NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DRAFT PERMIT FACT SHEET
April 2026

Permittee Name:	Dry Creek Rancheria
Facility Name:	Dry Creek Rancheria Wastewater Treatment Plant
Mailing Address:	P.O. Box 607 Geyserville, CA 95441
Facility Location:	3250 Highway 128 East Geyserville, CA 95441
Contact Person(s):	Lacie McWhorter, Environmental Technician (707) 431-4035 Lacie.McWhorter@riverrockcasino.com
NPDES Permit No.:	CA0005241

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I. STATUS OF PERMIT

Dry Creek Rancheria (the "permittee") has applied for the renewal of their National Pollutant Discharge Elimination System (NPDES) permit to authorize the discharge of treated effluent from their Wastewater Treatment Plant to Stream P1, a tributary to the Russian River, located in Geyserville, California. A complete application was submitted on November 2, 2022. EPA Region 9 has developed this permit and fact sheet pursuant to Section 402 of the Clean Water Act (CWA), which requires point source dischargers to control the amount of pollutants that are discharged to waters of the United States through obtaining a NPDES permit.

The Dry Creek Rancheria Band of Pomo Indians is a federally recognized Indian Tribe. Currently, U.S. EPA Region 9 retains the primary regulatory responsibility for administering the NPDES permitting program within the Dry Creek Rancheria. EPA has prepared the NPDES permit renewal and factsheet pursuant to Section 402 of the Clean Water Act (CWA), which prohibits the discharge of pollutants from point sources without CWA authorization. The NPDES permit incorporates federal water quality requirements.

The permittee is currently covered under NPDES permit CA0005241 issued on November 29, 2017. The permit expired on December 31, 2022, but pursuant to 40 CFR § 122.6, the terms of the existing permit are administratively extended until the issuance of a new permit.

Under Section 402 of CWA, EPA is proposing to reissue the permittee's NPDES permit authorization to discharge treated wastewater from the Facility to Stream P1, a tributary to the Russian River. EPA developed this fact sheet based on information provided in the permit application, effluent discharge data, as well as applicable laws and regulations.

This permittee has been classified as a minor discharger.

II. SIGNIFICANT CHANGES TO PREVIOUS PERMIT

Permit Condition	Previous 2017 Permit	Re-issued permit	Reason for change
Mass-based effluent limits for BOD and TSS	The previous permit contained average monthly effluent limit ("AMEL") calculated based on a 0.10 MGD and an average weekly effluent limit ("AWEL") based on 0.20 MGD.	Revised AMEL and AWEL based on the maximum treatment capacity of 0.15 MGD.	Mass limits are adjusted based on lower design capacity, which will control pollutant loading to the receiving water.
Temperature monitoring	None	Required	Effluent monitoring requirements for temperature have been incorporated in the permit to ensure that the applicable narrative standards are not exceeded and to calculate

Permit Condition	Previous 2017 Permit	Re-issued permit	Reason for change
			temperature-specific ammonia criteria.
Ammonia effluent limit	The permittee had to calculate the WQBEL for total ammonia (in mg N/L) based on the Tribal Water Quality Protection Ordinance Appendix A using the temperature and pH at the time of the sampling (i.e. a "floating limit").	Compliance with the ammonia effluent limit will be determined using a ratio, called the ammonia impact ratio ("AIR"). The permit limit is set to a value of 1.0. The permittee also must continue to monitor and report ammonia effluent values in addition to the AIR value.	AIR provides more flexibility than a specific, fixed effluent concentration and is easier than a floating limit to determine and report compliance.
Total dissolved solids and electrical conductivity	The previous 2017 permit required weekly monitoring for total dissolved solids (TDS).	The new permit establishes effluent limits for TDS and requires monthly monitoring for electrical conductivity (EC).	Due to reasonable potential finding, the permit requires effluent limits for TDS. Permit also includes monthly monitoring requirements for EC to assess reasonable potential.
Aluminum effluent limits	None	The new permit incorporates aluminum effluent limits and monthly monitoring.	Reasonable potential analysis showed that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards.
Oil and Grease effluent limits	The 2012 permit required effluent limits and weekly monitoring for oil and grease, which were not carried over to the 2017 permit.	Re-established in the permit.	Permit contains the effluent limits and monitoring requirements to evaluate compliance with the limit prohibiting discharge of oils and greases.
Best Management Practices (BMPs) and Pollution Prevention	Not required.	The new permit incorporates standard BMPs language for small utilities.	The permit includes BMPs and pollution prevention requirements to minimize surface water contamination from site runoff, spillage or leaks, sludge or waste disposal based on 40 CFR § 122.44(k).
Asset Management	Not required	Required	Based on 40 CFR § 122.41(e) and Asset Management Planning Provisions into NPDES Permits (EPA, 2014), the permittee is required to manage its aging sewer and stormwater systems and maintain a targeted level of treatment.

Permit Condition	Previous 2017 Permit	Re-issued permit	Reason for change
Capacity Attainment and Planning	Not required	Required	The permit requires notification for if average dry weather flow for any month exceeds 90 percent of the annual dry weather design capacity; report due to EPA within 90 days
Other effluent limitations	Receiving water limitations were required in Part I.E of the previous permit	Replaced the previous receiving water limitations with the other effluent limitations based on reasonable potential analysis.	The receiving water limitations in the previous permit have been replaced with the narrative water quality-based effluent limitations to address the U.S. Supreme Court's decision in City and County of San Francisco, California v. Environmental Protection Agency (2025) 145 S. Ct. 704.

III. GENERAL DESCRIPTION OF FACILITY

Dry Creek Rancheria is located on Highway 128 in Sonoma County, California near the City of Geyserville.

The existing wastewater treatment plant (WWTP) serves the Dry Creek Rancheria, which includes a casino with an average daily population of approximately 3,000 guests and employees. Wastewater generated by the Dry Creek Rancheria includes sewage, restaurant wash waters, and miscellaneous wastewater from guest support services. Currently, all wastewater generated from the Dry Creek WWTP is land-applied on site (through landscape irrigation or spray-field irrigation) after treatment. Even during wet weather, the WWTP has sufficient storage capacity to retain treated wastewater for future landscape irrigation. There is sufficient distance between 13.5-acre spray fields and the receiving water that the plant's discharge does not reach the stream. The facility has not discharged in over 10 years.

The Dry Creek Rancheria WWTP was constructed in the first quarter of 2003 and expanded in the fall of 2004. The WWTP has a maximum treatment capacity of 150,000 gallons per day (gpd). The average daily flow rate was 50,000 gpd in 2024-2025.

At the headworks, wastewater is pumped from the influent wet well via grinder pumps. The wastewater is screened by a self-cleaning rotary screen with 1/4" openings that is covered to control odors. Screened materials are collected in the screening bin and trucked off-site to the landfill.

