevent runoff or overspray onto non-targeted areas.

h. Point source irrigation is required where plant height at maturity will affect the uniformity of an overhead system.

i. Minimum 24" setback of overhead irrigation is required where turf is directly adjacent to a continuous hardscape that flows or could runoff into the curb and gutter.

j. Slopes greater than 10% shall be irrigated with point source or other low-volume irrigation technology.

k. A single valve shall not irrigate hydrozones that mix high water use plants with moderate or low water use plants.

l. Trees shall be placed on separate valves.

m. All non-turf landscape areas shall be irrigated with District approved drip irrigation systems or other alternative District approved point source irrigation equipment.

n. Sprinkler heads, rotors and other emission devices on a valve shall have matched precipitation rates. All spray irrigation systems shall be a brake rotary type or be multi-stream, multi-trajectory, adjustable arc, rotating stream sprinkler with matched precipitation rates. All rotating stream sprinkler units shall be installed in a 40 psi pressure regulated spray head body and provide the highest potential distribution uniformity. All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher.

o. Head-to-head coverage is required unless otherwise directed by the manufacturer's specifications

p. Swing joints or other riser protection components are required on all risers.

q. Check valves shall be installed to prevent low-head drainage.

r. Master shut-off valves are required on all projects with irrigated landscapes over

5,000 square feet.

s. Irrigation efficiency factors of 0.75 for overhead spray devices and 0.81 for drip system devices shall be used for ETWU and MAWA calculations.

t. A diagram of the irrigation plan, including hydrozones and equipment locations, shall be provided and kept with the irrigation controller for subsequent management purposes.

(5) Irrigation Audit: Project applicants shall submit an irrigation audit report for all applicable projects.

a. The project applicant shall submit an irrigation audit report that includes inspection, system tune-up, system test with distribution uniformity, reporting overspray and runoff that causes overland flow, and precipitation of an irrigation schedule, including configuring irrigation controllers with application rate, soil types, plant factors, slope, exposure and other factors necessary for accurate programming.

b. All landscape irrigation audits shall be conducted by a local agency landscape irrigation auditor or a third-party certified landscape irrigation auditor. Landscape audits shall not be conducted by the person who designed or installed the landscape.

c. In production home developments, audits of 15% of the landscapes shall be sufficient.

G. Rebate for High-Efficiency Washing Machines in Residences

District customers in the West Marin Service area are eligible for rebate as available from time to time for District approved high-efficiency washing machines in existing residences. New construction in the District's West Marin service area are required to be equipped with high-efficiency washing machines in accordance with Section E. (2) (e) of this regulation. District rebates are not available for high-efficiency washing machines required in new residential construction.

H. Rebate for Removing Irrigated Turf from Residential Properties

(1) The owner of property containing a formal lawn area or areas shall be eligible for a cash rebate from the District if said owner removes all or part of the formal lawn area(s) and replaces same with eligible plant materials and meets the qualification requirements. "Formal lawn area" means an existing lawn in good condition which is irrigated regularly, by an automatic inground irrigation system, with water furnished by the District and mowed regularly.

(2) Qualification requirements:

(a) Application for rebate must be made on District's form prior to removing the formal lawn area(s). All applicable information requested must be supplied.

(b) Application for rebate must include a landscape plan or sketch showing the size, in square feet, and location of all formal lawn area(s) on the Applicant's parcel and the location of formal lawn area(s) that will be removed and replaced.

(c) The Applicant must utilize only eligible replacement materials for the formal lawn area(s) removed which are to be considered in calculating the rebate. Eligible replacement materials are District-approved water-conserving and low water use California native plants or District-approved synthetic turf.

(d) If the automatic inground irrigation system will continue to serve some remaining formal lawn area(s), Applicant must modify the system so that water is not served to the proposed replacement area.

(e) Formal lawn area(s) removed and replanted with eligible replacement materials shall be mulched with material suitably thick to prevent weed growth (minimum three inches) and reduce water loss. Areas shall not be irrigated except for limited hand-watering or temporary drip irrigation to establish the plant material.

(f) The owner of the property must sign a statement promising not to reinstall lawn in formal lawn area(s) where lawn has been removed as long as the owner holds property. The owner may be relieved of this promise at any time by returning the full amount of the District's rebate.

(g) The General Manager may at any time halt or suspend acceptance of applications for rebate if the District's funds appropriated for this purpose become exhausted.

(3) After reviewing the information supplied by the Applicant and making at least one site inspection to assure that qualification conditions have been met, District shall mail a rebate check.

(4) The amount of the rebate shall be determined by the Board from time to time.

(5) Rebates may be available for non-residential property or for hotels, motels, hospitals, government housing or a senior citizen complex on a parcel which is separately owned and assessed. Maximum rebate amount for a non-residential property shall be determined by General Manager on a case-by-case basis.

I. ~~Landscape Rebate Alternatives~~Rebate for Removal of Pool

(1) The District will rebate the permitted removal of an existing pool. The rebate shall be on a square foot basis with maximum level equivalent to the amounts set forth in Section H. The amount of the rebate shall be determined by the Board from time-to-time.~~The District will consider, and may approve, requests to substitute for any of the requirements in section F., well-designed alternatives or innovations that will effect similar significant and continuing reductions of water requirements. Determination of eligibility shall be at the sole discretion of the General Manager or designated staff.~~

J. Requirement for Installation of Water Conserving Plumbing Fixtures Upon Change of Property Ownership or Upon Bathroom Alteration

(1) Definitions.

(a) "Water-Conserving Plumbing Fixtures" means any toilet rated at 1.6 gallons of water per flush or less, urinals rated at 1.0 gallons of water per flush, showerheads with a flow rated at 2.0 gallons of water per minute or lavatory faucets that can emit no more than 1.5 gallons of water per minute.

(b) "Change in Property Ownership" means a transfer of present interest of real property, or a transfer of the right to beneficial use thereof, the value of which is substantially equal to the proportion of ownership interest transferred.

(c) "Bathroom Alteration" means any alteration or addition of a bathroom that includes replacement or addition of any toilet(s).

(d) "Retrofit" means replacing "Existing Plumbing Fixtures" with "Water-Conserving Plumbing Fixtures."

(e) "Existing Plumbing Fixtures" means any toilet using more than 1.6 gallons of water per flush, urinals using more than 1.0 gallons of water per flush, showerheads with a flow rated more than 2.0 gallons of water per minute or lavatory faucets that emit more than 1.5 gallons of water per minute.

(f) "Existing Structure" means any structure built and available for use or occupancy on or before March 1, 1992, which is equipped with a toilet using more than 1.6 gallons of water per flush or a urinal using more than 1.0 gallons of water per flush.

(2) Retrofit Upon Change of Property Ownership.

All Existing Plumbing Fixtures in Existing Structures receiving water from the District's water system, including residential, commercial, industrial and government structures, shall, at the time of Change of Ownership, be Retrofitted, if not already done, exclusively with Water-Conserving Plumbing Fixtures. This requirement shall affect all escrow accounts involving transfer of property opened after February 29, 1992. Escrow accounts opened before March 1, 1992 which close after March 1, 1992 shall not be affected by this requirement.

(3) Retrofit Upon Bathroom Alteration.

Effective March 1, 1992, all structures receiving water from the District's water system, including residential, commercial, industrial and government, shall, upon Bathroom Alteration, be Retrofitted exclusively with Water-Conserving Plumbing Fixtures.

(4) Retrofit Exemptions.

The District's General Manager may grant an exemption in the following instances:

(a) Unavailability of Water-Conserving Plumbing Fixtures to either match a well-defined historic architectural style fitted with authentic plumbing fixtures or accommodates existing house plumbing without Bathroom Alteration.

(b) Special health circumstances upon submittal of reasonable evidence that demonstrates that specific plumbing fixtures are required by the user that may not meet the Water Conserving Plumbing Fixture criteria defined by this regulation.

(c) Faucets at kitchen sinks or antique faucets which do not have standard threaded openings for aerators.

(5) Compliance and Penalties.

Compliance shall be by the honor system. It shall be the Seller's responsibility (in the case of Change of Property Ownership) and the title holder's responsibility (in the case of Bathroom Alteration) to obtain, in addition to any normal permits required by agencies other than the District, to apply for and obtain from the District a Certificate of Compliance acknowledging that the Seller or title holder has stated that the Retrofit installation required by this regulation has been completed. If the District later determines or finds that the work was not done or was not completed or that Water Conserving Plumbing Fixtures are no longer present, the District may assess an annual fee of 20% of the estimated annual water bill as determined by the District until the owner of the property demonstrates that the required Retrofit work has in fact been done. A site inspection shall be required in such cases and the owner shall be charged $35 for each such site inspection as an added fee on the owner's

water bill.

(6) Alternative Compliance Procedure for Transfers of Residential Property

At Seller's option, Seller shall pay the District $315 per bathroom that does not fully comply with Regulation 17 H. Half bathrooms shall count as one bathroom. The District shall thereupon immediately provide a Certificate of Compliance to Seller. Buyer shall then be responsible for installation of the Water Conserving Plumbing Fixtures and Seller shall provide Buyer with a copy of District Regulation 17 H. and shall notify Buyer of this requirement in writing before close of escrow. Buyer shall have one year from the date of close of escrow to install such fixtures. Upon being notified that said fixtures have been installed and making a brief inspection confirming installation, the District shall pay the Buyer an amount equal to the payment made to District by Seller. If after one year, the Water Conserving Plumbing Fixtures have not been installed, the District shall use this money for any other Board approved water conservation program and shall be under no obligation to pay said money to Buyer.

(7) Responsibility for Compliance Negotiable

The Seller is responsible for compliance with Regulation 17 J, however responsibility for payment of the deposit specified in Section J (6) may be assumed by the Buyer so long as the agreement is not otherwise inconsistent with the terms of Regulation 17 J. Any such agreement shall be evidenced in a writing signed by both the Buyer and Seller.

K. High Efficiency Toilet Replacement Program(s)

(1) A High Efficiency Toilet (HET) is defined as any toilet with an average flush volume of 1.28 gallons per flush or less. An Ultra High-Efficiency Toilet (UHET) also known as a MaP Premium toilet is defined as any toilet with an average flush volume less than1.1 gallons per flush.

(2) Any qualifying customer of the District who removes and recycles all toilets rated to use more than 1.6 gallons per flush and replaces same with a District approved HET or UHET may request a cash rebate or bill credit in an amount established by the Board of Directors from time to time for each such toilet replaced.

(3) To qualify for a rebate(s) hereunder, application shall be made on a form available from the District and person signing application shall:

(a) Request District make a brief inspection of customer's structure at a time and date approved in advance by customer to identify water conservation measures appropriate and effective for the customer to implement or be pre-qualified by District staff via other communications means. Should customer refuse access for an inspection or not receive pre-qualification, District shall not be under any obligation to make a rebate. Inspection requirements are subject to available staff time.

(b) Be a customer of the District and the customer's structure in which the replaced toilet(s) is located shall be served water in the District's West Marin Service Area and replacing a toilet installed prior to January 1, 1992, and manufactured to flush more than 1.6 gallons per flush; and

(c) Provide District with bill of sale or original receipt of sale within the current fiscal year and made out to said customer by person or vendor selling customer the HET or UHET or, in lieu thereof, provide District with letter

addressed to said customer signed by a licensed plumber or contractor stating that a HET(s) or UHET(s) has been installed by said plumber or contractor at the customer's address; and

(4) If the customer is renting the structure, a rebate will be made provided customer includes with the application a letter from the owner of the property consenting to District making rebate payment to customer for the replacement of a non-water conserving toilet(s).

(5) Rebates are not available for toilets installed in buildings constructed after January 1, 1992 or for replacement of toilets rated to use 1.6 gallons per flush or less.

(6) Free or subsidized UHET giveaways may be available to customers from time to time. Eligibility requirements listed in K (3) (a) to (d) apply to this program should it become available.

L. Rebates for District Approved Swimming Pool Covers

District customers are eligible for rebates as available from time to time for purchasing District approved swimming pool covers. Eligible pool covers must be a solar or safety cover with non-netted type material and, at least 12 mil in thickness, and at least 450 square feet..

M. Weather Based Irrigation Controller Installation Program

(1) A Weather Based Irrigation Controller is defined as any irrigation controller using weather data to create the actual irrigation schedule and which schedule is automatically adjusted by the controller to meet the applied water demand based on actual weather data. Weather Based Irrigation Controllers may either receive "real time" weather data or generate the weather data using an integrated solar radiation sensor.

(2) District customers using more than an average of 400 gallons per day are eligible for rebates or vouchers as available from time to time for purchasing District approved Weather Based Irrigation Controllers. Directly installed Weather Based Irrigation Controllers may be available from time to time. Customers receiving Weather Based Irrigation Controller rebates or vouchers may be subject to a pre and post installation inspection.

N. Landscape Water Efficiency Rebate

(1) Landscape water efficient rebates are available to customers who install District qualified water efficient landscape equipment including:

(a) Drip irrigation systems

(b) Water pressure-regulating devices

(c) Check valves

(d) Multi-stream rotating sprinkler nozzles (lawn areas only)

(e) Rain shut-off devices

(f) Mulch

(g) Soil conditioner/amendment

(2) Rebate amounts will be established by the Board of Directors from time to time depending on customer classification and water savings potential. Customers are allowed only up to the maximum rebate level for the life of the program.

(3) Applicant shall request and agree to a brief District pre-inspection of customer's property to identify water efficient landscape actions to be taken. District will pre-approve and post-inspect to confirm the retrofit installations. Inspections are subject to available staff time.

(4) Applicant shall provide District with a complete bill of sale or original receipt of sale within the current fiscal year, clearly showing the purchase of the landscape water efficiency installed items noted in the pre-inspection.

(5) Free or subsidized water efficient landscape items such as rain sensors, and mulch may be available to customers. Eligibility requirements listed in N(1) through (3) apply should items become available.

O. Rebate for Rainwater Harvesting and Greywater Systems

The District will rebate the installation of District approved rainwater harvesting and greywater systems in an amount approved by the Board from time-to-time.

P. Rebate for Hot Water recirculating systems

The District will rebate the installation of District approved hot water recirculation systems in an amount approved by the Board from time-to-time.

Q. Exemptions from Provisions Set Forth in Regulation 17 (A. through PM.)

(1) Retrofit Exemptions

The District's General Manager may grant an exemption from Section M. in the following instances:

(a) Unavailability of Water-Conserving Plumbing Fixtures to either match a well-defined historic architectural style fitted with authentic plumbing fixtures or accommodate existing house plumbing without Bathroom Alteration;

(b) Special health circumstances upon submittal of reasonable evidence that demonstrates that specific plumbing fixtures are required by the user that may not meet the Water Conserving Plumbing Fixture criteria defined by this regulation.

(c) Faucets at kitchen sinks or antique faucets which do not have standard threaded openings for aerators.

(2) Other Exemptions

The District's General Manager may grant exemptions from Section A. through NP. only for purposes of health, safety and sanitation or if applicant demonstrates an "at least as effective as" water efficiency alternative. The District's General Manager shall have the sole decision of determining whether applicant has demonstrated an "at least as effective as" water efficiency alternative.

RESOLUTION NO. 23-XX

RESOLUTION OF THE BOARD OF DIRECTORS OF NORTH MARIN WATER DISTRICT AMENDING REGULATION 15

WHEREAS, pursuant to Water Code Section 31024, the Board of Directors (Board) of the North Marin Water District (District) may establish rules and regulations for the sale, distribution, and use of water; and

WHEREAS, District Regulation 15 provides the requirements, conditions and procedures as well as restrictions and exemptions for all water conservation programs, available in the Novato Service Area; and

WHEREAS, District staff has recommended updating the language contained in various sections of Regulation 15 to continue keep the water conservation innovative, robust and comprehensive; and

NOW, THEREFORE, BE IT RESOLVED:

1. The Board of Directors of North Marin Water District finds and determines that the foregoing Recitals are true and correct, and incorporates the Recitals herein.
2. The Board of Directors of the North Marin Water District hereby approves the amended Regulation 15 as indicated in **EXHIBIT A**, attached hereto and incorporated by this reference.
3. This Resolution shall be effective immediately upon adoption and shall remain in effect until such time as modified, repealed, or superseded by further resolution of the Board.
4. If any provision of this Resolution, or any part thereof, is for any reason held to be *ultra vires*, invalid, unenforceable, or unconstitutional, the remaining provisions shall not be affected but shall remain in full force and effect, and to this end the provisions of this Resolution are severable.

* * * * *

I hereby certify that the foregoing is a true and complete copy of a resolution duly and regularly adopted by the Board of Directors of NORTH MARIN WATER DISTRICT at a regular meeting of said Board held on December 19, 2023 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

Eileen Mulliner, Secretary
North Marin Water District

(SEAL)

RESOLUTION NO. 23-XX

RESOLUTION OF THE BOARD OF DIRECTORS OF NORTH MARIN WATER DISTRICT AMENDING REGULATION 17

WHEREAS, pursuant to Water Code Section 31024, the Board of Directors (Board) of the North Marin Water District (District) may establish rules and regulations for the sale, distribution, and use of water; and

WHEREAS, District Regulation 17 provides the requirements, conditions and procedures as well as restrictions and exemptions for all water conservation programs, available in the West Marin Service Area; and

WHEREAS, District staff has recommended updating the language contained in various sections of Regulation 17 to continue keep the water conservation innovative, robust and comprehensive; and

NOW, THEREFORE, BE IT RESOLVED:

1. The Board of Directors of North Marin Water District finds and determines that the foregoing Recitals are true and correct, and incorporates the Recitals herein.
2. The Board of Directors of the North Marin Water District hereby approves the amended Regulation 17 as indicated in **EXHIBIT A**, attached hereto and incorporated by this reference.
3. This Resolution shall be effective immediately upon adoption and shall remain in effect until such time as modified, repealed, or superseded by further resolution of the Board.
4. If any provision of this Resolution, or any part thereof, is for any reason held to be *ultra vires*, invalid, unenforceable, or unconstitutional, the remaining provisions shall not be affected but shall remain in full force and effect, and to this end the provisions of this Resolution are severable.

* * * * *

I hereby certify that the foregoing is a true and complete copy of a resolution duly and regularly adopted by the Board of Directors of NORTH MARIN WATER DISTRICT at a regular meeting of said Board held on December 19, 2023 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

Eileen Mulliner, Secretary
North Marin Water District

(SEAL)

7

NORTH MARIN WATER DISTRICT

MEMORANDUM

To: Board of Directors December 19, 2023

From: Tony Williams, General Manager
Eric Miller, Assistant GM/Chief Engineer

Subj: Consider Approving the Updated Regulation 18 – Recycled Water Service
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RECOMMENDED ACTION: That the Board:
1) Adopt Ordinance No. 47 Repealing Ordinance 24
2) Adopt Resolution No. 23-XX Regulation 18 Recycled Water Service

FINANCIAL IMPACT: None at this time

Background

District Regulation 18 describes the types and availability of recycled water as well as the requirements and procedures, including formal agreements and permits necessary for connection to and use of recycled water supplied through the District's Recycled Water distribution system. These regulations generally apply to new development but can be applicable to a commercial property owner requesting new recycled water service for certain approved uses and where the District has determined a retrofit of the existing water service facilities is feasible to accommodate recycled water service.

Regulation 18 was originally adopted by the Board through Resolution No. 08-20 in September 2008 in anticipation of the implementation of the District's then new Recycled Water service. The Regulation was updated in 2011 to include required language from the State Water Resources Control Board in order to be eligible for Clean Water State Revolving Fund low interest loans. The loans were necessary to fund the installation of the distribution system and the changes regulation added text mandating use of recycled water for new and existing customers should recycled water become available as well as adding penalties for noncompliance and exemption requests. These changes were formally approved through Ordinance 24.

Proposed Update

Although Regulation 18 has generally met the needs of the District and satisfies state requirements, it has become evident that it lacks clarity on the definition of terms used, details on requirements, conditions and procedures for establishing recycled water service, and a clear understanding of responsibilities of both the District and the recycled water customers. The revised draft Regulation (Attachment 1) is provided as well as the current version of the regulation (Attachment 2). The revised version required the addition of new and expanded sections and

because these changes are extensive and required format adjustments, it proved difficult to show the changes using the existing version. The development of the revised Regulation included input from various key staff from Operations, Engineering and Water Quality, as well as assistance from the District's on-call consulting firm West Yost. West Yost also reviewed similar regulations of other established Bay Area recycled water providers to determine general industry practice.

Ordinance No. 24 was originally adopted to establish the 2011 version of Regulation 18 to satisfy state funding requirements for recycled water projects that the District was planning at the time and subsequently received state funding. In general, ordinances are not required to establish or amend District Regulations and therefore repealing Ordinance No. 24 is recommended. Repealing Ordinance No. 24 will effectively repeal the current version of Regulation 18. The proposed new version of Regulation 18 can be adopted by Resolution which is the recommendation of staff.

RECOMMENDATION

That the Board: 1) Adopt Ordinance No. 47 (Attachment 3) that repeals Ordinance No. 24 Recycled Water Service; and 2) Adopt Resolution No. 23-XX (Attachment 4) Regulation 18 Recycled Water Service.

ATTACHMENTS:

1. Draft Revised Regulation 18
2. Current Version of Regulation 18
3. Draft Ordinance No. 47 Repealing Ordinance No. 24.
4. Resolution No. 23-XX Approving Regulation 18 (without Exhibit A)

NORTH MARIN WATER DISTRICT

REGULATION 18

RECYCLED WATER SERVICE

a. Intent and Purpose

The purpose of this Regulation is to set forth uniform requirements for the use of water furnished from the District's recycled water system. This regulation shall govern all use of recycled water furnished by the District and shall apply to all consumers thereof. The objectives of this regulation are to:

(1) Prevent a public hazard, public nuisance or other condition detrimental to the public health, welfare and safety, or detrimental to the environment, from developing from or in connection with the distribution of recycled water.

(2) Maintain conformance to State regulatory requirements regarding recycled water use.

(3) Provide for the setting of rates, charges, and fees that equitably distribute the cost of operation, maintenance, and improvement of the District's water system to those who benefit.

(4) Provide for monitoring, compliance, and enforcement activities resulting from or in connection with the use of recycled water furnished by the District.

b. Recycled Water Use

Recycled water is a valuable resource that extends the District's water supply. Recycled water available to and purveyed by the District shall be used only for uses as are permitted under set in Title 22 of the California Code of Regulations and with the general water reuse order (State General Order) from the State Water Resources Control Board (SWRCB, State Water Board) and approved by the District Board of Directors. Recycled water shall be used in accordance with the District's Recycled Water Users Manual (Recycled Water Manual) as may be amended from time to time.

c. Definitions

As used in this Regulation 18, the following terms have the meaning stated below.

(1) Applicant
Shall mean a person who applies for recycled water service (under Regulation 1) or seeks an extension agreement (under Regulation 25).

(2) Consumer
Shall mean any person, persons, or firm including any public body or institution with an account with the District for service. The consumer may be the owner, tenant, or property manager, as appropriate. The consumer may be a different person than the applicant.

(3) District
Shall mean the North Marin Water District.

(4) Chief Engineer
Shall mean the Chief Engineer of the North Marin Water District, appointed by the Board of Directors, or his or her authorized representative acting within the scope of assigned duties. The Chief Engineer as so appointed shall be a professional engineer registered by the State of California. Notwithstanding the two preceding sentences, the General Manager, if so registered, may act directly as Chief Engineer.

(5) Distribution Infrastructure
Shall mean the recycled water facilities owned, operated, and maintained by the District to provide recycled water services to the public in general. With respect to the facilities that provide recycled water service, District facilities comprise the primary water meter and all facilities upstream thereof, including pipelines, pumps and other appurtenances used to transport and distribute recycled water, water meters, and reservoirs and other storage and treatment facilities.

(6) General Manager
Shall mean the General Manager of the North Marin Water District, appointed by the Board of Directors, or his or her authorized representative acting within the scope of assigned duties.

(7) Offsite Facilities
Shall mean all recycled water pipelines, water meters, and connecting service lines on the upstream (street) side of the water meter. Offsite facilities are owned by the District and are part of the public recycled water distribution system.

(8) Onsite Facilities
Shall mean all recycled water distribution facilities on private property, downstream of the water meter. Onsite facilities are privately owned by the owner of the property which they serve.

(9) Recycled Water
Shall mean reclaimed water from wastewater, treated and disinfected for beneficial non-potable reuse within the District's service area. Recycled water shall be produced by further treatment of secondary effluent as defined in Title 22, California Code of Regulations, Division 4, Environmental Health, Chapter 3, Reclamation Criteria, as it may be amended from time to time.

(10) Recycled Water Service Area
Shall mean the area within the District water service area, as defined by the Chief Engineer, where recycled water pipelines allow for connections for recycled water service, and the area which will receive recycled water service within a reasonable time.

d. District Responsibilities

The primary responsibility of the District related to recycled water service is to protect public health and safety and the environment by maintaining compliance with the State General Order and State laws and regulations associated with recycled water use. The authority for enforcement of this Regulation is vested in the District's General Manager, or designee. A field inspector or other designated employee of the District is authorized to act as an agent of the District on behalf of the General Manager, with the power to inspect and issue notices of violations of this chapter.

The Chief Engineer or designee shall prepare, maintain, and update from time to time the District Standard Specifications for Potable Water, Recycled Water and Sewer Facilities (Standard Specifications) and the District Recycled Water Manual to implement this Regulation.

The District shall be responsible for the review and approval of plans, the inspection of recycled water facilities for off-site and on-site construction, and the issuance of a Recycled Water Use Permit in accordance with Regulation 18.f. The District shall also be responsible for submitting site-specific engineering reports, as may be required for on-site recycled water improvements, to the SWRCB Division of Drinking Water (DDW).

e. Requirements, Conditions and Procedure for Establishment of Recycled Water Service

(1) Recycled Water Service Area

The Recycled Water Service Area shall be determined by the Chief Engineer.

(2) Conditions for Recycled Water Service Eligibility

Recycled water service connections shall be considered subject to:

(a) The property location within the District's Recycled Water Service Area;
(b) Close proximity to the recycled water distribution system such that an extension of the distribution system is deemed reasonable by the Chief Engineer;
(c) The availability of recycled water supply and system capacity;
(d) The proposed use consistent with approved uses within the District Recycled Water Manual;
(e) The connection to recycled water service at the existing consumer and/or existing development's property is determined to not pose a potential threat to public health, safety and welfare, and/or the protection of the environment; and
(f) Approval by the Chief Engineer.

(3) Mandatory Use

The District reserves the right to require new development and existing consumers within the Recycled Water Service Area to apply for a permit and use recycled water in-lieu of potable water for all approved non-potable uses, upon determination by the District that the site is eligible under the criteria in Regulation 18.e(2). If the District determines that recycled water service is required, written notification shall be provided to the development project representative or existing consumer (Applicant) that recycled water use is required. The notification shall include information regarding:

(a) District water service connection application procedures,
(b) a description of any recycled water facilities that must be constructed to extend service to the Applicant's property, including on-site improvements,
(c) a date by which the Applicant site must connect to recycled water service,
(d) the Facilities Reserve Charge and other fees associated with connection to the District recycled water distribution system, and
(e) the rate for recycled water in effect at the time of connection.

The Applicant shall apply for recycled water use permit in accordance with Regulation 18.f. The planning, design, installation, and cost of connection to the District's recycled water system, including District fees and charges, extension of recycled water facilities to the Applicant's property and any on-site improvements for recycled water use shall be the responsibility of the Applicant.

The Applicant may request exemption from required use in accordance with Regulation 18.e(5).

(4) Voluntary Use

Applicants for new, expanded, or retrofit water service within the Recycled Water Service Area may voluntarily connect to recycled water service at their cost, upon determination by the District that the site is eligible under the criteria in Regulation 18.e(2). The Applicant shall apply for recycled water use permit in accordance with Regulation 18.f.

The planning, design, installation, and cost of connection to the District's recycled water system, including extension of recycled water facilities to the Applicant's property and any on-site improvements for recycled water use shall be the responsibility of the

Applicant. The Applicant shall be responsible for any District fees and charges associated with the recycled water connection.

(5) Exemption

(a) Exemption Requests. Existing consumers or Applicants may request exemption from mandatory use of recycled water. A written request for an exemption shall be submitted to the District and shall include specific reasons that constitute the necessity of an exemption. The request for exemption shall include sufficient supporting information for at least one of the following criteria:

(i) Connection to the recycled water system and use of recycled water is determined not economical for the consumer, applicant, or the District. Recycled water service that is not economical, as used herein, shall be as reasonably determined by the Chief Engineer.

(ii) Anticipated or existing recycled water demands are minor compared to overall water demands.

(iii) Inadequate recycled water supply is available to service the demand.

(iv) Conversion to recycled water service at the existing consumer and/or existing development's property is determined to pose a potential threat to public health, safety and welfare, and/or the protection of the environment.

(v) The current or planned use(s) of recycled water is/are not among the list of allowable uses as specified under State law, and/or are not included in the permitted uses as issued within the District's recycled water distribution permit from the SWRCB.

After receipt of such request for exemption, the District may ask for additional written information from the consumer/applicant. The General Manager shall make a determination on all requests for exemptions within thirty (30) calendar days. Denial of a request for an exemption can be appealed to the District Board of Directors. Appeals shall be in writing, and filed with the District within ten (10) business days after the General Manager's decision and shall state the specific grounds for appeal. The Board of Directors will hear the appeal within sixty (60) calendar days after the appeal has been filed and will issue its decision within thirty (30) days after the appeal is heard. The Board's decision shall be final.

(b) Mandatory Use Exemptions. New development and existing consumers shall be exempt from mandatory use of recycled water should the District determine at least one of the following criteria:

(i) Existing or proposed residential use will contain no landscape areas owned in common requiring irrigation.

(ii) Existing or proposed development of single-family, detached residences for which no common-area association or entity will have responsibility for irrigation system maintenance and operations.

(iii) Existing or proposed development for which recycled water service is determined by the Chief Engineer not to be economical because of its distance from available or planned recycled water sources; and/or because anticipated or existing recycled water demands are minor compared to overall water demands.

(iv) Existing distribution infrastructure capacity is insufficient to meet the anticipated recycled water demands.

(v) Recycled water supply is insufficient to meet the anticipated recycled water demands.

(vi) Recycled water service at the existing consumer and/or existing development's property is determined to pose a potential threat to public health, safety and welfare, and/or the protection of the environment.

f. Recycled Water Use Permits

(1) Applicants for recycled water service shall submit to the District an application for service as prescribed in Regulation 1 or Regulation 3, and in the District Recycled Water Manual.

(2) After review and acceptance of the application, the District will issue a Recycled Water Use Permit that will specify the requirements for the Applicant's onsite water distribution facilities, the portions of the premises where recycled water will be applied, and other matters as determined by the District. Recycled water service will not commence until the District verifies compliance with the permit requirements.

(3) Recycled water consumers shall maintain a Recycled Water Use Permit. Consumers shall comply with all permitting, tracking, record keeping, monitoring, and inspection procedures that may be established by the District from time to time for such permit holders. The Recycled Water Use Permit grants the consumer permission to use recycled water in conformance with District recycled water standards, manuals, guidelines, codes, ordinances, and policies, including any special site-specific requirements that may be identified.

(4) Any proposed changes to the consumer-owned recycled water facilities, including areas and types of recycled water use, shall be submitted for approval by the District in advance of making such modifications.

g. Recycled Water Service and Facilities Reserve Charges

Fees and charges for recycled water shall be in accordance with the amount specified in a resolution establishing fees and charges and approved by the Board of Directors, and in accordance with Regulations 1 and 54.

h. Design and Construction

The Applicant shall be responsible for the planning, design, and construction of offsite and onsite facilities in accordance with District Regulations, Standard Specifications, and the District Recycled Water Manual, and all associated costs and District fees and charges.

The Applicant shall apply for recycled water service with the District in accordance with Regulation 1 and the District Recycled Water Manual. Planning for recycled water service shall be in accordance with Regulation 24. Extension of recycled water to the Applicant's site shall be conducted in accordance with Regulation 28.

Design and construction of recycled water facilities shall conform with the District Standard Specifications. Retrofit of onsite facilities and installation of onsite facilities shall conform to the District Recycled Water Manual.

Design plans shall be approved by the District and fees collected prior to construction. Construction of offsite and onsite recycled water facilities shall be inspected by a District inspector or designee, and in accordance with Regulation 28. Upon satisfactory inspection and testing of

offsite and onsite facilities, the District shall issue a Recycled Water Permit and commence recycled water delivery to the Applicant's site.

i. Installation and Maintenance Responsibilities

Applicants for new or expanded water service, or those consumers requesting conversion to recycled service, shall be responsible to pay the full cost of facilities necessary to deliver recycled water to the premises, including but not limited to the planning, design, and construction costs of any required onsite and offsite facilities, and in accordance with Regulation 25. Applicants shall be responsible for all District fees and charges associated with connection to the District's recycled water facilities.

All offsite recycled water facilities constructed up to the meter shall become the property of the District for operation and maintenance upon satisfactory inspection, testing and closeout in accordance with the water service agreement executed in accordance with Regulation 1. All privately owned facilities, onsite facilities, shall be installed, owned, and operated by the consumer in accordance with Regulation 10.

j. Consumer Responsibilities

Consumers shall comply with all of the provisions of this Regulation relative to the use of recycled water during the entire time that recycled water is delivered to the consumer. In addition, consumers shall comply with all applicable provisions contained in the District Recycled Water Manual, permit conditions, and other laws, regulations, agreements, orders, guidelines, and/or standards, and any amending or superseding requirements thereof.

The consumer shall bear all costs incurred to remedy the noncompliance with any such provisions, and shall pay any monetary penalties or fines imposed for the violation of or noncompliance with such provisions. The omissions or acts by the District shall not relieve the consumer of responsibility to comply with the provisions of this Regulation. Without limiting the generality of the foregoing, consumers shall comply with the following requirements:

(1) Consumer-Owned Facilities.

Consumer-owned facilities include all onsite recycled water distribution facilities within the property, downstream of the water meter. Consumers shall design and construct consumer-owned recycled water facilities in accordance with District Standard Specifications and Recycled Water Manual. Consumers shall maintain such facilities in good working order as to achieve compliance with all District requirements applicable to the use of recycled water, including Regulation 10. The consumer shall be responsible for all costs of operating and maintaining the water service facilities on the consumers' side of the water service meter(s).

(2) Use of Recycled Water.

Consumers shall be responsible for application of recycled water on their use areas and the associated operations and maintenance of the consumer-owned facilities as approved in their Recycled Water Use Permit. Use of recycled water beyond the areas and uses in the approved permit requires a permit modification application to be submitted to the District, payment of applicable fees and charges, and written District approval.

(3) Designation of Recycled Water User Supervisor.

Each Consumer shall designate a Recycled Water User Supervisor (User Supervisor), a natural person who operates or maintains customer-owned recycled water facilities, for each site covered by a Recycled Water Use Permit. The User

Supervisor shall serve as a liaison with the District, and shall have the authority to carry out the requirements of the Recycled Water Manual and Recycled Water Use Permit, including the operations and maintenance of the onsite recycled water system and prevention of potential hazards.

The User Supervisor shall attend periodic recycled water use training courses offered by the District. At the end of each such course, the District shall issue a certificate to each such person who satisfactorily completes the course. Such certificate shall provide that, in the absence of violations of the provisions of this Regulation, it shall be effective until the commencement of the next training course or until the rules, regulations, permits or orders applicable to recycled water use within the District are changed, whichever is later. Such certificates are not transferable in any manner.

(4) Monitoring.

Consumers shall regularly monitor consumer-owned facilities and submit accurate monitoring reports to the District on a timely basis in accordance with the reporting requirements outlined in the Recycled Water Use Permit issued by the District to the Consumer. The Consumer shall notify the District immediately if any unauthorized use or discharge of recycled water occurs, or if other conditions occur, which impact or threaten to impact the public health.

(5) Access to Site.

All recycled water consumers shall permit the officers, employees, and agents of the District, the State or Regional Water Quality Control Board, Marin County, and other entities with jurisdiction over recycled water or public health, access to the site where recycled water supplied by the District is used, or where records relative to recycled water use are kept, for the purposes of:

(a) inspection, testing, and repair of facilities, equipment, practices, or operations regulated pursuant to the Recycled Water Manual, and State General Order; and

(b) sampling or monitoring to assure compliance with the Recycled Water Manual and State General Order.

Access may be scheduled outside typical business hours to effectively conduct testing and inspection, and minimize impact to the public.

In addition, consumers shall supply access to, or copies of, records relative to recycled water use to representatives of the above-named entities upon request.

k. Penalties for Noncompliance

Any consumer who fails to timely submit accurate monitoring reports to the District in accordance with its recycled water use permit, who fails to comply with this regulation and/or the Recycled Water Manual, or who uses water or discharges wastewater in any manner which is contrary to the laws, regulations, agreements, permits, orders, guidelines, and/or standards relative to the use of water is subject to citation pursuant to Regulation 19, as well as other remedies in law or equity. Continued noncompliance with this regulation may result in the discontinuation of recycled water service supplied for irrigation purposes.

l. Protection of Public Health

(1) Connection between recycled water and potable water lines is prohibited. If both recycled water and potable water lines are present at the consumer's facilities, the

consumer shall install a backflow prevention device downstream of the water meter, on the potable water system in accordance with Regulation 6, at the expense of the customer.

Recycled water service may be terminated if the District determines that the consumer has failed to install and appropriately maintain the required backflow prevention devices to protect the District's facilities, and that a substantial risk of damage exists, whether or not the consumer's failure was willful or negligent.

(2) Notwithstanding compliance by a consumer with these rules and regulations, the District reserves the right and has the authority to terminate recycled water service immediately, without notice, in the interest of protecting a threat to the public health if at any time during construction or operation of the recycled water system, real or potential hazards are evidenced, such as cross-connections with the potable system, failure to conform to monitoring and reporting requirements, improper tagging, signing, or marking, improper construction, or unapproved/prohibited uses.

NORTH MARIN WATER DISTRICT

REGULATION 18
RECYCLED WATER SERVICE

a. Types of Recycled Water Use

Recycled water available to and purveyed by the District shall be used only for irrigation of turf or landscape, dust control, and such other uses as are permitted under applicable orders of the Regional Water Quality Control Board and are approved by the District Board of Directors. Recycled water shall be used in accordance with the District's "Guidelines for Recycled Water Use" as may be amended from time to time.

b. Requirements, Conditions and Procedure for Conversion or Establishment of Recycled Water Service

The District will identify existing consumers and potential new development within Recycled Water Service Areas and determine the feasibility of providing recycled water service to these consumers. The District will also review applications for new or expanded water service to determine whether recycled water can cost-effectively and readily serve all or any portion of the Applicant's property. If the District determines that recycled water service is feasible, written notification shall be provided to the consumer or Applicant that recycled water use is required. The notification may include information regarding District water service procedures, a description of the District's recycled water project, a description of any recycled water facilities that must be constructed on the consumer or Applicant site including dual plumbing if applicable, a date by which the consumer or Applicant site must be ready to accept recycled water service, and the then current rate for recycled water.

Existing consumers identified by the District as feasible recipients of recycled water will be required to retrofit existing water service facilities to accommodate recycled water service. Applicants for new or expanded water service may be required to install dual plumbing, pursuant to the terms and conditions specified by the District.

In the case of an application for new or expanded water service that includes irrigation of turf areas outside a Recycled Water Service Area, and where recycled water service is not currently available, the following evaluation process shall apply:

i. The District shall first make a preliminary determination of whether the turf areas can be supplied with recycled water. In making this preliminary determination, the District shall consider the cost of providing recycled water including the cost of delivering recycled water to the Applicant's property and other potential users in the vicinity, and the quantity of recycled water required and available.

ii. If the District Board of Directors makes a preliminary determination that it will be cost-effective and reasonable to provide recycled water service, the Applicant shall pay to the District the estimated cost to prepare a report on the feasibility of supplying recycled water for all or a portion of the Applicant's property. The report shall at a minimum include a conceptual plan and relevant environmental information. If the actual cost of the report exceeds, or is expected to exceed, the amount paid by the Applicant, the Applicant shall pay the excess or anticipated excess amount on receipt of an invoice from the District for the additional amount. If the total cost of the report is less than the payments received, the difference shall be refunded to the Applicant.

iii. After reviewing the feasibility report, the District Board of Directors shall make a final determination whether the Applicant's property shall be served with recycled water.

(iii (a)) If the determination is that the property shall be served with recycled water, the Applicant shall enter into an agreement with the District and in accordance with Section f of this Regulation 18 shall pay all costs necessary to supply recycled water to the Applicant's property, including but not limited to the capital costs of any required in-tract and off-tract facilities. The District's normal facility reserve charges, and the District's then current rates and charges for water service shall also apply.

(iii (b)) If the Board of Directors determines that it is not feasible to serve the Applicant's property with recycled water, the Applicant may apply for water service from the District's potable water system.

c. Recycled Water Use Permits

Consumers and Applicants required to use recycled water shall submit to the District a Recycled Water Service Application no later than thirty (30) days after receipt of notification from the District. After review and acceptance of the application, the District will issue a Recycled Water Use Permit that will specify the requirements for the consumer's water distribution facilities, the portions of the premises where recycled water will be applied, and other matters as determined by the District. Recycled water service will not commence until the District verifies compliance with the permit requirements.

Once a permit has been issued, a potable water supply may be provided only upon the finding of "special circumstances" as determined in the District's sole discretion. All such potable water delivered will be billed at the then current potable water rate. The District will advise the consumer or Applicant of any additional conditions that shall apply to the delivery of a potable water supply until recycled water is made available.

d. Recycled Water Pricing

The price for recycled water during peak season as defined by the District (currently June 1 – October 31) will be at a rate to be set by the Board of Directors that shall be less than the then current potable water rate. During the non-peak season (currently November 1 – May 31), the price for recycled water shall be equal to the then current potable water rate.

e. Installation and Maintenance Costs

When an existing consumer is required by the District to convert to recycled water service, the District will pay the reasonable capital costs of retrofitting the water service facilities on the consumer's side of the water service meter and will also provide for the recycled water service facilities necessary to deliver recycled water to the meter.

Applicants for water service and consumers requesting installation of additional facilities in order to expand capacity, or those consumers requesting conversion to recycled service not required by the District, shall be responsible for the full cost of facilities necessary to deliver recycled water to the premises.

Once recycled water service delivery commences, the consumer shall be responsible for all costs of operating and maintaining the water service facilities on the consumers' side of

the water service meter(s), except where the District, in its sole discretion, has determined that it would be in the best interest of the District to operate and maintain on-site facilities.

f. Design and Construction of Retrofit Work:

Consumers required to convert to recycled water service must complete the required retrofit work by the date indicated in the District notification. In the alternative, and with adequate notice, the Consumer may request that the District complete the required retrofit work.

i. Retrofit Work By District - Where the District performs the design and construction of the retrofit work, the consumer shall provide access to the site as necessary for the District or its contractor(s) to perform the design and construction work, including but not limited to inspections, testing retrofit facilities, and performing required cross-connection and backflow prevention valve testing where installation of backflow prevention devices is required by law or by the District.

ii. Retrofit Work By Consumer - Prior to consumer construction of the retrofit work, consumers shall submit for District review a proposed schedule, cost estimate, and design for the retrofit construction work. The submittal must be approved by the District prior to commencement of work. Retrofit elements required by state law must be included in the retrofit design. Any changes or modifications to the approved retrofit work must be submitted for District approval prior to construction. The retrofit design and construction must comply with all applicable federal, state, and local codes, laws, ordinances, and regulations. The consumer must also obtain all necessary permits. The consumer shall maintain compliance documents and furnish copies of said documents upon District request. Consumers shall install backflow prevention devices if required by law or the District. The District shall not be a party to any contract between the consumer and a third-party consultant or contractor, and District shall have no liability or responsibility thereunder, however, the District shall be entitled to review the contracts. The consumer shall agree to indemnify the District with respect to any claims arising from the design or construction of the retrofit work. The District shall be entitled to inspect the retrofit work to verify that the retrofit facilities are

installed and functioning, and to perform required cross-connection and backflow prevention valve testing. The consumer or his representative and any construction contractor used to perform the retrofit work shall be present during the final inspection.

iii. Failure to Complete Retrofit Work - Consumers who do not complete the retrofit work to enable the delivery of recycled water by the District-specified date will not be in compliance with this regulation. A penalty (as detailed in Section h.) shall apply for all potable water used during any period of noncompliance. Once the retrofit is complete and the consumer site is ready to accept recycled water, the consumer will pay the then current recycled water rate. If recycled water is unavailable when the retrofit is complete, the potable water rate shall be charged until recycled water is available for delivery to the site.

g. Penalties for Noncompliance

In the event of noncompliance with this regulation, the consumer shall pay for all potable water used plus a penalty in the amount of 100% of the then current potable water rate. Continued noncompliance with this regulation may result in the discontinuation of potable water service supplied for irrigation purposes.

h. Exemption Requests

A request for an exemption to this regulation shall be made in writing to the District General Manager and shall include specific reasons that constitute the necessity of an exemption. The General Manager shall make a determination on all requests for exemptions within thirty (30) calendar days. Denial of a request for an exemption can be appealed to the District Board of Directors. Appeals shall be, in writing, and filed with the District within ten (10) business days after the General Manager's decision and shall state the specific grounds for appeal. The Board of Directors will hear the appeal within sixty (60) calendar days after the appeal has been filed and will issue its decision within thirty (30) days after the appeal is heard. The Board's decision shall be final.

ORDINANCE NO. 47

AN ORDINANCE OF NORTH MARIN WATER DISTRICT REPEALING ORDINANCE NO. 24

BE IT ORDAINED by the Board of Directors of North Marin Water District as follows:

Section 1. The Board of Directors of North Marin Water District finds and declares that the 2011 version of District Regulation 18 Recycled Water Service established under Ordinance No. 24 is no longer effective.

Section 2. Effective forthwith, Ordinance No. 24 is repealed.

* * * * * *

I hereby certify that the foregoing is a true and complete copy of an ordinance duly and regularly adopted by the Board of Directors of North Marin Water District at a regular meeting thereof held on December 19, 2023 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Eileen Mulliner
District Secretary

(SEAL)

RESOLUTION NO. 23-XX

RESOLUTION OF THE BOARD OF DIRECTORS OF NORTH MARIN WATER DISTRICT ADOPTING REGULATION 18 RECYCLED WATER SERVICE

WHEREAS, pursuant to Water Code Section 31024, the Board of Directors (Board) of the North Marin Water District (District) may establish rules and regulations for the sale, distribution, and use of water; and

WHEREAS, the District amended Regulation 18 Recycled Water Service in 2011 through Ordinance No. 24 on April 19, 2011; and

WHEREAS, the District repealed Ordinance No. 24 on or about December 19, 2023; and

WHEREAS, District Regulation 18 provides the requirements, conditions and procedures as well as restrictions and exemptions for use of the District's Recycled Water system, available in portions of the Novato Service Area; and

WHEREAS, District staff has recommended updating the language contained in various sections of Regulation 18, the responsibilities and requirements for both the District as well as the recycled water consumer, and to clarify exemptions for use as well as and adding new language to clarify the definitions used and the requirement to provide protection of public health; and

NOW, THEREFORE, BE IT RESOLVED:

1. The Board of Directors of North Marin Water District finds and determines that the foregoing Recitals are true and correct, and incorporates the Recitals herein.
2. The Board of Directors of the North Marin Water District hereby approves Regulation 18 as indicated in **EXHIBIT A**, attached hereto and incorporated by this reference.
3. This Resolution shall be effective immediately upon adoption and shall remain in effect until such time as modified, repealed, or superseded by further resolution of the Board.
4. If any provision of this Resolution, or any part thereof, is for any reason held to be *ultra vires*, invalid, unenforceable, or unconstitutional, the remaining provisions shall not be affected but shall remain in full force and effect, and to this end the provisions of this Resolution are severable.

* * * * *

I hereby certify that the foregoing is a true and complete copy of a resolution duly and regularly adopted by the Board of Directors of NORTH MARIN WATER DISTRICT at a regular meeting of said Board held on December 19, 2023 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

Eileen Mulliner, Secretary
North Marin Water District

(SEAL)

8

NORTH MARIN WATER DISTRICT

MEMORANDUM

To: Board of Directors December 19, 2023

From: Tony Williams, General Manager

Subj: Consider Approving New District Regulation 19 Enforcement for Recycled Water Use
t:\gm\bod misc 2023\8-15-23 meeting\new reg 19\8-15-23 bod memo reg 19.docx

RECOMMENDED ACTION: Consider Adopting Resolution No. 23-XX Approving Regulation 19 Enforcement for Recycled Water

FINANCIAL IMPACT: None at this time

Background

District Regulation 18 – Recycled Water Service describes the requirements and procedures, including permits necessary for service from District's Recycled Water distribution system. The District's Recycled Water system operations, including the distribution and end uses, is highly regulated by the state under various codes and regulations including but not limited to the California Water Code, California Code of Regulations, the State Water Resources Control Board's (Water Board) Water Quality Order 2016-0068-DDW General Water Reclamation Requirements for Recycled Water Use, and the District's approved Title 22 Engineering Report (July 2016). In addition, the discharge of recycled water whether within or outside of its intended use (e.g. irrigation of lands) is regulated under the Water Board's Water Quality Order 2014-0090-DWQ General Waste Discharge Requirements for Recycled Water Use. Associated with the various codes regulations and orders are extensive monitoring and reporting burdens placed on the District, and in some cases, passed onto our recycled water customers.

The Water Board, as well as the Regional Water Boards may impose administrative civil liability and seek monetary penalties or take other appropriate enforcement actions against the District for violating the state's general orders related to recycled water cite above. Regulation 18 (updated version) includes a section addressing penalties for non-compliance and reference to the proposed new Regulation 19, discussed herein.

Proposed New Regulation 19

Staff is proposing a new District Regulation 19, which serves as a stand-alone enforcement regulation for recycled water use. The proposed draft includes sections addressing violations, public nuisance related to unauthorized discharges, the liability associated with violations, non-compliance, and associated District recourses, and mandatory use assurance section. Importantly, the proposed Regulation 19 cross-references existing District Regulations 1,

6, 18, and 55, that address the handling of costs incurred by the District to correct the condition of illegal or non-permitted use as well as termination of service for non-compliance (Regulation 55).

Regulation 19 was drafted using the District's current Regulation 107 "Enforcement" for sewer (wastewater) services in the Oceana Marin enterprise as a template. The language in Regulation 107 has been part of the District's wastewater related regulation since the 1970s recognizing the codes, regulations and orders related to wastewater, and the associated subsequent penalties for violations. The proposed regulation and resolution have been reviewed by District legal counsel.

RECOMMENDATION

That the Board Adopt Resolution No. 23-XX approving new District Regulation 19 Enforcement for Recycled Water Use.

ATTACHMENTS:

1. Draft Regulation 19
2. Resolution No. 23-XX Approving Regulation 19 (without Exhibit)

NORTH MARIN WATER DISTRICT

REGULATION 19

ENFORCEMENT FOR RECYCLED WATER USE

a. Violation

Any person found to be violating any provision of the District's Regulation 18 shall be served by the General Manager or other authorized person with written notice stating the nature of the violation and providing a reasonable time limit for satisfactory correction thereof. The violating party shall within the period of time stated in such notice permanently cease the violation.

b. Public Nuisance

Continued operation of any facility in violation of the provisions of these regulations or the continued recycled water use that causes or contributes to a condition of pollution as defined in Water Code section 13050(l) or nuisance as defined in Water Code section 13050(m) is hereby declared to be a public nuisance. The District may cause proceedings to be brought for the abatement of the nuisance during the period of such violation.

c. Liability for Violation

Any person violating any of the provisions of this regulation shall become liable to and shall indemnify the District for any expense, loss or damage occasioned by the District by reason of such violation.

Costs associated with the discovery and correction of an illegal connection to the District's potable or recycled water systems are the responsibility of the property owner to which the illegal connection was made. The property owner shall reimburse the District for its said costs including:

(1) all District costs to investigate the illegal connection, and

(2) all District costs as described in Regulation 1, 6, and 18, to correct the connection.

Costs associated with the discovery and correction of an illegal or non-permitted use of the District's recycled water system are the responsibility of the property owner on which property the illegal use occurred. The property owner shall reimburse the District for its said costs including:

(1) all District costs to investigate the illegal use, and

(2) all District costs as described in Regulation 1, 6, 18, and 55, to correct the condition of illegal or non-permitted use.

d. Non-Compliance

If a customer fails to comply with this regulation by failure to install, test or correct deficiencies or by removal, tampering with or modifying a requirement device, facility or component; or by unauthorized use of potable or recycled water; the District shall have the right to refuse or terminate water service in accordance with Regulation 55, and, if it deems necessary, physically disconnect the customer's piping from the District's distribution system.

The District may also impose a penalty, in an amount approved by the Board from time to time, to be assessed on the customer water bill.

e. Mandatory Use Assurance

In the event of extended non-use of available and approved recycled water at a property, the consumer shall pay for all potable water used plus a penalty in the amount of 100% of the then current potable water rate. Continued non-use may result in the discontinuation of potable water service supplied for irrigation purposes.

RESOLUTION NO. 23-XX

**RESOLUTION OF THE BOARD OF DIRECTORS OF
NORTH MARIN WATER DISTRICT
APPROVING REGULATION 19 ENFORCEMENT FOR RECYCLED WATER**

WHEREAS, pursuant to Water Code Section 31024, the Board of Directors (Board) of the North Marin Water District (District) may establish rules and regulations for the sale, distribution, and use of water; and

WHEREAS, District Regulation 18 Recycled Water Service provides the requirements, conditions and procedures as well as restrictions and exemptions for use of the District's Recycled Water system, available in portions of the Novato Service Area; and

WHEREAS, the District's Recycled Water System operations is highly regulated by the state under various codes and regulations including but not limited to the California Water Code, California Code of Regulations, State Water Resources Control Board Water Quality Orders and the District's approved Title 22 Engineering Report (July 2016). In addition, the discharge of recycled water whether within or outside of its intended use is also regulated under state orders. The Associated extensive monitoring and reporting places requirements on the District and in some cases onto our recycled water customers; and

WHEREAS, District staff has developed Regulation 19 Enforcement for Recycled Water, that establishes the District's authority and ability to enforce the requirements for recycled water use, including termination of service if necessary and reimbursement of District incurred costs; and

NOW, THEREFORE, BE IT RESOLVED:

1. The Board of Directors of North Marin Water District finds and determines that the foregoing Recitals are true and correct, and incorporates the Recitals herein.
2. The Board of Directors of the North Marin Water District hereby approves the Regulation 19 Enforcement for Recycled Water provided in **EXHIBIT A**, attached hereto and incorporated by this reference.
3. This Resolution shall be effective immediately upon adoption and shall remain in effect until such time as modified, repealed, or superseded by further resolution of the Board.
4. If any provision of this Resolution, or any part thereof, is for any reason held to be *ultra vires*, invalid, unenforceable, or unconstitutional, the remaining provisions shall not be affected but shall remain in full force and effect, and to this end the provisions of this Resolution are severable.

* * * * *

I hereby certify that the foregoing is a true and complete copy of a resolution duly and regularly adopted by the Board of Directors of NORTH MARIN WATER DISTRICT at a regular meeting of said Board held on the 19th of December, 2023 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

Eileen Mulliner, Secretary
North Marin Water District

(SEAL)

9

ITEM #9

NORTH MARIN WATER DISTRICT

MEMORANDUM

To: Board of Directors December 19, 2023

From: Tony Williams, General Manager

Subj: Potter Valley Project Surrender and Decommissioning
t:\gm\bod memos 2023\12-19-23 meeting\pvp comment letter\12-19-23 bod memo pvp update_comment ltr.docx

RECOMMENDED ACTION: Authorize the General Manager to Send a Comment Letter to PG&E on Behalf of the District

FINANCIAL IMPACT: None at this time

Background

The Potter Valley Hydroelectric Project (Potter Valley Project), owned and operated by Pacific Gas & Electric (PG&E), is located along the Eel River and diverts water into the East Fork of the Russian River which flows into Lake Mendocino. The Potter Valley Project features include Lake Pillsbury impounded by Scott Dam; Van Arsdale Reservoir impounded by the Cape Horn Diversion Dam which includes a fish ladder; and a tunnel and penstocks that divert Eel River water to the powerhouse located in Potter Valley, and ultimately water flows into Lake Mendocino. Releases from Lake Mendocino flow into the Upper Russian River and are highly regulated by the state. The Potter Valley Project currently diverts, on average, approximately 60,000 acre-feet of Eel River water into the Russian River per year. The Project is licensed by the Federal Energy Regulatory Commission (FERC).

In February 2022, PG&E announced its plans to surrender the FERC license and decommission the Project. In July 2022, FERC accepted PG&E's proposed 30-month schedule to submit a license surrender application and decommissioning plan. The schedule has a January 2025 completion date at which point a final surrender application and decommissioning plan will be revealed. However, PG&E released an initial draft decommissioning and surrender application in late November 2023 and plans to submit a final draft in May 2024 for public input ahead of the January 2025 deadline to submit a final plan to FERC. A copy PG&E's Initial Draft Surrender Application and Conceptual Decommissioning Plan is provided as Attachment 1.

New Eel-Russian Facility

The Mendocino County Inland Water and Power Commission (MCIWPC), the Round Valley Indian Tribes (RVIT), and Sonoma Water (collectively known as the "Proponents") submitted a proposal to PG&E on July 31, 2023 (updated on August 3, 2023) to express interest

in certain PVP facilities for preserving diversion to and flows in the Russian River and improving Eel River fisheries. The proposal was submitted to PG&E in response to its requirement to receive a proposal by the end of July 2023, ahead of their November initial draft surrender application milestone. Subsequently, in early November the original Proponents developed a revised proposal that didn't change the characteristics of the two diversion options but added more organizations to the Proponents group: California Trout, Trout Unlimited, Humboldt County, and the California Department of Fish & Wildlife.

The revised proposal is aimed at achieving co-equal goals of restoring fish migration at and at constructing a new Eel River diversion facility. The specifics remain to be determined, but the outcomes could include, among other issues, ensuring PG&E's final plan provides for proper disposition of sediment from Lake Pillsbury that is released by Scott Dam's removal; ensuring PG&E respectfully protects tribal cultural resources; and ensuring that PG&E's plan provides adequate restoration of the sites of Scott Dam and Cape Horn Dam. There is a commitment by the Proponents to ensure that neither the deconstruction of the dams by PG&E nor the construction of the new diversion facility will delay the other. The new diversion facility will be constructed simultaneously with or immediately after the removal of Cape Horn Dam to minimize the disruption of flows into the Russian River basin. The revised proposal also includes creation of a regional entity (by December 31) to serve as a legal organization in discussing a New Eel-Russian Facility with PG&E.

Fortunately, the revised proposal was included in PG&E's November Initial Draft Surrender Application and Conceptual Decommissioning Plan (Plan) that was released on November 17, 2023. PG&E's Plan integrates the required PG&E decommissioning actions such as removal of existing dams along with the features contained in two options for a future diversion facility proposed by the Proponents (see Section 4 of the Plan). PG&E's Plan is conceptual and another version for public review is planned for release in May 2024 that may contain more details of the actions required for decommissioning.

Eel-Russian Project Authority

The New Eel-Russian Facility proposal currently included in PG&E's Plan provides for the creation of a Regional Entity that has the legal and financial capacity to not only enter into a purchase agreement with PG&E in the short term, but also to own, construct and operate a new water diversion facility on the Eel River in the long term. On December 5, 2023, the Sonoma County Board of Supervisors, who also serve as the Board of Directors for the Sonoma County Water Agency, voted to approve a Joint Exercise of Powers Agreement (JPA) with Mendocino

County Inland Water and Power Commission to form the Eel-Russian Project Authority. The new entity will have the power to negotiate with the PG&E as the utility moves ahead with plans to surrender operations of the Potter Valley Project and to decommission the Scott and Cape Horn dams on the Eel River. The new authority will also have the legal capacity to own, construct and operate a new water diversion facility near the current Cape Horn dam location.

Given the significance of the future New Eel-Russian Facility on the Russian River, the various water suppliers in Mendocino, Sonoma and Marin counties, including Sonoma Water's water contractors, that rely on the Russian River for water supply have an interest in ensuring PG&E's final Plan includes the New Eel Russian Facility proposal details including the associated coordinated efforts of dam decommissioning and new diversion facility construction. PG&E is requesting comments on the current Plan by December 22, 2023. A draft comment letter is provided for consideration by the Board (Attachment 2). A similar comment letter will be sent on behalf of the Water Agency Committee (WAC) in a separate effort.

RECOMMENDATION

Authorize the General Manager to sign the attached draft comment letter to PG&E regarding their Initial Draft Surrender Application and Conceptual Decommissioning Plan on behalf of the District.

ATTACHMENTS:

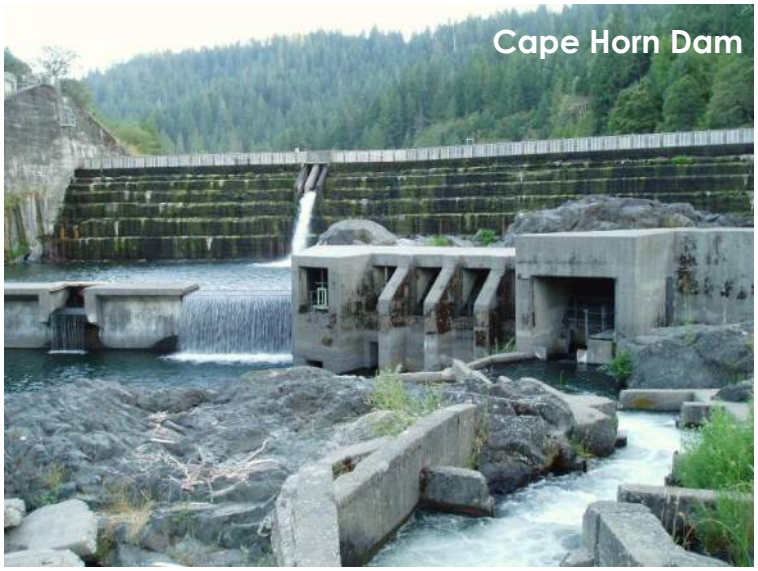
1. Initial Draft Surrender Application and Conceptual Decommissioning Plan
2. Draft Comment Letter to PG&E

ATTACHMENT 1

PACIFIC GAS AND ELECTRIC COMPANY

Potter Valley Hydroelectric Project
(FERC Project No. 77)

Initial Draft Surrender Application and Conceptual Decommissioning Plan



November 2023

PACIFIC GAS AND ELECTRIC COMPANY

POTTER VALLEY HYDROELECTRIC PROJECT
(FERC Project No. 77)

Initial Draft Surrender Application and Conceptual Decommissioning Plan

Prepared By:
Stantec Consulting Services Inc.
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833-4325

Prepared For:
Pacific Gas and Electric Company
12840 Bill Clark Way
Auburn, CA 95602

November 2023

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List of Acronyms

CDFW	California Department of Fish and Wildlife
DSOD	Division of Safety of Dams
FERC	Federal Energy Regulatory Commission
ILP	Integrated Licensing Process
MNF	Mendocino National Forest
MW	megawatt
NAVD88	National Vertical Datum of 1988
NFSL	National Forest System Lands
NGVD29	National Geodetic Vertical Datum of 1929.
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
PAD	Pre-Application Document
PG&E	Pacific Gas and Electric Company
PVID	Potter Valley Irrigation District
PVP	PVP 77 LLC
RPA	Reasonable and Prudent Alternative
RPM	Revolutions per minute
SHPO	State Historic Preservation Officer
USACE	United States Army Corps of Engineers
USFS	United States Forest Service
USGS	United States Geological Survey
USSD	United States Society on Dams

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1.0 INTRODUCTION

On January 25, 2019, Pacific Gas and Electric Company (PG&E) filed a Notice of Withdrawal of its Notice of Intent (NOI) and Pre-Application Document (PAD) with the Federal Energy Regulatory Commission (FERC or Commission) for the Potter Valley Hydroelectric Project (Project), FERC Project No. 77, stating that PG&E is: 1) discontinuing its efforts to relicense the Project; and 2) terminating its efforts to transfer or sell the Project.[1] In response to PG&E's Notice of Withdrawal, on March 1, 2019, FERC issued a Notice Soliciting Applications[2] from any party interested in filing a license application for a new license for the Project, stating that applicants must first file a NOI and PAD.

Given the FERC's solicitation did not result in a viable new applicant, on May 11, 2022, FERC directed PG&E to provide a plan and schedule for submitting a Surrender Application and Decommissioning Plan (Surrender Application) by July 11, 2022.[3] In response, PG&E timely filed a proposed plan and schedule on July 8, 2022.[4] The plan and schedule stated that PG&E would file a Surrender Application with FERC within 30 months after FERC approval of the proposed plan and schedule. FERC approved PG&E's proposed plan and schedule on July 29, 2022.[5] Therefore, the deadline for filing of the Surrender Application is January 29, 2025.

As shown in Table 1-1 (key process milestones), Tribes, regulatory agencies, and other interested parties (e.g., local governments, non-governmental organizations [NGO's], and members of the public) have two opportunities for public review. The Initial Draft Surrender Application is the first opportunity for public review. The subsequent Final Draft Surrender Application (available in June 2024) is the second opportunity for public review. The Final Draft Surrender Application will include an environmental analysis (Exhibit E).

Table 1-1. Key Process Milestones for Development and Submittal of the Surrender Application.

Distribution of Initial Draft Surrender Application	November 17, 2023
Deadline for Comments on Initial Draft Surrender Application	December 22, 2023
Initial Consultation with Resource Agencies and Tribes	December 2023 – February 2024
Distribution of Final Draft Surrender Application	June 3, 2024
Consultation with Resource Agencies and Tribes	June 2024
Deadline for Comments on Final Draft Surrender Application	July 18, 2024
Filing and Distribution of Final Surrender Application	January 29, 2025

[1] FERC Accession No. 20190125-5100
[2] FERC Accession No. 20190301-3038
[3] FERC Accession No. 20220511-3004
[4] FERC Accession No. 20220708-5267
[5] FERC Accession No. 20220729-3016

This Initial Draft Surrender Application was prepared and distributed to Tribes, regulatory agencies, and other interested parties on November 17, 2023, to provide the following information:

- Description of the existing Project (Section 2.0 – Project Location and Facilities)
- Reason for the license surrender (Section 3.0 – Reason for Surrender)
- Description of PG&E's Conceptual Decommissioning Plan (Section 4.0 – Conceptual Decommissioning Plan)

PG&E's Conceptual Decommissioning Plan is presented herein to solicit comments on PG&E's proposed approach for the decommissioning of Project facilities. PG&E's goals upon conclusion of the decommissioning process are to: (1) remove the Project from FERC and Division of Safety of Dams (DSOD) jurisdiction; and (2) no longer operate or maintain the Project in the future. Potential project effects, proposed license surrender conditions, a conceptual restoration plan, and the associated exhibits will be included in the Draft Final Surrender Application to be distributed to Tribes, regulatory agencies, and other interested parties by June 3, 2024, for review and comment. Decommissioning of the Project by PG&E includes:

- Removal of Scott Dam and Cape Horn Dam followed by site restoration;
- Restoration of the remnant inundation zone of Lake Pillsbury and Van Arsdale Reservoir;
- Removal and restoration of recreational facilities (e.g., campgrounds; day-use facilities; recreation access roads and trails; kiosk; and boat ramps) located on Forest Service and PG&E land;
- Abandoning in place and capping underground Project facilities;
- Leaving in place Project facility access roads on private land; and
- Removal or leaving in place the remaining Project support facilities and features.

A description of PG&E's decommissioning activities for Scott Dam Area is provided in Section 4.2 and for Cape Horn Dam Area in Subsection 4.3.1.1.

PG&E also received a proposal from California Department of Fish and Wildlife (CDFW) California Trout, Humboldt County, Mendocino County Inland Water and Power Commission, the Round Valley Indian Tribes, Sonoma County Water Agency, and Trout Unlimited (collectively referred to as the Proponents) for Project facilities in the Cape Horn Dam Area. PG&E is soliciting comments from Tribes, regulatory agencies, and other interested parties on the Proponents proposal. The proposal is called the "New Eel-Russian Facility".

Proponents are committed to the coequal goals of (1) improving fish migration and habitat on the Eel River with the objective of achieving naturally reproducing, self-sustaining, and harvestable native anadromous fish populations and (2) maintaining material and continued water diversion from the Eel River through the existing tunnel to the Russian River to support water supply reliability, fisheries, and water quality in the Russian River basin.

The Regional Entity, a joint power authority, to be governed by a board comprised of the County of Sonoma, Sonoma County Water Agency, Mendocino County Inland Water and Power

Commission, and the Round Valley Indian Tribes, will be responsible for modifications at the former Cape Horn Dam site and Van Arsdale Diversion, as necessary, to construct the New Eel-Russian Facility. A description of the Regional Entity's proposed modifications to Cape Horn Dam is provided in Subsections 4.3.1.2 and 4.3.1.3; these proposed modifications are preliminary and subject to further design development and stakeholder input.

To implement the Regional Entity's proposed modifications, the Final Surrender Application would include a request to FERC to authorize the conveyance of property interests in various Project assets and facilities, including the existing intake and fish screen facilities, the tunnel and flowline, and the powerhouse and outlet works in order that they might be modified. If either approach is included in the Final Surrender Application, the Regional Entity will seek federal authority to complete the Facility as expeditiously as practicable after deconstruction. Such authority may be granted pursuant to a nonpower license, partial license transfer, or some other FERC approved procedure.

The deadline to submit comments on the Initial Draft Surrender Application is December 22, 2023. Electronic submittal of comments is encouraged. Please submit comments to:

Tony Gigliotti
Senior Licensing Project Manager
Power Generation
12840 Bill Clark Way
Auburn, CA 95602
E-mail: PVSurrender@pge.com

Information about PG&E's decommissioning process, including pertinent documents, are available at the following website: [http://pottervalleysurrenderproceeding.com].

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2.0 PROJECT LOCATION, FACILITIES, AND OPERATIONS

2.1 Introduction

This section describes PG&E's Project and current operations.

2.2 Project Location and Overview

The Project is located on the Eel River and the East Branch Russian River in Mendocino and Lake Counties, California. The Project is approximately 15 miles northeast of the City of Ukiah. The majority of the Project is located on land owned by PG&E and National Forest System Lands (NFSL) administered by the United States Forest Service (USFS), Mendocino National Forest (MNF). An overview of the major Project facilities and land jurisdictions in the vicinity of the Project are shown on Maps 2-1 and 2-2, respectively.

The uppermost portion of the 9.2 megawatt (MW) Project includes Scott Dam and the storage reservoir it impounds, Lake Pillsbury, on the Eel River. Below Scott Dam, the Eel River flows approximately 12 miles to Van Arsdale Reservoir, created by Cape Horn Dam. Cape Horn Dam has fish passage facilities, enabling salmon, steelhead, and lamprey to access the Eel River and tributary streams between Cape Horn Dam and Scott Dam. There are no fish passage facilities at Scott Dam. At Van Arsdale Reservoir, water that is diverted is conveyed south by a series of tunnels, conduits, and penstocks to the Potter Valley Powerhouse, while water remaining in the Eel River is released from, or spills over, Cape Horn Dam where it flows northwest approximately 150 miles to the Pacific Ocean. Releases made at Scott Dam and Cape Horn Dam support salmon and steelhead populations in the Eel River Watershed.

The Potter Valley Powerhouse is located in the Upper Russian River Watershed, and releases from the powerhouse are a major source of water in the East Branch Russian River and for local water users. The East Branch Russian River flows south from the Potter Valley Powerhouse (approximately 11 miles[1]) and is impounded by the U.S. Army Corps of Engineers' (USACE) Coyote Dam to form Lake Mendocino. Lake Mendocino is operated and managed by the USACE for the purposes of flood control and water supply, in coordination with Sonoma County Water Agency and Mendocino County Russian River Flood Control and Water Conservation Improvement District. Water from Lake Mendocino is used in Mendocino and Sonoma counties for irrigation, municipal and domestic water supply, recreation, and support of salmon and steelhead populations in the Russian River. Water leaving Lake Mendocino joins with the mainstem Russian River and flows approximately 96 miles to the Pacific Ocean near the town of Jenner. The Eel River and Russian River Watersheds are depicted on Map 2-3.

Recently, PG&E dam safety engineers determined that the seismic risk at Scott Dam is greater than previously understood. To reduce the potential seismic risk, by letter dated May 22, 2023[2], PG&E notified the FERC that they are indefinitely keeping the spillway gates at Scott Dam open so that water cannot be impounded above the spillway elevation, thereby reducing water storage

[1] Potter Valley Powerhouse to the ordinary high water mark of Lake Mendocino (Coyote Dam Spillway elevation at 764.8 feet above mean sea level).

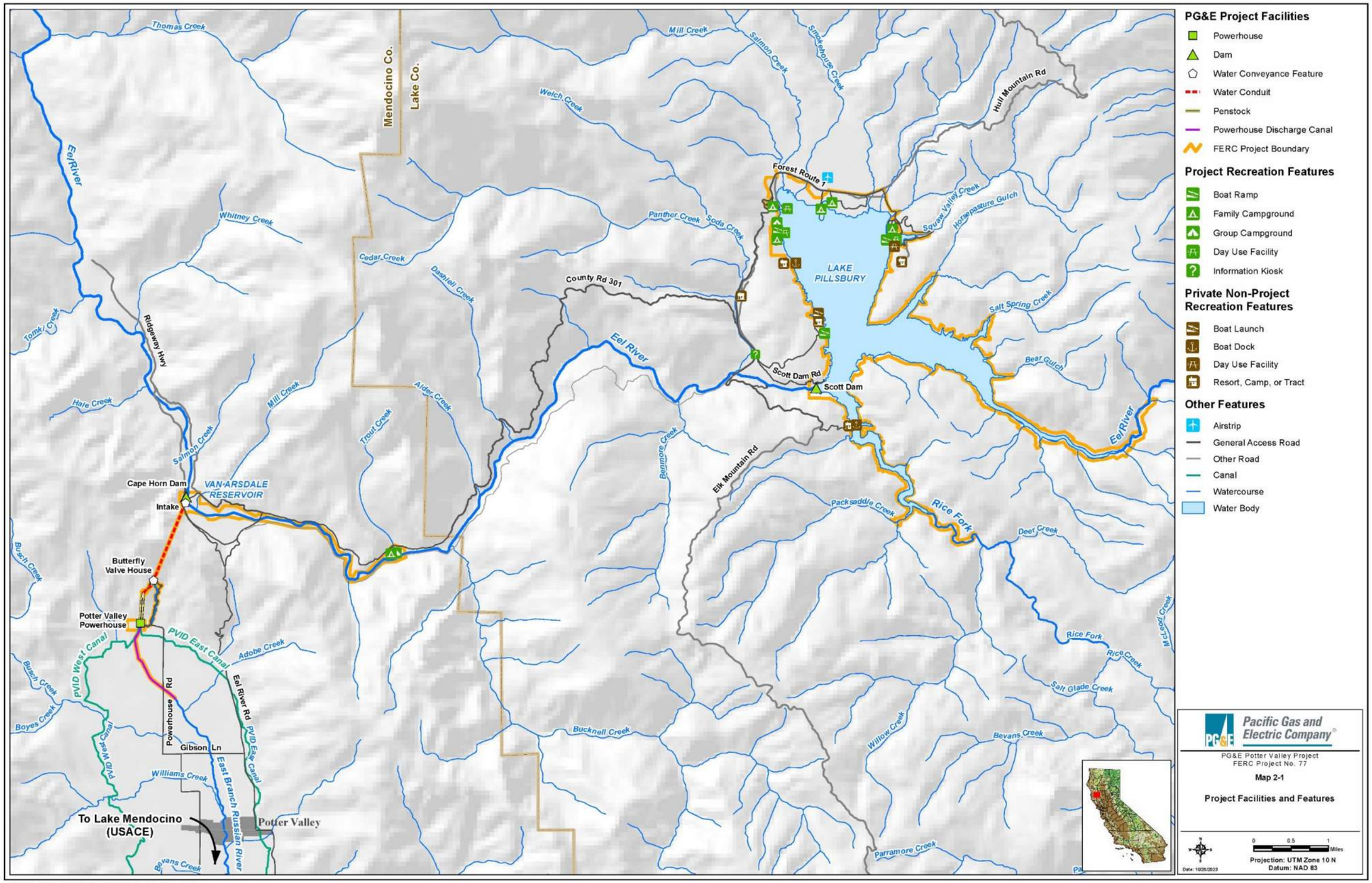
[2] FERC Accession No. 20230523-5020

capacity in Lake Pillsbury by approximately 20,000 ac-ft (PG&E 2023). In an April 12, 2023, letter, DSOD concurred with PG&E's proposed reservoir restriction (DSOD 2023). During a routine inspection in July 2021, PG&E discovered a transformer at its Potter Valley Powerhouse that did not meet current operating standards. The powerhouse has been offline since that time. Based on the new reservoir restriction, PG&E has no plans to replace the transformer and return the Potter Valley Powerhouse to service. Currently, PG&E is diverting water from the Eel River to meet minimum instream flow requirements in the East Branch Russian River and to meet water delivery contracts to the Potter Valley Irrigation District (PVID) at the tailrace of the Potter Valley Powerhouse.

2.3 Project History

The Eel Power and Irrigation Company commenced construction of the Cape Horn Diversion Dam, Intake, Tunnels, and the Potter Valley Powerhouse in 1905. In 1908, construction of the initial Project works was completed by the company which had been reorganized into the Snow Mountain Water and Power Company. In 1920, the Snow Mountain Water and Power Company applied to the USFS for a final power permit for the construction of Scott Dam. During the same year, construction of the dam began, and a request was made to transfer the application for a final power permit to the Federal Power Commission (predecessor to the current Federal Energy Regulatory Commission [FERC]). The construction of Scott Dam was completed the following year.

The Project was first licensed by the Federal Power Commission in 1922. The license was transferred to PG&E in 1930. The Project was relicensed by FERC in 1983. In 2004, FERC issued an Order Amending License (Order) for the Project which included a complex set of conditions to govern stream flows in both the Eel River and East Branch Russian River, as well as storage levels in Lake Pillsbury. Implementation of this Order resulted in increased flows in the Upper Eel River for the protection of salmon and steelhead populations, while reducing power generation output from the Project and the amount of water diverted to the East Branch Russian River. The license expired in 2022; the Project currently operates, and will continue to operate, under the annual license issued pursuant to 16 U.S.C. § 808(a)(1), which will renew automatically pursuant to the Commission's April 21, 2022 Notice of Authorization for Continued Project Operation until the surrender and decommissioning proceeding is concluded.