Wastewater flows to a 31,000-gallon transfer tank and then to 2 parallel sequencing batch reactors (SBR) with 92,000 gallon capacity each. The raw influent wastewater has a fairly high BOD_5 concentration of approximately 650 mg/L due to water use in the casino. The batches are run in cycles to accomplish denitrification of wastewater through timed periods of aeration and

nitrification. The SBR is aerated to a dissolved oxygen level of 5.0 mg/L for about 45 minutes (3 minutes of aeration followed by 42 minutes of mixing without aeration) followed by setting mode for 5.5 hours, and the decant cycle is about 120 minutes. Approximately 75% of each batch is decanted and pumped to a 31,000-gallon filter flow equalization tank and sludge from the bottom of the reactor goes to the sludge storage tank. The decant from the equalization tank is sent to 3 continuous upflow sand filters operated in parallel. Wastewater is pumped into the bottom of each sand filter tank and flows up through the sand material and up over a weir. A polymer (alum) is added to the inflow line prior to three sand filters in parallel to enhance coagulation. Solids are removed continuously from the sand filter by an air cleaning system. About 25% of the water is reject water and sent to the transfer tank to go through the process again. The reject from the continuous upflow air cleaning system can be sent to either the transfer tank or the sludge storage tank. Sludge is not thickened or dewatered. Once every 2 months, the sludge tank is emptied until about four feet of sludge is left at the bottom, and the sludge is hauled offsite using septic pump trucks to Laguna Santa Rosa Wastewater Treatment Plant for further processing and disposal. If stronger wastewater is needed for the reactor, the sludge tank can be aerated to mix up the sludge that has settled towards the bottom of the sludge tank. Then, an overflow pipe allows the topmost layer of water in the sludge tank, consisting of stronger wastewater, to overflow into the transfer tank.

Effluent from the sand filters is disinfected through UV disinfection consisting of three banks of two UV units in series. There are 16 UV bulbs in each bank. The system operates so that two of the three banks are in use, while the third bank undergoes cleaning. Operators physically wipe down the bulbs once per month to clean. UV-disinfected effluent is pumped to six 35,200-gallon chlorine contact tanks to maintain residual chlorine for reuse. Chlorinated effluent finally goes to an effluent chamber. When the facility uses the effluent for irrigation or reuse, the effluent is pumped up to 14 storage tanks with a capacity of 5,870 gallon per tank at higher ground, which currently stores up to 82,200 gallons of recycled water for emergency overflow.

IV. DESCRIPTION OF RECEIVING WATER

Effluent from the Dry Creek Rancheria WWTP will be primarily stored or reused on-site, and any remainder effluent that is not recycled or land-applied will be discharged and may reach the receiving water Stream P1 (Outfall 001). Stream P1 is located on the Rancheria and is an unnamed tributary to the Russian River within the Russian River Watershed, Middle Russian River hydrologic area, and Geyserville hydrologic sub-area. Stream P1 is a partially ephemeral and partially perennial stream that is a Water of the U.S. The ephemeral section flows southwesterly for several hundred feet until it reaches a segment of the stream that is perennial where the slope levels off. The perennial segment continues for several hundred feet until it reaches a culvert passing under Highway 128. At Highway 128, the perennial flow disappears into the subsurface alluvium. From the Highway, the stream is a straight conveyance channel maintained free of vegetation until it reaches the Russian River for approximately 2 miles. The distance of the Dry Creek Rancheria WWTP to Stream P1's confluence with the Russian River is approximately 1 mile. See Attachment B of the permit for the location map. See

Section VI.B.1 of this fact sheet for more information regarding the standards, designated uses, and impairments of the receiving water.

Effluent used to be conveyed to a stormwater detention basin located to the south and west of the WWTP and may flow to the Russian River, but this detention basin was removed during construction for the Dry Creek Rancheria improvement project. Dry Creek Rancheria is currently in a planning process for another stormwater detention basin.

V. DESCRIPTION OF DISCHARGE

The discharge is tertiary treated sanitary wastewater as described in Section III. The influent to the facility is domestic wastewater, and no industrial sources discharge to the facility. The treatment system consists of influent screening, sequential batch reactors (SBRs), equalization, sand filtration, UV disinfection, chlorination, dechlorination (if discharged to the outfall), effluent pumping, and sludge storage. Recycled water is pumped to the recycled water storage tank and reused for toilet/urinal flushing and landscape irrigation. Disinfection by both UV and chlorine occurs in series prior to discharge. The Discharger collects samples after disinfection and conducts monitoring for BOD, TSS, pH, temperature, ammonia, total residual chlorine, and bacteria to ensure proper treatment even though no effluent has been discharged directly to a surface water in over 10 years. The permit application lists the following effluent data for the existing (non-discharging) treatment system:

Parameter	Maximum Daily Discharge	Average Daily Discharge
BOD_5	5.0 mg/L	5.0 mg/L
TSS	22.0 mg/L	6.3 mg/L
pH	7.0 s.u. – 7.7 s.u.	
Temperature	86.0 ^{o}F	82.9 ^{o}F
Fecal Coliform	2.0 MPN/100 mL	2.0 MPN/100 mL
Ammonia (as N)	0.2 mg/L	0.02 mg/L
Total Chlorine Residual	0.2 mg/L	0.2 mg/L

VI. DETERMINATION OF NUMERICAL EFFLUENT LIMITATIONS

EPA has developed effluent limitations and monitoring requirements in the permit based on an evaluation of the technology used to treat the pollutant (i.e., "technology-based effluent limits") and the water quality standards applicable to the receiving water (i.e., "water quality-based effluent limits"). EPA has established the most stringent of applicable technology-based or water quality-based effluent limitations in the draft permit, as described below.

A. Applicable Technology-Based Effluent Limitations

Publicly Owned Wastewater Treatment Systems (POTWs)

EPA developed technology-based treatment standards for municipal wastewater treatment plants in accordance with Section 301(b)(1)(B) of the CWA. The minimum levels of effluent quality attainable by secondary treatment for Biochemical Oxygen Demand (BOD_5), Total Suspended Solids (TSS), and pH, as defined in 40 CFR § 133.102, are listed below. Mass limits, as required by 40 CFR § 122.45(f), are included for BOD_5 and TSS based on the maximum treatment capacity of 0.15 MGD.

BOD_5 and TSS

Concentration-based Limits

30-day average – 30 mg/L

7-day average – 45 mg/L

Removal Efficiency – minimum of 85%

Mass-based Limits

30-day average – (30 mg/L)(0.15 MGD)(8.345 conversion factor) = 37 lbs/day

7-day average – (45 mg/L)(0.15 MGD)(8.345 conversion factor) = 56 lbs/day

Removal Efficiency – minimum 85 %

For both BOD5 and TSS, the arithmetic means of values, by weight, for effluent samples collected in a period of 30 consecutive calendar days cannot exceed 15 percent of the arithmetic mean of values, by weight, for influent samples collected at approximately the same times during the same period.

pH

Instantaneous Measurement: 6.0 – 9.0 standard units (S.U.)

EPA has also established effluent limitations for settleable solids in the permit. The minimum levels of effluent quality attainable by secondary treatment for Settleable Solids, as specified in the "EPA Region IX Policy memo" dated May 14, 1979, are listed below:

Settleable Solids

30-day average – 1 mL/L

Daily maximum – 2 mL/L

B. Water Quality-Based Effluent Limitations

Water quality-based effluent limitations are required in NPDES permits when the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an excursion above any water quality standard (40 CFR § 122.44(d)(1)).

When determining whether an effluent discharge causes, has the reasonable potential to cause, or contributes to an excursion above narrative or numeric criteria, the permitting authority shall use procedures which account for existing controls on point and non-point sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity) and where appropriate, the dilution of the effluent in the receiving water (40 CFR § 122.44(d)(1)(ii)).