Map 2-1. Project Facilities and Features

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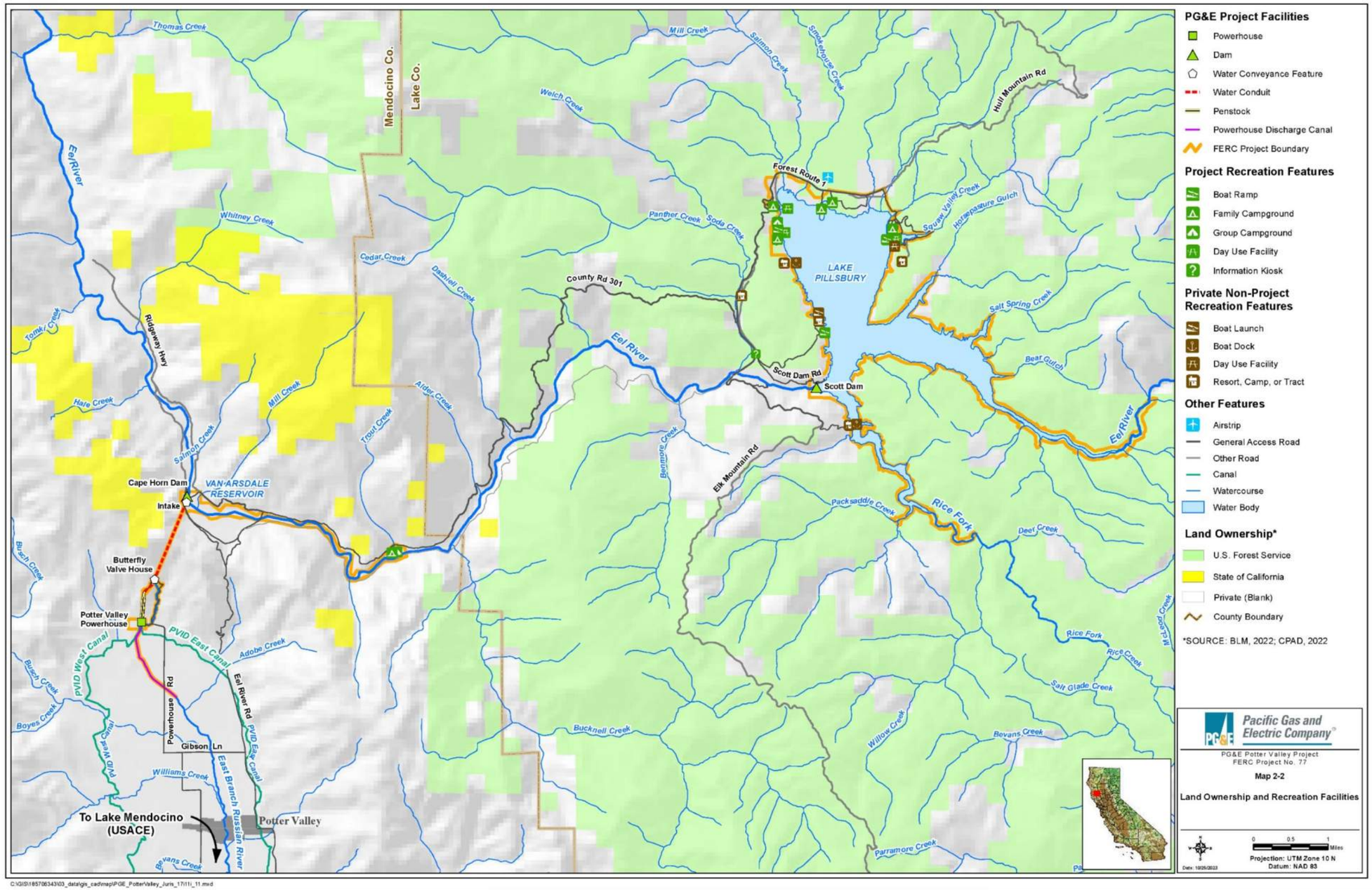

Map 2-2. Land Ownership and Recreation Facilities

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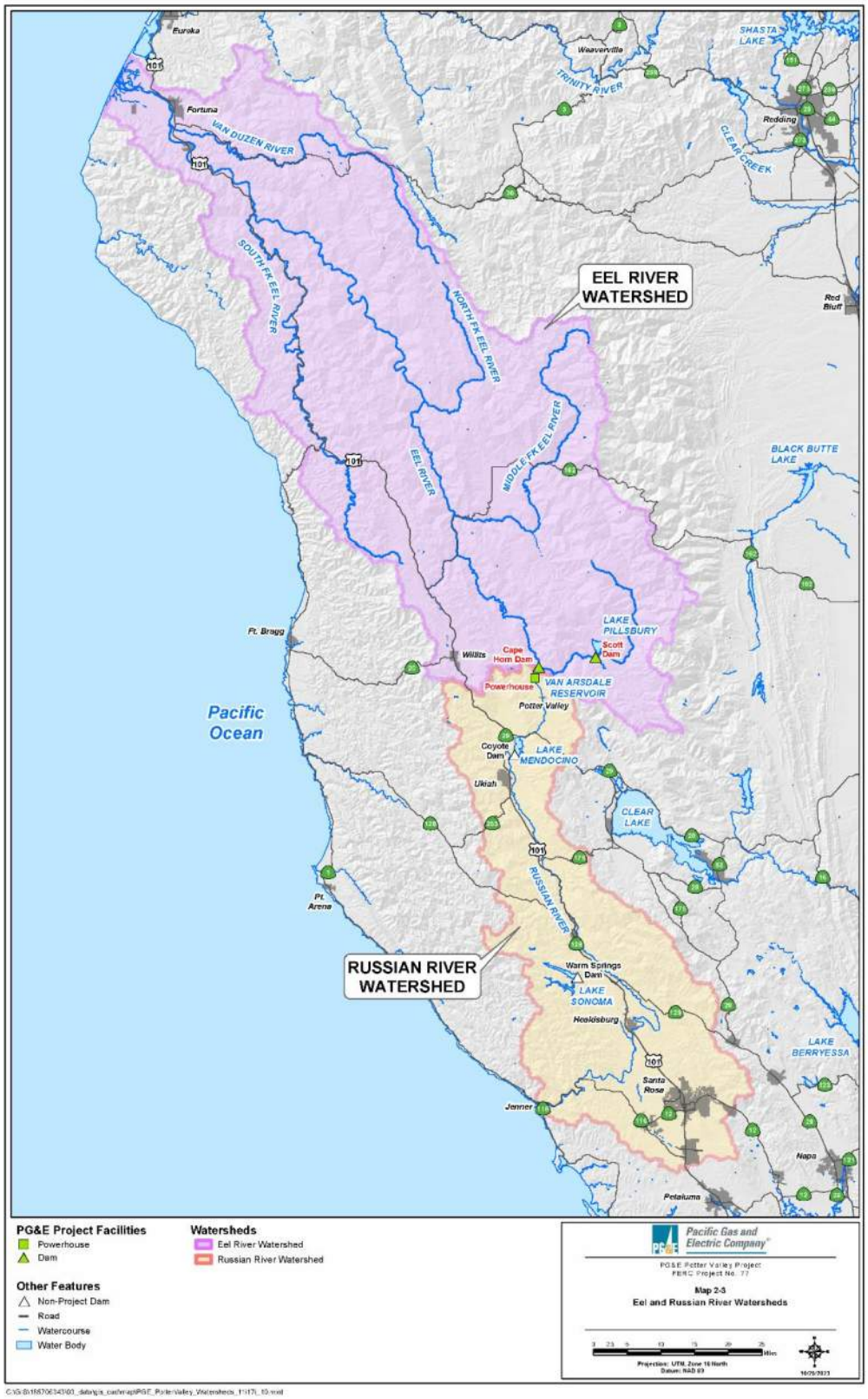

Map 2-3. Eel and Russian River Watersheds

2.4 Existing Project Facilities

This section describes Project facilities under FERC jurisdiction. A list of the Project facilities in the Scott Dam Area is provided in Table 2-1 and a list of the Project facilities in the Cape Horn Dam Area is provided in Table 2-2. Physical characteristics and facility specifications of primary Project facilities in the Scott Dam and Cape Horn Dam areas are provided in Table 2-3. Map 2-1 provides a geographic overview of the Project; Map 2-2 shows land ownership and recreation facilities; Map 2-3 provides an overview of the Eel River and Russian River Watersheds; and Maps 2-4 through 2-7 provide a detailed geographic depiction of Project facilities. Figure 2-1 includes a schematic showing piping details of Project facilities entering, within, and exiting the powerhouse.

Table 2-1. Project Facilities in the Scott Dam Area.

Project Facility/Feature
Dam and Associated Facility/Features
Scott Dam
Valve Control House
Reservoir
Lake Pillsbury (storage reservoir)
Reservoir Gage
E1—Lk Pillsbury NR Potter Valley CA (11470000)
River Gages
E2—Eel R BL Scott Dam NR Potter Valley CA (11470500)
Leakage Weirs and Piezometers and Associated Trail
Scott Dam Leakage Weirs
Scott Dam Piezometers
Scott Dam Piezometers and Leakage Weir Access Trail
Project Communication Line
Scott Dam Block Building Communication Line
Ancillary and Support Facilities
Scott Dam Block Building
Scott Dam Boat Barrier
Project Facility Access Roads
Gage E2 Access Rd
Scott Dam Rd
Upper Scott Dam Access Rd

Table 2-1. Project Facilities in the Scott Dam Area (continued)
Project Facility/Feature
Recreation Facilities and Access Roads
Family Campgrounds
Fuller Grove Campground
• Fuller Grove Campground Rd
Navy Campground
• Navy Campground Access Rd (18N50)
• Navy Campground Loop Rd
Oak Flat Campground
• Oak Flat Campground Rd
Pogie Point Campground
• Pogie Point Campground Loop Rd
• Pogie Point Campground and Day-Use Area Access Rd (18N75)
Sunset Point Campground
• Sunset Point Campground East Loop Rd
• Sunset Point Campground West Loop Rd
Trout Creek Campground
• Trout Creek Campground Loop Rd
Group Campgrounds
Fuller Grove Group Campground
• Fuller Grove Group Campground Access Rd
Trout Creek Group Campground
• Trout Creek Campground Rd
Day-Use Facilities
Eel River Visitor Information Kiosk
Fuller Grove Day-Use Area and Boat Launch
• Fuller Grove Day-Use Area and Boat Launch Access Rd
Pillsbury Pines Day-Use Area and Boat Launch
• Pillsbury Pines Day-Use Area and Boat Launch Access Rd
Pogie Point Day-Use Area
Lake Pillsbury Low Level Boat Launch

Table 2-2. Project Facilities in the Cape Horn Dam Area.

Project Facility/Feature
Dam and Associated Facility/Features
Cape Horn Dam
Cape Horn Dam Instream Flow Release
Reservoir
Van Arsdale Reservoir
Intake Structures
Van Arsdale Diversion Intake
Tunnels and Adits
Tunnel No. 1
Tunnel No. 2
Tunnel No. 1 Slide Gate and Adit
Tunnel No. 1 Gage Shaft
Conduits, Penstocks, Control and Valve Houses
Conduit No. 1 (Upper Wood Stave, Steel Pipe and Components)
Conduit No. 2 (Lower Wood Stave, Steel Pipe and Components)
Conduit No. 1, 72-inch Butterfly Valve House
Conduit No. 1 Standpipe and Surge Chamber Vent
Penstock No. 1
Penstock No. 2
Penstock Nos. 1 and 2, 60-inch Gate Valves (2)
Penstock Bypass Channel
Powerhouse Bypass System
Powerhouse, Switchyard, and Tailrace
Potter Valley Powerhouse
Potter Valley Powerhouse Switchyard
Potter Valley Powerhouse Tailrace, Radial Gate, and Venturi Flume
Potter Valley Powerhouse Discharge Canal
Diversion Gages
E5—Potter Valley Irrig CN E5 NR Potter Valley CA (11471105)
E6—Potter Valley Irrig CN E6 NR Potter Valley CA (11471106)
E16—Potter Valley PH Intake near Potter Valley CA (11471000)
River Gages
E11—Eel River at Van Arsdale Dam near Potter Valley CA (11471500)

Table 2-2. Project Facilities in the Cape Horn Dam Area (continued)
Project Facility/Feature
Leakage Weirs and Piezometers
Cape Horn Dam Leakage Weirs
Cape Horn Dam Piezometers
Fish Screen and Associated Facilities
Van Arsdale Fish Screen Facility
Van Arsdale Fish Screen Facility Back-up Generator Building
Van Arsdale Fish Screen Facility Motor Control Building
Van Arsdale Fish Return Channel
Storage Building
Fish Ladder and Associated Facilities
Cape Horn Dam Fish Ladder Inlet / Outlet
Cape Horn Dam Fish Ladder
Fish Attraction Facility
Cape Horn Dam Fish Ladder Rock Fall Fence
Cape Horn Dam Fish Ladder Intake / Outlet Debris Boom
Project Communication/Power Lines
Conduit No. 1, 72-inch Butterfly Valve House Communication Line
Cape Horn Dam Control Building Communication/Power Line
Fish Screen Facility Communication/Power Line
Tunnel No. 1 Slide Gate and Adit Communication/Power Line
Penstock Nos. 1 and 2, 60-inch Stop Valves Communication/Power Line
Helicopter Landing Sites
Potter Valley Powerhouse Helicopter Landing Site
Ancillary and Support Facilities
Potter Valley Powerhouse Operators Office
Potter Valley Powerhouse Maintenance Office
Potter Valley Powerhouse Operators Restrooms
Project Facility Access Roads
Cape Horn Dam East Access Rd
Intake Access Rd
Penstock, Pipeline and Butterfly Valve House Access Rd (Access for private landowner)
Powerhouse Main Access Rd
Project Facility Access Trails
Gage E11 Access Trail

Table 2-3. Project Facility Specifications.

Scott Dam Area (elevations are based on PG&E Datum, which equals NGVD 29 + 81.7 feet)	
Dam	
Scott Dam	
Dam Location	Eel River
Dam Type	Concrete, gravity
Dam Height and Length	130 feet high and 805 feet long
Spillway Crest Elevation	1,900 feet
Spillway Type	Ogee
Spillway Gates[1]	• 5 radial gates each 32 feet wide by 10 feet high • 26 steel slide gates each 10 feet high and varying width from 7.5 feet to 10.08 feet
Diversion/Outlet Tunnel	• Outlet Type/Capacity: 72-inch diameter, riveted-steel pipe (invert elevation 1,812 feet) • Controlled by a 42-inch Lauren-Johnson needle valve • Rated capacity: 400 cfs at reservoir elevation of 1,910 feet
Reservoir	
Lake Pillsbury	
Normal Maximum Water Surface Area	2,275 acres
Normal Maximum Water Surface Elevation	1,910 feet
Current Usable Storage Capacity	66,876 ac-ft
Cape Horn Dam Area (elevations are based on NGVD 29)	
Dam	
Cape Horn Dam	
Dam Location	Eel River
Dam Type	Earthfill and concrete, gravity
Dam Height and Length	Earthfill section: 60 feet high and 237 feet long Concrete, gravity section: 63 feet high and 283 feet long
Spillway Elevation	Earthfill section: 1,516.8 feet Concrete, gravity section: 1,490.3 feet
Spillway Type	Overflow
Spillway Gates	—
East and West Release Gates	Instream flow release

[1] In 2023, PG&E discontinued closing the gates on Scott Dam in the spring due to seismic concerns.

Table 2-3. Project Facility Specifications (continued)	
Fish Ladder	• Pool-and-weir ladder, with submerged orifices in upper ladder bays • 10-12 cfs capacity • Ladder attraction flows of ~100 cfs provided by weir across Eel River below Cape Horn Dam
Reservoir	
Van Arsdale Reservoir	
Normal Maximum Water Surface Area	106 acres
Normal Maximum Water Surface Elevation	1490.3 feet
Current Usable Storage Capacity	390 ac-ft
Diversion System	
Van Arsdale Intake	
Fish Screens	• Pair of inclined plane screens • 600 square feet of screen area for each screen • Designed to pass 240 cfs each
Archimedes Screw Pump	• 84 inches by 44 feet, 6 inches • Flow rate is approximately 4 cfs • Passes fish from screens to fish return channel
Fish Return Channel	• 214 feet, 11 inches long; 4 feet wide; 5 to 6 feet deep • Passes fish from Archimedes screw pump to fish return pipe
Fish Return Pipe	• 18-inch diameter; 416 feet long • Passes fish from fish return channel to fish ladder at Cape Horn Dam
Diversion Tunnel	72-inch diameter, 320 cfs capacity
Tunnel No. 1	
Overall Length	5,826 feet long
Section No. 1	205-foot-long, concrete-lined, modified, horseshoe-shaped section, 7 feet high by 6 feet wide
Section No. 2	5,453-foot-long, timber-lined, trapezoidal-shaped section, 7.16 feet high, with a bottom width of 6 feet and a top width of 5 feet
Section No. 3	129-foot-long, concrete-lined, circular section, 7.25 feet in diameter
Section No. 4	39-foot-long, concrete and steel-lined section, 7.25 feet in diameter
Control	6-foot by 6.5-foot slide gate is located between the horseshoe-shaped tunnel section and the timber-lined section

Table 2-3. Project Facility Specifications (continued)	
Conduit No. 1	
Overall Length	457 feet long
Section No. 1	A 50-foot-long "day lighted" steel pipe section containing a 72-inch butterfly valve and a sand trap/settling chamber
Section No. 2	367-foot-long, 7-foot-diameter wood stave conduit
Section No. 3	29-foot-long steel pipe, varying in diameter from 7 to 7.25 feet
Section No. 4	10-foot-long, 7.25-diameter steel pipe
Control	72-inch Penstock Butterfly Valve
Tunnel No. 2	
Overall Length	807 feet long
Section No. 1	78-foot-long, 7.25 feet in diameter concrete and steel-lined circular section
Section No. 2	729-foot long, 7 to 7.25 feet in diameter concrete-lined, circular section
Control	None
Conduit No. 2	
Overall Length	367 feet long
Section No. 1	8.1-foot steel pipe that tapers from 7.25 feet to 7 feet in diameter
Section No. 2	359-foot-long, 7-foot-diameter wood stave conduit
Control	Two 60-inch-diameter gate valves at the heads of Penstock No. 1 and No. 2
Powerhouse	
Penstock No. 1	
Length	1,793 feet long
Type	Riveted-steel pipe
Diameter	Varying from 62 inches at the gate valve to 48 inches at the powerhouse
Penstock No. 2	
Length	1,812 feet long
Type	Riveted-steel pipe
Diameter	Varying from 62 inches at the gate valve to 48 inches at the powerhouse

Table 2-3. Project Facility Specifications (continued)	
Unit 1	
First Date of Operation	2-9-1939
Installed Capacity, Generator	4,400 kW
Type of Turbine	Single horizontal reaction turbine
Horsepower	6,500
RPM	720
Minimum Hydraulic Capacity	45 cfs
Maximum Hydraulic Capacity	170 cfs
Unit 3	
First Date of Operation	3-1-1910
Installed Capacity, Generator	2,559 kW
Type of Turbine	Single horizontal reaction turbine
Horsepower	4,000
RPM	450
Minimum Hydraulic Capacity	25 cfs
Maximum Hydraulic Capacity	85 cfs
Unit 4	
First Date of Operation	9-15-1917
Installed Capacity, Generator	3,060 kW
Type of Turbine	Single horizontal reaction turbine
Horsepower	4,000
RPM	450
Minimum Hydraulic Capacity	25 cfs
Maximum Hydraulic Capacity	85 cfs
Overall Powerhouse	
Static Head[1]	475.5 feet
Total Maximum Flow	331 cfs
Total Prime Mover Capacity	14,500 hp
Total Generator Capacity	10,019 kW
Peak Output	9,200 kW
First Date of Operation[2]	4-1-1908

Notes: ac-ft = acre-feet
cfs = cubic feet per second
hp = horsepower
kW = kilowatts
RPM = rotations per minute

[1] Water surface at Van Arsdale Reservoir at spill crest elevation 1,490.3.
[2] Original Units Nos. 1 and 2 were replaced in 1939 as Unit No. 1.

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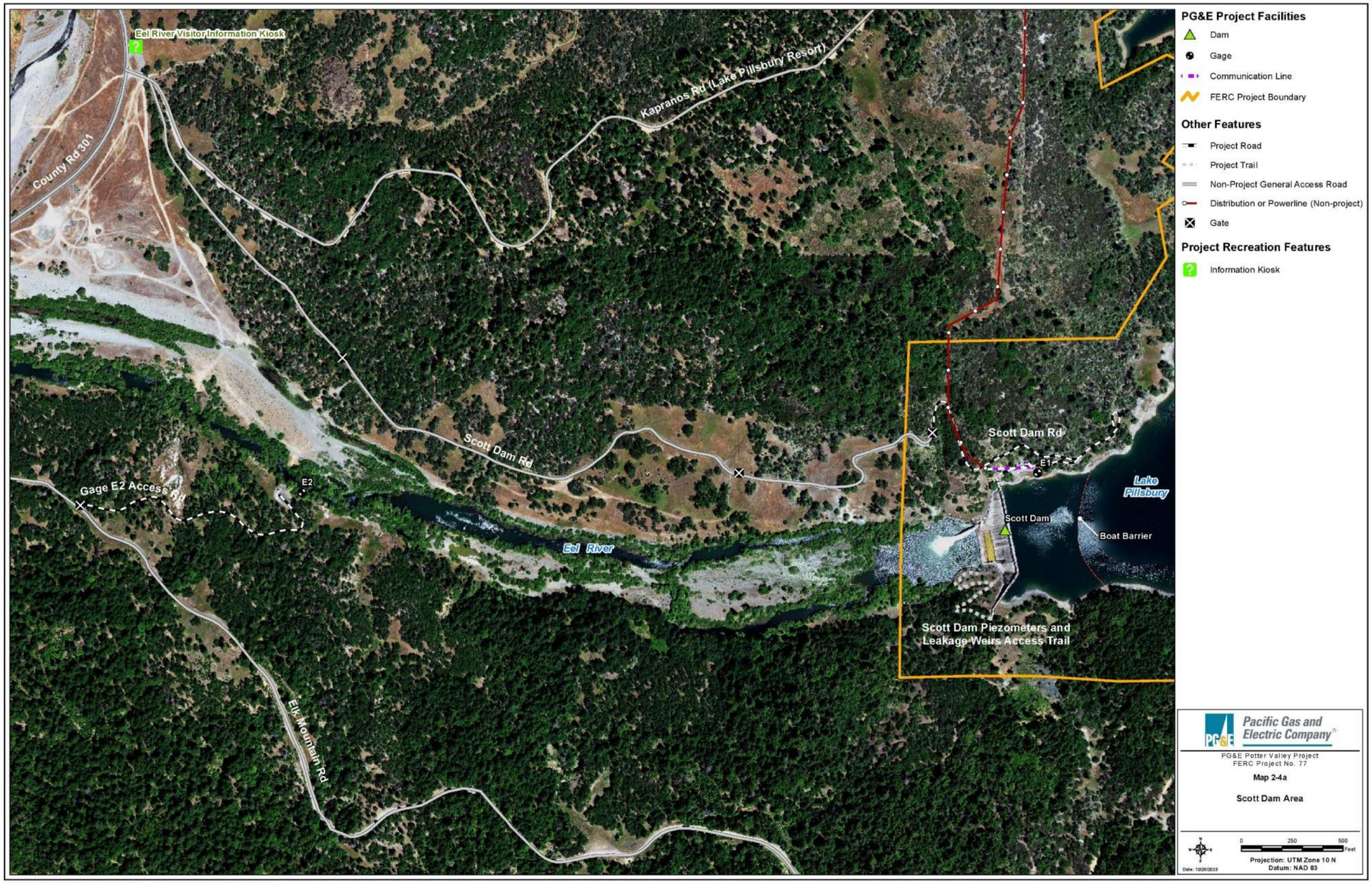

Map 2-4a. Scott Dam Area

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Map 2-4b. Scott Dam and Lake Pillsbury

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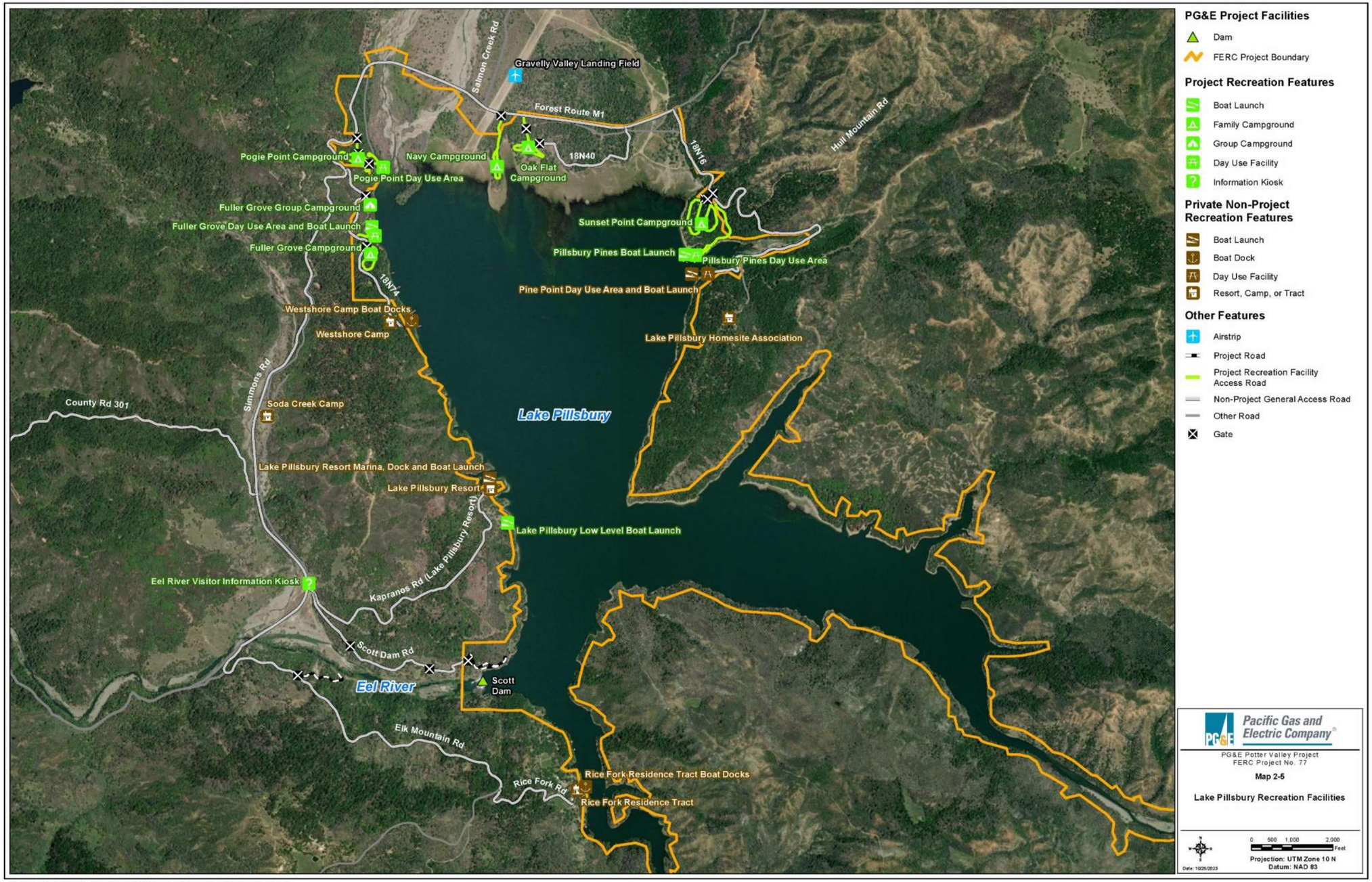

Map 2-5. Lake Pillsbury Recreation Facilities

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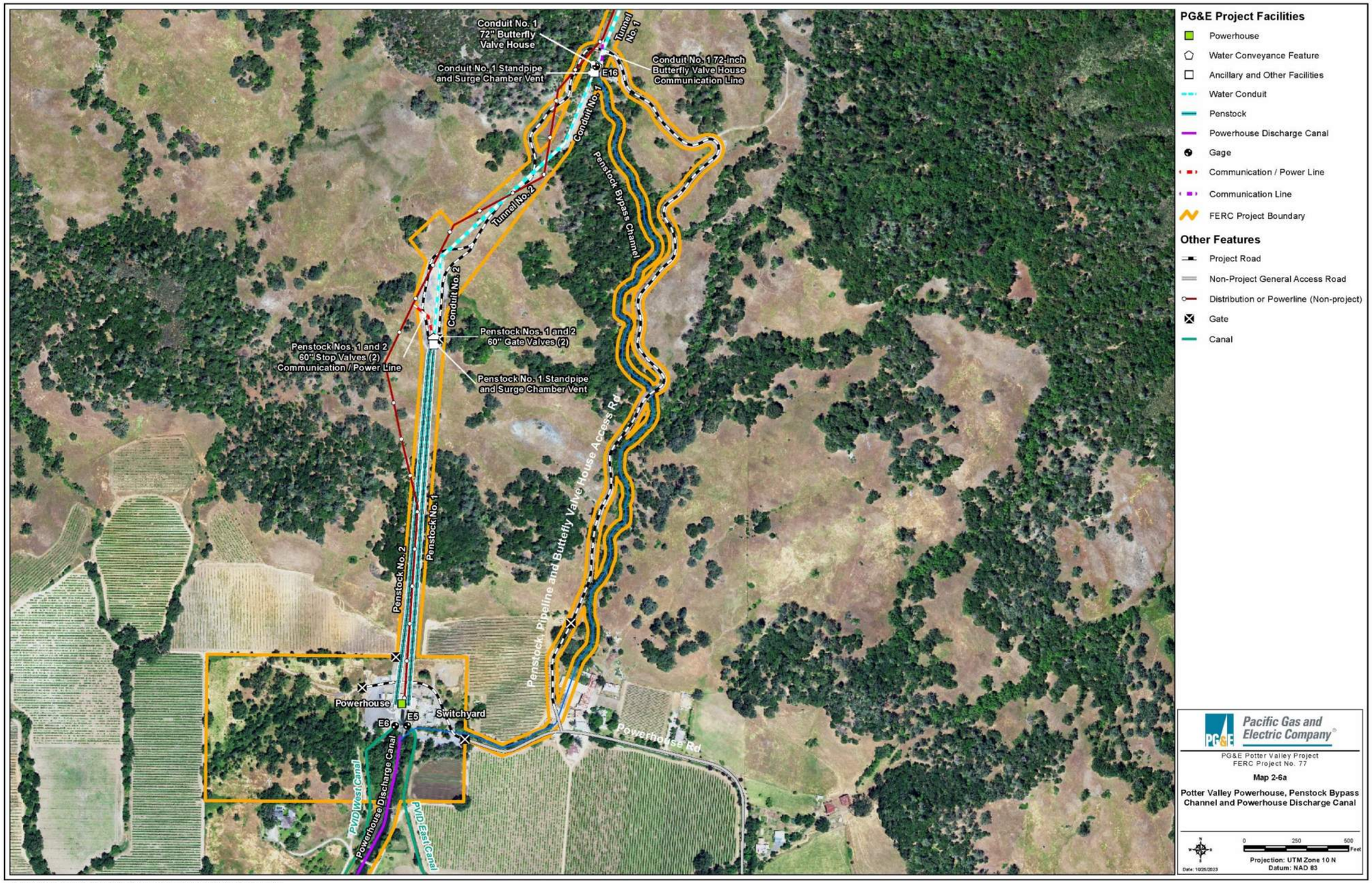

Map 2-6a. Potter Valley Powerhouse, Penstock Bypass Channel and Powerhouse Discharge Canal

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Map 2-6b. Potter Valley Powerhouse

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Map 2-7. Cape Horn Dam Area

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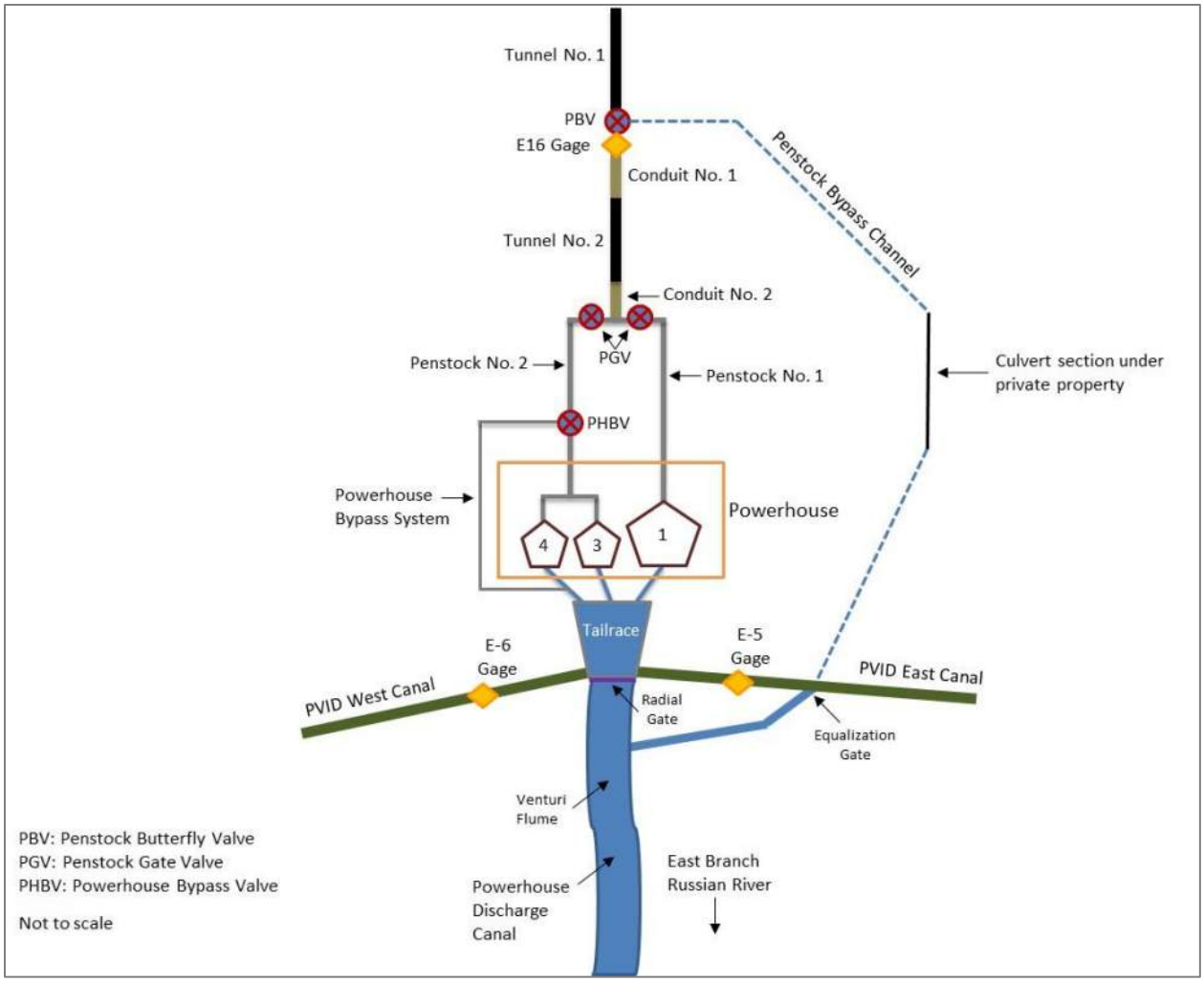

Figure 2-1. Potter Valley Powerhouse Schematic

2.4.1 Scott Dam Area

This section describes the Project facilities and features located in the Scott Dam Area. Note that Scott Dam Area elevations cited herein are based on PG&E's datum, which equals National Geodetic Vertical Datum of 1929 (NGVD29) + 81.7 feet.

2.4.1.1 Scott Dam

Scott Dam is a concrete, gravity-type, ogee-shaped structure having a maximum height of 130 feet and a total length of 805 feet. The ogee crest (spill crest), which is at an elevation of 1900 feet, is surmounted by five radial gates, each 32 feet wide by 10 feet high, and 26 steel slide gates, each 10 feet high and varying in width from 7.5 feet to 10.08 feet. The gates are manually operated with the exception of Gate 13 which is automated. Storage releases are made through a 72-inch diameter, riveted-steel outlet pipe passing through the dam at invert elevation 1812 feet, which is controlled by a 42-inch Lauren-Johnson needle valve. The needle valve is remotely operated.

2.4.1.2 Lake Pillsbury

Lake Pillsbury, formed by the construction of Scott Dam on the Eel River, has a surface area of approximately 2,275 acres at the normal maximum water surface elevation of 1910 feet and a current storage capacity of 76,876 acre-feet (ac-ft) (PG&E 2017). Due to concerns of bank instability in the reservoir and the potential for sloughing material to block the outlet needle valve or be released downstream creating high turbidity and streambed sedimentation, the reservoir is operated to maintain a minimum reservoir storage of at least 10,000 ac-ft, resulting in a normal usable storage of 66,876 ac-ft.

2.4.2 Cape Horn Dam Area

This section describes the Project facilities and features in the Cape Horn Dam Area. Note that all Cape Horn Dam Area elevations cited herein are based NAVD88 datum.

2.4.2.1 Cape Horn Dam

Cape Horn Dam is 520 feet long and consists of an earthfill section and a concrete, gravity overflow spillway section. The earthfill section on the right side of the dam is approximately 237 feet long and has a 10-foot-wide crest at elevation 1,516.8 feet. The maximum height of the embankment is roughly 60 feet at the concrete retaining wall on the left side of the embankment. The embankment is comprised of earthfill with a concrete corewall.

The concrete, gravity overflow spillway section forms the left side of the dam and has a maximum height of 63 feet. The spillway crest is at elevation 1,490.3 feet and is 283 feet long.

There is a 5-foot-diameter outlet through the spillway structure which was abandoned in place in 1987 due to an accumulation of sediment preventing its operation and the construction of a weir associated with fish ladder improvements that flooded the downstream side of the outlet. Currently, water passing downstream of the dam flows through the east and west release gates at the center of the dam, through the fish ladder on river left, or over the length of the spillway crest.

A pool-and-weir-type fish ladder provides fish passage over Cape Horn Dam allowing fish access to the Eel River and its tributaries between Cape Horn and Scott Dams. The fish ladder is 434 feet long and rises a vertical distance of 40 feet. It is comprised of 49 pools, each measuring 8 feet long, 4 to 10 feet wide, and 3 to 4 feet deep. The path of the ladder is roughly u-shaped, with the entrance located approximately 80 feet downstream from the toe of the dam and the exit at the west end of the dam crest. The ladder passes through the Van Arsdale Fisheries Station. Downstream migrant fish screened at the Van Arsdale Intake, located approximately 400 feet upstream of Cape Horn Dam, are introduced into the fish ladder just upstream of the counting station. A corrugated pipe along the ladder provides alternative upstream passage for adult lamprey.

2.4.2.2 Van Arsdale Reservoir

Van Arsdale Reservoir was formed by the construction of Cape Horn Dam on the Eel River. The reservoir has a surface area of approximately 65 acres at the normal maximum water surface elevation of 1,490.3 feet (USGS datum). The original storage capacity of Van Arsdale Reservoir was more than 1,100 ac-ft when constructed in 1907. However, accumulation of sediment over time

has resulted in significant loss of reservoir capacity. Based on the most recent bathymetric and topographic surveys, the current reservoir capacity is less than 390 ac-ft (GEI Consultants 2020).

2.4.2.3 Van Arsdale Intake

Van Arsdale Intake diverts water upstream of Cape Horn Dam and conveys it to the Potter Valley Powerhouse, approximately 9,257 feet south. The intake structure, located on the southwest bank of Van Arsdale Reservoir, is approximately 400 feet upstream from Cape Horn Dam. At the entrance to the diversion tunnel, the intake consists of two fish screen bays, an inclined plane screen in each bay, an Archimedes screw pump, and a fish return channel.

The fish return channel leads to a secondary fish screen which reduces the fish return flow from 4 cubic feet per second (cfs) to 2 cfs. This reduced flow carries screened fish and debris through a series of fish return pipes to a half-round ogee spillway and a baffled flume, where it discharges into the fish ladder just upstream of CDFW's Van Arsdale Fisheries Station.

Each of the inclined plane fish screens is approximately 82 feet long and 8 feet wide and is comprised of wedge wire screening material with 1/8-inch slotted openings. The screens are cleaned by an automated compressed air sparging system that blows debris off the screens from below. The debris is then carried by water flowing over the top of the screens to the fish bypass system. Each screen is designed to pass 240 cfs with an approach velocity of 0.4 foot per second (i.e., 600 square feet of screen). However, the screens have been derated to 50% capacity due to current mechanical limitations, and so only 240 cfs total can be diverted through the screens.

2.4.2.4 Tunnels/Conduits

A trans-basin diversion system comprised of tunnels, steel pipes, and wood stave conduits passes through two ridges transporting water from the Van Arsdale Intake to Potter Valley Powerhouse. The first ridge is crossed by a 5,826-foot-long underground tunnel (Tunnel No. 1). The second ridge is crossed by an 807-foot-long underground tunnel (Tunnel No. 2). Tunnel No. 1 and Tunnel No. 2 are connected by an approximately 457-foot-long aboveground conduit which crosses the valley between the two ridges (Conduit No. 1). A second aboveground conduit section (Conduit No. 2), approximately 367 feet in length, connects the downstream end of Tunnel No. 2 to Penstock No. 1 (1,793 feet long) and Penstock No. 2 (1,812 feet long).

Tunnel No. 1

Tunnel No. 1 is 5,826 feet long and comprised of the following sections:

- A 205-foot-long, concrete-lined, modified, horseshoe-shaped section, 7 feet high by 6 feet wide;
- A 5,453-foot-long, timber-lined, trapezoidal-shaped section, 7.16 feet high, with a bottom width of 6 feet and a top width of 5 feet;
- A 129-foot-long, concrete-lined, circular section, 7.25 feet in diameter; and
- A 39-foot-long, concrete and steel-lined section, 7.25 feet in diameter.
- A 6-foot by 6.5-foot slide gate is located between the horseshoe-shaped tunnel section and the timber-lined section.

Conduit No. 1

Conduit No. 1 is a 457-foot-long section of conduit and valve which connects Tunnel No. 1 to Tunnel No. 2 and is comprised of the following sections:

- A 50-foot-long "day lighted" steel pipe section containing a 72-inch butterfly valve and a sandtrap/settling chamber;
- A 367-foot-long, 7-foot diameter wood stave conduit;
- A 29-foot-long steel pipe, varying in diameter from 7 feet to 7.25 feet; and
- A 10-foot-long, 7.25 feet diameter steel pipe.

Tunnel No. 2

Tunnel No. 2 is 807-feet long and comprised of the following sections:

- A 78-foot-long, 7.25 feet in diameter concrete and steel-lined circular section; and
- A 729-foot long, 7 to 7.25 feet in diameter concrete-lined, circular section.

Conduit No. 2

Conduit No. 2 is 367 feet long and connects the downstream end of Tunnel No. 2 to the penstocks. Conduit No. 2 is comprised of the following sections:

- An 8.1-foot steel pipe that tapers from 7.25 feet to 7 feet in diameter; and
- A 359-foot-long, 7-foot-diameter wood stave conduit.

The wood stave portion of Conduit No. 2 bifurcates into two 62-inch-diameter pipes that lead to two 60-inch-diameter gate valves at the heads of Penstock No. 1 and No. 2.

2.4.2.5 Penstocks and Penstock Bypass

Penstock No. 1

Penstock No. 1 is a 1,793-foot-long, riveted-steel pipe varying in diameter from 62 inches at the gate valve to 48 inches at the Potter Valley Powerhouse. Penstock No. 1 supplies water to Unit No. 1.

Penstock No. 2

Penstock No. 2 is a 1,812-foot-long, riveted-steel pipe varying in diameter from 62 inches at the gate valve to 48 inches at the Potter Valley Powerhouse. A 30-inch diameter wye branch from Penstock No. 2 supplies water to Unit No. 3 and Unit No. 4.

Penstock Bypass Channel and Powerhouse Bypass System

A butterfly valve house is located at the junction of Tunnel No. 1 and Conduit No. 1. Beginning near the butterfly valve house and terminating in the discharge canal downstream of the powerhouse, a seasonal creek is used as a penstock bypass channel to maintain flows in the East Branch Russian River during powerhouse outages that include dewatering of the entire penstock system. The capacity of the penstock bypass channel is approximately 25 cfs.

PG&E constructed a powerhouse bypass system in November 2009 with a capacity of 140 cfs. This is a fully automated system that is used to maintain required flow releases through the powerhouse as measured at gage E-16. The powerhouse bypass system can only be used when the penstock is in service (the limited-capacity penstock bypass channel is still used when the penstock is taken out of service).

2.4.2.6 Powerhouse, Switchyard, and Tailrace

Potter Valley Powerhouse

The 9.2 MW Potter Valley Powerhouse has three generating units. Water surface at Van Arsdale Reservoir at spill crest elevation (1,490.3 feet), yields a static powerhouse head equal to 475.5 feet. The powerhouse is a steel-frame structure approximately 101 feet long by 53 feet wide.

The three generating units are Francis turbines (PG&E 1994) and are further described below.

- Unit No. 1[1] is a 6,500-horsepower, single horizontal reaction turbine operating at 720 revolutions per minute (RPM) that is directly connected to a 4,400 kilowatt (kW) generator rated at 5,500 kilovolt-amperes (kVA).
- Unit 3 is a 4,000-horsepower, single horizontal reaction turbine operating at 450 RPM that is directly connected to a 2,559 kW generator rated at 3,187 kVA.
- Unit 4 is a 4,000-horsepower, single horizontal reaction turbine operating at 450 RPM that is directly connected to a 3,060 kW generator rated at 3,400 kVA.

Potter Valley Switchyard

The Potter Valley Switchyard, located adjacent to the powerhouse, contains a main transformer bank with a total capacity of 12,000 kVA and steps up the powerhouse output from 2.4 kilovolts (kV) to 60 kV. The bank consists of four 4,000-kVA, single-phase, 60-cycle, air-cooled, outdoor-type transformers with one used as a spare. One station service transformer bank provides station light and power to the powerhouse. Three transformer banks (one is a back-up) and related facilities associated with PG&E's 12 kV distribution system, are non-Project.[2]

Three 60 kV SF6 gas circuit breakers provide direct connection into PG&E's transmission system at the powerhouse. Disconnect and bypass switches provide maintenance of the SF6 gas circuit breakers.

[1] Original Units Nos. 1 and 2 were replaced in 1939 as Unit No. 1.

[2] Transmission lines are not part of the Project. Power is fed directly to PG&E's interconnected transmission system which passes through the powerhouse switchyard.

Potter Valley Tailrace

The three generating units discharge water into the Potter Valley Powerhouse Tailrace. The tailrace is comprised of three individual concrete channels which join together into a common channel approximately 60 feet downstream from the powerhouse. This common channel continues another 25 feet to the 12-foot by 6-foot tailrace radial gate, and forms the head works for the PVID East and West canals. Water not diverted to the PVID canals flows into a 60-foot-long Venturi flume which discharges into the 6,325-foot-long Powerhouse Discharge Canal. Water from the Powerhouse Discharge Canal flows into the East Branch Russian River.

2.4.3 Power Lines and Communication Lines

There are six Project communication and power lines. In general, these lines provide communication and power to Project valve houses, slide gates, ancillary facilities (control buildings), and to the Van Arsdale Fisheries Station facilities (see Tables 2-1 and 2-2).

2.4.4 Gages, Weirs, and Piezometers

PG&E currently maintains a network of gaging stations that include one gage that measures reservoir elevation at Lake Pillsbury, three gages that measure diversion flows, two calculated diversion gages, and two gages that measure river flows below Scott Dam and Cape Horn Dam. In addition, PG&E maintains leakage weirs and piezometers[1] at Cape Horn Dam and Scott Dam. Project gages names and purpose are summarized on Table 2-4.

Table 2-4. Project Gages

PG&E Name	USGS No.	USGS Name	Purpose
Scott Valley Dam Area			
Reservoir Gage			
E1	11470000	Lk Pillsbury NR Potter Valley CA	Measures Lake Pillsbury reservoir elevation
River Gage			
E2	11470500	Eel R BL Scott Dam NR Potter Valley CA	Measures flow in the Eel River downstream of Scott Dam
Cape Horn Dam Area			
Diversion Gages			
E5	11471105	Potter Valley Irrig CN E5 NR Potter Valley CA	Measures diversion to the PVID East Canal
E6	11471106	Potter Valley Irrig CN E6 NR Potter Valley CA	Measures diversion to the PVID West Canal
E16	11471000	Potter Valley PH Intake near Potter Valley CA	Meter at the Penstock No. 1 Butterfly Valve House measures flows from the Eel River to the Potter Valley Powerhouse

[1] Pipe set vertically in the ground that is perforated at the end and is used to monitor groundwater level.

Table 2-4. Project Gages (continued)			
PG&E Name	**USGS No.**	**USGS Name**	**Purpose**
Calculated Diversion Gages			
EC6	11471100	Potter Valley Irrig CN 5+6 NR Potter Valley CA	Calculates total deliveries to PVID (EC6 = E5 + E6)
E7	11471099	Potter Valley PH (TR only) NR Potter Valley CA	Calculates flows from the Potter Valley Powerhouse to the East Branch Russian River (E7 = E16 - (E5 + E6))
River Gage			
E11	11471500	Eel R Van Arsdale Dam NR Potter Valley CA	Measures flow in the Eel River downstream of Cape Horn Dam

Notes: PVID = Potter Valley Irrigation District
USGS = United States Geological Survey

2.4.5 Ancillary and Support Facilities

Project ancillary and support facilities consist of the operator's office, maintenance office, and restrooms at Potter Valley Powerhouse; storage and control buildings at Cape Horn Dam; Cape Horn Dam Fish Ladder rock fall fence and debris booms; Scott Dam block building (houses the generator, office and control room); and Lake Pillsbury boat barrier. Ancillary and support facilities in the Scott Dam and Cape Horn Dam areas are summarized on Tables 2-1 and 2-2, respectively.

2.4.6 Project Access Roads and Trails

Various roads and trails used almost exclusively by PG&E for routine operation and maintenance of the Project are referred to as Project roads and trails. The Project roads and trails associated with the Potter Valley Project are identified in Tables 2-1 and 2-5. These tables also identify Project roads and trails used to access Project recreation facilities. County and USFS roads open to the public with multiple uses are not designated as Project roads.

Table 2-5. Project Roads and Trails

Project Roads and Trails	Approximate Length (feet)
Scott Dam Area	
Project Facility Access Roads	
Scott Dam Rd	1,513
Upper Scott Dam Access Rd	416
Gage E2 Access Rd	1,474
Project Facility Access Trails	
Scott Dam Piezometers and Leakage Weirs Access Trail	601
Recreation Facility Access Roads	
Fuller Grove Campground Rd	1,656

Table 2-5. Project Roads and Trails (continued)	
Project Roads and Trails	**Approximate Length (feet)**
Fuller Grove Day-Use Area and Boat Launch Access Rd	588
Fuller Grove Group Campground Access Rd	488
Navy Campground Access Rd (18N50)	887
Navy Campground Loop Rd	1,482
Oak Flat Campground Rd	1,577
Pillsbury Pines Day-Use Area and Boat Launch Access Rd	2,196
Pogie Point Campground and Day-Use Area Access Rd (18N75)	1,543
Pogie Point Campground Loop Rd	1,759
Sunset Point Campground East Loop Rd	1,727
Sunset Point Campground West Loop Rd	2,331
Trout Creek Campground Loop Rd	405
Trout Creek Campground Rd	1,419
Cape Horn Dam Area	
Cape Horn Dam East Access Rd	970
Intake Access Rd	496
Penstock, Pipeline and Butterfly Valve House Access Rd	6,175
Powerhouse Main Access Rd	648
Project Facility Access Trails	
Gage E11 Access Trail	166

2.4.7 Project Recreation Facilities

A variety of developed Project recreation facilities are located in the immediate vicinity of the Project. A list of these Project recreation facilities is included in Table 2-1. The locations of these recreation facilities are shown on Map 2-1 and Map 2-5. The developed Project recreation facilities include family campgrounds, group campgrounds, and day-use facilities that are open to the public.

Five family campgrounds and one group campground are located along the shoreline of Lake Pillsbury (Map 2-5). In addition, one campground with both family and group capacity is located along the Eel River upstream of Van Arsdale Reservoir (Map 2-1). Developed day-use facilities in the vicinity of Lake Pillsbury include a visitor information kiosk, three day-use areas, three boat launches, and associated parking and picnic areas.

A variety of non-Project private recreation facilities, including recreational resorts and private camps, and private residence tracts are also located around Lake Pillsbury and shown on Map 2-5. With the exception of Westshore Camp, all of the private recreation facilities in the vicinity of Lake Pillsbury are located on NFSL and therefore operated under long-term lease agreements with the USFS. The Westshore Camp is located on PG&E land and operated by the Westshore Campers

Association under a long-term lease agreement with PG&E. The owners of the private recreation facilities around Lake Pillsbury maintain boat docks and/or launches along the shoreline. These boat docks and launches are located within the FERC Project boundary, on land owned by PG&E, and are therefore operated under long-term agreements with PG&E.

2.5 Existing Project Operations

The Project is operated in compliance with existing regulatory requirements, agreements, and water rights to generate power and deliver consumptive water to local water users. The following sections summarize the regulatory requirements and water rights associated with the Project.

2.5.1 Regulatory Requirements

Project operations are regulated by requirements contained in: (1) the existing 1983 FERC license (FERC 1983); (2) the 2004 license amendment (FERC 2004), which incorporated the terms of NMFS' RPA (NMFS 2002); and (3) a 2007 operational "reinterpretation" of the terms of the 2002 RPA. The Project is further limited by PG&E's existing water rights and water supply agreement with PVID.

2.5.1.1 FERC License

The original license for the Potter Valley Project was issued effective April 15, 1922, and expired on April 14, 1972. From 1972 to 1983, the Project operated on annual licenses during the extended relicensing period. FERC issued a new license for the Project in 1983, which was amended in January 2004. The amended license expired on April 14, 2022. The Project is currently operating annual licenses issued by FERC.

Over the years, FERC has additionally issued a variety of administrative orders associated with the license, which have included, for example, approval of reports, plans, and design drawings; extension of time to complete various actions; and approval of temporary modifications to the flow regime. Table 2-6 provides a summary of the License Articles. Refer to the License Order for a complete description of each License Article.

Table 2-6. FERC License Articles

License Article	Summary of License Articles
Article 1	The Project is subject to the provisions, terms, and conditions of the license.
Article 2	No substantial changes may be made in the plans, maps, specifications, and statements in the exhibits until approved by FERC.
Article 3	The Project will be in substantial conformity with the approved exhibits.
Article 4	The Project is subject to inspection by FERC's regional engineer.
Article 5	Requires the Licensee to acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for Project construction, maintenance, and operation.
Article 6	In the event the Project is taken over by the United States upon termination or transfer of the license, Licensee will be responsible for and will make good any defect of title to or of right of occupancy, which is necessary for Project maintenance and operation.
Article 7	The Commission will determine the actual original cost of the Project and any addition thereto.

Table 2-6. FERC License Articles (continued)	
License Article	**Summary of License Articles**
Article 8	Requires the Licensee to install and monitor stream gages and gaging stations.
Article 9	Requires the Licensee to install additional capacity or make other changes as directed by FERC.
Article 10	Requires coordination of Project with other power systems in the interest of power and other beneficial public uses of the water.
Article 11	Whenever the Licensee is directly benefited by the construction work of another Licensee, on a storage reservoir or other headwater improvement, the Licensee will reimburse the owner of the headwater improvement.
Article 12	The United States retains and safeguards the right to use water in such amount as may be necessary for the purposes of navigation; and operations controlled for the protection of life, health, and property and in the interest of conservation and utilization for power purposes and other beneficial public uses.
Article 13	Requires the Licensee to permit reasonable use of reservoir or other Project properties as may be ordered by FERC in the interest of comprehensive development of the waterway.
Article 14	Requires the Licensee to avoid interference between Project transmission lines or other Project facilities and any other communication facilities installed before or after construction.
Article 15	Requires the Licensee to construct, maintain, and operate protective devices in the interest of fish and wildlife resources, as ordered by FERC, or as recommended by other Federal or State agency after an opportunity for a hearing.
Article 16	Requires the Licensee to permit the United States to use, free of cost, Project works or lands to construct fish and wildlife facilities.
Article 17	Requires the Licensee to construct, maintain, and operate reasonable recreational facilities as directed by FERC, or as recommended by other Federal or State agency after an opportunity for a hearing.
Article 18	Requires the Licensee to allow the public free access, to a reasonable extent (safety considerations), to Project waters and adjacent Project lands owned by the Licensee.
Article 19	Requires the Licensee to take reasonable measures to prevent soil erosion on land adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution resulting from Project construction, operation, or maintenance.
Article 20	Requires the Licensee to clear and keep clear lands along open conduits, and all trees along the periphery of reservoirs that may die during Project operation will be removed.
Article 21	Requires the Licensee only conduct dredge and fill activities in association with work specifically authorized under the license; during maintenance of the Project; or after obtaining FERC approval.
Article 22	Requires the Licensee to convey to the United States, free of cost, lands and rights-of-way required to construct, complete, or improve navigation facilities in connection with the Project.
Article 23	Requires that operation of any navigation facilities constructed in connection with the Project are controlled by reasonable rules and regulations in the interest of navigation.
Article 24	Requires the Licensee provide power, free of cost, to the United States for the operation and maintenance of navigation facilities in the vicinity of the Project.
Article 25	Requires the Licensee construct, maintain, and operate lights and other signals for the protection of navigation.

Table 2-6. FERC License Articles (continued)	
License Article	**Summary of License Articles**
Article 26	Requires payment by Licensee for timber cut, used, or destroyed in the construction and maintenance of the Project on lands of the United States.
Article 27	Requires the Licensee to prevent, control, and suppress fires on Project lands.
Article 28	Licensee may not object to or prevent use of water for fire suppression.
Article 29	Requires the Licensee to be liable for destruction of any structures or property of the United States during Project construction, maintenance, or operation.
Article 30	Requires Licensee to permit any agency of the United States, without charge, to construct or permit conduits, chutes, ditches, railroads, roads, trails, telephone and power lines, and other means of transportation and communication not inconsistent with the Project license.
Article 31	Requires state or federal jurisdictional approval over the location and standards of roads and trails; and other uses of land, including quarries, borrow pits, and spoil disposal areas during construction and maintenance.
Article 32	Requires Licensee to minimize interference with transmission, telegraph, telephone, etc., wires during construction and maintenance activities.
Article 33	Requires Licensee to clear and maintain transmission rights-of-way.
Article 34	Requires Licensee to cooperate with the disposal by the United States of mineral and vegetative materials, under the Act of July 31, 1947.
Article 35	Requires Licensee to maintain and operate the Project in good faith and comply with terms of the license and, if not, FERC will consider the Licensee's intent to surrender and terminate the license.
Article 36	Right of the Licensee to use or occupy waters or lands of the United States for the purpose of maintaining the Project will cease at the end of the license period, unless the Licensee obtains a new license, or an annual license is issued.
Article 37	Terms and conditions in the license will not be construed as impairing any terms and conditions of the Federal Power Act.
Article 38	Requires the Licensee maintain identified flow releases from the Project for the protection and maintenance of fishery resources in the Eel River and the East Branch Russian River. [deleted]
Article 39	Requires the Licensee to develop a study plan to determine the effects of the flow release schedule provided for in Article 38 on the salmonid fishery resources of the Upper Eel River and the East Branch Russian River. [deleted]
Article 40	Requires the Licensee file with FERC functional design drawings of the modifications to the existing upstream fish passage facility at Cape Horn Dam, including a construction schedule and cost estimate.
Article 41	Requires the Licensee conduct a study to determine measures needed at Scott Dam to provide a temperature regime downstream needed to facilitate the timely migration of juvenile salmonids from the Upper Eel River.
Article 42	Requires the Licensee, prior to implementation of any construction projects, to consult with the California State Historic Preservation Officer (SHPO) to develop and implement a study for the identification and protection of cultural resources that may be affected by operation and maintenance of the Project.
Article 43	Requires the Licensee maintain Lake Pillsbury's surface elevation at the highest, most practicable level, commensurate with other Project purposes during the summer recreation season. [deleted]

Table 2-6. FERC License Articles (continued)	
License Article	**Summary of License Articles**
Article 44	Requires Licensee to file amended Exhibit K and Exhibit R-2 drawings for FERC approval.
Article 45	Requires Licensee to submit stability analysis of the Scott Dam under seismic loading to FERC.
Article 46	Requires Licensee to continue to consult and cooperate with appropriate Federal, state, and other natural resources agencies for the protection and development of the environmental resources and values of the Project area.
Article 47	Specifies annual charges that the Licensee will pay to the United States.
Article 48	Gives the Licensee authority to grant permission for certain types of use and occupancy of Project lands and waters without FERC approval as long as the use is consistent with protecting and enhancing scenic, recreational, and other environmental values of the Project.
Article 49	Specifies terms and conditions of amortization funds.
Article 50	FERC may modify or terminate this license in any manner considered appropriate in light of the final disposition of any litigation involving the water and related contractual rights with are incident in this Project.
Article 51	Requires the Licensee to file for FERC approval a plan to upgrade the Tomki Creek gage. [deleted]
Article 52	Requires the Licensee to file for FERC approval a plan to implement and comply with NOAA Fisheries' Reasonable and Prudent Alternative, and Reasonable and Prudent Measures of the Biological Opinion filed by NOAA Fisheries on November 29, 2002.
Article 53	Requires the Licensee to file for FERC approval a plan for (1) funding of annual Chinook salmon carcass surveys; and (2) funding of the California Department of Fish and Game's Chinook salmon and stock rescue program.
Article 54	Requires the Licensee to file for FERC approval a plan to conduct or fund annual surveys to identify and monitor nesting, perching, and foraging areas used by bald eagles in the Lake Pillsbury area.
Article 55	Requires the Licensee to file for FERC approval a plan to conduct or fund bathymetric surveys of Lake Pillsbury every 10 years, beginning in 2005.
Article 56	Requires the Licensee extend a public boat ramp if water levels at both the Fuller Grove and Pillsbury Pines boat ramps are too low to permit the use of either ramp on three out of any 10 consecutive Labor Day holiday weekends following implementation of the flow schedule required by Article 51.
Article 57	Requires the Licensee install a continuous reading thermograph below Scott Dam during the months of August through October for a period of 10 years beginning in 2004.
Article 58	FERC reserves authority to require modifications to the Project license as may be necessitated by modification by the California State Water Resources Control Board of its Decision 1610.

Notes: Articles 1 to 37 described in FERC's Form L-5, Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters and Lands of the United States (FERC 1975). Articles 38, 39, and 43 were removed from the Project license on January 28, 2004 (106 FERC ¶ 61,065).

2.5.1.2 Water Rights

PG&E holds water rights for both power and consumptive uses. Water is diverted from the Eel River for generation at Potter Valley Powerhouse in the East Branch Russian River Watershed. After passing through the Potter Valley Powerhouse, a portion of the powerhouse outflow is diverted via canals to PVID for consumptive use. The remaining outflow is abandoned to the East Branch Russian River. This abandoned water from powerhouse operations adds significant inflow to Lake Mendocino and benefits downstream users.

PG&E has three licensed water rights for the Project diversions and two pre-1914 water rights (Table 2-7). License 1424, with a priority date of March 12, 1920, allows PG&E to divert and store up to 102,366 acre-feet per annum (afa) at Lake Pillsbury for the beneficial uses of hydropower generation and incidental Fish and Wildlife Protection and Enhancement. License 1199, with a priority date of August 15, 1927, allows PG&E to divert and store up to 4,500 afa at Lake Pillsbury for irrigation purposes within the PVID service area. License 5545, with a priority date of March 11, 1930, allows PG&E to divert to storage up to 4,908 afa of water at Lake Pillsbury and to directly divert up to 40 cfs from the Eel River for irrigation purposes within the PVID service area in the Russian River Watershed.

PG&E claims a pre-1914 water right to directly divert up to 340 cfs from the Eel River, as specified in Statement of Water Diversion and Use (SWDU) 1010, for power generation and irrigation use. PG&E also claims a pre-1914 water right to store up to 1,457 afa in Van Arsdale Reservoir, as specified in SWDU 4704, for power, irrigation and domestic use.

Table 2-7. Summary of Existing Water Rights

Appl. No.	License/ Permit No.	SWDU No.	Priority / First Use	Gage	Storage (afa)	Direct Diversion (cfs)	Season		Description (Name of Works)	Point of Diversion	Place of Use	Type of Use	Water Right Class
							Begin	End					
1719	1424	–	3/12/1920	E 1	102,366	–	Nov 1	Jun 1	Lake Pillsbury (Scott Dam)	Eel River	Potter Valley Powerhouse	P, FWL	License
5661	1199	–	8/15/1927	E 1	4,500	–	Nov 1	Apr 30	Lake Pillsbury (Scott Dam)	Eel River	PVID	I	License
6594	5545	–	3/11/1930	E 1	4,908	–	Nov 1	Jun 1	Scott Dam	Eel River	PVID	I	License
				E C6	–	40	May 1	Oct 31	Cape Horn Dam				
–	–	1010	1905	E 16	–	340	–	–	Potter Valley Powerhouse Diversion	Eel River	Potter Valley Powerhouse	P, I	Pre-1914
–	–	4704	1907	E 3	1,457	–	–	–	Van Arsdale	Eel River	Potter Valley Powerhouse and PVID	P, I, D	Pre-1914

Notes: afa = acre-feet per annum
cfs = cubic feet per second
D = domestic
FWL = fish and wildlife
I = irrigation
P = power
PVID = Potter Valley Irrigation District
SWDU = Statement of Water Diversion and Use

3.0 REASON FOR SURRENDER

On April 6, 2017, PG&E filed a NOI[1] to prepare an application for a new license for the Project and a PAD with the FERC following the Integrated Licensing Process (ILP). PG&E later determined that it would be contrary to the best interests of its electric ratepayers to continue relicensing the Project. Therefore, on January 25, 2019, PG&E filed a Notice of Withdrawal of the NOI and PAD for the Project, stating PG&E was: 1) discontinuing its efforts to relicense the Project; and 2) terminating its efforts to transfer or sell the Project.[2]

On March 1, 2019, in response to PG&E's Notice of Withdrawal, FERC issued a Notice Soliciting Applications[3] from any party interested in filing a license application for a new license for the Project, stating that applicants must first file a NOI and PAD. On June 28, 2019, a group of acknowledged proxies for a new Regional Entity (hereafter referred to as the NOI Parties[4]) submitted an NOI to the FERC identifying their intent to file an application for new license for the Project utilizing the FERC's ILP.[5]

On January 31, 2022, the NOI Parties submitted a letter to the FERC indicating they had not established a new Regional Entity or accomplished the other tasks identified in their process plan, and, as a result, would not file a final license application for the Project as required.[6]

Given the FERC's solicitation did not result in a viable new applicant, on May 11, 2022, FERC directed PG&E to provide a plan and schedule for submitting a Surrender Application by July 11, 2022.[7] In response, PG&E filed a proposed plan and schedule on July 8, 2022.[8] The plan and schedule stated that PG&E would file a Surrender Application with FERC within 30 months after FERC approval of the proposed plan and schedule. The FERC approved PG&E's proposed plan and schedule on July 29, 2022.[9] Therefore, the deadline for filing of the Surrender Application is January 29, 2025.

1 FERC Accession Nos. 20170406-5314 (Public) and 20170406-5315 (Privileged)

2 FERC Accession No. 20190125-5100

3 FERC Accession No. 20190301-3038

4 The NOI parties include: Sonoma Water, Round Valley Indian Tribes, Mendocino County Inland Water and Power Commission, California Trout, and Humboldt County Public Works Department

5 FERC Accession No. 20190628-5265

6 FERC Accession No. 20220131-5223

7 FERC Accession No. 20220511-3004

8 FERC Accession No. 20220708-5267

9 FERC Accession No. 20220729-3016

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4.0 CONCEPTUAL DECOMMISSIONING PLAN

4.1 Introduction

This Conceptual Decommissioning Plan provides an overview of PG&E's activities related to decommissioning of Project facilities such that the Project will be removed from FERC and DSOD jurisdiction and no longer be operated or maintained in the future by PG&E.

Decommissioning of the Project includes:

- Removal of Scott and Cape Horn Dams followed by site restoration;
- Restoration of the remnant inundation zone of Lake Pillsbury and Van Arsdale Reservoir;
- Removal and restoration of recreational facilities (e.g., campgrounds; day-use facilities; recreation access roads and trails; kiosk; and boat ramps) located on Forest Service and PG&E lands;
- Abandoning in place and capping underground Project facilities;
- Leaving in place Project facility access roads on private lands; and
- Removal or leaving in place the remaining Project support facilities and features.

The Conceptual Decommissioning Plan is organized into two geographic areas—Scott Dam Area and Cape Horn Dam Area. PG&E's approach to removal of the dams and the associated lake/reservoir, and the decommissioning of associated Project support facilities/features is summarized for each area. Due to the complexity of construction activities, a more detailed description is provided for the removal of Project dams. Refer to Tables 4-1 and 4-2 for a summary of the decommissioning of Project facilities and features in the Scott Dam and Cape Horn Dam areas and the associated land jurisdiction.

PG&E also received a proposal from CDFW California Trout, Humboldt County, Mendocino County Inland Water and Power Commission, the Round Valley Indian Tribes, Sonoma County Water Agency, and Trout Unlimited (collectively referred to as the Proponents) for Project facilities in the Cape Horn Dam Area. The proposal is called the "New Eel-Russian Facility".

Proponents are committed to the coequal goals of (1) improving fish migration and habitat on the Eel River with the objective of achieving naturally reproducing, self-sustaining, and harvestable native anadromous fish populations and (2) maintaining material and continued water diversion from the Eel River through the existing tunnel to the Russian River to support water supply reliability, fisheries, and water quality in the Russian River basin.

Two approaches for achieving the objectives are currently proposed:

- Control Section with Pump Station Approach, and
- Roughened Channel with Gravity Supply Approach.

The Regional Entity comprised of Sonoma County Water Agency, Mendocino County Inland Water and Power Commission, and the Round Valley Indian Tribes is responsible for modifications (construction) at Cape Horn Dam. A complete description of the Regional Entity's proposed modifications to Cape Horn Dam is provided in Subsections 4.3.1.2 and 4.3.1.3; these proposed modifications are preliminary and subject to further design updates and stakeholder input.

To implement the Regional Entity's proposed modifications, the Final Surrender Application would include a request to FERC to authorize the conveyance of property interests in various Project assets and facilities, including the existing intake and fish screen facilities, the tunnel and flowline, and the powerhouse and outlet works in order that they might be modified. If either approach is included in the Final Surrender Application, the Regional Entity will seek federal authority to complete the Facility as expeditiously as practicable after deconstruction. Such authority may be granted pursuant to a nonpower license, partial license transfer, or some other FERC approved procedure.

4.2 Scott Dam Area - Decommissioning of Project Facilities/Features

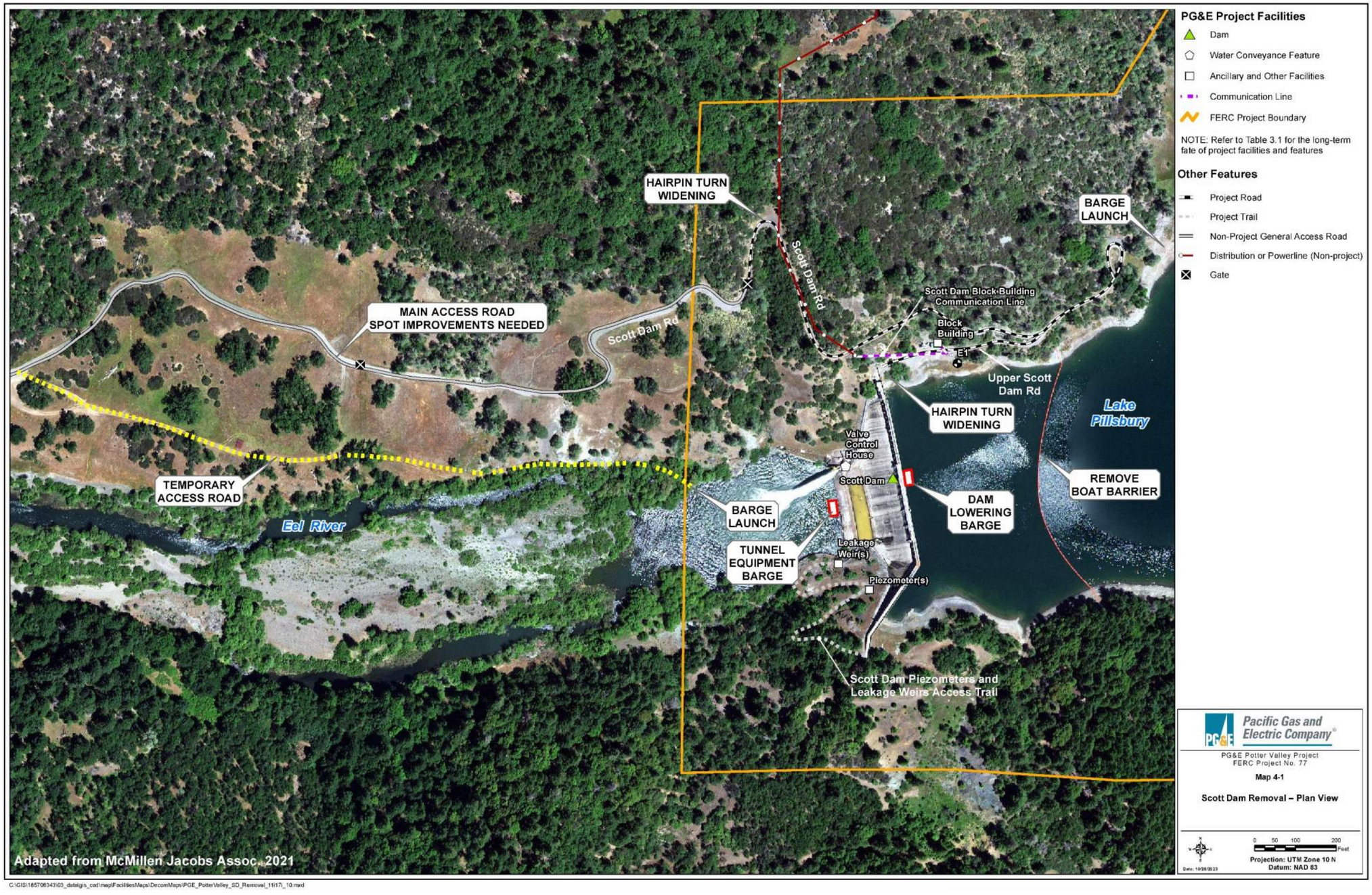
The following provides a description of decommissioning of Project facilities and features located in the Scott Dam Area. This includes Scott Dam, Lake Pillsbury, and associated Project support facilities and features.

4.2.1 Scott Dam

PG&E is evaluating removal of Scott Dam by two different approaches: Rapid Dam Removal and Phased Dam Removal. The description of each removal approach is based on the *McMillen Jacobs Associates Scott Dam and Cape Horn Dam Removal Alternatives Technical Memorandum* (November 2021), existing site conditions, engineering drawings, and technical expertise. The approaches for removal of Scott Dam should be considered preliminary in nature and are subject to change based on further engineering design and resource agency consultation. The two removal approaches are described below. Note that Scott Dam Area elevations cited herein are based on PG&E's datum, which equals National Geodetic Vertical Datum of 1929 (NGVD29) + 81.7 feet.

4.2.1.1 Rapid Dam Removal

Rapid Dam Removal entails expedited removal of Scott Dam (approximately 2 years in duration depending on site conditions and flows) such that no water is impounded, and the structure would no longer be under the jurisdiction of FERC or DSOD. Rapid Dam Removal results in flushing of a large volume of sediment (approximately 12 million cubic yards) downstream of the remnant reservoir into the Eel River. See Map 4-1 and Figures 4-1 and 4-2 for plan and section views of the dam removal.



Map 4-1. Scott Dam Removal - Plan View.

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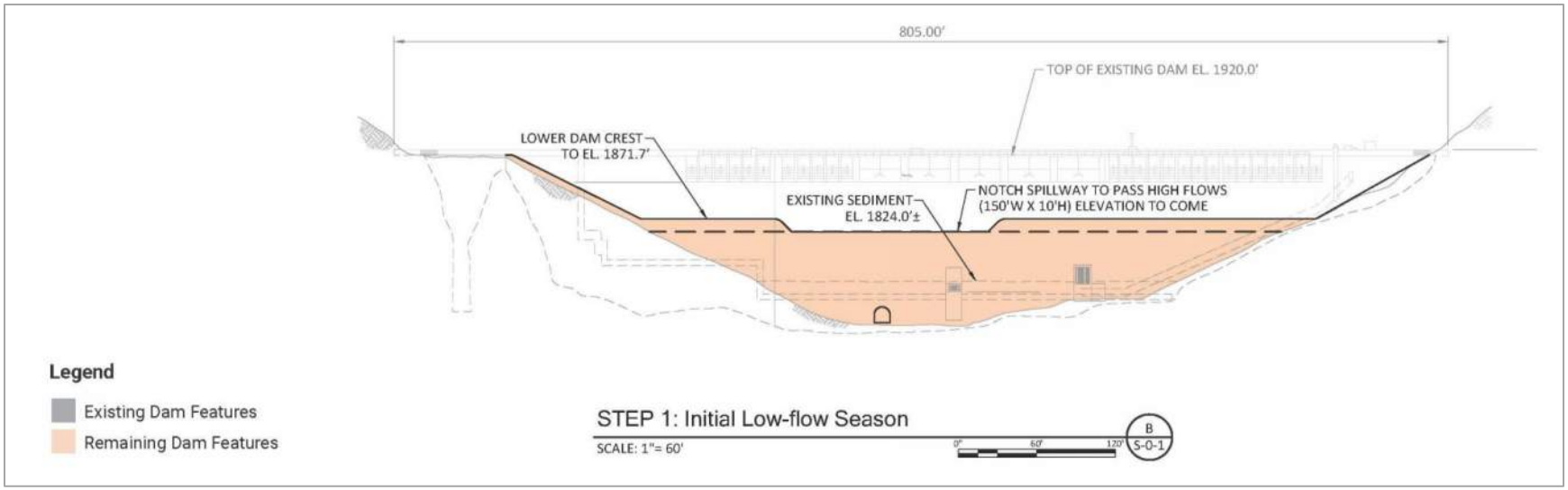


Figure 4-1. Scott Dam Rapid Dam Removal Approach – Initial Dam Removal (Initial Low-flow Season).

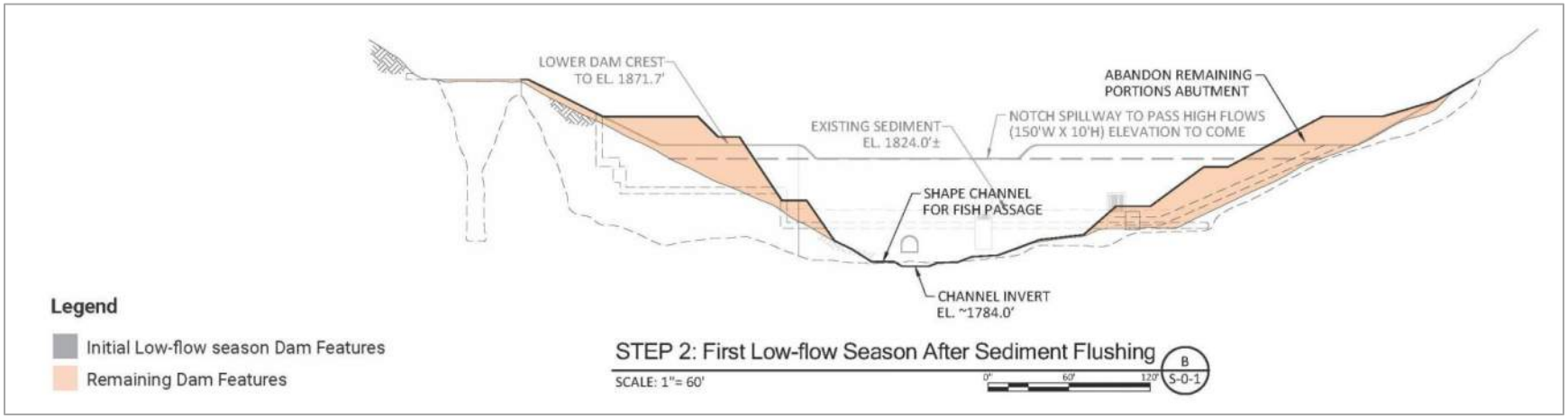


Figure 4-2. Scott Dam Rapid Dam Removal Approach – Final Dam Removal (First Low-flow Season After Sediment Flushing).

Specifically, Rapid Dam Removal includes the following:

Initial Low-flow Season Activities: June – October (1st Year)

- Initiate reservoir drawdown after the runoff season when inflows are generally below 400 cfs, the approximate capacity of the needle valve.
  - The reservoir storage at the start of the drawdown period (June) will be approximately 50,000 acre-feet at an elevation of 1,900 feet. Completion of the drawdown will occur in October at approximately 10,000 acre-feet of storage at an elevation of 1,861.7 feet.
  - To the extent possible, timing of drawdown (flow releases) will be coordinated with water demands in the East Branch of the Russian River.
  - Drawdown rates between about 1 and 2 feet per day are proposed, consistent with the U.S. Society on Dams (USSD) Guidelines for Dam Decommissioning Projects (USSD 2015).
- Construct a temporary road (approximately 1,600 feet) off Scott Dam Road to provide access to a temporary barge launch at the downstream terminus of the existing plunge pool below the dam (Map 4-1).
  - A barge will be placed at the launch site to move heavy equipment to the spillway apron. At the spillway apron, a ramp will be constructed to allow movement of construction equipment between the barge and spillway apron.
  - Road improvements to Scott Dam Road and Upper Scott Dam Road will also be completed to facilitate equipment access to the dam site (Map 4-1).
- Construct an adit tunnel (approximately 15 feet in diameter; capacity of 7,000 cfs) in the base of the spillway, incorporating a temporary plug approximately 8-10 feet from the upstream dam face.
  - PG&E will complete a concrete condition assessment and stability analysis during development of the final engineering design.
  - At the downstream terminus of the tunnel, a channel (approximately 80–90 feet in length and 7.5–14.5 feet deep) and concrete buttress will be constructed in the spillway apron to facilitate downstream sediment transport.
- Remove the upper portion of the dam (dam lowering and notching).
  - Dam removal design will be approved by FERC Dam Safety and DSOD prior to initiation of dam removal activities.
  - Dam removal activities will initially take place using barge-mounted equipment.
    - A small barge-mounted crane will be used to remove larger, removable appurtenances from the top of the dam (steel slide gates, radial gates, gate operating cylinders, hoists, and sheds).
  - Once the appurtenances have been removed from the top of the dam and spillway, a barge-mounted hydraulic impact hammer or similar equipment would then proceed with removal of the upper portion of the dam.