EPA evaluated the reasonable potential to discharge toxic pollutants according to guidance provided in the *Technical Support Document for Water Quality-Based Toxics Control* (TSD) (Office of Water, U.S. EPA, March 1991) and the *U.S. EPA NPDES Permit Writers' Manual* (Office of Water, U.S. EPA, September 2010). These factors include:

1. Applicable standards, designated uses and impairments of receiving water
2. Dilution in the receiving water
3. Type of industry
4. History of compliance problems and toxic impacts
5. Existing data on toxic pollutants - Reasonable Potential Analysis

1. Applicable Standards, Designated Uses, and Impairments of Receiving Water

The Dry Creek Rancheria does not have approved water quality standards for discharges to waters located on tribal land. However, the discharge of wastewater from the WWTP may reach a tributary of the Russian River (via Stream P1) for which the North Coast Regional Water Quality Control Board (Regional Water Board) has developed water quality standards. The discharge must meet applicable water quality standards at the point of entry onto State lands and must be protective of downstream uses as specified in the California Water Quality Control Plan for the North Coast Region (North Coast Basin Plan, June 2018 Edition). In such circumstances, EPA's practice is to evaluate adjacent or downstream standards to the discharge. To protect downstream uses, EPA has applied these water quality standards based on Basin Plan. EPA also has applied the California Toxics Rule and the implementing procedures in the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (i.e., State Implementation Policy or SIP).

The Basin Plan states on page 2-1 that the designated uses "of any specifically identified water body generally apply to all its tributaries." The Basin Plan lists the following beneficial uses for the Geyserville hydrologic sub-area (HSA):

MUN Municipal and Domestic Supply
AGR Agricultural Supply
IND Industrial Service Supply
GWR Groundwater Recharge
FRSH Freshwater Replenishment
NAV Navigation
REC-1 Water Contact Recreation
REC-2 Non-Contact Water Recreation
COMM Commercial and Sport Fishing
WARM Warm Freshwater Habitat
COLD Cold Freshwater Habitat
WILD Wildlife Habitat
RARE Rare, Threatened, or Endangered Species
MIGR Migration of Aquatic Organisms
SPWN Spawning, Reproduction, and/or Early Development

The following are listed as potential beneficial uses:
PRO Industrial Process Supply
POW Hydropower Generation
SHELL Shellfish Harvesting
AQUA Aquaculture

The Basin Plan also contains Waste Discharge Prohibitions applicable to point source discharges into the North Coastal Region, including the Russian River and its tributaries, which have additionally been considered in development of the water quality-based effluent limits in this permit. Waste discharge is prohibited in the Russian River and its tributaries during the period of May 15 through September 30 and during all other periods when the waste discharge flow is greater than one percent of the receiving stream's flow as set forth in the permit. In addition, the discharge of municipal waste during October 1 through May 14 shall be of advanced treated wastewater in accordance with effluent limitations in the permit and shall not exceed 23 MPN/100 mL in any 30-day period.

The Russian River Geyserville Hydrologic Subarea is listed as an impaired waterbody for aluminum, diazinon, indicator bacteria/pathogens, sedimentation/siltation, specific conductivity, and temperature pursuant to California's 2020-2022 Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report), approved by EPA on May 11, 2022. Total Maximum Daily Loads to address these impairments are currently under development.

Lastly, Dry Creek Rancheria designed the treatment plant to treat effluent to California (Title 22) disinfection standards for the reuse of wastewater. Title 22 requires that for spray irrigation of food crops, parks, playgrounds, schoolyards, and other areas of public access, wastewater be adequately disinfected, oxidized, coagulated, clarified, and filtered. Because the facility has reused 100% of the effluent over the past 10 years, EPA is choosing to apply Title 22 requirements for ensuring safety of reused wastewater.

2. Dilution in the Receiving Water

Discharge from Outfall 001 is to Stream P1, which may have no natural flow during certain times of the year. Therefore, no dilution of the effluent has been considered in the development of water quality-based effluent limits applicable to the discharge.

3. Type of Industry

Typical pollutants of concern in untreated and treated domestic wastewater include ammonia, nitrate, oxygen demand, pathogens, temperature, pH, oil and grease, and solids. Chlorine and turbidity may also be of concern due to treatment plant operations.

4. History of Compliance Problems and Toxic Impacts

There have been no effluent limit violations in the previous five years, as the facility has not discharged during this time.

Compliance evaluation inspections were performed by EPA Region 9 on July 19, 2019 and September 17, 2025 during the last permit term. The 2019 inspection report noted that in 2018 and 2019, the facility submitted several Discharge Monitoring Reports late. The 2025 inspection report noted that chemicals were not stored on secondary containment structures or areas. However, no overall areas of concern were noted.

5. Existing Data on Toxic Pollutants

The facility's effluent discharge is typically stored and then re-used. Although the Dry Creek Rancheria WWTP has never discharged, operational data for conventional and non-conventional pollutants is available from the current treatment system performance. The facility included weekly effluent sample data from 01/06/2021 to 12/29/2021 in their permit application. The permit will continue requirements for monitoring, including WET testing, and EPA will continue to evaluate monitoring results to determine if additional effluent limitations are required in the future.

For pollutants with effluent data available, EPA has conducted a reasonable potential analysis based on statistical procedures outlined in EPA's *Technical Support Document for Water Quality-based Toxics Control* herein after referred to as EPA's TSD (EPA 1991). These statistical procedures result in the calculation of the projected maximum effluent concentration based on monitoring data to account for effluent variability and a limited data set. The projected maximum effluent concentrations were estimated using a coefficient of variation of 0.6 and the 99 percent confidence interval of the 99th percentile based on an assumed lognormal distribution of daily effluent values (sections 3.3.2 and 5.5.2 of EPA's TSD). EPA calculated the projected maximum effluent concentration for each pollutant using the following equation:

Projected maximum concentration = C_e × *reasonable potential multiplier factor.*

Where, "C_e" is the reported maximum effluent value and the multiplier factor is obtained from Table 3-1 of the TSD.

Table 1. Summary of Reasonable Potential Statistical Analysis:

Parameter[(1)(2)]	**Maximum Observed Concentration (Ce)**	***n***	**RP Multiplier**	**Projected Maximum Effluent Concentration**	**Most Stringent Water Quality Criterion**	**Statistical Reasonable Potential?**
Total Dissolved Solids	990 mg/L	29	1.16	1,148 mg/L	150 mg/L[(3)]	Y
Turbidity	110 NTU	50	5.24	576 NTU	2 NTU[(4)]	Y
Ammonia as N	48 mg/L	14	5.10	245 mg/L	17 mg/L[(5)]	Y

Nitrate as N	8.5 mg/L	18	2.73	23 mg/L	10 mg/L[6]	Y
Phosphorus	14 mg/L	5	4.19	59 mg/L	--	--
Aluminum	2.1 mg/L	50	2.63	5.5 mg/L	1.0 mg/L[6]	Y
Total Coliform	32 MPN/100 mL[7]	54	6.47	207 MPN/100 mL	2.2 MPN/ 100 mL[8]	Y
Total Residual Chlorine	0.2 mg/L	5	4.19	0.8 mg/L	0.011 mg/L[9]	Y

(1) For purposes of RP analysis, parameters measured as Non-Detect are considered to be zeroes. Only pollutants detected are included in this analysis.
(2) Effluent data was collected by the permittee in January- December 2021, except for phosphorus and total residual chlorine data which were obtained from application Form 2A, Table A-B.
(3) Specific water quality objectives for Upstream Russian River HU. See Basin Plan Table 3-1.
(4) For recycled water supplied for irrigation, the turbidity of the filter effluent shall not exceed average of 2 NTU within any 24-hour period. See the California Code of Regulations, title 22, section 60307(a).
(5) The acute criterion magnitude for ammonia was taken from the 2013 Final Aquatic Life Criteria for Ammonia document. The chosen ammonia value is temperature and pH dependent.
(6) Based on the Basin Plan section 3.3.3, the maximum contaminant level (MCL) and secondary maximum contaminant level (SMCL) provisions specified in title 22 of the California Code of Regulations (CCR) are applied to waters designated for use as domestic or municipal supply (MUN).
(7) The permittee reported a total coliforms concentration of 32 MPN/100 mL on January 20, 2021. This was the only detected value out of 54 samples.
(8) Disinfection standards in Title 22, Division 4, Chapter 3 of the CCR for spray irrigation of food crops, parks, playgrounds, schoolyards, and other areas of public access.
(9) Chlorine criteria in EPA's Nationally Recommended Water Quality Criteria are listed as 19 µg/L as a 1-hour average and 11 µg/L as a 4-day average for the protection of aquatic life.

C. Rationale for Numeric Effluent Limits and Monitoring

EPA evaluated the typical pollutants expected to be present in the effluent and selected the most stringent of applicable technology-based effluent limitations or water quality-based effluent limitations. Where effluent concentrations of toxic parameters are unknown or are not reasonably expected to be discharged in concentration that have the reasonable potential to cause or contribute to water quality violations, EPA may establish monitoring requirements in the permit. Where monitoring is required, data will be reevaluated, and the permit may be reopened to incorporate effluent limitations as necessary.

Flow:

No limits established for flow, but flow rates must be continuously monitored and reported. Based on the North Coast Basin Plan, Section 4.1.1.2 (June 2018 Edition), during the period of October 1 through May 14, discharges of wastewater shall not exceed one percent of the flow of the Russian River. In addition, discharge prohibition applies to ensure that there shall be no

discharge of wastewater effluent to the Russian River or its tributaries from May 15 through September 30 each year.

Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS):

The Basin Plan contains the requirement that, in addition to flow restrictions, "the discharge of municipal waste during October 1 through May 14 shall be of advanced treated wastewater in accordance with effluent limitations contained in NPDES permits for each affected discharger..."

EPA is interpreting the Basin Plan' s requirement to discharge "advanced treated wastewater" to require water quality discharge restrictions for BOD_5 and TSS more stringent than technology-based secondary treatment standards. Therefore, EPA has incorporated water quality-based standards for BOD_5 and TSS more stringent than technology-based standards that are consistent with the discharge requirements for other municipal wastewater discharges in the North Coast regional area. The permit therefore establishes an average monthly limit of 10 mg/L, an average weekly maximum of 15 mg/L, and a daily maximum limit of 20 mg/L for BOD_5 and TSS. These water quality-based effluent limits are more stringent than technology-based effluent limitations and have been incorporated into the permit. Under 40 CFR § 122.45(f), mass limits are also required for BOD_5 and TSS. Mass-based limits are calculated using the maximum treatment capacity of 0.15 MGD and are included in the permit. Monitoring is required weekly. Final BOD_5 and TSS limits established in the permit are listed below.

Concentration-based Limits

Average Monthly – 10 mg/L
Average Weekly – 15 mg/L
Maximum Daily – 20 mg/L
Removal Efficiency – minimum of 85%

Mass-based Limits

Average Monthly – (10 mg/L)(0.15 MGD)(8.345 conversion factor) = 12.5 lbs/day
Average Weekly – (15 mg/L)(0.15 MGD)(8.345 conversion factor) = 18.8 lbs/day
Maximum Daily – (20 mg/L)(0.15 MGD)(8.345 conversion factor) = 25.0 lbs/day

pH:

The basin plan requires that a pH of 6.5-8.5 must be met at all times and that changes in normal ambient pH level not exceed 0.5 units. This water quality standard in the Basin Plan is more stringent than secondary treatment standard for pH, therefore, this limit supersedes TEBL for PH.

Temperature:

The Russian River Geyserville Hydrologic Subarea has a cold freshwater habitat (COLD) designated use due to it providing habitat for coho salmon and steelhead trout. The Basin Plan prohibits the increase of receiving water temperature greater than 5°F above natural receiving water temperature. The receiving water is listed as impaired for temperature, and the

California CWA 303(d) List (approved 2022) notes that flow alteration and removal of riparian vegetation are the primary sources of temperature impairment in the watershed.

The Basin Plan includes narrative water quality standards for temperature, which have been incorporated into the permit. Effluent monitoring requirements for temperature have been established to ensure that the applicable narrative standards are not exceeded and to calculate temperature-specific ammonia criteria, as described above.

Turbidity:

The Russian River is listed as an impaired water body for sedimentation/siltation pursuant to Section 303(d) of the Clean Water Act. A Total Maximum Daily Load has not been established to address sediment loadings. Aspects of the sediment impairing the Russian River include settleable solids, suspended solids, and turbidity. Since reasonable potential exists for turbidity, the permit retains the previous effluent limits and weekly monitoring requirements for turbidity to prevent an increase in sediment levels in the downstream waterbodies.

Total Dissolved Solids and Electrical Conductivity:

The Basin plan lists the Russian River Geyserville Hydrologic Subarea as an impaired waterbody for specific conductivity. The Basin Plan includes the following numeric water quality objectives for specific conductance (at 77°F) and total dissolved solids (TDS) in the form of 90% upper limit and 50% upper limit (see Table 2 or North Coast Basin Plan, 2018 Edition, Table 3-1). The following criteria apply to the mainstem Russian River upstream of its confluence with the Laguna de Santa Rosa:

Table 2. Specific Water Quality Objectives for TDS and Conductivity

Parameter	Units	90% Upper Limit(1)	50% Upper Limit(2)
Specific Conductance (at 77°F)	µmhos/cm	320	250
Total Dissolved Solids	mg/L	170	150

(1) 90th percentile for a calendar year. 90% or more of the values must be less than or equal to the upper limit.
(2) 50th percentile of the monthly means for a calendar year. 50% or more of the monthly means must be less than or equal to the upper limit.

Based on the nature of wastewater treatment plant effluent and reasonable potential for TDS, EPA has included effluent limits and weekly monitoring requirements for TDS in the permit. EPA has translated the TDS water quality objectives for 90% upper limit and 50% upper limit into the maximum daily and average monthly effluent limitations, respectively. Therefore, an average monthly of 150 mg/L and maximum daily limit of 170 mg/L are established for TDS in the permit. Due to lack of discharge data for electrical conductivity (EC), it is unknown at this time if the discharge from the new WWTP will have reasonable potential to cause or contribute to an exceedance of water quality objectives. Therefore, the draft permit establishes monthly monitoring requirements for EC to assess reasonable potential in the new permit issuance.

Total Coliform bacteria:

Based on the nature of wastewater treatment plant effluent and potential for human contact with the effluent, EPA has incorporated recycled water standards into the permit. Effluent from the facility is designed to meet Title 22 of the CCR disinfection standards for the recycling of wastewater. Title 22 requires that for spray irrigation of food crops, parks, playgrounds, schoolyards, and other areas of public access, wastewater be adequately disinfected, oxidized, coagulated, clarified, and filtered. The effluent total coliform levels are evaluated in two ways:

(a) may not exceed 2.2 MPN/100 ml as 7-day median
(b) may not exceed 23 MPN/100 ml more than one sample in any 30-day period or
(c) may not exceed 240 MPN/100 ml at any time.

Due to reasonable potential for total coliform and antibacksliding, the previous permit limit will remain as a maximum daily limit of 23 MPN/100 ml with weekly monitoring. Based on the Basin Plan section 4.1.1.2.4 (i.e., waste discharge prohibitions for the Russian River and its tributaries), a weekly median limit of 2.2 MPN/100 ml is also required in this permit.