  - The lowered crest elevation would be between elevation 1,861.7 and 1,890.0 feet, leading to a total volume of demolished material between about 4,000 cubic yards and 16,000 cubic yards, respectively.
  - During the dam lowering, a large notch (10–15 feet deep and 150–200 feet wide; overall discharge capacity between 15,000–40,000 cfs depending on head) will be constructed in the spillway.
  - Rubble and other material generated from the dam lowering and notching will be side-cast down the face of the spillway or placed on barges and hauled to a temporary holding area on PG&E-owned land near the dam for later placement.
    - Some large clean material from the dam (e.g., no rebar protruding, greater than about 2 feet diameter) will be placed in the plunge pool area below the final river grade. Material will be large enough, and placed deep enough, so that it will not be eroded/mobilized before the accumulated bedload in the reservoir is released and has an opportunity to occupy the space.

- Dredge sediments near the new tunnel intake.
  - Reservoir sediment deposits (estimated 15 feet deep) immediately upstream of the concrete adit plug (tunnel intake) will be removed using a clamshell dredge or similar approach.

First High-flow Season Activities: November (1st Year) – May (2nd Year)

- Remove the adit plug and initiate sediment flushing during the first high-flow season (November – May).
  - Prior to the initiation of sediment flushing, the concrete plug in the adit tunnel near the upstream face of the dam (tunnel intake) will be drilled and explosives placed in the hole.
  - Following pre-established protocols related to river flow forecasting, the explosives would be detonated during or preceding an anticipated flood event of sufficient magnitude to evacuate fine sediment deposits from the reservoir (likely between December and March).

First Low-flow Season After Sediment Flushing Activities: June – October (2nd Year)

- Complete final dam removal during the first low-flow season following sediment flushing activities (June – October).
  - Demolition will occur using land-based heavy equipment such as hydraulic excavators and hoe rams and/or drilling and blasting techniques. Demolition using a crane and wrecking ball may also be used.
  - Dam removal includes cutting a section through the base of the dam to accommodate the bankfull flood and the 100-year flood.
  - The total volume of material comprising the lowered dam is roughly 115,000 cubic yards. Approximately 80 percent of the material (approximately 92,000 cubic yards) would be removed during demolition.

- Some large clean material from the dam (e.g., no rebar protruding, greater than about 2 feet diameter) will be stored in the portion of the plunge pool area below the final river grade.
- The bulk of the remaining materials will be stored and capped on site (e.g., along the left abutment, on the cribwall, and/or behind the remainder of the dam upstream of the pinnacle).

4.2.1.2 Phased Dam Removal

Phased Dam Removal entails successive lower and notching of Scott Dam over three seasons such that sediment is flushed from the reservoir downstream into the Eel River during high flows in three pulses (1st Year – approximately 1.1 million cubic yards; 2nd Year – approximately 8.5 million cubic yards; and 3rd Year – approximately 2.4 million cubic yards). Ultimately, the dam would no longer impound water and would be removed from FERC and DSOD jurisdiction. See Map 4-1 and Figures 4-3 through 4-6 for plan and section views of the dam removal, respectively.

Specifically, Phased Dam Removal includes the following:

Initial Low-flow Season Activities: June – October (1st Year)

- Initiate reservoir drawdown after the runoff season when inflows are generally below 400 cfs, the approximate capacity of the needle valve.
  - The reservoir storage at the start of the drawdown period (June) will be approximately 50,000 acre-feet at an elevation of 1900 feet. The initial reservoir drawdown will begin at an elevation of approximately 1,850 feet.
  - To the extent possible, timing of drawdown (flow releases) will be coordinated with water demands in the East Branch of the Russian River.
  - Drawdown of between 1 and 2 feet per day is proposed, consistent with the USSD Guidelines for Dam Decommissioning Projects (USSD 2015).
- Implement road improvements on Scott Dam Road and Upper Scott Dam Road. Refer above to Rapid Dam Removal for a description of road and access improvements (Map 4-1).

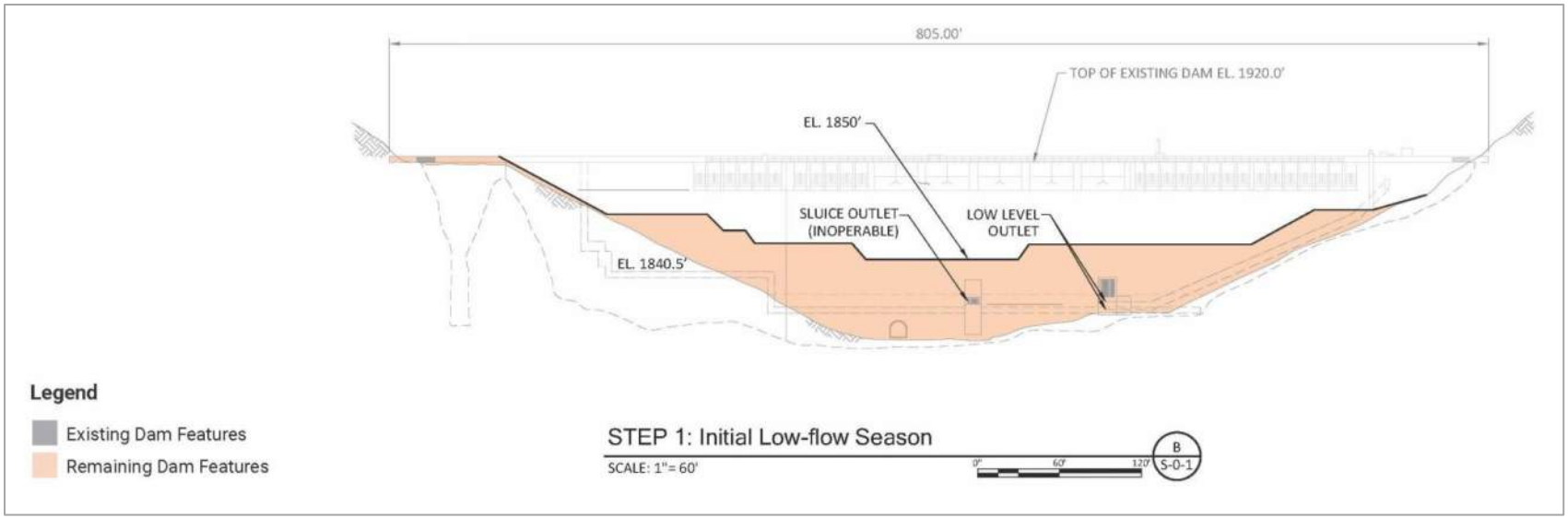


Figure 4-3. Scott Dam Phased Dam Removal Approach – Initial Dam Removal (Initial Low-flow Season)

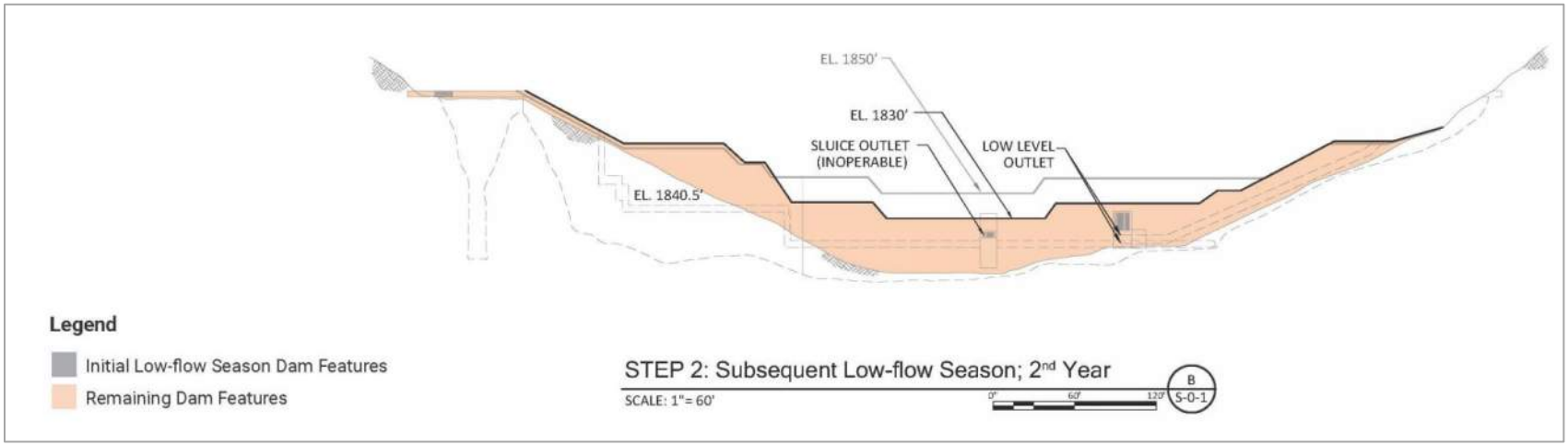


Figure 4-4. Scott Dam Phased Dam Removal Approach – Successive Dam Lowering and Notching (Subsequent Low-flow Season; 2nd Year)

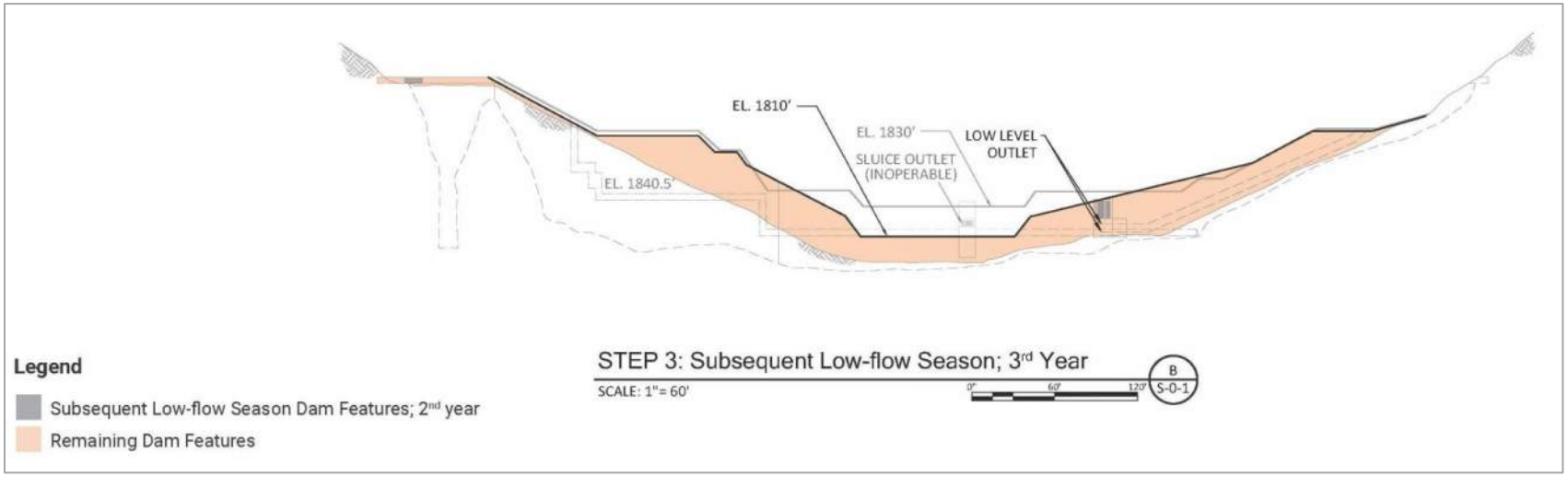


Figure 4-5. Scott Dam Phased Dam Removal Approach – Successive Dam Lowering and Notching (Subsequent Low-flow Season; 3rd Year)

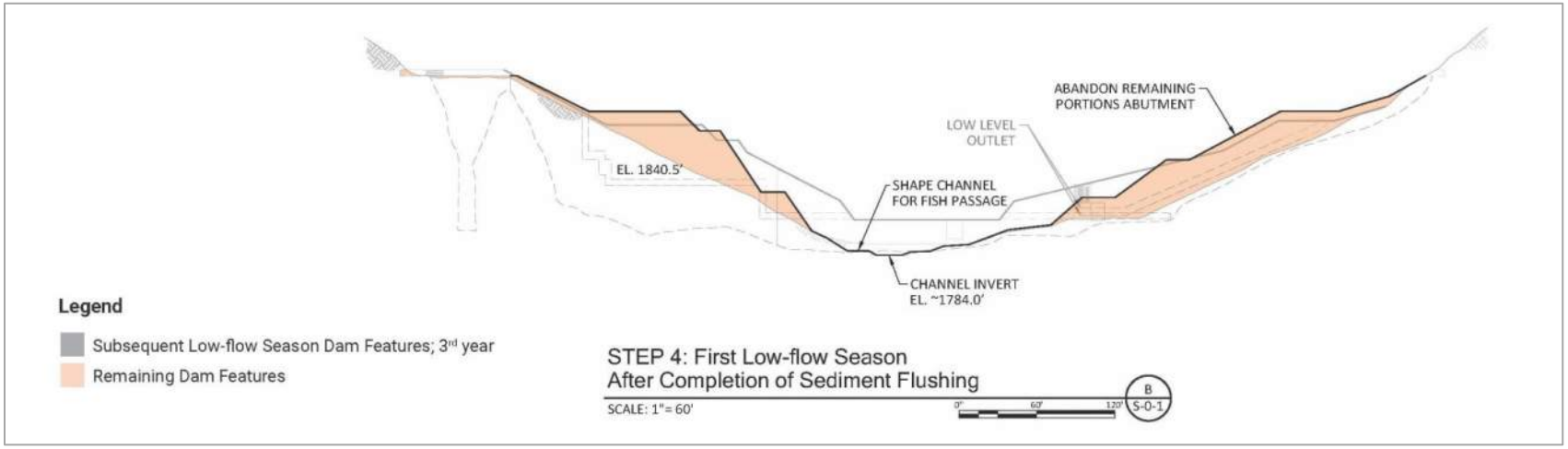


Figure 4-6. Scott Dam Phased Dam Removal Approach – Final Dam Removal (First Low-flow Season After Completion of Sediment Flushing)

- Initiate dam lowering and notching to 1,850 feet elevation.
  - PG&E will complete additional analysis in development of the final engineering design that will be approved by FERC and DSOD prior to commencing removal activities.
  - Initial dam lowering and notching will take place using barge-mounted machinery, similar to the Rapid Dam Removal approach.
    - A small barge-mounted crane would be used to remove larger, removable appurtenances from the top of the dam (i.e., steel slide gates, radial gates, gate operating cylinders, hoists, and sheds). Hoe rams or similar machinery would then be used to lower the dam.
    - Removal will also include provisions for setting vertical explosives in lifts and sequentially blasting, side-casting, hauling off and/or placement of material.
    - The dam will initially be lowered to approximately 1,850 feet elevation and include a spillway notch sufficient to convey the anticipated high winter and spring flows.
  - Dam material disposal will be implemented consistent with methods described above under Rapid Dam Removal.

First High-flow Season Activities: November – May (1st Year)

- Flush sediment from the reservoir through the dam notch during high flows.
  - During the first high-flow season, sediment stored in the reservoir would be flushed downstream through the dam notch. Lowering the dam to an elevation of 1,850 feet corresponds with an anticipated release of approximately 1.1 million cubic yards of stored sediment (assuming a 50-foot-wide notch) (Stillwater Sciences 2021).

Subsequent Low-flow Season Activities: June – October (2nd Year and 3rd Year)

- Lower and notch dam over two additional successive low-flow seasons (2nd year dam elevation -1,830 feet, 3rd year dam elevation – 1,810 feet)
  - The dam will be successively lowered and notched during two subsequent low-flow construction seasons (June-October), first to elevation 1,830 feet (20 feet of lowering the 2nd year), and then to elevation 1,810 feet (an additional 20 feet of lowering the 3rd year). Construction methods will be similar to those described above under initial dam lowering and notching.

Subsequent High-flow Seasons Activities: November (2nd Year) – May (3rd Year) and November (3rd Year) – May (4th Years)

- Flush sediment from the reservoir through the dam notch during high flows.
  - During the second and third high-flow seasons, sediment stored in the reservoir would be flushed downstream through the dam notch. The volume of material expected to be passively flushed and evacuated from the reservoir is 8.5 million cubic yards (2nd – 3rd year) and 2.4 million cubic yards (3rd – 4th year).

First Low-flow Season After Completion of Sediment Flushing Activities: June – October (4th Year)

- Complete final dam removal.
  - Final dam removal would commence (June–October) after three successive low-flow period dam lower/notchings and high-flow sediment flushing events.
  - The construction removal activities, including deposition of dam material, are consistent with those described above under Rapid Dam Removal.

4.2.2 Lake Pillsbury

Following removal of Scott Dam, the former inundation zone of Lake Pillsbury will return to a natural river channel. PG&E will restore the former inundation zone, including the historic river channel.

4.2.3 Other Associated Project Support Facilities and Features

PG&E has reviewed the associated Project support facilities and features in the Scott Dam Area. Table 4-1 provides a summary of decommissioning of Project facilities and features in the Scott Dam Area and the associated land ownership. Decommissioning of Project facilities and features includes leaving the facility in place (L), removal of the facility with restoration (RR), transfer of the facility, if requested by a qualified interested party (T), and removal of the facility with no restoration (X).

Table 4-1. Decommissioning of Project Facilities and Features in the Scott Dam Area.

Project Facility/Feature	Land Ownership	Decommissioning		
		Rapid Dam Removal	Phase Dam Removal	Potential Transfer
Dam and Associated Facility/Features				
Scott Dam	PG&E	RR	RR	
Valve Control House	PG&E	X	X	
Reservoir				
Lake Pillsbury (storage reservoir)	PG&E/USFS	RR	RR	
Reservoir Gage				
E1—Lk Pillsbury NR Potter Valley CA (11470000)	PG&E	X	X	
River Gages				
E2—Eel R BL Scott Dam NR Potter Valley CA (11470500)	PG&E	L (remove equip only)	L (remove equip only)	T (leave equipment)

Table 4-1. Decommissioning of Project Facilities and Features in the Scott Dam Area (continued)				
Project Facility/Feature	Land Ownership	Decommissioning		
		Rapid Dam Removal	Phase Dam Removal	Potential Transfer
Leakage Weirs and Piezometers and Associated Trail				
Scott Dam Leakage Weirs	PG&E	RR	RR	
Scott Dam Piezometers	PG&E	L (cap)	L (cap)	
Scott Dam Piezometers and Leakage Weir Access Trail	PG&E	L	L	
Project Communication Line				
Scott Dam Block Building Communication Line	PG&E	X	X	
Ancillary and Support Facilities				
Scott Dam Block Building	PG&E	L (remove equip only)	L (remove equip only)	
Scott Dam Boat Barrier	PG&E	X	X	
Project Facility Access Roads				
Gage E2 Access Rd	PG&E	L	L	Easement
Scott Dam Rd	PG&E	L	L	
Upper Scott Dam Access Rd	PG&E	L	L	
Recreation Facilities and Access Roads				
Family Campgrounds				
Fuller Grove Campground	USFS	RR	RR	T
Fuller Grove Campground Rd	USFS	RR	RR	T
Navy Campground	USFS	RR	RR	T
Navy Campground Access Rd (18N50)	USFS	RR	RR	T
Navy Campground Loop Rd	USFS	RR	RR	T
Oak Flat Campground	USFS	RR	RR	T
Oak Flat Campground Rd	USFS	RR	RR	T
Pogie Point Campground	USFS	RR	RR	T
Pogie Point Campground Loop Rd	USFS	RR	RR	T
Pogie Point Campground and Day-Use Area Access Rd (18N75)	USFS	RR	RR	T
Sunset Point Campground	USFS	RR	RR	T
Sunset Point Campground East Loop Rd	USFS	RR	RR	T
Sunset Point Campground West Loop Rd	USFS	RR	RR	T

Table 4-1. Decommissioning of Project Facilities and Features in the Scott Dam Area (continued)				
Project Facility/Feature	Land Ownership	Decommissioning		
		Rapid Dam Removal	Phase Dam Removal	Potential Transfer
Trout Creek Campground	PG&E	RR	RR	T
Trout Creek Campground Loop Rd	PG&E	RR	RR	T
Group Campgrounds				
Fuller Grove Group Campground	PG&E	RR	RR	T
Fuller Grove Group Campground Access Rd	PG&E	RR	RR	T
Trout Creek Group Campground	PG&E	RR	RR	T
Trout Creek Campground Rd	PG&E	RR	RR	T
Day-Use Facilities				
Eel River Visitor Information Kiosk	USFS	RR	RR	T
Fuller Grove Day-Use Area and Boat Launch	PG&E	RR	RR	
Fuller Grove Day-Use Area and Boat Launch Access Rd	PG&E	RR	RR	
Pillsbury Pines Day-Use Area and Boat Launch	PG&E	RR	RR	
Pillsbury Pines Day-Use Area and Boat Launch Access Rd	USFS/PG&E	RR	RR	
Pogie Point Day-Use Area	USFS/PG&E	RR	RR	
Lake Pillsbury Low Level Boat Launch	USFS/PG&E	RR	RR	

4.3 Cape Horn Dam Area - Decommissioning of Project Facilities/Features

The following provides a description of decommissioning of Project facilities and features located in the Cape Horn Dam Area. This includes Cape Horn Dam, Van Arsdale Reservoir, and other associated Project support facilities and features.

4.3.1 Cape Horn Dam

PG&E is evaluating the decommissioning of Cape Horn Dam under three different approaches: Dam Removal, Control Section with Pump Station, and Roughened Channel with Gravity Supply. The description of approaches is based on the *McMillen Jacobs Associates Scott Dam and Cape Horn Dam Removal Alternatives Technical Memorandum* (November 2021), existing site conditions, engineering drawings, and technical expertise. The approaches for removal of Cape Horn Dam should be considered preliminary in nature and are subject to change based on further engineering design and stakeholder consultation. The three removal approaches are described below. Note that Cape Horn Dam elevations cited herein are based on NAVD88 datum.

4.3.1.1 Cape Horn Dam Removal

The following identifies Cape Horn Dam Removal activities proposed by PG&E. It is assumed that Cape Horn Dam Removal would take place after Scott Dam removal. See Map 4-2 for the plan view of the proposed approach. The dewatering and construction sequencing for this approach is captured graphically in Map 4-3.

Specifically, Cape Horn Dam Removal includes the following activities:

June – October (1st Year)

- Construct a temporary access road on the river-right (looking downstream) from the dam to an area directly across from the existing fish screen (Map 4-2).
  - The access road is necessary to facilitate construction of a temporary cofferdam and channel through the earthen embankment along the existing dam wingwall to pass Eel River flow downstream.
- Construct a small cofferdam along the right bank of the river at the existing dam wingwall to isolate the earthen embankment portion of the dam.
  - Excavate and armor a channel through the earthen embankment to pass Eel River flows downstream during construction.
  - Lower the dam wingwall and provide structural stability improvements, if needed.
- Install a channel-spanning cofferdams upstream and downstream of Cape Horn Dam to isolate the work area.
  - Tie a new upstream cofferdam into the left bank area (near the existing diversion facility) and remove the small wingwall cofferdam to allow Eel River flows to continue to pass downstream of the existing dam.
  - The channel-spanning cofferdam will also allow water to pass through the existing diversion screens.
- Drain the isolated portion of work area between the cofferdams using pumps and/or siphons.
  - Nuisance water would be pumped/siphoned on an ongoing basis during construction and passed downstream and/or into the tunnel.
- Prepare for dam removal by removing sediment stored immediately upstream of the dam to allow access for heavy equipment to begin demolition.
  - The removed sediment will be placed on adjacent PG&E land for future disposal.
- Remove the concrete gravity portion of Cape Horn Dam using land-based heavy equipment such as hydraulic high-traction excavators, hoe rams and/or drilling and blasting.
- Remove the dam wingwall (earthen embankment portion of the dam), fish hotel, exclusion barrier, and fish ladder.
- Store removed dam materials on adjacent PG&E land above the 100-year floodplain on river-right (looking downstream) for future disposal.

- Remove cofferdams after completion of the demolition of Cape Horn Dam and associated facilities, starting with the downstream cofferdam then proceeding to upstream cofferdam.
- Flush remaining sediments impounded in the former reservoir during subsequent high-flow events.

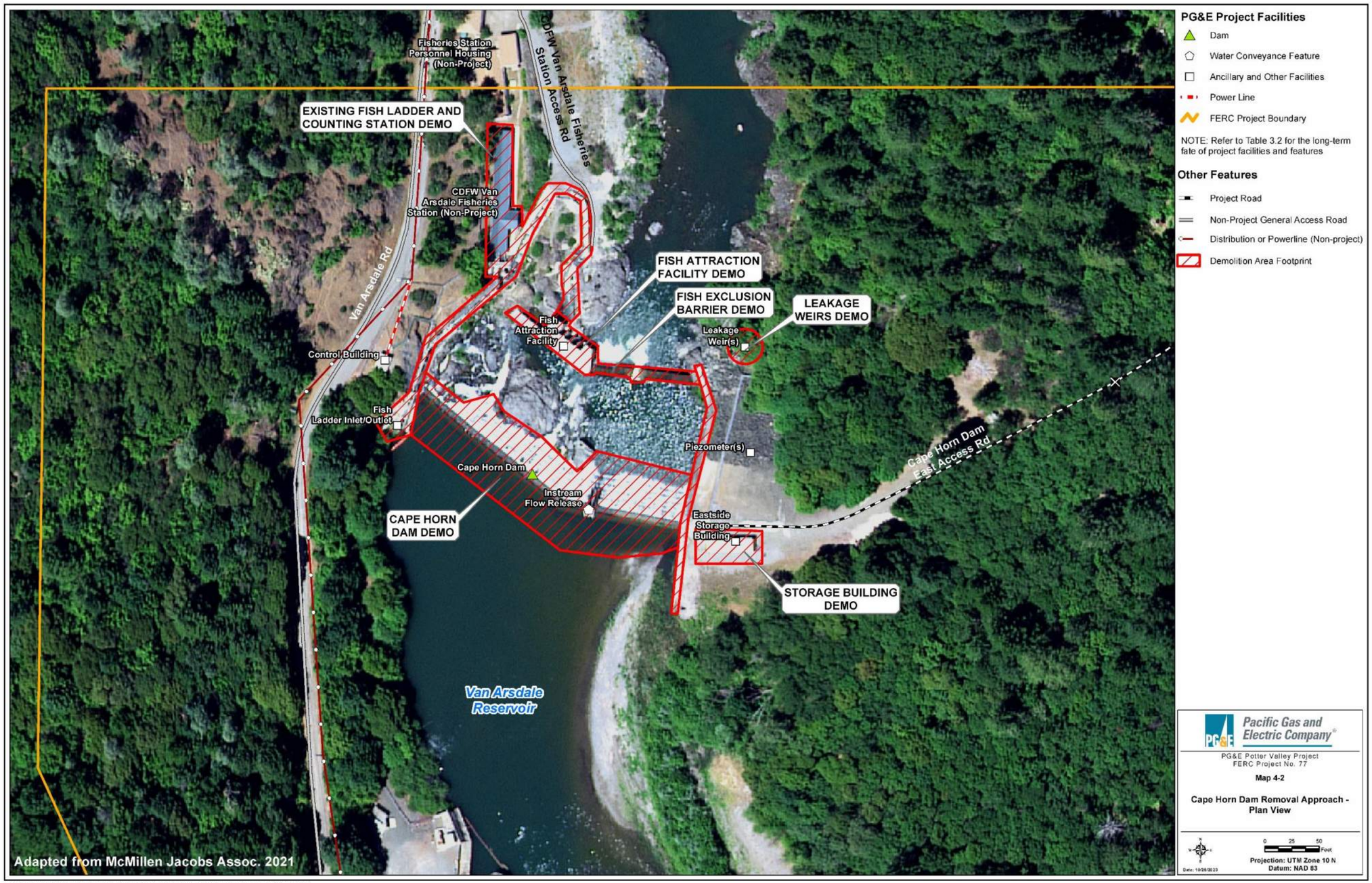
4.3.1.2 Control Section with Pump Station

The Control Section with Pump Station approach proposed by the Regional Entity (Alternative C-1 in McMillen Jacobs Associates 2021) entails substantial removal of the concrete gravity and earthfill portions of Cape Horn Dam and construction of a new pump station near the dam to divert and convey water through a conduit to the existing Van Arsdale Diversion Facility. See Map 4-4, Figure 4-7, and Figure 4-8 for plan and section views of the proposed approach. To minimize the construction time window and potential in-river impacts, it is important that the dam removal and diversion upgrades be constructed at the same time, or immediately sequentially using a single construction window. Both Regional Entity's approaches (Subsection 4.3.1.2 and 4.3.1.3) utilize this construction sequence.

The control section that remains in the river would be approximately 150 feet long. Depending on the final design and excavation plan (pending additional hydraulic modeling, geotechnical evaluation, and consultation), the control section will be composed of residual concrete from the dam, intact bedrock, and rip rap. The purpose of the control section would be to a) allow for volitional passage of salmonids across the range of fish passage design flows, and b) maximize the amount of time that the pump intake screens are at least partially submerged.

Specifically, the Control Section with Pump Station approach includes:

- Lowering a section of the concrete gravity portion of Cape Horn Dam from elevation 1,494.0 feet (NAVD88) to between about 1,445.0 and 1,450.0 feet to create a control section (Note: the final grade will be determined by hydraulic modeling and geotechnical investigations).
  - The portion removed would begin at the existing concrete wingwall and would gently slope downward toward river left to help concentrate flows near the pump station intake.
  - At the end of the control section a vertical section of the dam would remain in place (approximate elevation 1,477.0; elevation to be verified with hydraulic modeling), beyond which the dam would slope upward to match the existing crest elevation (1,494.0 feet).
  - The section would be designed to completely contain the 100-year flow.
  - The section would also be designed to meet state and federal fish passage criteria across the range of fish passage design flows.



Map 4-2. Cape Horn Dam Removal Approach – Plan View.

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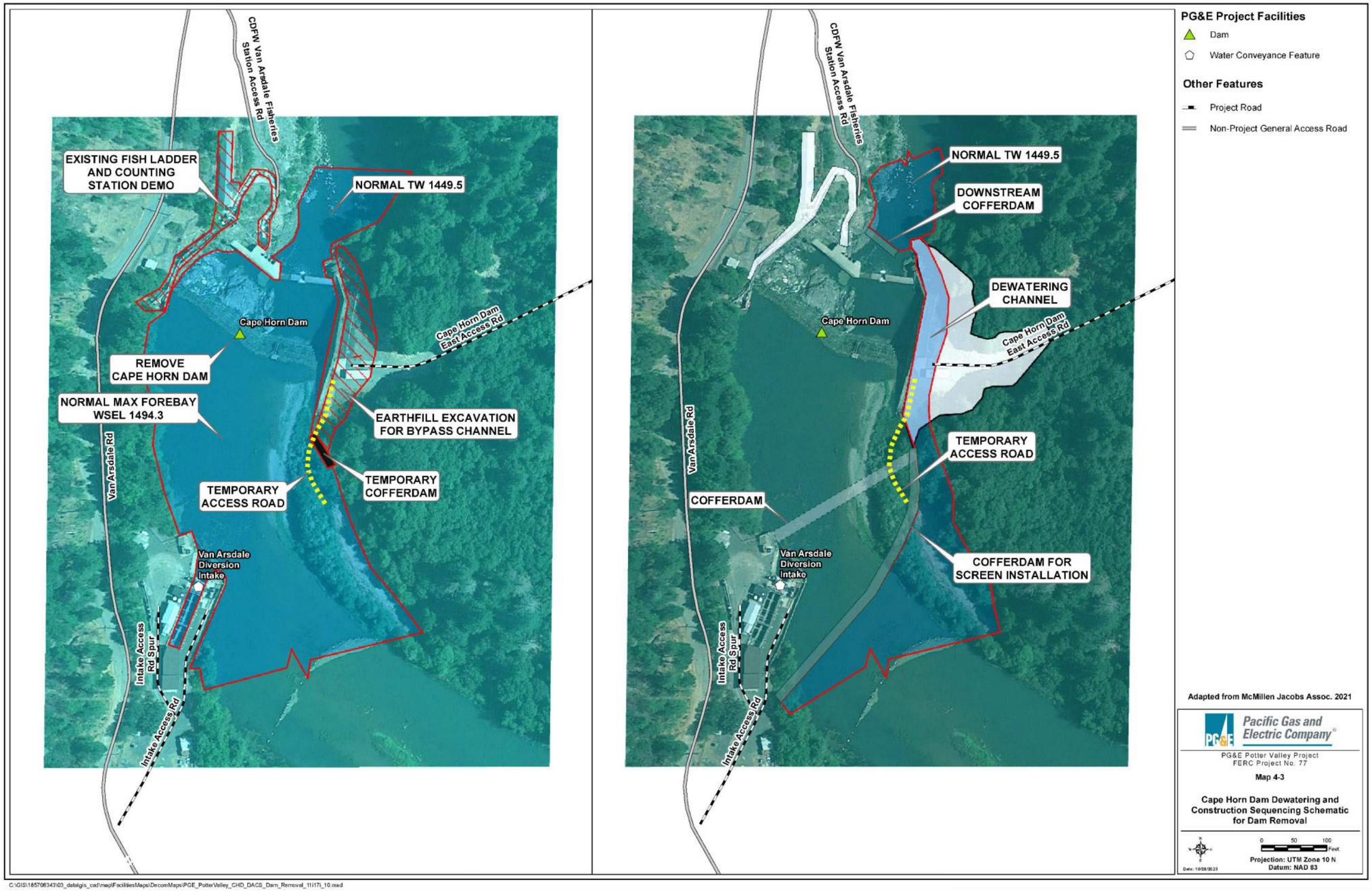

Map 4-3. Cape Horn Dam Dewatering and Construction Sequencing Schematic for Dam Removal.

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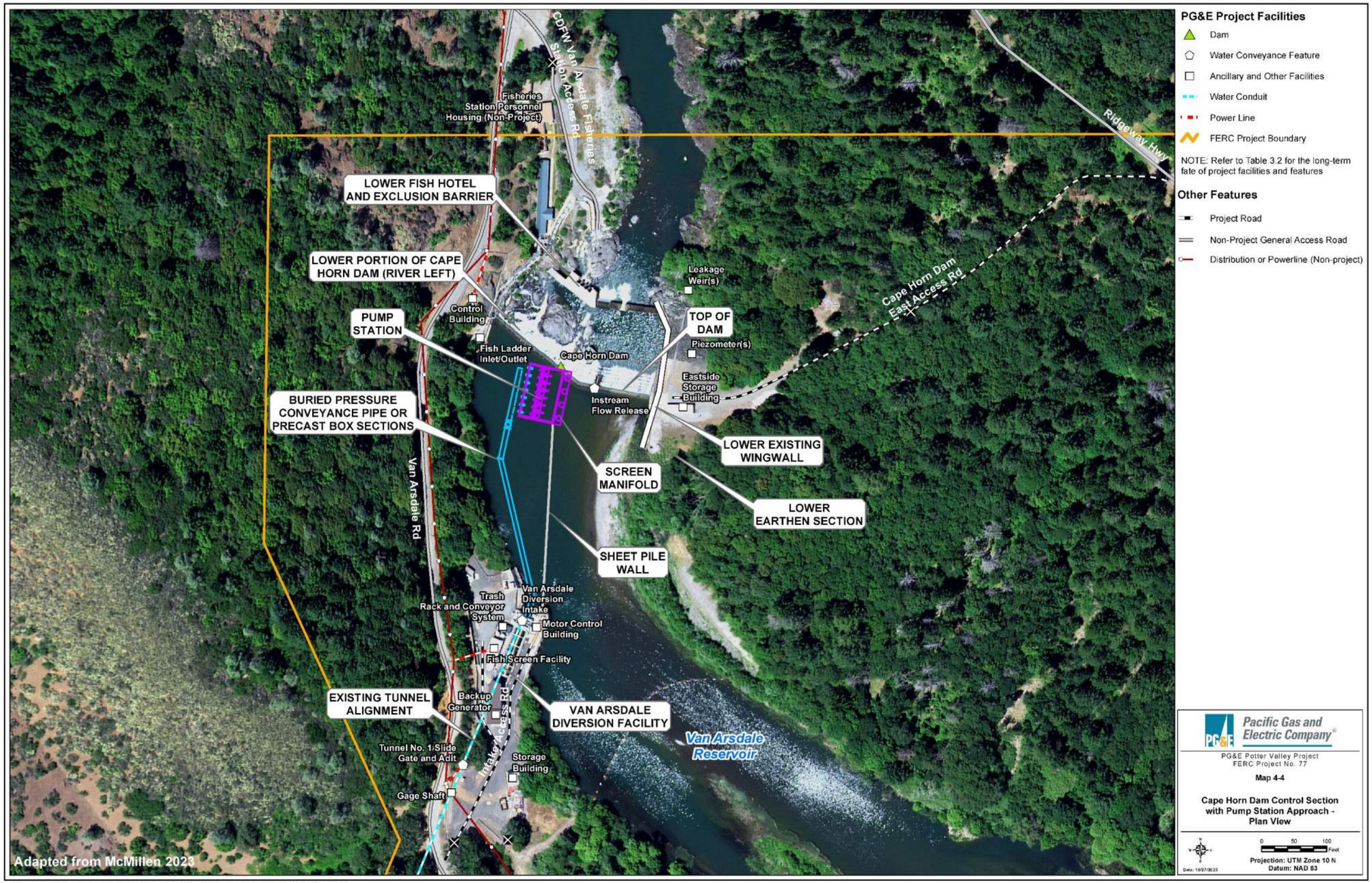

Map 4-4. Cape Horn Dam Control Section with Pump Station Approach – Plan View.