Oil and Grease:

Treated and untreated domestic wastewater may contain levels of oil and grease which may be toxic to aquatic organisms. There are no numeric water quality standards for oil and grease (only narrative standards which have been incorporated into the permit). Therefore, an effluent limit based on Best Professional Judgment is being established with monthly monitoring.

Nitrate + nitrite (as nitrogen):

The receiving water has a designated use for municipal drinking water (MUN). The Basin Plan includes, by incorporation of Title 22 of the California Code of Regulations (CCR) § 6443 (MCL, Maximum Contaminant Levels – Inorganic Chemicals), a MCL of 10 mg/L for nitrate plus nitrite (measured as N) to protect drinking water designated uses in the receiving water. In addition, the USEPA Ambient Water Quality Criteria for the Protection of Human Health is also 10 mg/L for nitrates. Due to reasonable potential finding, the effluent limits remain in the permit for nitrate plus nitrite (measured as nitrogen). Monitoring is required weekly, when discharging.

Ammonia and Ammonia Impact Ratio:

Treated and untreated domestic wastewater may contain levels of ammonia that are toxic to aquatic organisms. Ammonia is converted to nitrate during biological nitrification process, and then nitrate is converted to nitrogen gas through biological denitrification process. Due to the potential for ammonia to be present in sanitary wastewater at toxic levels and due to the conversion of ammonia to nitrate, effluent limitations are established using the Ammonia Impact Ratio ("AIR") for all facilities.

The AIR is calculated as the ratio of the ammonia value in the effluent to the applicable ammonia water quality standard. The 2013 Final Aquatic Life Ambient Water Quality Criteria for

Ammonia in freshwater contains ammonia criteria that are pH and temperature dependent. Therefore, pH, temperature, and ammonia sampling must be concurrent. See Attachment D of the permit for a sample log to help calculate and record the AIR values and Attachment E for applicable Water Quality Standards. The AIR effluent limitation value is 1.0.

The permittee also must monitor and report ammonia effluent values in addition to the AIR value. AIR provides more flexibility than a specific, fixed effluent concentration and is protective of water quality standards since the value is set relative to the water quality standard. If the reported value exceeds the AIR limitation, then the effluent ammonia-N concentration exceeded the ammonia water quality criterion.

Total Residual Chlorine:

Chlorine is added to recycled effluent through a series of chlorine contact chambers immediately prior to storage in the recycle water storage tanks. This water is not anticipated to be discharged, but if the discharge occurs in certain circumstances, it would be discharged after dechlorination.

Although chlorine is not expected to be present in the discharge, EPA finds there is a reasonable potential for chlorine residual to be present due to the use of chlorine at the WWTP for cleaning the sand filters and its use for reclaimed water applications. The Basin Plan does not contain criteria or objectives for chlorine concentrations. However, chlorine in EPA's National Recommended Water Quality Criteria is listed as 19 µg/L (acute) and 11 µg/L (chronic). EPA has translated these water quality criteria into effluent limitations (Table 3) to protect the designated uses associated with aquatic life in the receiving water. A monthly average of 0.01 mg/L and daily maximum limit of 0.02 mg/L are established for total residual chlorine with weekly monitoring in the permit.

Table 3: WQBEL Calculations for Chlorine(1)

	Acute	Chronic
Aquatic Life Criteria, mg/L(2)	0.019	0.011
No Dilution Credit Authorized	0	0
Background Concentration	0	0
WLA (Dissolved), mg/L	0.019	0.011
WLA multiplier (99th %)	0.321	0.527
LTA, mg/L	0.0061	0.0058
LTA_{MDL} Multiplier (99th %)(3)	--	3.11
MDL, mg/L	--	**0.02 mg/L**
LTA_{AML} Multiplier (95th %)(3)	--	1.55
AML, mg/L	--	**0.01 mg/L**

(1) Derivation of permit limit based on Section 5.4.1 of USEPA's TSD
(2) Chlorine criteria in EPA's Nationally Recommended Water Quality Criteria are listed as 19 µg/L (acute) and 11 µg/L (chronic). This was converted to mg/L to maintain consistency with the units used for the final effluent limitations.

(3) LTA multiplier based on sampling frequency of four times per month per Section 5.5.3 of USEPA's TSD

In addition, the permittee must continue to maintain an on-site logbook of chlorine usage and wastewater flows directed to discharge or reclamation to ensure compliance with the chlorine permit limits and water quality standards.

Aluminum:

The receiving water has a designated use for municipal drinking water (MUN) and is listed as impaired for aluminum. The Basin Plan includes, by incorporation of Title 22 of the California Code of Regulation, an MCL for aluminum of 1.0 mg/L (see Table 64431-A of the CCR). Based on the reasonable potential analysis, EPA has determined that the discharge has reasonable potential to cause or contribute to an exceedance of the MCL for aluminum. Therefore, the permit contains average monthly effluent limit of 1.0 mg/L for aluminum. Monitoring is required monthly, when discharging.

Priority Pollutant Scan and Chronic Toxicity:

Priority pollutant and chronic toxicity monitoring requirements are described below in Sections VIII.B and C, respectively.

D. Anti-Backsliding

Section 402(o) and 303(d)(4) of the CWA and 40 CFR § 122.44(l)(1) prohibits the renewal or reissuance of an NPDES permit that contains effluent limits and permit conditions less stringent than those established in the previous permit, except as provided in the statute and regulation.

The permit does not establish any effluent limits less stringent than those in the previous permit and does not allow backsliding, except the maximum daily limits for BOD and TSS which EPA has determined were typographical or technical errors. A permit may be reissued with a less stringent effluent limitation if the limitation in the previous permit was a mistake, in accordance with Section 402(o)(2)(B)(ii) of the CWA.

E. Antidegradation Policy

EPA's antidegradation policy under CWA § 303(d)(4) and 40 CFR § 131.12 and California's Water Quality Control Plan for the North Coast Region for the Russian River, Geyserville Hydrologic Subarea require that existing water uses and the level of water quality necessary to protect the existing uses be maintained.

As described in this document, the permit establishes effluent limits and monitoring requirements to ensure that all applicable water quality standards are met. The permit does not include a mixing zone, therefore these limits will apply at the end of pipe without consideration of dilution in the receiving water. A priority pollutant scan and chronic toxicity monitoring are required once per permit term and a reopener provision is included to establish effluent limits in the future if the discharge is shown to have reasonable potential to cause or contribute to an exceedance of water quality standards.

Due to no discharge flow in over last 10 years, the low levels of toxic pollutants and bacteria present in the effluent, high level of treatment being obtained, and water quality-based effluent limitations, EPA has concluded that the discharge is not expected to adversely affect receiving water bodies or result in any degradation of water quality.

VII. OTHER EFFLUENT LIMITATIONS

The approved North Coast Basin Plan (June 2018 Edition) contains narrative water quality standards for pollutants applicable to the receiving water. The previous permit incorporated receiving water limitations based on the narrative water quality standards as backstops for unanticipated circumstances or any potential changes to effluent quality that could affect receiving water quality. This permit removes these receiving water limitations to be consistent with the 2025 U.S. Supreme Court ruling in City and County of San Francisco, California v. Environmental Protection Agency (No. 23-753), which held that the Clean Water Act does not authorize end-result requirements in NPDES permits.