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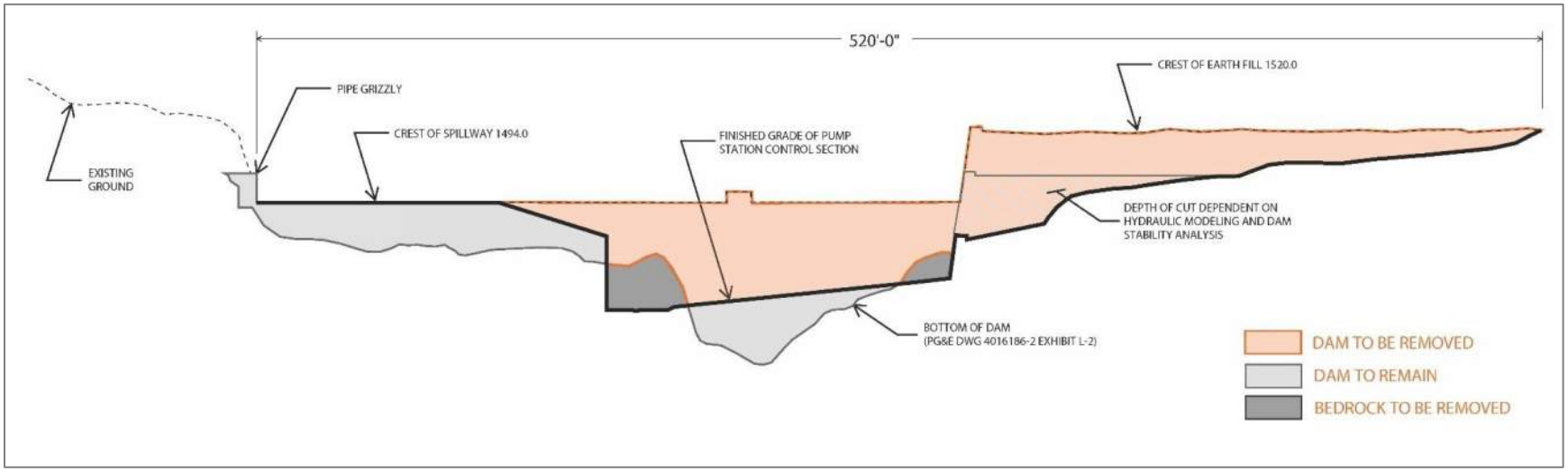


Figure 4-7. Cape Horn Dam Control Section with Pump Station - Final Dam Removal (Cross Section Through Dam)

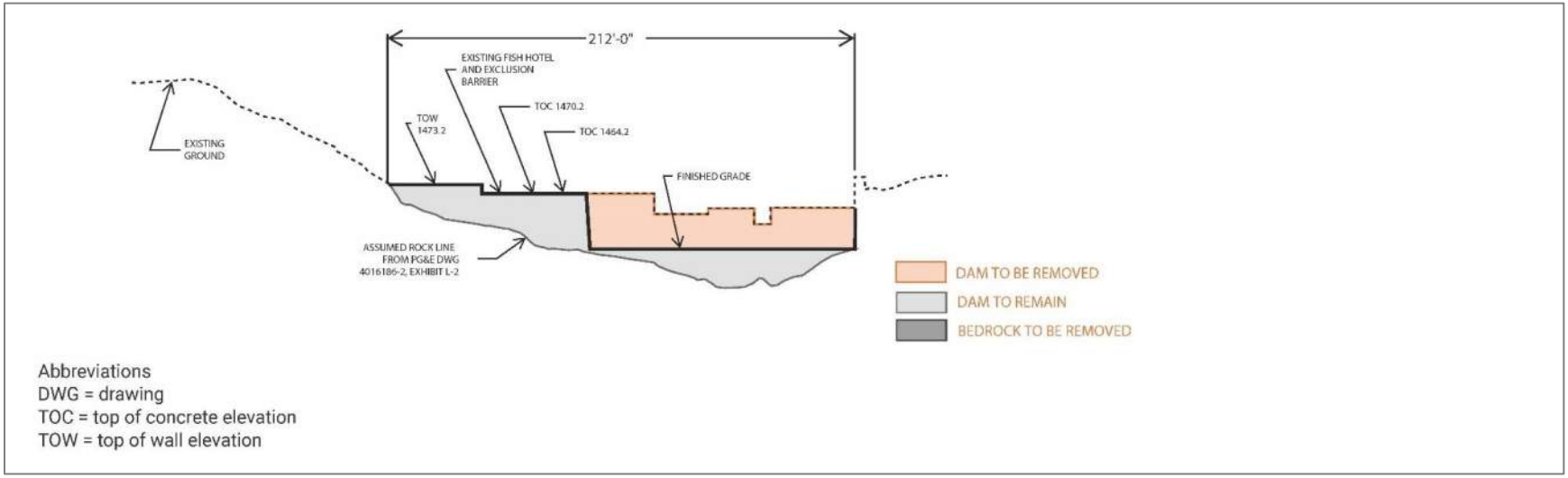


Figure 4-8. Cape Horn Dam Control Section with Pump Station - Final Fish Hotel and Exclusion Barrier Removal (Cross Section Through Fish Hotel and Exclusion Barrier)

- Lowering the existing wingwall to elevation 1,477.0 feet (elevation to be verified with hydraulic modeling and stability analysis) to a) contain the 100-year flow and b) improve the stability of the earthfill section.
  - Lowering the wingwall would require excavating the earthfill portion of the dam down to an approximate elevation of 1,473.5 feet (elevation to be verified with hydraulic modeling and stability analysis). This excavation will include partial demolition of the mass concrete corewall and possibly some of the reinforced concrete corewall.
- Installing a bank protection feature (e.g., sheet pile wall; vegetated revetment; mechanically stabilized earth wall) along river left running parallel with flow between the control section and the existing Van Arsdale Diversion facility to serve as a lateral constraint to route water through the control section and protect the facility from avulsing or out-flanking.
- Removing the existing fish hotel and exclusion barrier, located approximately 100 feet downstream of the control section, down to an elevation approximately 1.0 feet below the lowest elevation of the control section.
- Removing the fish ladder by either total removal or by cutting the walls down to surrounding grade and infilling the pools with flowable fill or similar material. All appurtenances associated with the fish ladder would also be removed.
- Constructing a new reinforced concrete pump station with fish screens rated for a combined diversion flow rate between 300 and 350 cfs and mounted to the face of the pump station along river left.
  - The pump station would be between approximately 80 and 100 feet long in the river flow direction and approximately 60 to 70 feet wide into the bank.
  - The new intake pump station would convey pumped water from a wet well located within the pump station to the existing Van Arsdale Diversion facility via one or more large diameter pipes or box culverts.
  - The screens would be vertically adjustable to accommodate bed fluctuations between 0 and 12 feet while diverting the maximum demand.
- Use of a bladder dam, or other surface elevation control structure, to aid in sediment management and/or to help ensure surface diversion will be evaluated in the hydraulic modeling and design phases.
- Final dimensions of retained dam facilities will be evaluated in the hydraulic modeling and design phases.
- Diverting screened water to a large wet well chamber where pumps would lift the water to one or more large diameter pipes or precast box culverts.
  - Water diversions occur primarily during the winter and spring, rather than the summer, due to the loss of storage behind Scott Dam.
  - The pipe or culvert conveyance would connect with a manifold that combines the pump outlets.

  - If a pipe is selected, the diameter would be approximately 7 to 8 feet for a single pipe, or approximately 5 to 6 feet for two pipes. A box culvert would be similar in size, requiring an approximately 6-by-8-foot section or similar.
  - The conveyance would discharge into the existing Van Arsdale Diversion facility at an elevation of approximately 1,475.0 feet.
- Retrofitting the interior of the existing Van Arsdale Diversion facility to include a sealed connection to the new conveyance (requires a new reinforced concrete bulkhead).
  - Retrofit work would also include removal of the trashrack, inclined screens, screen support structure, and air sparging system.
  - All other equipment appurtenant to the existing facility would also be removed (e.g., the Archimedes screw pump, trashrake, fish bypass channel, control building, screen cleaning system compressors and air receiver, bypass valve motor operators, and rear gate and gate hoists).
  - The existing bulkhead gate and 5-ton gate hoist would be retained and protected.

Dewatering and Construction Sequencing

The Regional Entity's construction of the Facility will not interfere with or delay PG&E's deconstruction of Cape Horn Dam. Removal of Cape Horn Dam and construction of the Control Section with Pump Station could be completed in 12 to 18 months; construction sequencing will require stakeholder input and close coordination with the planning for Scott Dam removal. Dewatering and construction sequencing is in development and will be included in the Draft Final Surrender Application.

4.3.1.3 Roughened Channel with Gravity Supply

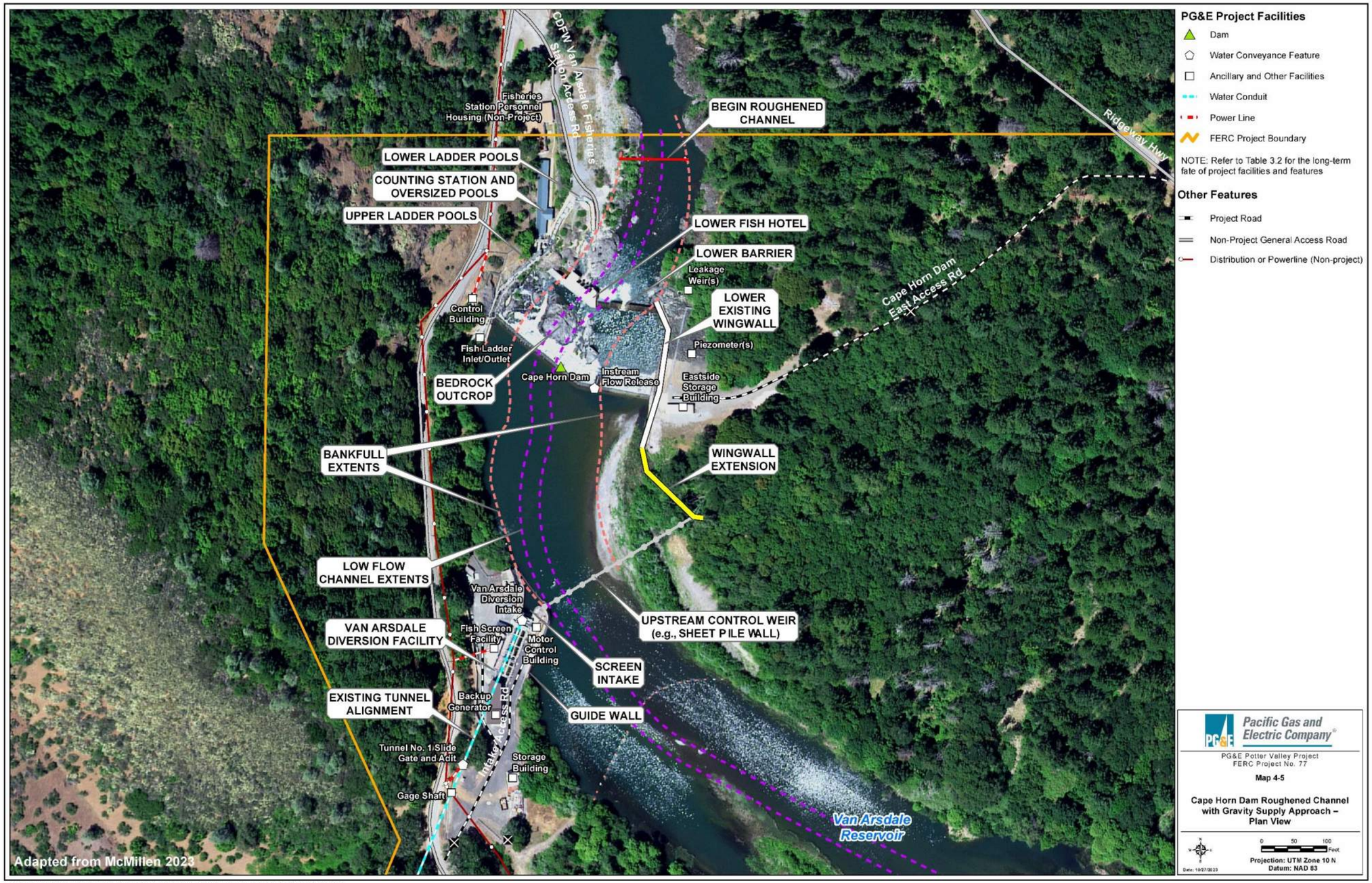
The Roughened Channel with Gravity Supply approach proposed by the Regional Entity (Alternative C-2 in McMillen Jacobs Associates 2021) entails substantial removal of the concrete gravity and earthfill portions of Cape Horn Dam and construction of a roughened channel and new diversion weir near the intake to the Van Arsdale Diversion facility. See Map 4-5, Figure 4-9, and Figure 4-10 for plan and section views of the proposed approach.

The roughened channel would include construction of a new river thalweg through the dam site, potentially removing bedrock while retaining dam foundation elements to achieve the target gradient and overall hydraulic objectives.

Depending on the final design and excavation plan (pending additional hydraulic modeling, geotechnical evaluation and consultation), the footprint of excavation and fill may be substantially larger than other approaches. The purpose of the roughened channel would be to a) allow for volitional passage of salmonids across the range of fish passage design flows, and b) maximize the amount of time that the intake screens are at least partially submerged.

Specifically, the Roughened Channel with Gravity Supply approach includes:

- Lowering part of the concrete gravity portion of Cape Horn Dam from elevation 1,494.0. (NAVD88) feet down to between elevation 1,455.0 and 1,460.0 feet.
- Lowering the fish hotel and exclusion barrier from a variable elevation down to between 1,450.0 feet and 1,455.0 feet.
- Constructing a roughened channel (total length between about 700 and 750 feet) starting approximately 225 to 250 feet downstream of the fish hotel/exclusion barrier and ending approximately 375 to 400 feet upstream of the dam.
  - The roughened channel would resemble a boulder cascade, with an average slope of approximately 3.0% and large rock material providing hydraulic complexity and channel stability sufficient to withstand extreme high-flow events.
  - The roughened channel would include a low-flow corridor (approximately 40 feet wide) that matches the existing channel at the downstream terminus and matches the low-flow section at the upstream terminus (upstream control weir).
  - Due to the length of roughened channel, vertical control cutoff walls (e.g., sheet pile; buried boulder) may be installed at two to three intermediate locations to arrest any headcut formations.
  - The design team will complete geotechnical and structural analysis for the proposed roughened channel to determine the final configuration and the engineering details associated with stability. The stability of the roughened channel bed material would be enhanced through the design process by undertaking sediment transport modeling and other measures to guide the specification for material size.
- Constructing an upstream control weir (sheet pile, concrete, or buried boulder) that spans the channel, connecting on river left to the existing diversion facility and on river-right to a reinforced concrete extension of the existing dam wingwall.
  - The upstream control weir would include a low-flow section approximately 40 feet wide with a minimum crest elevation between approximately 1,468.0 feet and 1,469.5 feet.
  - The upstream control weir would serve as a backwater control for a modified diversion structure.
  - Water conveyance to the East Branch Russian River would include the existing tunnel system and associated appurtenances.
  - Diversion of water into the existing diversion facility and water conveyance system would be through a series of new vertically adjustable fish screens (total capacity between 300 cfs and 350 cfs) mounted to the outside face of the existing Van Arsdale Diversion guidewall.



Map 4-5. Cape Horn Dam Roughened Channel with Gravity Supply Approach – Plan View.

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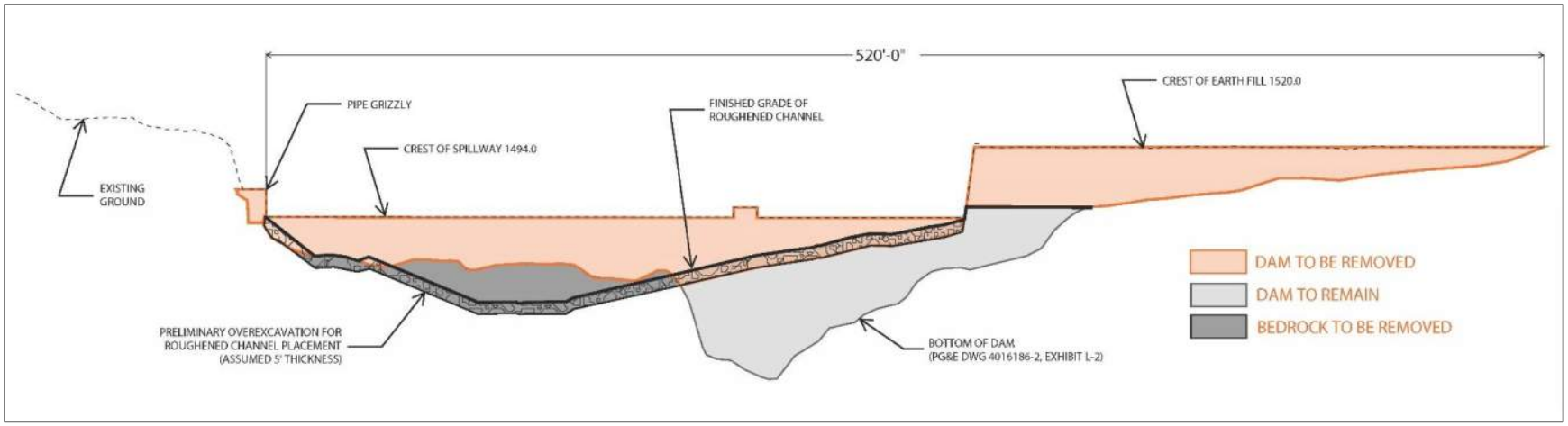

Figure 4-9. Cape Horn Dam Roughened Channel with Gravity Supply - Final Dam Removal (Cross Section Through Dam)

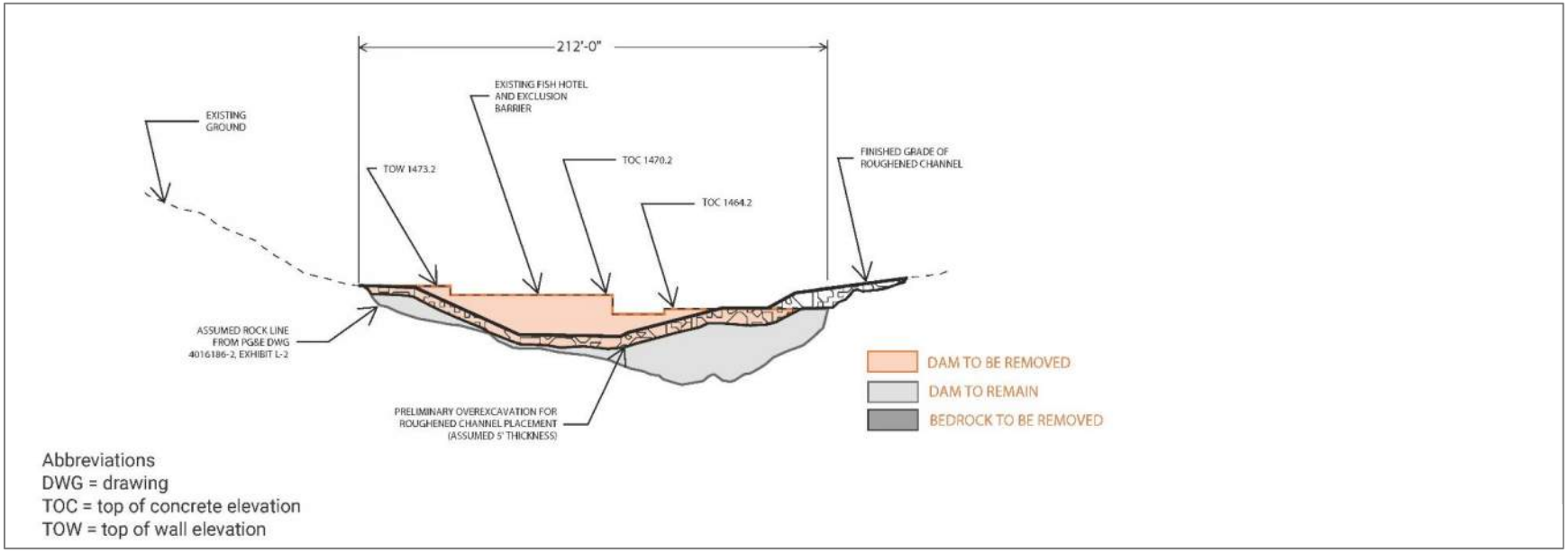

Figure 4-10. Cape Horn Dam Roughened Channel with Gravity Supply - Final Fish Hotel and Exclusion Barrier Removal (Cross Section Through Fish Hotel and Exclusion Barrier)

- Retrofit the interior of the existing diversion to include:
  - A new bulkhead wall to seal off the existing intake at the river.
  - Removal of the trashrack; inclined screens; screen support structure; air sparging system; and all other appurtenant equipment (e.g., the Archimedes screw pump, trashrake, fish bypass channel, bulkhead gate and 5-ton gate hoist, control building, screen cleaning system compressors and air receiver, bypass valve motor operators, and rear gate and gate hoists).
- Control equipment for the new screens and accompanying mechanical equipment.
- Use of a bladder dam or other surface elevation control structure to aid in sediment management and/or to help ensure surface diversion will be evaluated in the hydraulic modeling and design phases.
- Final dimensions of retained dam facilities and rock material for roughened channel will be evaluated in the hydraulic modeling and design phases.

Dewatering and Construction Sequencing

The Regional Entity's construction of the Facility will not interfere with or delay PG&E's deconstruction of Cape Horn Dam. Removal of Cape Horn Dam and construction of a new diversion and conveyance system could be completed in 12 to 18 months; construction sequencing will require stakeholder input and close coordination with the planning for Scott Dam removal. Dewatering and construction sequencing is in development and will be included in the Draft Final Surrender Application.

4.3.2 Van Arsdale Reservoir

Van Arsdale Reservoir will be drained as part of dam removal. Following removal of Cape Horn Dam, the former inundation zone of the reservoir will transition to a river channel. PG&E will restore the former inundation zone, including the historic river channel.

4.3.3 Other Associated Project Support Facilities and Features

PG&E has reviewed the associated Project support facilities and features in the Cape Horn Dam Area. Table 4-2 provides a summary of decommissioning of Project facilities and features in the Cape Horn Dam Area and associated land ownership. Decommissioning of Project facilities and features includes leaving the facility in place (L), partial removal of the facility with restoration (PR), removal of the facility with restoration (RR), and removal of the facility with no restoration (X).

Table 4-2. Decommissioning of Project Facilities and Features in the Cape Horn Dam Area.

Project Facility/Feature	Land Ownership	Decommissioning	
		Dam Removal	Control Section with Pump Station and Roughened Channel with Gravity Supply
Dam and Associated Facility/Features			
Cape Horn Dam	PG&E	RR	PR
Cape Horn Dam Instream Flow Release	PG&E	X	X
Reservoir			
Van Arsdale Reservoir	PG&E	RR	PR
Intake Structures			
Van Arsdale Diversion Intake	PG&E	L Remove trashrack; inclined screens; screen support structure; air sparging system; and all other appurtenant equipment Cap tunnel	L Remove trashrack; inclined screens; screen support structure; air sparging system; and all other appurtenant equipment
Tunnels and Adits			
Tunnel No. 1	PG&E	L Fill/cap tunnel	L
Tunnel No. 2	PG&E	L Fill/cap tunnel	L
Tunnel No. 1 Slide Gate and Adit	PG&E	L Remove gate Cap adit	L
Tunnel No. 1 Gage Shaft	PG&E	L Remove gage Cap shaft	L
Conduits, Penstocks, Control and Valve Houses			
Conduit No. 1 (Upper Wood Stave, Steel Pipe and Components)	PG&E	X	L
Conduit No. 2 (Lower Wood Stave, Steel Pipe and Components)	PG&E	X	L
Conduit No. 1, 72-inch Butterfly Valve House	PG&E	X	L
Conduit No. 1 Standpipe and Surge Chamber Vent	PG&E	L Remove standpipe Cap vent	L
Penstock No. 1	PG&E	L Cap penstock	L

Table 4-2. Decommissioning of Project Facilities and Features in the Cape Horn Dam Area (continued).			
		Decommissioning	
Project Facility/Feature	Land Ownership	Dam Removal	Control Section with Pump Station and Roughened Channel with Gravity Supply
Penstock No. 2	PG&E	L Cap penstock	L
Penstock Nos. 1 and 2, 60-inch Gate Valves (2)	PG&E	X	L
Penstock Bypass Channel	PRIVATE/ PG&E	L	L
Powerhouse Bypass System	PG&E	X	L
Powerhouse, Switchyard, and Tailrace			
Potter Valley Powerhouse	PG&E	L Disconnect equipment Remove fluids	L Disconnect equipment Remove fluids
Potter Valley Powerhouse Switchyard	PG&E	L Disconnect turbines	L Disconnect turbines/Retain station service transformers
Potter Valley Powerhouse Discharge Canal	PG&E/ PRIVATE	L	L
Diversion Gages			
E5 - Potter Valley Irrig CN E5 NR Potter Valley CA (11471105)	PG&E	X	L
E6 - Potter Valley Irrig CN E6 NR Potter Valley CA (11471106)	PG&E	X	L
E16 - Potter Valley PH Intake near Potter Valley CA (11471000)	PG&E	X	L
River Gages			
E11 - Eel River at Van Arsdale Dam near Potter Valley CA (11471500)	PG&E	L Remove equip	L
Leakage Weirs and Piezometers			
Cape Horn Dam Leakage Weirs	PG&E	X	L
Cape Horn Dam Piezometers	PG&E	L Cap piezometers	L

Table 4-2. Decommissioning of Project Facilities and Features in the Cape Horn Dam Area (continued)

Project Facility/Feature	Land Ownership	Decommissioning	
		Dam Removal	Control Section with Pump Station and Roughened Channel with Gravity Supply
Fish Screen and Associated Facilities			
Van Arsdale Fish Screen Facility	PG&E	X	L
Van Arsdale Fish Screen Facility Back-up Generator Building	PG&E	X	L
Van Arsdale Fish Screen Facility Motor Control Building	PG&E	X	L
Van Arsdale Fish Return Channel	PG&E	X	L
Storage Building	PG&E	X	L
Fish Ladder and Associated Facilities			
Cape Horn Dam Fish Ladder Inlet / Outlet	PG&E	X	X
Cape Horn Dam Fish Ladder	PG&E	X	X
Fish Attraction Facility	PG&E	X	PR
Cape Horn Dam Fish Ladder Rock Fall Fence	PG&E	X	X
Cape Horn Dam Fish Ladder Intake / Outlet Debris Boom	PG&E	X	X
Project Communication/Power Lines			
Conduit No. 1, 72-inch Butterfly Valve House Communication	PG&E	X	L
Cape Horn Dam Control Building Communication/Power Line	PG&E	X	L
Fish Screen Facility Communication/Power Line	PG&E	X	L
Tunnel No. 1 Slide Gate and Adit Communication/Power Line	PG&E	X	L
Penstock Nos. 1 and 2, 60-inch Stop Valves Communication/Power Line	PG&E	X	L
Helicopter Landing Sites			
Potter Valley Powerhouse Helicopter Landing Site	PG&E	L	L

Table 4-2. Decommissioning of Project Facilities and Features in the Cape Horn Dam Area (continued)

Project Facility/Feature	Land Ownership	Decommissioning	
		Dam Removal	Control Section with Pump Station and Roughened Channel with Gravity Supply
Ancillary and Support Facilities			
Potter Valley Powerhouse Operators Office	PG&E	X	L
Potter Valley Powerhouse Maintenance Office	PG&E	X	L
Potter Valley Powerhouse Operators Restrooms	PG&E	X	L
Project Facility Access Roads			
Cape Horn Dam East Access Rd	PG&E	L	L
Intake Access Rd	PG&E	L	L
Penstock, Pipeline and Butterfly Valve House Access Rd *(Access for private landowner)*	PRIVATE/ PG&E	L	L
Powerhouse Main Access Rd	PG&E	L	L
Project Facility Access Trails			
Gage E11 Access Trail	PG&E	L	L

5.0 REFERENCES

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PG&E (Pacific Gas and Electric Company). 2017. Lake Pillsbury Bathymetric Survey – 2016. PG&E Applied Technology Services Report No. 026.11-16.3.

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DRAFT

Dec. XX, 2023

Tony Gigliotti
Senior Licensing Project Manager
Power Generation
12840 Bill Clark Way
Auburn, CA 95602
Email: PVSurrender@pge.com

Subject: Support for New Eel-Russian Facility

Dear Mr. Gigliotti:

The North Marin Water District (NMWD) which purchases water from the Sonoma County Water Agency (Sonoma Water) under contract with seven other water providers, collectively known as the Water Contractors, strongly supports the inclusion of the New Eel-Russian Facility Proposal in the Pacific Gas and Electric Company (PG&E) Initial Draft Surrender Application published on Nov. 17, 2023. Mendocino County Inland Water and Power Commission, the Round Valley Indian Tribes and Sonoma Water submitted the proposal to PG&E in July to preserve water diversions into the Russian River, while also prioritizing upstream and downstream fish migration in the Eel River. The California Department of Fish and Wildlife, County of Humboldt, California Trout and Trout Unlimited subsequently signed on to a revised proposal in November.

The Water Contractors provide the overwhelming majority of the water supply for municipal and industrial purposes to over 600,000 residents of Sonoma and Marin Counties. The Water Contractors are highly dependent on Russian River water, as the region has limited local water resources and no ability to import water supplies from other regions of California. Eel River water that flows through PG&E's Potter Valley Project facilities into the East Branch of the Russian River provides an important component of Sonoma Water's system which delivers water to the Water Contractors.

The Proposal seeks to maintain diversions into the Russian River watershed while not delaying PG&E's plans to remove Scott Dam and Cape Horn Dam. The proposed New Eel-Russian Facility would provide for fish migration past the new diversion facilities while allowing water to be transferred to the Russian River when flows are high enough in the Eel River. These diversions are critical to the health of the Russian River watershed, to ongoing water supply for numerous communities in Sonoma, Mendocino and Marin counties, and to Russian River fisheries.

Russian River water users have made significant strides in reducing water use, improving water use efficiency, and developing alternative supplies (for example, Sonoma Water and its retail water customers take nearly 40 percent less water from the Russian River than they did 20 years ago, despite a growing population). However, halting the diversions, even temporarily, would directly threaten the drinking water supply for more than 97,000 people living in Russian River communities -- and would make the drinking water supply for 600,000 additional people less reliable.

The lack of diverted water would cause tens of millions of dollars of economic damage per year, result in drastic conservation measures and increased water rates, curtail needed new housing, and increase the region's vulnerability to droughts, wildfires and climate change. For

these reasons, NMWD supports the New Eel-Russian Facility Proposal, greatly appreciates that it was included in the Initial Draft Surrender Application by PG&E, and looks forward to the New Eel-Russian Facility Proposal continuing to be included in PG&E's Surrender Application and Decommissioning Plan.

Thank you for your consideration,

Anthony Williams
General Manager

10

NORTH MARIN WATER DISTRICT

MEMORANDUM

To: Board of Directors December 19, 2023

From: Eileen Mulliner, Executive Assistant / District Secretary

Subj: Board of Directors Committee Appointments
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At the December 5th Board meeting, the reorganization of the Board of Directors was conducted except for the appointments to various committees. The attached lists the committee / association representatives, both external and internal, to be appointed by the Board President.

ATTACHMENTS:

1. Proposed Committee Appointments - 2024

NORTH MARIN WATER DISTRICT

BOARD OF DIRECTORS

COMMITTEE / ASSOCIATION APPOINTMENTS

2024

EXTERNAL COMMITTEES	**NMWD Representative(s)/**Alternate
North Bay Watershed Association 1 meeting per month – Friday 9:30 a.m. – 11:30 a.m. Petaluma / Novato	**Rick Fraites**/Jack Baker
Russian River Public Policy Facilitation Committee (Russian River Biological Assessment/Opinion) 1 meeting per year – Friday 9:00 a.m. – Noon Santa Rosa/Ukiah	**Steve Petterle**/TBD
Water Advisory Committee 1 meeting per quarter – Monday 9:00 a.m. – Noon Santa Rosa	**Jack Baker**/Michael Joly
North Bay Water Reuse Authority 1 meeting per quarter – Monday 9:30 a.m. Novato Sanitary District/Novato City Hall	**Jack Baker**/TBD
INTERNAL COMMITTEES	
West Marin Services ad Hoc Committee As needed	**Rick Fraites**/Ken Eichstaedt
Water Management ad Hoc Committee As needed	**Steve Petterle/**Michael Joly

Note: ad Hoc Committees are deleted off the list once no longer in use

11

North Bay Watershed Association
Board Meeting - Agenda

December 1, 2023| 9:30 – 11:30 a.m.

MEETING WILL BE HELD AT THE
Novato Sanitary District
500 Davidson Street, Novato, Ca. 94945

For those wishing to attend virtually
Join Zoom Meeting:
https://us02web.zoom.us/j/81630673971?pwd=dm94TXJCRWMyWFBLc3U5V2pTSmNRZz09
Webinar ID: 816 3067 3971 **Password**: 216460

Agenda and materials will be available the day of the meeting at: www.nbwatershed.org

AGENDA

Time	Agenda Item	Proposed Action
9:30	**Welcome and Call to Order – Roll Call and Introductions** *Jean Mariani, Chair*	*N/A*
9:35	**General Public Comments** This time is reserved for the public to address the Committee about matters NOT on the agenda and within the jurisdiction of the Committee.	*N/A*
9:40	**Agenda and Past Meeting Minutes Review** *Jean Mariani, Chair* **Treasurer's Reports (November)** *Jean Mariani, Chair*	*Approve/ Review*
9:50	**Guest Presentation - Why We Need Bold Regional Governance and Finance Innovations to Underpin Advancements in Climate Science and Engineering** *Warner Chabot, Executive Director, San Francisco Estuary Institute, Aquatic Science Center* Warner will describe the Bay Area's $110 billion dollar reconciliation with climate change by 2050, case studies of advances in scaled adaptation, and the crucial roles our public agency leaders and decision makers have in meeting these epic challenges.	*Presentation slides*

10:25	**Executive Director Report** *Andy Rodgers, Executive Director* Andy will facilitate a brief Board discussion to identify any next steps supporting workforce development initiatives in the region. Andy will provide updates and solicit board input on activities since the November 3 Board meeting, including reviewing a timely opportunity to submit a grant application for regional project funding, and summarizing other active and developing projects, meetings, regional programs and initiatives, communications, and committees. Andy will outline ideas for next and future Board meeting topics and solicit feedback.	*ED updates, Board questions, and input*
11:00	**Board Information Exchange and Updates** *Members* Members will highlight issues and share items of interest.	*N/A*
11:30	**Announcements/Adjourn** **Next Board Meeting: February 2** **Watershed Social Gathering January 5?**	*N/A*

12

DISBURSEMENTS - DATED DECEMBER 7, 2023

Date Prepared 12/4/23

The following demands made against the District are listed for approval and authorization for payment in accordance with Section 31302 of the California Water Code, being a part of the California Water District Law:

Seq	Payable To	For	Amount
P/R*	Employees	Net Payroll PPE 11/30/23 PPE	$182,359.41
90651	Internal Revenue Service	Federal & FICA Taxes PPE 11/30/23 PPE	71,256.73
90652	State of California	State Taxes & SDI PPE 11/30/23 PPE	16,238.57
90653	CalPERS	Pension Contribution PPE 11/30/23 PPE	45,985.14
*90650	CalPERS	December Insurance Premium (Employer $49,503, Retirees $12,226 & Employees $7,851)	$69,579.59
1	100 Wood Hollow Drive Owner	December Operating Expenses	5,144.50
2	AT&T	Leased Lines	229.51
3	Backflow Distributors	Embed Frame for 25" Belo Enclosure	53.17
4	Bold & Polisner	October Legal Fees-General ($3,533) & NMWD Portion-Potter Valley FERC	3,937.50
5		Vision Reimbursement	251.20
6	Direct Line, Inc.	November Telephone Answering Services	219.75
7	Fishman Supply Co	Safety Gloves & Rain Gear	566.73
8	Freyer & Laureta, Inc.	Prog Pymt#23: Engineering & Design Services for NMWD Hydropneumatic Pressure Stations (Balance Remaining on Contract $11,714)	891.00
9	GHD Inc.	Prog Pymt#1: NMWD Crest Pump Station CM (Balance Remaining on Contract $180,572)	9,428.26
10	Home Depot	Reissue Payment-Original Lost in Mail	815.87
11	Kavantjas, Mia	Novato "Toilet Rebate" Program	125.00
12	Kiosk Creative LLC	Novato & Point Reyes Water Quality Reports	1,170.00

Seq	Payable To	For	Amount
13	Koff & Associates Inc. - A Gallagher Company	Classification Compensation Survey for Negotiations (Balance Remaining on Contract $744)	2,625.00
14	Lara, Jessica	Novato "Toilet Rebate" Program	250.00
15	Lincoln Life Employer Serv	Deferred Compensation 11/30/23	10,714.81
16	Marin County Tax Collector	Annual Hazardous Material Inventory Permit (STP - $3,962, Yard - $2,126, PRTP - $386 & O.M.T.P. - $357)	6,831.00
17	Marin County Dept of Finance	STP SRF Loan Semi-Annual Principal & Interest (#29 of 40)	514,851.33
18	Nationwide Retirement Solution	Deferred Compensation 11/30/23	4,327.50
19	Noll & Tam Architects	Prog Pymt#29: ($21,118) & Prog Pymt#30: Consulting Services for NMWD Headquarters Upgrade A/E Services ($22,318) (Balance Remaining on Contract $92,891)	43,435.00
20	Novato, City of	To Renew Annual Encroachment Permit	6,336.00
21	Nute Engineering	Prog Pymt#10: Engineering Services for Ocean Marin Pond Rehab (Balance Remaining on Contract $50,127)	8,037.00
22	Pace Supply	Leak Clamps (6) & Couplings (3) ($1,031)	1,214.28
23	Redwood Health Services, Inc.	November 2023 Dental Claims & Fees Expense	9,469.82
24	Smeets, Milou	Novato "Washer Rebate" Program	100.00
25	State Water Resources Control	Clean Water SRF Loan Principal & Interest (RW South PH1B, Pymt#11 of 20 - $166,575, RW Central, Pymt#6 of 30 - $275,773 & RW South PH1A, Pymt#11 of 20 - $65,599)	507,946.76
26	USA BlueBook	Ammonium Hydroxide (STP)	67.95
27	Winzer Corporation	Miscellaneous Hardware for Auto Shop	407.27
28	Wood Rodgers, Inc.	Prog Pymt#10: Gallagher Well #1 Assessment/Rehab (Balance Remaining on Contract $4,700)	2,820.00

Seq	Payable To	For	Amount
29	ZORO	Pipe Fittings (12) & Swivels (12)	119.00
		TOTAL DISBURSEMENTS	**$1,527,804.65**

The foregoing payroll and accounts payable vouchers totaling $1,527,804.65 are hereby approved and authorized for payment.

Julie Blue 12/06/23

Auditor-Controller Date

12/6/23

General Manager Date

DISBURSEMENTS - DATED DECEMBER 14, 2023

Date Prepared 12/11/23

The following demands made against the District are listed for approval and authorization for payment in accordance with Section 31302 of the California Water Code, being a part of the California Water District Law:

Seq	Payable To	For	Amount
1	Able Tire & Brake	Tires (5) (Reel Trailer) ($1,699) & Repair on Valve Stem ('21 Nissan Frontier)	$1,833.22
2	All-American Printing Services	Printing of Low Income Rate Assistance Mailers (300)	231.11
3	Alpha Analytical Labs	Lab Testing	620.00
4	Athens Administrators	November Indemnity Review Fee	105.00
5	Bigard, Derek	Novato "Toilet Rebate" Program	125.00
6	Borges & Mahoney	Rebuild Kits for STP Chlorine Systems	2,898.21
7	Caltest Analytical Laboratory	Lab Testing	105.80
8	Cart-Away Concrete Systems	Discharge Chutes (2) (Maintenance)	448.48
9		Vision Reimbursement	170.00
10	Comcast	December Phone Services (Wood Hollow, Buck Institute, Yard & STP)	1,517.54
11	Comcast	December Internet Services (999 Rush Creek Place)	1,562.93
12	Conrado, Ligia	Return Payment-Paid Twice in Error	317.00
13	Core & Main	Elbows (20), Reducers (20), Valves (6) ($5,208) & Connection Rings (50)	5,783.06
14	Crabbe, Ryan	Novato "Pool Cover Rebate" Program	75.00
15	DataTree	November Subscription to Parcel Data Info	100.00
16	Diesel Direct West	Gasoline (1,001 gal)	4,229.04
17	Enterprise FM Trust	Monthly Leases for Nissan Rogues (2), Nissan Frontiers (2), F-150's (7), F-250's (2), Ford Rangers (6), Chevy Bolts (2), Chevy Colorado & Nissan Leaf	12,183.24

*Prepaid

Seq	Payable To	For	Amount
18	E Source	Provide Water Loss Analysis	20,400.00
19	Fiserv/Bastogne Inc.	Return Payment-Not Our Customer	191.13
20	Fisher Scientific	Safety Glasses & Sodium Hypochlorite (Lab)	75.59
21	Friedman's Home Improvement	Miscellaneous Hardware	260.68
22	Grainger	Miscellaneous Maintenance Tools & Supplies	1,017.32
23	Idexx Laboratories	Media & Supplies for Coliform Analysis (Lab)	2,149.65
24	Industrial Scientific Corp	Replacement Air Monitor ($1,051) & Calibration Gas for Maintenance	1,705.39
25	Integra Chemical	Dechlorination Tablets (1,680) (STP)	7,832.97
26	Kane, Shawn	Exp Reimb: Donuts for Confined Space Training	50.00
27	Konik, Iris	Refund of Deposit/New Development/WC Restriction-Novato	1,000.00
28	KP Promotions	Uniform Order	1,009.84
29	Lee, Parker	Refund of Deposit/New Development/WC Restriction-Novato	1,000.00
30	Marin Landscape Materials	Mason Mix & Soil (1 yd)	63.69
31	McLellan Co, WK	Miscellaneous Paving	13,242.77
32	Novato Builders Supply	Miscellaneous Hardware, Lumber & Concrete	1,744.51
33	ODP Business Solutions, LLC	Toner	325.48
34	Pace Supply	Couplings (24)	693.27
35	Pini Hardware	Miscellaneous Maintenance Tools & Supplies	437.47
36	Point Reyes Prop Mgmt Assn	December HOA Fees (25 Giacomini Rd)	75.05
37	QA Constructors	Refund Security Deposit on Hydrant Meter Less Final Bill	426.82
38	Recology Sonoma Marin	November Trash Service	618.51
39	Robbins, Michael	Return Payment-Paid Twice in Error	447.53
40	Soiland Co., Inc.	Asphalt Recycling (8 yds) & Rock (32 yds) ($1,104)	1,353.77

Seq	Payable To	For	Amount
41	Staples Business Credit	Replacement Paper Shredder ($2,316) & Miscellaneous Office Supplies	2,453.72
42	State Water Resources Control	Annual Permit Fee Waste Discharge Requirement - O.M ($3,746 & 26,785) & NPDES Stafford Lake ($3,749) (7/1/23-6/30/24)	34,280.00
43	Superior Automatic Sprinkler	Refund Security Deposit on Hydrant Meter Less Final Bill (2)	1,533.43
44	Thomas Scientific	Rust Remover	42.45
45	T & T Valve & Instrument	Solenoid Valves (3) (STP)	430.04
46	United Parcel Service	Delivery Services: Sent Lab Instrument out for Calibration	17.04
47	USA BlueBook	Turbidity Standard (Lab)	412.19
48	Verizon Wireless	November Cellular Charges	1,495.11
49	Verizon Wireless	SCADA & AMI Collectors	1,037.02
50	VWR International LLC	Buffers (4), Standard & Tryptic Soy Broth (Lab)	425.76
51	Wall, Alfred	Refund of Deposit/New Development/WC Restriction-Novato	1,000.00
52	Yock, Steven	Novato "Washer Rebate" Program	100.00
		TOTAL DISBURSEMENTS	**$131,652.83**

The foregoing payroll and accounts payable vouchers totaling $131,652.83 are hereby approved and authorized for payment.

Julie Blue 12/12/23

Auditor-Controller Date

12/12/23

General Manager for TW Date

NORTH MARIN WATER DISTRICT
MONTHLY PROGRESS REPORT FOR NOVEMBER 2023
December 19, 2023

1.

Novato Potable Water Prod - RR & STP Combined - in Million Gallons - FYTD

Month	*FY23/24*	*FY22/23*	*FY21/22*	*FY20/21*	*FY19/20*	*24 vs 23 %*
July	218.6	224.5	282.9	341.7	317.7	-3%
August	230.9	235.9	212.4	290.1	287.1	-2%
September	212.4	203.5	214.5	225.6	280.5	4%
October	197.0	191.6	198.5	307.8	286.0	3%
November	145.7	137.43	94.1	201.6	226.3	6%
FYTD Total	1,004.7	992.8	1,002.4	1,366.7	1,397.5	1.2%

West Marin Potable Water Production - in Million Gallons - FY to Date

Month	*FY23/24*	*FY22/23*	*FY21/22*	*FY20/21*	*FY19/20*	*24 vs 23 %*
July	7.1	6.3	6.0	8.2	8.9	13%
August	7.5	6.8	5.7	9.2	8.4	9%
September	6.7	6.3	5.9	7.9	7.8	6%
October	6.4	5.7	5.1	6.7	7.5	11%
November	5.0	4.6	3.5	5.8	6.7	10%
FYTD Total	32.6	29.8	26.2	37.8	39.3	10%

Stafford Treatment Plant Production - in Million Gallons - FY to Date

Month	*FY23/24*	*FY22/23*	*FY21/22*	*FY20/21*	*FY19/20*	*24 vs 23 %*
July	67.0	56.3	67.0	105.8	68.2	19%
August	98.3	67.9	31.3	81.1	103.8	45%
September	112.6	57.8	41.7	16.1	115.0	95%
October	109.4	54.0	28.2	7.7	103.4	102%
November	21.8	30.0	0.0	0.6	102.8	-27%
FYTD Total	409.1	266.0	168.1	211.3	493.0	54%

Recycled Water Production* - in Million Gallons - FY to Date

Month	*FY23/24*	*FY22/23*	*FY21/22*	*FY20/21*	*FY19/20*	*24 vs 23 %*
July	31.0	43.1	42.9	39.0	36.5	-28%
August	34.8	41.6	41.4	43.2	33.3	-16%
September	26.1	29.2	39.6	29.5	29.7	-11%
October	22.4	24.7	18.3	22.8	26.6	-9%
November	3.6	5.1	0.8	10.9	10.8	-29%
FYTD Total*	117.9	143.7	143.1	145.4	136.9	-18%

*Excludes potable water input to the RW system: FY24 =6.58MG, FY23= 10.8 MG FY22=10 MG; FY21=24.7 MG; FY20=16.7

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2. Regional and Local Water Supply

Lake Sonoma

	Current	2022
Lake Storage*	71,558 MG	31,978 MG
Supply Capacity	86 %	40 %

*Normal capacity =-245,000 AF (79,833.5 MG); deviation storage pool of 264,000 AF (86,025 MG)

Lake Mendocino

	Current	2022
Lake Storage *	19,975 MG	12,044 MG
Supply Capacity	76 %	46 %

*Normal capacity = 70,000-110,000 AF (22,800-35,840MG); flood control pool at 80,000 AF (26,000 MG)

3. Stafford Lake Data

	November Average		November 2023		November 2022	
Rainfall this month	3.16	Inches	3.33	Inches	0.80	Inches
Rainfall this FY to date	4.91	Inches	4.09	Inches	1.56	Inches
Lake elevation*	181.3	Feet	181.1	Feet	180.9	Feet
Lake storage**	517	MG	511	MG	503	MG
Supply Capacity	37	%	37	%	36	%

* Spillway elevation is 196.0 feet (NGVD29)
** Lake storage less 390 MG = quantity available for normal delivery

Temperature (in degrees)

	Minimum	Maximum	Average
November 2023 (Novato)	29	81	56
November 2022 (Novato)	29	82	54

4. Number of Services

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	Novato Water			Recycled Water			West Marin Water			Oceana Marin Swr		
November 30	FY24	FY23	Incr %	FY24	FY23	Incr %	FY24	FY23	Incr %	FY24	FY23	Incr %
Total meters installed	21,006	20,950	0.3%	102	102	0.0%	800	800	0.0%	-	-	-
Total meters active	20,856	20,798	0.3%	100	99	1.0%	793	791	0.3%	-	-	-
Active dwelling units	24,096	24,095	0.0%	-	-	-	838	837	0.1%	236	235	0.4%

5. Oceana Marin Monthly Status Report (November)

Description	November 2023	November 2022
Effluent Flow Volume (MG)	0.389	0.390
Irrigation Field Discharge (MG)	0.168	0.684
Treatment Pond Freeboard (ft)	7.5	7.3
Storage Pond Freeboard (ft)	12 (dry)	10.9

6. Safety/Liability

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	Industrial Injury with Lost Time				Liability Claims Paid		
	Lost Days	OH Cost of Lost Days ($)	No. of Emp. Involved	No. of Incidents	Incurred (FYTD)	Paid (FYTD) ($)	
FY 24 through Nov	1	$368	1	1	2	$7,754	(1)
FY 23 through Nov	130	$63,504	3	3	1	$36,512	(2)

Days since lost time accident through November 30, 2023 **135** **Days**

(1) Vehicle damage by NMWD valve cap & Claim settlement (planter Driveway repair)

(2) Claim settlement for driveway and concrete repair due to water damage to a property on Bugeia Lane

7. Energy Cost

FYE		November kWh	November ¢/kWh	November Cost/Day	Fiscal Year-to-Date thru November kWh	Fiscal Year-to-Date thru November ¢/kWh	Fiscal Year-to-Date thru November Cost/Day
2024	Stafford TP	38,040	23.6¢	$299	331,987	23.3¢	$440
	Pumping	104,330	32.6¢	$1,172	705,233	34.0¢	$1,577
	Other[1]	27,562	39.8¢	$378	168,320	39.7¢	$506
		169,932	31.7¢	$1,849	1,205,539	31.8¢	$2,523
2023	Stafford TP	42,755	22.9¢	$326	300,778	22.1¢	$435
	Pumping	102,040	27.1¢	$989	678,396	28.2¢	$1,268
	Other[1]	25,706	32.6¢	$299	180,975	32.1¢	$385
		170,501	26.9¢	$1,614	1,160,149	27.3¢	$2,088
2022	Stafford TP	38,897	21.5¢	$279	213,956	21.8¢	$305
	Pumping	70,638	27.2¢	$662	614,371	27.4¢	$1,109
	Other[1]	33,365	28.3¢	$326	219,443	31.5¢	$454
		142,900	25.9¢	$1,267	1,047,770	27.1¢	$1,868

[1]Other includes West Marin Facilities

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8. Water Conservation Update

	Month of November 2023	Fiscal Year to Date	Program Total to Date
High Efficiency Toilet (HET) Rebates	1	34	4,515
Retrofit Certificates Filed	0	31	6.828
Cash for Grass Rebates	4	13	1,076
Washing Machine Rebates	13	26	6,919
Water Smart Home Survey	1	8	3,929

9. Utility Performance Metric

SERVICE DISRUPTIONS (No. of Customers Impacted)	November 2023	November 2022	Fiscal Year to Date 2024	Fiscal Year to Date 2023
PLANNED				
Duration Between 0.5 and 4 hours	10	7	85	52
Duration Between 4 and 12 hours	0	0	0	0
Duration Greater than 12 hours	0	0	0	0
UNPLANNED				
Duration Between 0.5 and 4 hours	0	0	31	100
Duration Between 4 and 12 hours	4	0	82	0
Duration Greater than 12 hours	0	0	0	0
SERVICE LINES REPLACED				
Polybutylene	1	4	34	31
Copper Replaced or Repaired)	9	3	23	7

November 2023 Service Disruptions

Planned:
For the month of November, we had 10 planned service disruptions.
Plastic: 1 plastic service leak on Westwood Dr.
Copper: 9 copper service leaks on Plata Ct, Center Rd, Rowe Ranch Dr, Sonora Ct, and Sun Ln.

Unplanned:
For the month of November, we had 4 unplanned service disruptions.
Valve: A 4" valve failed at the Redwood Landfill.

10. Summary of Complaints and Service Orders

NORTH MARIN WATER DISTRICT

Summary of Complaints & Service Orders November 2023

Tag Breakdown:

Total: 151 **Consumer:** 71 Office: 80

Type	Nov-23	Nov-22	Added Notes
Billing			
High Bill	5	1	
Total	**5**	**1**	
Meter Replacement	29	34	
Total	**29**	**34**	
Need Read	3	4	
Total	**3**	**4**	
No-Water	4	4	
Total	**4**	**4**	
Leak			
Consumer	50	132	
District	8	9	
Total	**58**	**141**	
Water Quality			
Taste/ Odor	3	1	
Total	**3**	**1**	
Check Pressure	0	2	
Total	**0**	**2**	
Turn Off / On	26	38	
Total	**26**	**38**	
Other	23	21	
Total	**23**	**21**	
TOTAL FOR MONTH:	**151**	**246**	**-39%**

Bill Adjustments Under Board Policy:

November 23 vs. November 22

Nov-23	17	$5,790
Nov-22	15	$4,529

Fiscal Year vs Prior FY

FY 23/24	80	$21,384
FY 22/23	79	$21,448

2024 TAC AND WAC/TAC MEETING SCHEDULE 35 Stony Point Road, Santa Rosa, California			
Month	**Day**	**Body**	**Time**
JANUARY	8	TAC	9:00 a.m.
FEBRUARY	5	WAC/TAC	9:00 a.m.
MARCH	4	TAC	9:00 a.m.
APRIL	8	SPECIAL WAC/TAC	9:00 a.m.
MAY	6	WAC/TAC	9:00 a.m.
JUNE	3	TAC	9:00 a.m.
JULY	1	TAC	9:00 a.m.
AUGUST	5	WAC/TAC	9:00 a.m.
SEPTEMBER	9	TAC	9:00 a.m.
OCTOBER	7	TAC	9:00 a.m.
NOVEMBER	4	WAC/TAC	9:00 a.m.
DECEMBER	2	TAC	9:00 a.m.

Approved 11/06/2023

JOINT EXERCISE OF POWERS AGREEMENT

BY AND AMONG THE

MENDOCINO COUNTY INLAND WATER AND POWER COMMISSION,

COUNTY OF SONOMA, AND

SONOMA COUNTY WATER AGENCY.

CREATING THE

EEL-RUSSIAN PROJECT AUTHORITY

EEL-RUSSIAN PROJECT AUTHORITY

JOINT EXERCISE OF POWERS AGREEMENT

This Joint Exercise of Powers Agreement ("Agreement") is made by and among:

a. Mendocino County Inland Water and Power Commission, a joint exercise of powers agency organized and existing under the laws of the State of California;
b. County of Sonoma, a political subdivision of the State of California organized and existing under the laws of the State of California;
c. Sonoma County Water Agency, a body corporate and politic of the State of California;

These parties are referenced herein as Member Agencies or, individually, as a Member Agency.

WHEREAS, agencies formed under the Joint Exercise of Powers Act, Government Code sections 6500 et seq. (the "JPA Law") may acquire, finance, construct and operate public capital improvements;

WHEREAS, agencies formed under the JPA Law may provide services to serve territory within the jurisdictions of the agencies which form the joint powers entity;

WHEREAS, a need exists for coordinated planning to implement a project that allows Eel River water to continue to be imported into the Russian River watershed, all while advancing habitat protection and creation within the Eel River watershed;

WHEREAS, a joint powers agency is appropriate to implement this project; and

WHEREAS, the Member Agencies wish to form a joint powers agency to implement this project.

AGREEMENT

Now, therefore, in consideration of the above and of the mutual promises contained herein, the Parties do hereby agree as follows:

Article I. DEFINITIONS

Section 1.01 Definitions

a. "Agreement" means this Joint Exercise of Powers Agreement, as it may be amended from time to time.
b. "Authority" means the Eel-Russian Project Authority established by this Agreement.
c. "Board" or "Board of Directors" means the governing board of directors of the Authority.

d. "Budget" means an approved budget appropriating funding for the expenses of the Authority.
e. "Director" or "Directors" means one or more members of the Board of Directors.
f. "Facility" or "Facilities" means tunnels, buildings, diversion structures, watercourses, drainage channels, conduits, ditches, or other facilities for the diversion, management and delivery of resources within the boundaries of the Authority that are acquired by or constructed by the Authority. "Facilities" shall also include habitat restoration, water rights, easements, rights-of-way, and any other relevant personal or real property interest for any purpose of the Authority.
g. "Fiscal Year" means the period from July 1 in any calendar year to and including June 30 in the succeeding calendar year unless the Board should adopt another fiscal year by resolution.
h. "JPA Law" means the Joint Exercise of Powers Act, Government Code section 6500 et seq. as it now exists or may hereafter be amended.
i. "Member Agencies" means the parties to this Agreement identified above or which become party, accepting the rights and obligations of a Member Agency pursuant to an amendment to this Agreement.
j. "Project" means a grouping of Facilities to be acquired, constructed, operated, and/or maintained by the Authority that are needed to divert water from the Eel River watershed into the Russian River watershed for storage and diversion for downstream municipal, domestic, irrigation, or ecosystem benefit. The Project will be designed for upstream and downstream fish migration with a goal of achieving naturally reproducing, self-sustaining and harvestable native anadromous fish populations in the Eel River. The Project may also include habitat restoration on the Eel River but habitat restoration is not intended to be the primary focus of the Project.

Any reference in this Agreement to a statute shall mean that statute as it now exists or may hereafter be amended.

Article II. General Provisions

Section 2.01 Purpose

The purpose of this Agreement is to create the Authority which will exercise the common powers of the Member Agencies to implement the Project.

Section 2.02 Creation of Public Agency as Separate Legal Entity and Initial Actions

There is hereby created a public authority known as the "Eel-Russian Project Authority." It is the intent of the Parties that the Authority shall be a legal entity separate from the Member Agencies

pursuant to Government Code section 6507. Once this Agreement has been signed by all Member Agencies, then Sonoma County Water Agency shall schedule a first meeting of the Board of Directors of the Authority and shall place on the agenda any appropriate matters, including all those actions to be taken by the Authority upon its creation.

Section 2.03 Effective Date

This Agreement shall be effective on the date of the first scheduled meeting of the Board of Directors for the Authority.

Article III. POWERS

Section 3.01 General Powers

The Authority may exercise the powers granted to it under the JPA Law, including but not limited to the powers of each of the Member Agencies as may be necessary to the accomplishment of the purposes of this Agreement.

Section 3.02 Power to Issue Bonds and Other Financial Instruments

The Authority shall have all the powers provided in the JPA Law, including the power to issue bonds under the Marks-Roos Bond Pooling Law, Government Code section 6584 et seq., and other law or otherwise to borrow, including the use of certificates of participation.

Section 3.03 Specific Powers

The Authority is hereby authorized, in its own name, to do all acts necessary or convenient to the accomplishment of the purposes of this Agreement, including but not limited to:

a. To negotiate and enter into agreements with Pacific Gas and Electric Company for the acquisition of Facilities that are part of the Potter Valley Project;
b. To study, plan, and implement ways and means to provide a reasonable program and plan of operation to design, construct, operate, and maintain the Project including such agreements as may be necessary with wholesalers, retailers, or users of water;
c. To participate in financing or re-financing any Facilities, in accordance with any terms and conditions imposed by the JPA Law;
d. To make and enter into contracts necessary to the accomplishment of the purposes of this Agreement;
e. To contract for the services of engineers, attorneys, planners, financial consultants, and other needed professionals;
f. To employ such persons as it deems necessary;
g. To enter into agreements with the United States of America, the State of California or any other public or private person to provide a portion or all, of the costs which may be

required for Facilities, including any constructed by the State or Federal governments or one or more Member Agencies or the Authority itself;

h. To acquire, construct, manage, control, maintain, improve, repair, replace, and/or operate any Facilities.
i. To acquire by voluntary agreement, or if necessary, eminent domain, and to hold and dispose of, any interest in real or personal property, including water rights, necessary to the accomplishment of the purposes of this Agreement;
j. To receive gifts, contributions, and donations of property, funds, services, and other forms of financial or other assistance from any persons, firms, corporations, or governmental entities;
k. To sue and be sued in its own name;
l. To adopt rules, regulations, policies, bylaws, ordinances, and procedures governing the operation of the Authority;
m. To incur debts, liabilities, or other obligations, and to secure insurance, receive or provide indemnities, and enter into other mechanisms as appropriate for risk management;
n. To levy and collect assessments, fees, charges, and/or special taxes and to participate in other financing districts;
o. To apply for, accept, and receive state, federal, or local licenses, permits, grants, loans, and other aid from any agency of the United States of America, or of the State of California, or from any other public or private entity necessary for the accomplishment of the purposes of this Agreement;
p. To perform all acts necessary or proper to carry out fully the purpose of this Agreement and not inconsistent with the JPA Law;
q. To invest money not required for the immediate necessities of the Authority pursuant to Government Code sections 6505.5 and 53601;
r. To refinance indebtedness incurred by one or more Member Agencies in connection with any of the purposes of this Agreement;
s. To apply for letters of credit or other form of financial guarantees to secure the repayment of bonds and enter into agreements in connection therewith;
t. To assume commitments of a Member Agency by resolution of the Board;
u. To carry out and enforce this Agreement; and
v. To exercise all other powers not specified here but common to the Member Agencies and authorized by Government Code section 6508.

Section 3.04 Restriction on Exercise of Powers

The powers of the Authority shall be exercised in the manner provided in the Act and in the JPA Law, and, except for those powers set forth in the JPA Law, shall be subject (in accordance with

Section 6509 of the JPA Law) to the restrictions upon the manner of exercising such powers that are imposed upon the County of Sonoma in the exercise of similar powers.

Article IV. ORGANIZATION AND GOVERNANCE

Section 4.01 Governing Body of the Authority

a. The Authority shall be governed by a Board of Directors comprising five persons selected as set forth in this section below. All voting power of the Authority shall reside in the Board.
b. The Board shall be comprised by the following:
    i. Two Directors selected by the Mendocino County Inland Water and Power Commission from among the Commissioners that govern that agency or other representatives of the Commission selected by the Commissioners;
    ii. One Director selected by the County of Sonoma from among the Supervisors that govern the County or other representatives of the County selected by the Supervisors;
    iii. One Director selected by the Sonoma County Water Agency from the Directors that govern that agency or other representatives of the Agency selected by the Directors; and
    iv. One Director selected by the Round Valley Indian Tribes to represent the Tribes.
c. Each appointing authority shall also appoint an Alternate. The Alternates shall serve in the absence or recusal of the Director for whom they are the Alternate. Each Alternate shall meet the qualifications for serving as a Director.
d. Directors and Alternates serve at the pleasure of their appointing authorities and shall hold office until a successor takes the oath of office as a Director of the Authority.
e. Each appointing authority shall promptly appoint a successor to a Director or Alternate who ceases, for any reason, to be a Director or Alternate or qualified to serve on the Board of Directors.
f. The Authority may compensate Directors and/or Alternates for their role with the Authority as the Board of Directors may determine. A Director member or Alternate may be reimbursed for expenses they reasonably incur in the conduct of the Authority's business pursuant to a written policy of the Authority.

Section 4.02 Principal Office

The Board shall designate the Authority's principal office at a place convenient to the work of the Authority within or without the Authority. The Secretary shall note any change in that designation in the minutes of a Board meeting and notify each Member Agency of that change in writing. Upon creation of the Authority and until otherwise changed, the principal office shall be at the Sonoma County Water Agency.

Section 4.03 Board Meetings

The Board shall meet at the Authority's principal office or at such other place as it may designated. The Board shall establish the time and place of its regular meetings by resolution furnished to each Member Agency. Regular, adjourned, special, and emergency meetings shall be called and held as specified in the Ralph M. Brown Act, Government Code section 54950 et seq.

Section 4.04 Quorum and Votes

A simple majority of Directors then in office shall constitute a quorum for the transaction of business. Except as applicable law otherwise requires, the vote of a majority of a quorum is sufficient to carry an action; provided (1) that all approved actions of the Board of Directors shall be supported by at least one representative from each of the following: (a) the Mendocino County Inland Water and Power Commission; and (b) either Sonoma County Water Agency or the County of Sonoma; and (2) that any direct financial or legal obligation of a Member Agency to the Authority shall require approval of the Director appointed by that Member Agency. Directors may not cast proxy or absentee votes. Each Director shall have an equal vote.

Section 4.05 Minutes

The Secretary shall keep minutes of Board meetings, and provide them to each Director, Alternate, and Member Agency or, alternatively, maintain them on the Authority's website.

Section 4.06 Rules, Bylaws, and Regulations

The Authority may adopt and amend from time to time such rules, bylaws, and regulations for the conduct of its affairs as may be necessary or advisable and as are consistent with this Agreement and applicable law.

Section 4.07 Vote or Assent of Parties

Any agreement, vote, assent, or approval of a Member Agency required by this Agreement or applicable law shall be filed with the Secretary and be evidenced by a resolution or approved meeting minutes of the governing board of the Member Agency.

Section 4.08 Officers

Unless the Board determines otherwise by resolution, the Authority's officers designated in this section shall hold office for one year commencing with the first Board meeting of each calendar year provided, however, that the first Chairperson, Vice Chairperson, and Secretary appointed shall hold office from the date of their appointment to the second January 1st thereafter to avoid initial terms of less than a year. The Board shall also have the power to appoint such additional officers as it deems necessary and appropriate. The Treasurer and Auditor hereby designated may be changed by a vote of the Board members then in office, but shall not be Directors.

a. CHAIRPERSON AND VICE-CHAIRPERSON. The Board shall select from among its members a Chairperson and a Vice-Chairperson who shall cease to serve in that role upon ending service on the Board or upon the expiration of their terms as Chairperson and vice-Chairperson.

b. SECRETARY. The Board shall appoint a Secretary who may also be a Director but need not be; the Secretary shall be responsible for keeping the minutes of all meetings of the Board and all other official records of the Authority. The Secretary shall have charge of, handle, and have access to all other records of the Authority.

c. TREASURER. The Sonoma County Treasurer shall be the Treasurer of the Authority and shall be the depositary and shall have custody of all money of the Authority, from whatever source, and shall have the duties and obligations of the Treasurer as set forth in Sections 6505 and 6505.5 of the JPA Law. The Treasurer shall be responsible for providing quarterly reports and verifying the balance of such reports as maintained by the records of the Auditor.

d. AUDITOR. The Sonoma County Auditor-Controller shall be the Auditor of the Authority and shall have the duties and obligations of the Auditor as set forth in sections 6505 and 6505.6 of the JPA Law, including the audit obligation stated in section 7.02 of this Agreement.

Section 4.09 General Counsel

The Board may appoint an attorney licensed to practice in California who shall serve at the pleasure of the Board. Until such appointment, the General Counsel role for the Authority shall initially be filled by both an attorney for Mendocino County Inland Water and Power Commission and by an attorney for County of Sonoma/Sonoma County Water Agency. The two attorneys shall act as co-counsels for the Authority until such time as the Board appoints a replacement counsel. The two co-counsels may be paid by the Authority or may be paid by the Member Agencies who have retained them. The Parties acknowledge that joint representation of the Authority and the Member Agencies can constitute a conflict of interest and may raise issues associated with the duty of loyalty, client communication, and duty of confidentiality. It is the expectation of the Parties that the Authority will be staffed by staff persons working for the Member Agencies. In addition, the Board of Directors of the Authority will be made up, significantly, by directors of the Member Agencies. In addition, the Parties and the Authority are sophisticated in their provisioning of legal services. For these reasons, the Parties and the Authority are in good positions to evaluate this conflict of interest and by the approval of this Agreement the governing boards of the Member Agencies agree to waive such potential conflicts of interest and the Board of the Directors of the Authority is deemed to have also waived such conflict of interest. In the event of actual litigation between the Authority and any of its Member Agencies or as between the Member Agencies, each Member Agency shall be

permitted to continue to retain its own counsel, but the Authority will be required to retain independent counsel. General Counsel shall work cooperatively with the Executive Director, but shall report to the Board.

Section 4.10 Executive Director

The Executive Director shall be appointed by, and serve at the pleasure of, the Board. The Executive Director may be an employee of the Authority, a consultant, or an employee of one of the Member Agencies who shall be assigned to also perform the functions of Executive Director of the Authority. The Executive Director shall be responsible to the Board for the proper and efficient administration of the Authority as is or hereafter may be placed in their charge pursuant to this Agreement, or of any Board ordinance, resolution, or order. In addition to other powers and duties herein provided and unless modified by an action of the Board, the Executive Director is authorized:

a. Under policy direction of the Board, to plan, organize, and direct all activities of the Authority;
b. To appoint and to remove all Authority employees, all of whom shall serve at the pleasure of the Executive Director, except as is otherwise provided by law or by this Agreement including, but not limited to section 3.04 above;
c. To authorize expenditures authorized by an approved Budget;
d. To make recommendations to, and requests of, the Board concerning all of the matters and things which are to be performed, done, or carried out by the Authority;
e. To exercise all powers of the Authority delegated to the Executive Director; and
f. To call meetings of the Board.

Section 4.11 Privileges and Immunities

As provided in Government Code section 6513, all the privileges and immunities from liability, exemption from laws, ordinances, and rules, all pension, relief, disability, workers' compensation, and other benefits which apply to the activities of officers, directors, agents, or employees of a public agency when performing their respective functions shall apply to the officers, directors, agents, and/or employees of the Authority to the same degree and extent while engaged in the performance of any of the functions and other duties of such officers, directors, agents, or employees under this Agreement. None of the officers, directors, agents or employees of the Authority shall be deemed, solely by reason of their employment by the Authority, to be employed by any Member Agency or, by reason of their employment by the Authority, to be subject to any of the requirements of any Member Agency.

Section 4.12 Bonding

Any person who has charge of any funds or securities of the Authority shall be bonded in amounts fixed by Board resolution.

Section 4.12 Conflicts of Interest

Directors are "public officials" within the meaning of the Political Reform Act of 1974, as amended, and its regulations, for purposes of financial disclosure, conflict of interest and other requirements of such Act and regulations, subject to a contrary opinion or written advice of the California Fair Political Practices Commission. The Authority shall adopt a conflicts of interest code in compliance with the Political Reform Act.

Article V. Planning, Design, Construction, and Operation

Section 5.01 Planning

The Authority shall undertake and/or participate in such studies and planning as necessary to implement the Project. These efforts shall include negotiating with Pacific Gas and Electric to acquire facilities that are part of the Potter Valley Project.

Section 5.02 Design and Construction

The Authority shall develop, design, acquire, and construct Facilities and necessary funding to implement the Project. The Authority may construct, rehabilitate, or fund all or part of Facilities and projects independently or in cooperation with the United States, the State of California, or another public entity or entities.

Section 5.03 Operation and Maintenance

The Authority shall operate and maintain the Project in such a manner that is consistent with the direction of the Board.

Article VI. Budgets and Payments

Section 6.01 Budget

Before the start of each subsequent fiscal year, the Board shall adopt a Budget for the ensuing Fiscal Year which it may amend from time to time. By resolution the Board may agree to such deadline as is needed to give the Member Agencies an opportunity to consider the adopted budget in coordination with the adoption of their budgets.

Section 6.02 Contributions for Operating Expenses

a. Upon its formation, the Authority is not expected to have any assets. The Authority will nevertheless undertake planning and administrative work before adoption of an initial

Budget and securing funding. The Member Agencies agree to negotiate in good faith for the funding to support this work.

b. The Authority shall allocate overhead costs associated with its operation. The Authority shall allow Member Agencies a reasonable opportunity to review and comment on any proposed allocation or reallocation of overhead.

c. In accordance with Section 6512.1 of the JPA Law, the Board may direct repayment or return to the Parties of all or part of any contributions made by the Parties upon such terms as may be consistent with the JPA Law Act and other applicable law. The Authority shall hold title to all assets it acquires during the term of this Agreement, including but not limited to Infrastructure.

Article VII. ACCOUNTING AND AUDITS

Section 7.01 Accounts and Reports

The Authority shall maintain books and accounts consistently with standards adopted by the Controller of the State of California for special districts.

Section 7.02 Audit

The Auditor shall cause to be conducted an audit compliant with generally accepted audit standards of the records and the accounts of the Authority and file such audit reports with the State Controller and each Member Agency within six months of the end of each fiscal year or by such other deadline as is imposed by law or a grant or loan agreement.

Article VIII. ISSUES OF LIABILITY AND INDEMNIFICATION

Section 8.01 Liabilities as Between the Authority and its Member Agencies

The debts, liabilities, and obligations of the Authority shall be the debts, liabilities, or obligations of the Authority alone and not of the Member Agencies as provided in Government Code section 6508.1. Any financial dealings between the Authority and one or more Member Agencies shall be by written contract.

Section 8.02 Liability of Directors

Except as otherwise provided in this Agreement, the funds of the Authority may be used to defend, indemnify, and hold harmless the Authority and any officer, director, agent, or employee for their actions taken within the course and scope of their work for the Authority. The Authority may self-insure, participate in pooled self-insurance, or purchase insurance to provide this specific coverage.

Section 8.03 Debts, Liabilities, and Obligations of the Authority

The debts, liabilities, and obligations of the Authority shall not be the debts, liabilities and obligations of any Party or any other Public Agency.

Section 8.04 Non-Liability for Obligations, Activities, or Operation of the Authority

No Member Agency, officer, director, agent, consultant, or employee of the Authority shall be individually or personally liable for the payment of the principal or premium or interest on any obligation of the Authority; but nothing herein contained shall relieve any such party from the performance of any official duty provided by law or by the instruments authorizing the issuance of any obligation of the Authority.

Section 8.05 Indemnification of Parties

The Authority shall, to the fullest extent allowable under applicable law, indemnify and hold harmless each of the Member Agencies for and against any claim, action, liability, penalty or other imposition whatsoever upon such Member Agency by reason of (a) the activities of the Authority or (b) such Member Agency's status as party to this Agreement.

Section 8.06 Insurance

As part of its normal operations, or as a requirement of a purchase and sale agreement entered into, or to be entered into, with Pacific Gas and Electric Company, or as a result of separate agreements with third parties involved in Project implementation, the Authority shall purchase all appropriate general liability insurance and any other needed insurance, and may also receive or secure indemnities or other mechanisms for risk management.

Article IX. RESCISSION, TERMINATION, AND WITHDRAWAL

Section 9.01 Project Commitments

This Agreement may not be rescinded or terminated, the Authority dissolved, and no Member Agency may withdraw from the Authority while the Authority has outstanding legally enforceable commitments unless another public agency has provided such reasonable written assurances to perform those commitments as the State, the Federal government, or other contracting parties as to those commitments may request.

Section 9.02 Rescission or Termination

A Member Agency may withdraw from this Agreement pursuant to section 9.04. The Authority shall wind up its affairs and dissolve upon withdrawal by the second-to-last Member Agency to do so. The Authority may wind up its affairs and dissolve and the Authority terminated by unanimous written consent of the Member Agencies. Any such dissolution shall be consistent

with this section 9. This Agreement shall terminate with dissolution of the Authority except as respects insurance and indemnities which the Board may identify to survive that dissolution.

Section 9.03 Disposition of Assets

Upon termination of this Agreement, the Authority's remaining assets shall be returned to the Member Agencies then participating in the Authority in proportion to their contributions to the Authority's funding or as the Authority Board may otherwise unanimously determine. The Board shall first offer any Facilities and other illiquid assets of the Authority to the Member Agencies for good and adequate consideration. If no such sale is consummated, the Board shall offer such illiquid assets to any public or private entity for good and adequate consideration. The net proceeds from any sale or the illiquid assets if no sale occurs shall be distributed as provided in the first sentence of this section.

Section 9.04 Withdrawal

a. Except as provided in paragraph b, no Member Agency may withdraw from the Authority without the unanimous consent of the other Member Agencies after:

    1. the withdrawing Member Agency provides written notice to the other Member Agencies of intent to withdraw, and

    2. the withdrawing Member Agency honors any unmet obligations under this Agreement.

Any withdrawal shall be effective on the last day of the fiscal year in which the withdrawal is agreed unless all Member Agencies agree otherwise in writing.

b. A Member Agency may withdraw from the Authority without the unanimous consent of the other Members Agencies 120 days after the withdrawing Member Agency provides written notice to the other Member Agencies that at least one of the following events has occurred: (1) the Authority was not awarded a license by FERC; (2) the Authority rejected the license offered by FERC; or (3) the Authority failed to consummate a purchase and sale agreement with PG&E for the portions of the Potter Valley Project needed to implement the purpose of the Authority.
c. If a withdrawing Member Agency has any rights in any Facilities or responsibility for obligations of the Authority, except by a written agreement of all Member Agencies, the withdrawing Member Agency may not sell, lease or transfer those rights or be relieved of those obligations, except an obligation to pay its share of operation and maintenance costs of Facilities.
d. The Authority shall not refund or repay a withdrawing Member Agency's initial commitment of funds to the Authority absent unanimous agreement of the initial Member

Agencies. The Authority may refund or repay any subsequent contribution in accordance with any written terms and conditions upon which the contribution was made.

Article X. GENERAL PROVISIONS

Section 10.01 Term

The Authority shall continue until this Agreement is rescinded or terminated as herein provided and as provided in this section 10 of this Agreement.

Section 10.02 Admission of New Parties

Additional public entities may become Member Agencies upon such terms and conditions as the Board may provide with the unanimous consent of all Member Agencies, evidenced by a written addendum to this Agreement signed by all of Member Agencies, including the new Member Agency.

Section 10.03 Amendment

This Agreement may be amended only by the unanimous agreement of the Member Agencies.

Section 10.04 Assignment; Binding on Successors

Except as otherwise provided in this Agreement, the rights and duties of the Member Agencies may not be assigned or delegated without the written consent of all other Member Agencies. Any attempt to assign or delegate such rights or duties in contravention of this Agreement shall be null and void and confer no rights on any third party. Any approved assignment or delegation shall be consistent with the terms of any then extant commitments or other obligations of the Authority.

Section 10.05 Notice of Agreement or Amendment

a. Within 30 days of the effective date of this Agreement or any amendment to it and pursuant to the JPA Law, the Authority shall give notice to the Secretary of State. The Authority shall give any other notice required by applicable law upon the approval, termination or any amendment of this Agreement.
b. Within 10 days after the effective date of this Agreement, the Authority shall cause a statement of the information, required by California Government Code Section 53051, to be filed with the office of the California Secretary of State and with the Sonoma County Clerk.

Section 10.06 Notice

Any notice or instrument required to be given or delivered by depositing the same in any United States mail, registered or certified, postage prepaid, addressed to the Member Agency or the

Authority, shall be deemed to have been received by addressee 72 hours after such deposit. Notice may be given by such other means as the Authority or a Member Agency specifies in writing.

Section 10.07 Severability

Should a court of competent jurisdiction decide any part, term or provision of this Agreement conflicts with law or is otherwise unenforceable or ineffectual, the validity of the remaining portions or provisions shall not be affected and, to that end, the Member Agencies declare the parts, terms, and provisions of this Agreement to be severable.

Section 10.08 Successors

This Agreement shall be binding upon and shall inure to the benefit of the successors and permitted assigns of the Member Agencies.

Section 10.09 Counterparts; Electronic Signatures

This Agreement may be executed in counterparts, all of which together shall constitute a single agreement, and each of which shall be an original for all purposes. Signatures may be given by emailed pdf or other equivalent means with the same force as original wet signatures.

Section 10.10 Integration

This Agreement represents the full and entire Agreement among the Member Agencies with respect to the matters covered herein.

Section 10.11 Execution; Warrantee

The legislative bodies of the Member Agencies have each authorized execution of this Agreement, as evidenced by the respective signatures attested below. The persons signing below warrant for the benefit of the Member Agencies for which they do not sign that they have actual authority to bind their respective principals to this Agreement.

IN WITNESS WHEREOF, the Member Agencies have caused this Agreement to be executed as of the day and year first above-written.

[SIGNATURE BLOCKS ON NEXT PAGE]

COUNTY OF SONOMA

_____ _____

Chair Date

Approved as to form:

_____

Counsel

MENDOCINO COUNTY INLAND WATER AND POWER COMMISSION

_____ _____

Chair Date

Approved as to form:

_____

Counsel

SONOMA COUNTY WATER AGENCY

_____ _____

Chair Date

Approved as to form:

_____

Counsel

Sonoma Water

Clean. Reliable. Essential. Every Day.