EPA has evaluated whether there is reasonable potential for the discharge to cause or contribute to an exceedance of any narrative water quality standards in accordance with 40 CFR section 122.44(d). Where reasonable potential is determined, this permit requires more stringent numeric effluent limitations and/or monitoring requirements in Part I.A of the permit (e.g., BOD, nitrate+nitrite, temperature, oil and grease, turbidity, TSS/TDS/setteable solids, priority pollutant scan, toxicity) or narrative water-quality based limitations in Part I.D of the permit as “other effluent limitations” (e.g., pesticide(s), floating materials, color-, taste-, or odor-producing substances, and biostimulatory substances) to ensure that the discharge satisfies Clean Water Act section 301(b)(1)(C) (33 U.S.C. section 1311(b)(1)(C)). If unanticipated circumstances or changes to effluent quality occur during the permit term, EPA may reopen this Order and Permit to include any limitations necessary to protect water quality.

VIII. MONITORING AND REPORTING REQUIREMENTS

The permit requires the permittee to conduct monitoring for all pollutants or parameters where effluent limits have been established, at the minimum frequency specified. Additionally, where effluent concentrations of toxic parameters are unknown or where data are insufficient to determine reasonable potential, monitoring may be required for pollutants or parameters where effluent limits have not been established.

A. Effluent Monitoring and Reporting

The permittee shall conduct effluent monitoring to evaluate compliance with the draft permit conditions. The permittee shall perform all monitoring, sampling and analyses in accordance with the methods described in the most recent edition of 40 CFR § 136, unless otherwise specified in the draft permit. All monitoring data shall be reported on monthly Discharge Monitoring Report (DMR) and submitted quarterly as specified in the draft permit.

All monitoring data shall be electronically reported via DMR forms on EPA's Central Data Exchange (CDX) and submitted as specified in the permit.

B. Priority Toxic Pollutants Scan

A Priority Toxic Pollutants scan shall be conducted once during the permit term to ensure that the discharge does not contain toxic pollutants in concentrations that may cause a violation of water quality standards. The permittee must conduct the priority pollutants scan concurrently with a whole effluent toxicity testing. Permit Attachment F provides a complete list of Priority Toxic Pollutants, including identifying the volatile compounds that should be collected via grab sample procedures. The permittee shall perform all effluent sampling and analyses for the priority pollutants scan in accordance with the methods described in the most recent edition of 40 CFR § 136, unless otherwise specified in the draft permit or by EPA. 40 CFR § 423, Appendix A provides a complete list of Priority Toxic Pollutants.

C. Whole Effluent Toxicity (WET) Requirements

The CWA requires that all waters be suitable for aquatic life, which includes the protection and propagation of fish, shellfish, and wildlife. As evidence that CWA requirements protecting aquatic life from chronic and acute toxicity are met, samples are collected from the effluent and tested for toxicity in a laboratory using EPA's WET methods. These aquatic toxicity test results are used to determine if the NPDES effluent causes toxicity to aquatic organisms. Toxicity testing is important because for scores of individual chemicals and compounds, chemical-specific environmentally protective levels for toxicity to aquatic life have not been developed, or set as water quality standards. In due course, some such chemicals and compounds can eventually make their way into effluents and their receiving surface waters. When this happens, toxicity tests of effluents can demonstrate toxicity due to present, but unknown, toxicants (including possible synergistic and additive effects), signaling a water quality problem for aquatic life.

EPA's WET methods are systematically-designed to expose sensitive life stages of a test species (e.g., fish, invertebrate, algae) to both an NPDES effluent sample and a control sample. During the toxicity test, the test organism may show a difference in biological response, such as; eggs not fertilized, early life stages that grow too slowly or abnormally, or death. At the end of a toxicity test, the different biological responses of the organisms in the effluent group and the organisms in the control group are summarized using common descriptive statistics (e.g., means, standard deviations, coefficients of variation). The effluent and control groups are then compared using an applicable inferential statistical approach (i.e., hypothesis testing or point estimate model) chosen by the permitting authority and specified in the NPDES permit. The chosen statistical approach is compatible with both the experimental design of the WET method and the applicable toxicity water quality standard. Based on this statistical comparison, a toxicity test will demonstrate that the effluent is either toxic or not toxic, in relation to the permit's toxicity limit for the effluent. EPA's WET methods are specified under 40 CFR § 136 and/or in applicable water quality standards.

In the permit, EPA requires the permittee to analyze WET test data using the Test of Significant Toxicity (TST) statistical approach. This statistical approach is described in *National*

Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document (EPA 833-R-10-003, 2010; TST Technical Document) and Denton DL, Diamond J, and Zheng L. 2011. Test of significant toxicity: A statistical application for assessing whether an effluent or site water is truly toxic. *Environ Toxicol Chem* 30:1117-1126. This statistical approach supports important choices made within a toxicity laboratory which favor quality data and EPA's intended levels for statistical power when true toxicity is statistically determined to be unacceptably high (≥ 25 Percent Effect (PE)), or acceptably low (< 10 PE). Example choices are practices supporting healthy test organisms, increasing the minimum recommended replication component of the WET method's experimental design (if needed), technician training, etc. TST results do not often differ from other EPA-recommended statistical approaches using hypothesis testing (Diamond D, Denton D, Roberts J, Zheng L. 2013. Evaluation of the Test of Significant Toxicity for determining the toxicity of effluents and ambient water samples. *Environ Toxicol Chem* 32:1101-1108.). The TST maintains EPA's desired low false positive rate for WET methods—the probability of declaring toxicity when true toxicity is acceptably low ≤ 5%—when quality toxicity laboratories conduct toxicity tests (TST Technical Document; Fox JF, Denton DL, Diamond J, and Stuber R. 2019. Comparison of false-positive rates of 2 hypothesis-test approaches in relation to laboratory toxicity test performance. *Environ Toxicol Chem* 38:511-523.). Note: The false positive rate is a long-run property for the toxicity laboratory conducting a WET method. A low false positive rate is indicted by a low long-run toxicity laboratory control coefficent of variation for the test species/WET method, using a minimum of 30 to 50 toxicity tests.

The following chronic toxicity test results were obtained from the 2022 toxicity testing report representative of Dry Creek Rancheria's Wastewater Treatment Facility effluent discharge during the previous permit term. Results are analyzed using the TST statistical approach described in Appendix B of the TST Technical Document.

Table 4. Chronic Toxicity Data Summary and Reasonable Potential Determination.

Toxicity test initiation & completion dates	Test species/WET method	Chronic toxicity test did not reject (Fail "1"), or rejected (Pass "0"), TST null hypothesis	Associated PE	Reasonable potential if Fail (1) or associated PE ≥ 10
01/27/22-01/31/22	*Selenastrum capricornutum*/ chronic	0	-41.4%	No
01/27/22-02/02/22	*Ceriodaphnia dubia*/ chronic	0	-11.1%	No
01/27/22-02/03/22	Fathead Minnows/ chronic	0	-21.9%	No

In accordance with 40 CFR § 122.44(d)(1), reasonable potential for chronic toxicity has not been established. This is because no chronic toxicity test result is Fail (1) indicating unacceptable toxicity is not present in the effluent and no associated PE (Percent (%) Effect) value is ≥ 10 indicating toxicity at a level higher than acceptable is not present in the effluent (see Table 1 and section 1.4 in TST Technical Document). Thus, no chronic toxicity WQBELs are required for the permitted discharge (40 CFR § 122.44(d)(1)). However, monitoring and reporting for both the median monthly and maximum daily effluent results for the parameter of chronic toxicity are required, so that effluent toxicity can be assessed in relation to CWA requirements for the permitted discharge (see Part I, Table 2 in this NPDES permit).

In accordance with 40 CFR § 122.44(d)(1)(ii), in setting the permit's levels for chronic toxicity and conditions for discharge, EPA is using a test species/chronic short-term WET method and a discharge Instream Waste Concentration (IWC) representing conservative assumptions for effluent dilution necessary to protect receiving water quality. The IWC is a discharge-specific term based on the permit's authorized mixing zone or initial dilution. Generally, the dilution model result "S" from Visual Plumes/Cormix is used. S is the volumetric dilution factor, i.e. 1 volume effluent is diluted with S − 1 volumes surface water) = [(Ve + Va) / Ve]. Following the mass balance equation, if the dilution ratio D = Qs / Qe, then [(Qe + Qs) / Qe] = 1 + D = S.

For this discharge, S = 1 (i.e., no authorized dilution). The discharge-specific IWC = 1 to 1 dilution (1:1, 1/1) = 100% effluent. The IWC made by the toxicity laboratory is mixed as 1 part solute (i.e., effluent) to 0 parts dilutant (1: (1 – 1)) for a total of 1 part.

The TST's null hypothesis for chronic toxicity (H_o) is: In-stream Waste Concentration (IWC) mean response (% effluent) ≤ 0.75 Control mean response. The TST's alternative hypothesis is (H_a): IWC mean response (% effluent) > 0.75 Control mean response. For this permit, results obtained from a single chronic toxicity test are analyzed using the TST statistical approach, where the required chronic toxicity IWC for Discharge Point Number 001 is 100% effluent.

For NPDES samples for toxicity testing, the sample hold time begins when the 24-hour composite sampling period is completed (or the last grab sample in a series of grab samples is taken) and ends at the first time of sample use (initiation of toxicity test). 40 CFR § 136.3(e) states that the WET method's 36-hour hold time cannot be exceeded unless a variance of up to 72-hours is authorized by EPA.

For POTWs, it is not practicable (40 CFR § 122.45(d)) for EPA to set an average (median) weekly effluent limit, in lieu of a maximum daily effluent limit. This is because discharges of unacceptable toxicity—true chronic toxicity ≥ 25 PE, the TST's chronic toxicity RMD—are not adequately restricted by two effluent limits (median weekly and median monthly) each using a median of up to 3 toxicity test results. Under such limits, a highly toxic (chronic, acute) discharge could occur with no restriction. Moreover, using two such median limits further decreases the probability that an effluent with unacceptable toxicity will be caught, resulting in a permitted discharge which under-protects the aquatic life from unacceptable chronic toxicity.

Species sensitivity screening for chronic toxicity is not an automatic requirement in this permit. However, the permit retains a species sensitivity screening condition as an option for the permitting authority to exercise, particularly when the quality of the permitted discharge has changed, or is expected to change, during the permit term.

IX. SPECIAL CONDITIONS

A. Biosolids

Standard requirements for the monitoring, reporting, recordkeeping, and handling of biosolids in accordance with 40 CFR § 503 are incorporated into the permit. The permit also includes, for dischargers who are required to submit biosolids annual reports, which include major POTWs that prepare sewage sludge and other facilities designated as "Class 1 sludge management facilities", electronic reporting requirements. Permittees shall submit biosolids annual reports using EPA's NPDES Electronic Reporting Tool ("NeT") by February 19th of the following year.

B. Pretreatment

EPA has established pretreatment standards to prevent the introduction of pollutants into POTWs which will interfere with or pass through the treatment works, and to improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges (Section 307 of the CWA). EPA requires any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 MGD and receiving from nondomestic sources pollutants which pass through or interfere with the operations of the POTW or are otherwise subject to pretreatment standards to establish a pretreatment program.

There are no nondomestic facilities discharging pollutants which pass through or interfere with the operations of this POTW, or which are otherwise subject to pretreatment standards. Therefore, there are no pretreatment requirements in this permit.

C. Sanitary Sewer Overflows

A Sanitary Sewer Overflow (SSO) is an overflow, spill, release, or diversion of wastewater from a sanitary sewer collection system that occurs prior to a treatment plant. The permit prohibits sanitary sewer overflows and requires the permittee to identify and describe all SSOs that occur over the permit term

D. Development and Implementation of Best Management Practices

Pursuant to 40 CFR § 122.44(k)(4), EPA may impose Best Management Practices (BMPs) which are "reasonably necessary…to carry out the purposes of the Act." The pollution prevention requirements or BMPs in the draft permit operate as technology-based limitations on effluent discharges that reflect the application of Best Available Technology and Best Control Technology. Therefore, the permit requires that the permittee develop (or update) and implement a Pollution Prevention Plan with appropriate pollution prevention measures or BMPs designed to prevent pollutants from entering Stream P1 an unnamed tributary to the Russian River and other surface waters while performing normal processing operations at the

facility. In addition, the permittee shall develop and implement BMPs that are necessary to safeguard against erosion from the discharge and prevent adverse impacts to receiving waters.

E. Asset Management

40 CFR § 122.41(e) requires permittees to properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. USEPA published a guide entitled Incorporating Asset Management Planning Provisions into NPDES Permits (December 2014) that directs Municipalities to manage their aging sewer and stormwater systems at a time of urban population growth and more stringent water quality protection requirements. Asset management planning provides a framework for setting and operating quality assurance procedures and ensuring the permittee has sufficient financial and technical resources to continually maintain a targeted level of service. The permittee shall develop an Asset Management Plan that considers short-and long-term vulnerabilities of collection systems, facilities, treatment systems, and outfalls. The intent is to ensure facility operations are not disrupted and compliance with permit conditions is achieved. Asset management requirements have been established in the permit to ensure compliance with the provisions of 40 CFR § 122.41(e).

F. Capacity Attainment and Planning

To ensure EPA is made aware of potential wastewater treatment capacity attainment issues, the permit requires that a written report be filed within ninety (90) days if the average dry-weather wastewater treatment flow for any month exceeds 90 percent of the annual dry weather design capacity of the waste treatment and/or disposal facilities.

G. Reclaimed Water-use Standards

The facility reuses wastewater for on-site irrigation and non-potable water uses such as toilet flushing. The Tribe has agreed to follow the reclamation criteria established by the California Department of Health Services to protect public health and the environment. The California Department of Health Services (DHS) has established statewide reclamation criteria in Chapter 3, Division 4, Title 22, California Code of Regulations (CCR), Section 60304, et seq. (Hereafter Title 22) for the use of reclaimed water. These requirements implement the reclamation criteria in Title 22.

Although the Tribe is not required to comply with these State criteria for wastewater reused on Tribal lands, the Tribe is currently voluntarily willing to follow these criteria for the re-use of its wastewater. The applicable terms are therefore included in this permit.