Potter Valley Project Update and Formation of the Eel-Russian Project Authority

Grant Davis, General Manager, Sonoma Water

Pam Jeane, Assistant General Manager, Sonoma Water

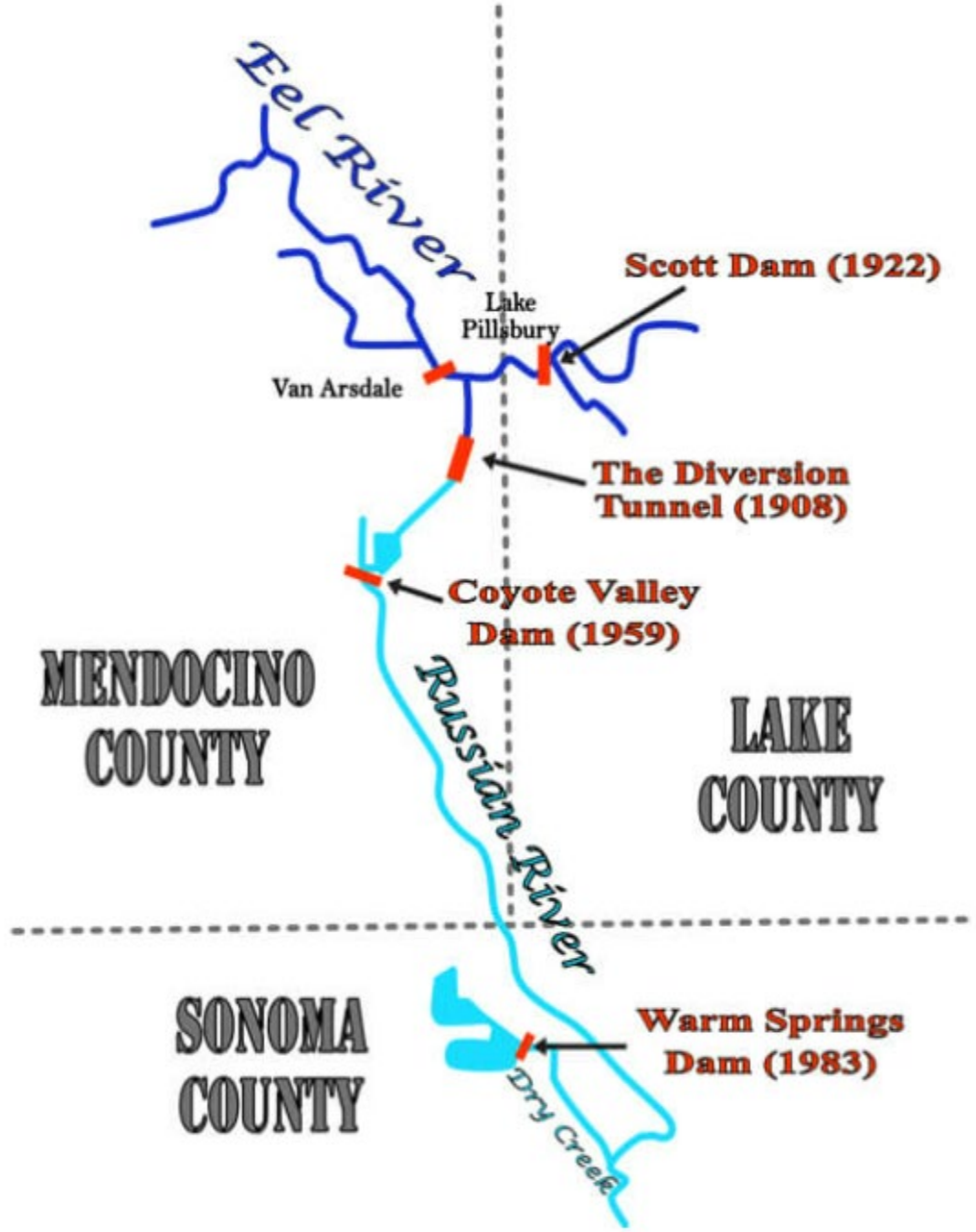
sonomawater.org

Today’s Item

- Update on the Potter Valley Project license surrender process
- Consider authorizing the Chair to execute the Joint Exercise of Powers Agreement to create the Eel-Russian Project Authority
- Request Chair appoint representatives to the Eel-Russian Project Authority Board of Directors

Potter Valley Project (PVP)

- Owned and operated by Pacific Gas & Electric Co. for over 100 years
- Prior to 2007, an average of 150,000 acre-feet (AF) of water annually was transferred from the Eel River to the Russian River
- Between 2007 and 2021 the transfer averaged about 60,000 AF per year
- This water source is critical to Russian River water users
- This water also benefits migrating threatened chinook salmon



PG&E Decision to Surrender

Date	Action
Nov. 17	Distribution of Initial Draft Surrender Application including decommissioning plan
Dec. 22	Deadline for comments on Initial Draft Surrender Application
Dec. 2023 – Feb. 2024	Initial consultation with resource agencies and tribes
June 2024	Consultation with resource agencies and tribes
June 3, 2024	Distribution of Final Draft Surrender Application
July 18, 2024	Deadline for comments on Final Draft Surrender Application
Jan. 29, 2025	Filing and distribution of Final Surrender Application

Potter Valley and Russian River Impacts

- Impacts from decommissioning:
  - **Lake Mendocino is predicted to go dry about five out of 10 years** (unless significant intervening measures are taken)
  - Threats to human health and safety and listed fish species.
  - Conservation and local projects cannot replace this source of water in the short term
  - Economic losses in the tens of millions

Original proposal submitted to PG&E

- Sonoma Water, Mendocino County Inland Water and Power Commission, Round Valley Indian Tribes
- Under the proposal (which PG&E has issued a non-binding acceptance in concept) the proponents would:
  - Form a Regional Entity as a JPA
  - Convene a table to negotiate a settlement agreement
  - Develop the financial capacity for ownership, construction, and operation of the Facility
  - Agree with PG&E on terms for a Purchase and Sale Agreement
  - Acquire and modify the PVP's water diversion facilities and construct a New Eel-Russian Facility

Progress since August: Revised Proposal

- Key stakeholder meetings facilitated by California Department of Fish and Wildlife and Round Valley Indian Tribes
- Revised proposal submitted to PG&E, which includes CDFW, CalTrout, Humboldt County and Trout Unlimited
- Revised proposal establishes principles for negotiating terms and conditions for water diversion facility:
  - Ensures reliable water supplies to Russian River and restores Eel River fisheries
  - Dam deconstruction and diversion construction would be coordinated to not result in delays
  - A License Surrender Agreement would be agreed upon by November 2024
  - Coalition will also focus on regional outcomes

Community engagement

- Stakeholder assessment included 38 interviews with 73 people
- Russian River Water Forum established and has met four times since May 2023
- Regional press on both original and revised proposal
- Presentations to city councils and community organizations
- Webpage established for updates, **sonomawater.org/PVP**

Progress since August: PG&E draft

- PG&E released initial draft License Surrender Application on Nov. 17, 2023
- High-level description of decommissioning plan
- Includes references to revised proposal and description of two diversion facility options
- Proponents will submit comments to PG&E by Dec. 22, 2023

Short Term Keys to Success (before January 2025)

- Form initial Regional Entity
- Agreement on terms for a purchase and sale agreement and settlement agreement
- Financial Capacity
  - Russian River Water Rights Holders
  - Capital Funding
  - Operations and Maintenance Funding
  - **Cost for Water Supply Reliability**
- Address water right constraints
  - Many water users will not have legal access to water

Formation of initial Regional Entity:
Eel-Russian Facility Authority

- Joint Exercise of Powers Authority (JPA)
- Mendocino County Inland Water and Power Authority, County of Sonoma, Sonoma Water
- Round Valley Indian Tribes will have a seat on five-member board
- Legal standing to negotiate with PG&E, to enter into agreements with PG&E and other parties, and to implement the proposed Eel-Russian Facility project

Recommended Board actions

1) Approve, and authorize the Chair to execute, the Joint Exercise of Powers Agreement between the Mendocino County Inland Water and Power Commission, County of Sonoma, and Sonoma County Water Agency and creating the Eel-Russian Project Authority

2) Request Chair appoint a representative from Sonoma Water's Board of Directors and a representative from the County Board of Supervisors to serve on the Eel-Russian Project Authority Board of Directors, and appoint an alternate for each

Questions and Discussion

NOVATO

Olompali park to reopen after nine-month closure

$13M repair project to x slide damage cut off access

A shuttered stretch of Redwood Boulevard leading to Olompali State Park in Novato is expected to reopen on Friday. The park has been closed since mudslide damage cut off access to the area during heavy rain in March. SHERRY LAVARS — MARIN INDEPENDENT JOURNAL

Redwood Boulevard is cracked and buckled after a mudslide near Buck Center Drive in Novato in March 22. ALAN DEP — MARIN INDEPENDENT JOURNAL

BY ADRIAN RODRIGUEZ

ARODRIGUEZ@MARINIJ.COM

Olompali State Historic Park near Novato is expected to reopen this week following mudslide damage repair that blocked access for nearly nine months.

The slide happened during heavy rain in March. It buckled a 100-foot section of Redwood Boulevard near the Buck Center for Research on Aging and threatened two major utility lines serving Marin. While the park itself was not in need of repair, the damage cut off the only access road, forcing it to remain closed.

The $13 million project is still weeks from wrapping up, but Caltrans plans on restoring public access for one-way traffic control around 3 p.m. Friday. The single-lane access will be in effect until Caltrans completes construction along a retaining wall, which is expected to continue through at least January, said Matt O'Donnell, an agency spokesperson.

Park officials plan to open the park Friday afternoon, and reinstate its normal operating hours, 9 a.m. to 5 p.m., on Saturday.

“It’s an important place, not only for what it means as a beautiful landscape, but also its connection to the history of the entire region,” said Ryan Forbes, a California State Parks interpreter. “It’s incredibly important for everyone at California State Parks to share this once again with the community.”

Olompali is a 700-acre park nestled on the outskirts of Novato along Highway 101. The east-facing slopes of Mount Burdell overlook the Petaluma River and San Pablo Bay.

It’s become a popular destination for hikers, bicyclists, horseback riders, and because of its rich history, it attracts history buffs as well.

Olompali, which roughly translates to southern village or southern people, had been inhabited by the Coast Miwok from as early as about 6,000 B.C. until the mid-1800s. It served as a major Miwok trading post.

In 1852, James Black, Marin County’s first judge and tax assessor, purchased the land from Coast Miwok headman Camilo Ynitia, the only Native American to have been awarded a Mexican land grant. Black gave the land to his daughter Mary when she married dentist Dr. Galen Burdell.

The Burdells moved permanently to the property, which they operated as a working ranch. It was sold in the 1940s, and it has since been home to a Jesuit retreat, a dairy ranch, a private swim club and a hippie commune.

Olompali was preserved as a state historic park in 1977.

Emergency response to the slide involved Pacific Gas & Electric Co., Marin County Department of Public Works, Marin Municipal Water District and North Marin Water District officials.

The location of the slide is where natural gas and water pipelines that serve tens of thousands of Marin residents are buried. The mudslide did move and damage PG&E power poles, but it did not damage the two gas lines that serve 93,000 Marin residents. Gas service and electric service have continued without interruption.

The slide also moved an aqueduct at the bottom of the hillside that carries Russian River water into Marin County. The aqueduct provides 75% of the water supply for 60,000 residents in the Novato area served by the North Marin Water District and about 25% of the water supply for 191,100 central and southern Marin residents served by the Marin Municipal Water District.

Out of caution, the aqueduct was shut off for nearly a month in case of further slide movement, said Tony Williams, general manager of the North Marin Water District. A break in the aqueduct could cause millions of gallons of water to flood onto nearby Highway 101.

North Marin Water District spent about $250,000 to perform several evaluations of the aqueduct, and to purchase about 80 feet of pipe in case findings called for a quick fix, Williams said.

While no immediate mending is required, “we are still assessing the results of those analyses and determining if and when a repair is warranted,” Williams said.

Water district staffers expect to present an update to its board next month.

The Caltrans work will also restore the bicycle path access on Redwood Boulevard that links Marin and Sonoma counties. A temporary bike path has been in place since July.

“We appreciate Caltrans’ speed in getting this work done so quickly,” said Rosemarie Gaglione, director of county public works.

During the closure, park staff were reassigned to other Bay Area parks, Forbes said. While it was inconvenient, Forbes said the crew is focusing on reopening.

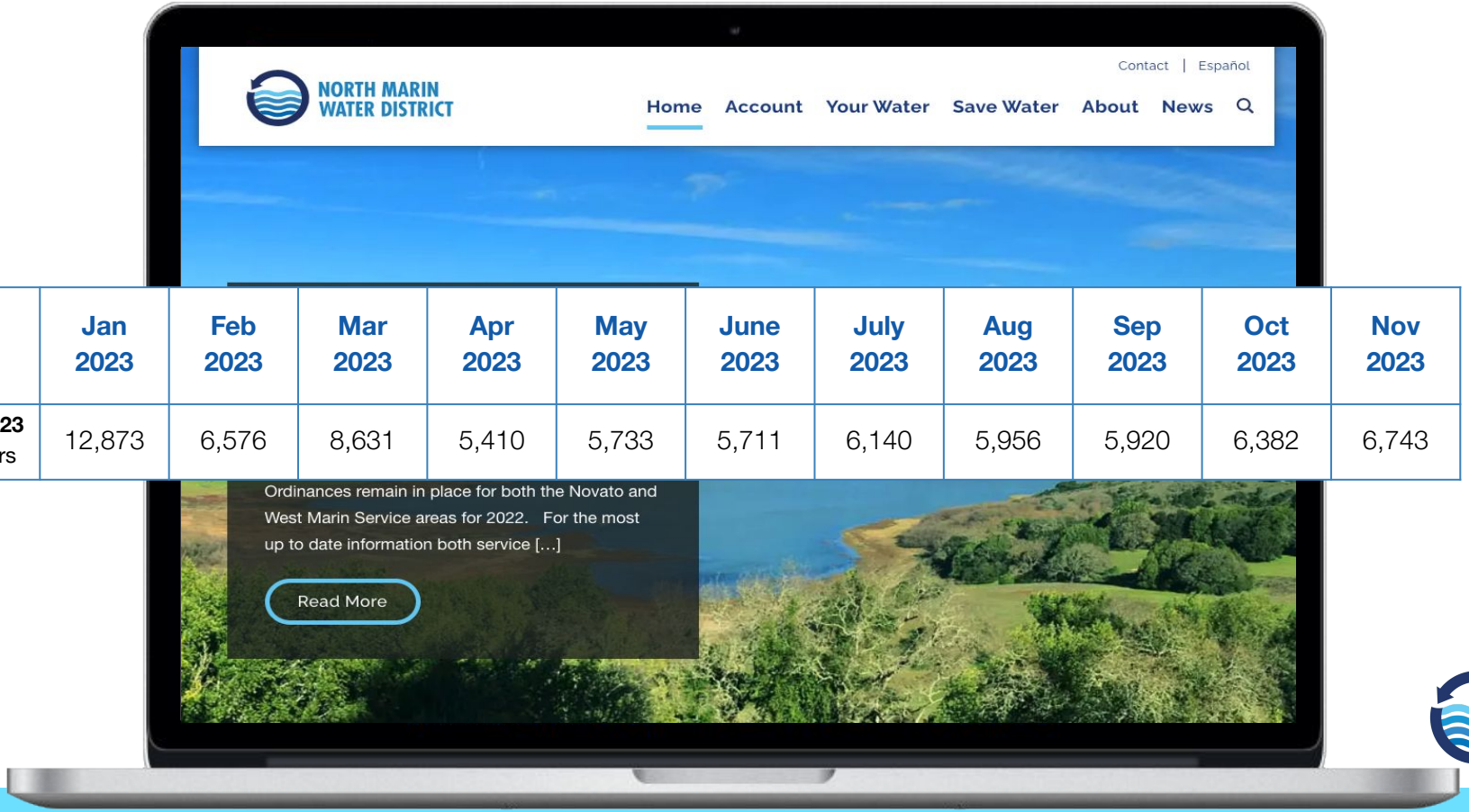
“We want to thank the public for their patience and understanding during this period that the park needed to be closed,” Forbes said. “With the reopening, we look forward to an exciting new year welcoming back visitors and providing access to high quality outdoor recreation and education experiences.”

NORTH MARIN
WATER DISTRICT

Web & Social Media Report

November 2023

Website Statistics



	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023
2022/ 23 Visitors	12,873	6,576	8,631	5,410	5,733	5,711	6,140	5,956	5,920	6,382	6,743

Social Media Followers

	Jan-2023	Feb-2023	Mar-2023	Apr-2023	May-2023	Jun-2023	Jul-2023	Aug-2023	Sep-2023	Oct-2023	Nov-2023
Facebook Followers	2,172	2,202	2,243	2,300	2,322	2,363	2,390	2,416	2,436	2,454	2,471
X (Twitter) Followers	110	112	113	120	121	122	122	122	123	124	125
Instagram Followers	748	759	774	794	808	822	835	841	844	859	860

NMWD Most Visited Pages

Pages	Views
Home	7,578
Online Billing	2,526
2023 Survey (We want to hear from you!)	1,457
My Water Usage (WaterSmart Portal)	940
2023 Survey thank you	701
Weather & Production Statistics	407
What Is An Acre Foot?	219
Contact	178
About NMWD	130

November Social Media Highlights | Facebook

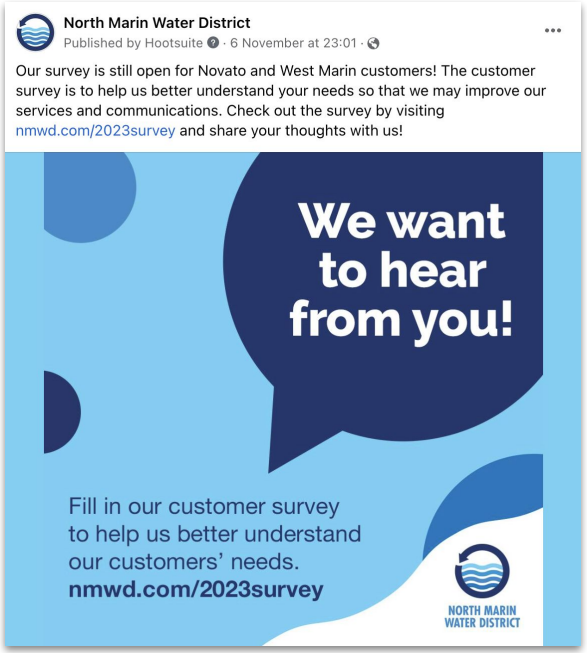
402 people reached | 28 engagements

281 people reached | 32 engagements

Engagements include likes, reactions, clicks and comments

November Social Media Highlights | Facebook

130 people reached | 4 engagements



258 people reached | 15 engagements

Engagements include likes, reactions, clicks and comments

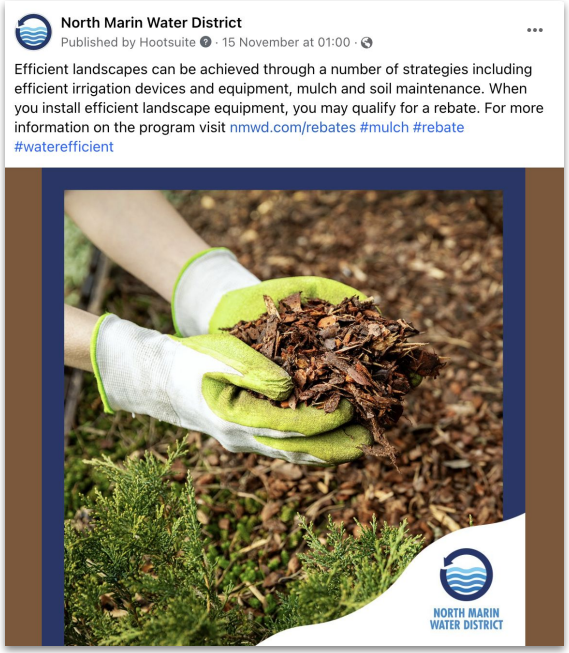
November Social Media Highlights | Facebook

336 people reached | 23 engagements

228 people reached | 16 engagements

Engagements include likes, reactions, clicks and comments

November Social Media Highlights | Facebook



202 people reached | 10 engagements

342 people reached | 31 engagements

Engagements include likes, reactions, clicks and comments

November Social Media Highlights | Facebook

113 people reached | 3 engagements

61 people reached | 3 engagements

Engagements include likes, reactions, clicks and comments

November Social Media Highlights | Facebook

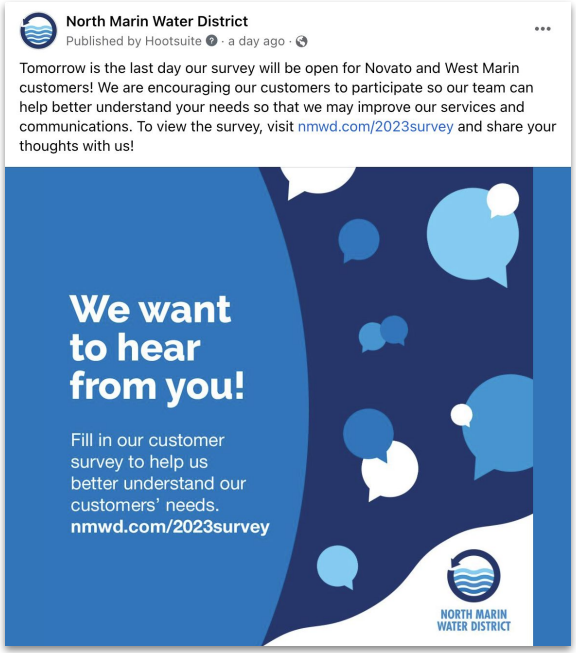
172 people reached | 7 engagements

208 people reached | 9 engagements

Engagements include likes, reactions, clicks and comments

November Social Media Highlights | Facebook

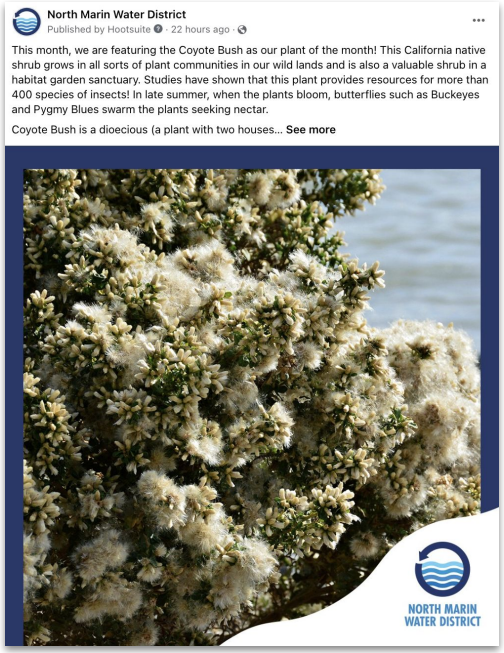
246 people reached | 15 engagements



298 people reached | 21 engagements

Engagements include likes, reactions, clicks and comments

November Social Media Highlights | Facebook



123 people reached | 5 engagements

Engagements include likes, reactions, clicks and comments

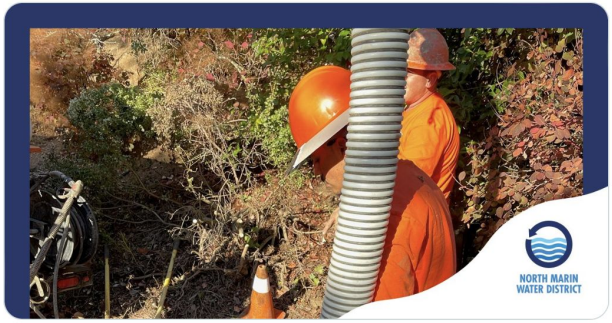
November Social Media Highlights | X (Twitter)

North Marin Water District @NorthMarinWater · Nov 2

Colin Davenport, our Electrical and Mechanical Tech, is celebrating his 7th year at the North Marin Water District! Congratulations, Colin. #anniversary #7years

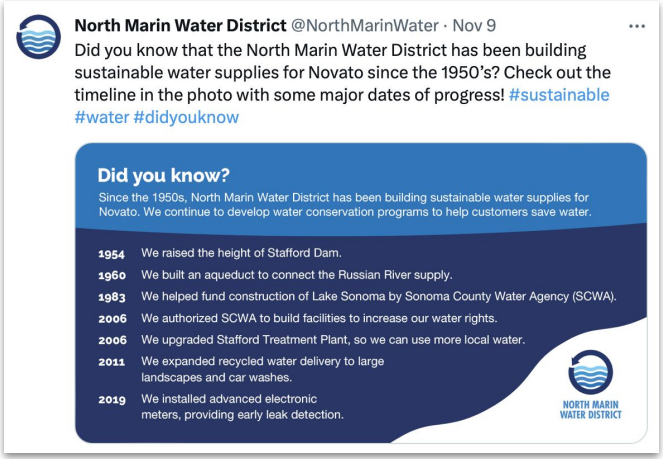
North Marin Water District @NorthMarinWater · Nov 3

Happy #NationalConstructionDay! NMWD celebrates our dedicated, hardworking crew who are committed to keeping your water flowing safely and to all construction workers out there! #construction #waterprofessionals



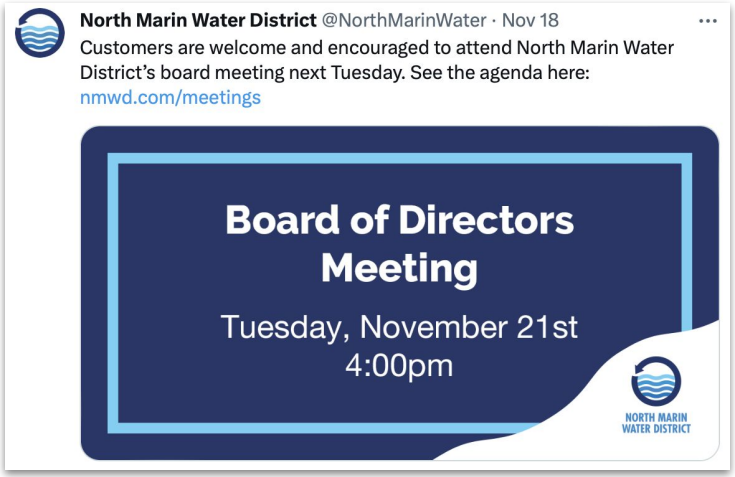
November Social Media Highlights | X (Twitter)

November Social Media Highlights | X (Twitter)



November Social Media Highlights | X (Twitter)

November Social Media Highlights | X (Twitter)

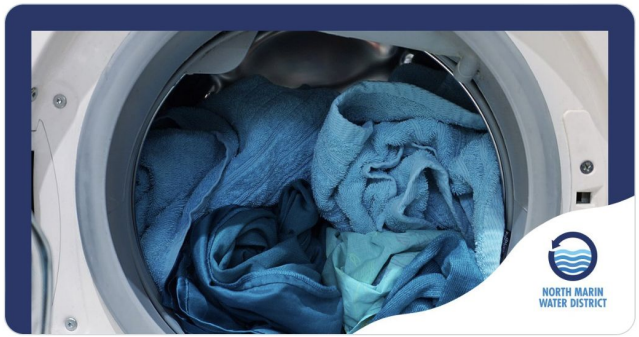


November Social Media Highlights | X (Twitter)

November Social Media Highlights | X (Twitter)

North Marin Water District @NorthMarinWater · Nov 29

Did you know that NMWD offers rebates on high-efficiency washers? A standard clothes washer uses about 40 to 45 gallons per wash load while a high-efficiency washer uses about 15 to 25 gallons per wash load. For more info about our rebates check out nmwd.com/indoors/



North Marin Water District @NorthMarinWater · Nov 29

Tomorrow is the last day our survey will be open for our customers! We are encouraging our customers to participate so our team can help better understand your needs so that we may improve our services and communications. To view the survey, visit nmwd.com/2023survey.

November Social Media Highlights | X (Twitter)

North Marin Water District @NorthMarinWater · 23h

This month, we are featuring the Coyote Bush as our plant of the month! This California native shrub grows in all sorts of plant communities in our wild lands and is also a valuable shrub in a habitat garden sanctuary.
#plantofthemonth #coyotebush

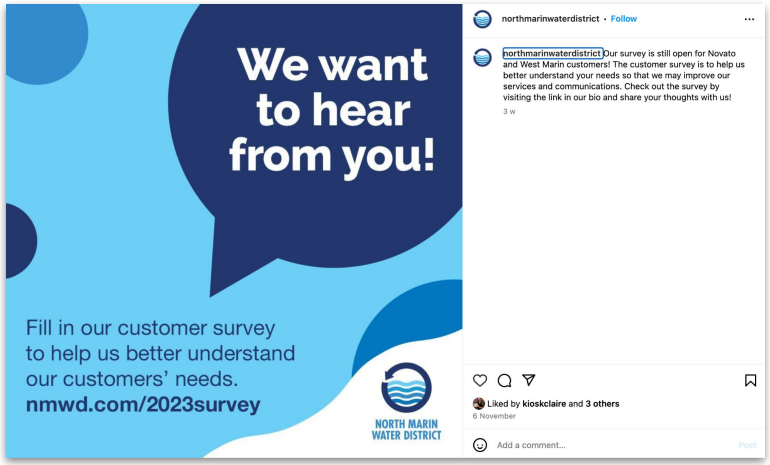
November Social Media Highlights | Instagram

9 likes

11 likes

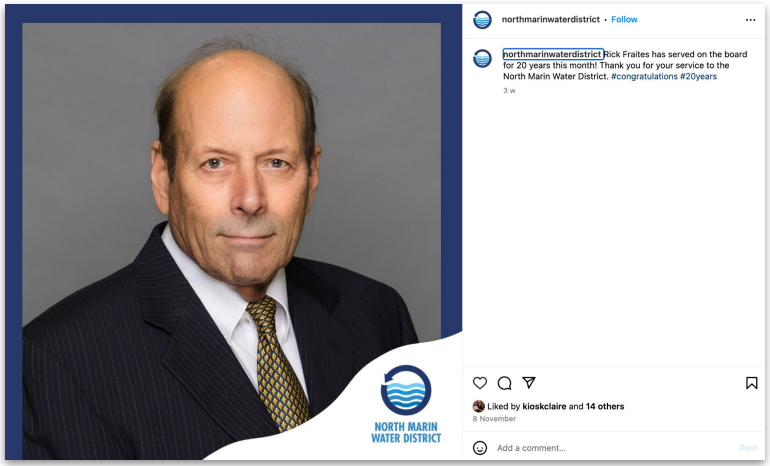
November Social Media Highlights | Instagram

3 likes

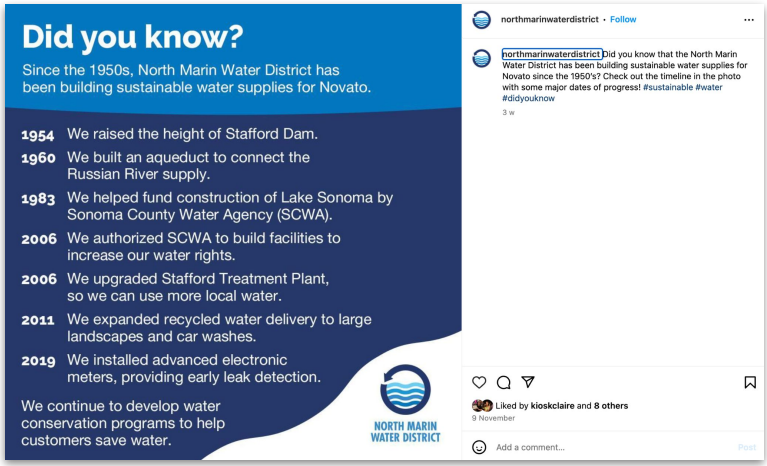


4 likes

November Social Media Highlights | Instagram

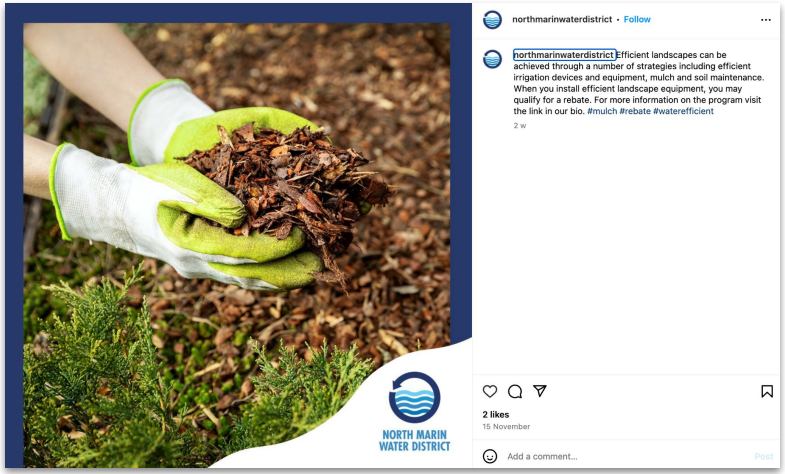


15 likes

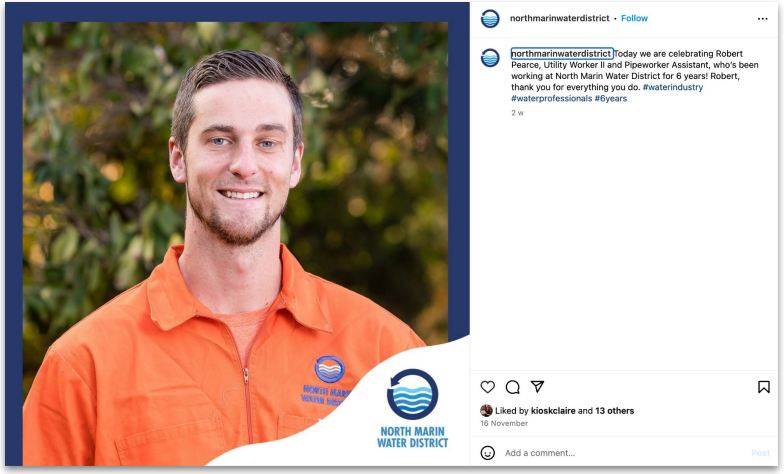


9 likes

November Social Media Highlights | Instagram

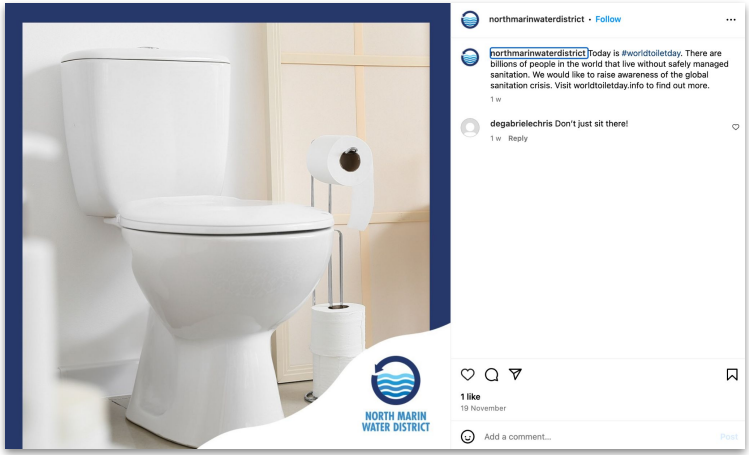


2 likes



14 likes

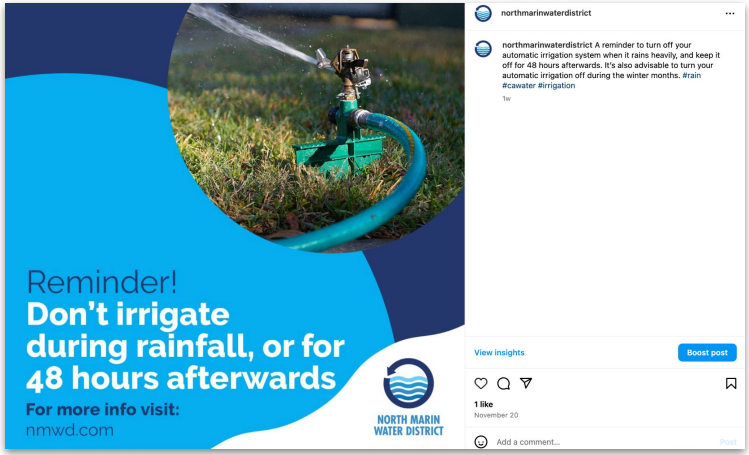
November Social Media Highlights | Instagram



1 like

2 likes

November Social Media Highlights | Instagram



1 like

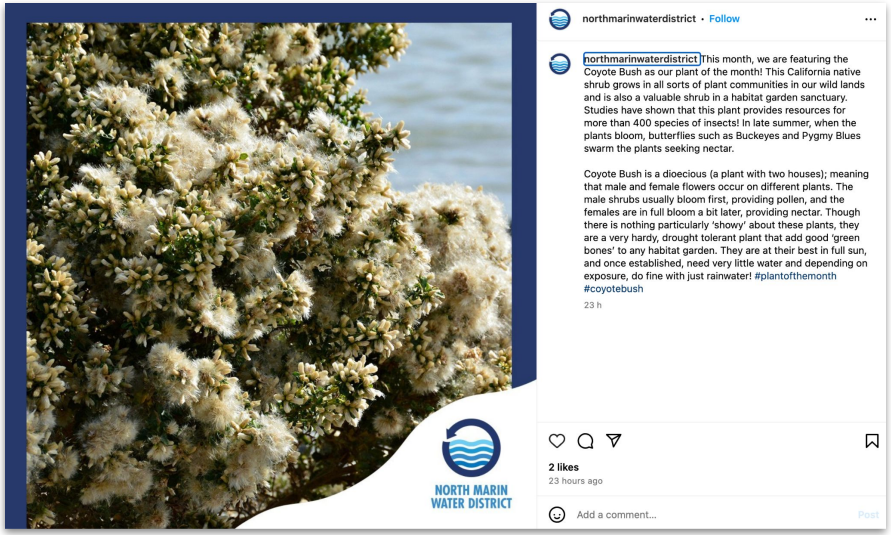
4 likes

November Social Media Highlights | Instagram

4 likes

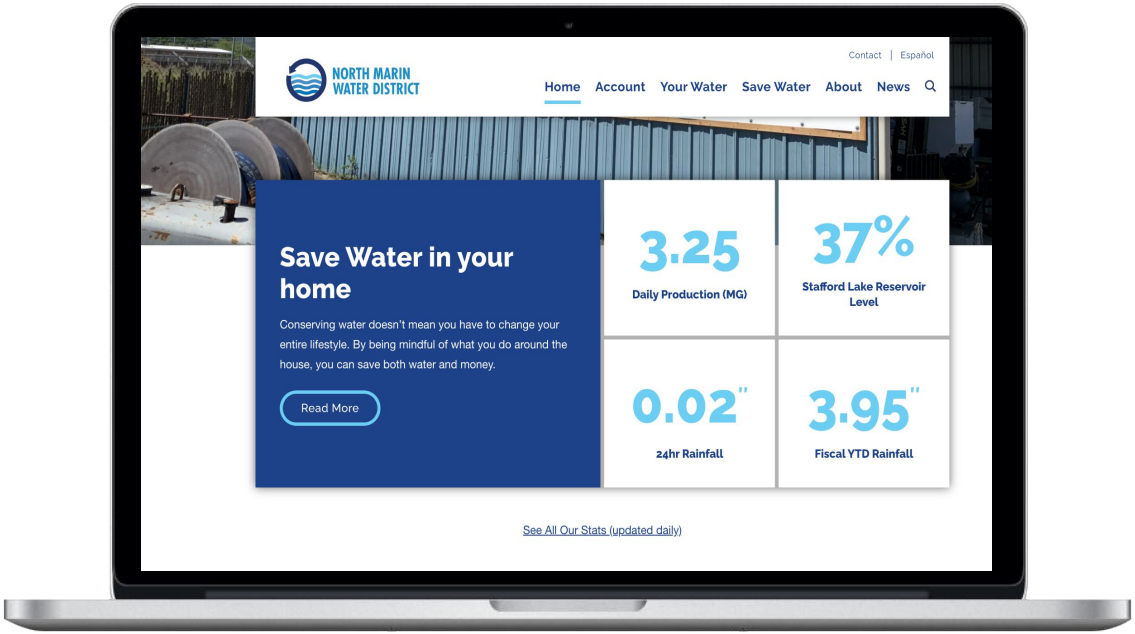
2 likes

November Social Media Highlights | Instagram



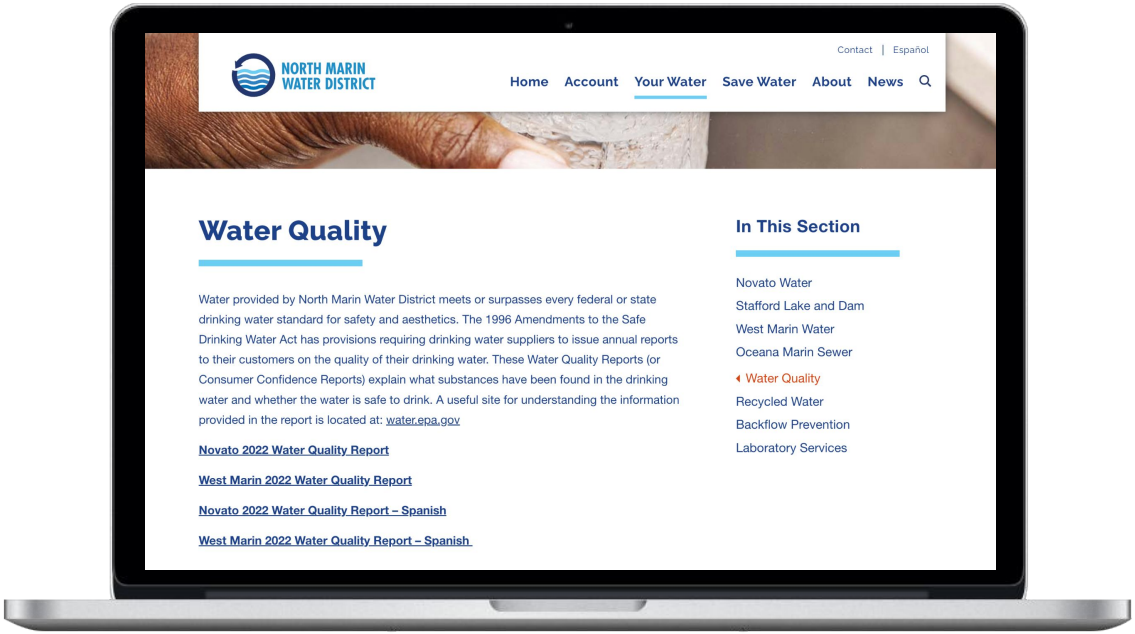
2 likes

SCADA Data Project



Kiosk set up an SFTP site for Core Utilities to upload Production and Weather JSON files to.

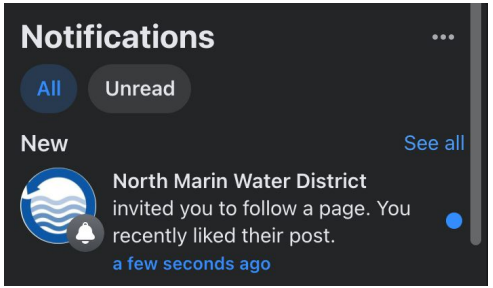
Spanish Water Quality Reports On NMWD.com



Kiosk finalized the Spanish versions of the Water Quality reports and uploaded them to the website.

Facebook Likes Campaign - November Report

We are running an evergreen ad which encourages customers in the NMWD service areas to ‘like’ (follow) the NMWD Facebook page.



Spend in November 2023	**Reach** (Number of people who saw the ad)	**Impressions**	**Results** (New Page Likes)	**Cost Per New Page Like**
$44.99	2,320	4,139	19	$2.37

*This month, we were able to reach over **2,320** people with the Likes Campaign*

What's Next?

- Kiosk is working on a presentation summarizing the 2023 Customer Survey questionnaire
- Kiosk is working on redesigning and digitizing Rebate Application forms
- Social posts will continuing highlighting employees on their work anniversaries and feature a 'plant of the month' in partnership with Home Ground Habitats
- Kiosk continues to work with staff to get photos of construction and maintenance projects throughout Novato and West Marin

Thank You

13

CLOSED SESSION ITEM

14

CLOSED SESSION ITEM

15

CLOSED SESSION ITEM