X. OTHER CONSIDERATIONS UNDER FEDERAL LAW

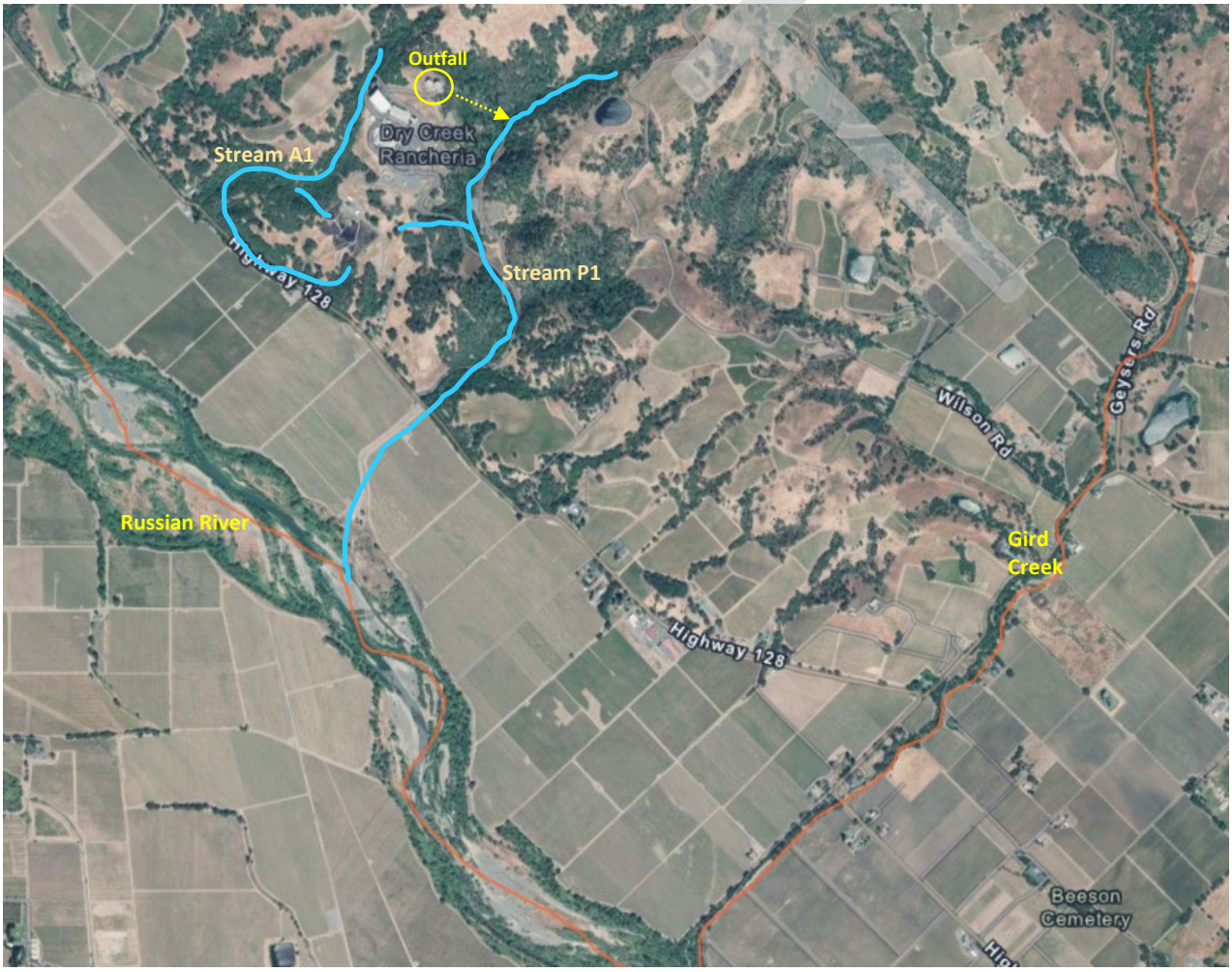
A. Impact to Threatened and Endangered Species

Section 7 of the Endangered Species Act of 1973 (16 U.S.C. § 1536) requires federal agencies to ensure that any action authorized, funded, or carried out by the federal agency does not

jeopardize the continued existence of a listed or candidate species, or result in the destruction or adverse modification of its habitat.

Action Area

Under Section 7 of the ESA regulations, the "action area" means all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action (50 CFR § 402.02). The action area for reissuance of the permit includes the wastewater treatment facility footprint, the land application sites, and the receiving waters from the discharge location to the confluence of stream P1 and the Russian River. Action areas for the discharge are as follows:



Species and Critical Habitat Considered

On August 14, 2025, EPA used the U.S. Fish and Wildlife Service (USFWS)'s IPaC website to generate an official list of threatened or endangered species that occur in area neighboring the Dry Creek Rancheria including Stream P1 and the Russian River. EPA shared this ESA species list and a brief description of the facility, its treated wastewater discharge, and the tentative action area with USFWS on September 2, 2025. USFWS confirmed via email that the list IPaC provided

is accurate for the species the Service consults on that should be considered for the proposed project.

On August 19, 2025, EPA also shared the project area and facility information with National Marine Fisheries Service (NMFS) and requested their technical assistance for the species and critical habitat information. EPA received a species and critical habitat list from NMFS staff via email on September 18, 2025 that Central California Coast (CCC) steelhead and California Coastal (CC) Chinook salmon are present within the Russian River watershed. CCC coho salmon in the mainstem Russian River is approximately 5.5 miles downstream of the confluence with Grid Creek, and NMFS would not expect coho individuals to be within the action area.

From the USFWS Threatened and Endangered Species Online Database (i.e., IPaC) and correspondence with the Services, EPA evaluated the species list as follows to determine whether any of these species would be found in the action area and to determine whether species in the action area may be affected by reissuance of the proposed permit. EPA found there is currently one Federally listed endangered, four Federally listed threatened, and two Federally listed proposed threatened species and critical habitat in the action area. Five species are being considered under USFWS jurisdiction, and two species are being considered under NOAA-NMFS jurisdiction.

Table 5. ESA Species List for Rancheria area, near Geyserville, California

Jurisdiction	Type	Common Name	Scientific Name	Status	Critical Habitat
USFWS	Birds	Northern Spotted Owl	*Strix occidentalis caurina*	Threatened	Yes[1]
	Insects	Monarch Butterfly	*Danaus plexippus*	Proposed Threatened	Proposed[2]
	Plants	Burke's Goldfields	*Lasthenia burkei*	Endangered	No
	Reptiles	Green Sea Turtle	*Chelonia mydas*	Threatened	No
		North western Pond Turtle	*Actinemys marmorata*	Proposed Threatened	No
NMFS	Fish	Central California Coast Steelhead	*Oncorhynchus mykiss*	Threatened	Yes[3]
		California Coastal Chinook salmon	*Oncorhynchus tshawytscha*	Threatened	Yes[4]

[1] There is final critical habitat for Northern Spotted Owl. The action area does not overlap this critical habitat.

[2] There is proposed critical habitat for Monarch Butterfly. This critical habitat is located outside the action area.

[3] The Russian River has been designated as critical habitat for Central California Coast Steelhead.

[4] The Russian River has been designated as critical habitat for California Coast Chinook Salmon.

Effect Evaluation

a. **Northern Spotted Owl** (*Strix occidentalis caurina*)

The Northern Spotted Owl is a medium-sized, dark brown owl with a barred tail, white spots on the head and breast and dark brown eyes surrounded by prominent facial disks. Their habitat includes land covered by evergreen trees in cool, northern latitudes, also called taiga. Northern spotted owls are nocturnal predators that capture prey with their claws. They primarily eat small forest mammals such as woodrats, mice, and flying squirrels. The species range-wide distribution includes British Columbia through the Cascade Range, coastal ranges, and intervening forested lands in Washington, Oregon, and northern California, as far south as Marin County. The Northern Spotted Owl is known to or believed to occur in Sonoma County where the facility is located. The action area does not contain critical habitat for this species. This species may be exposed to the treated effluent in stream P1 and Russian River directly through drinking or bathing in the treated effluent, while indirect exposure could come from eating prey that have been in frequent contact with the treated effluent or a reduction in prey abundance. These activities are unlikely to cause an adverse response because the species primarily resides in dense forest and is sufficiently mobile to leave the area of the discharge if desired. EPA has determined that the discharge from the treatment plant would have no effect on the Northern Spotted Owl or its critical habitat.

b. **Monarch Butterfly** (*Danaus Plexippus)*

Adult Monarch Butterfly is large, with bright orange wings surrounded by a black border and covered with black veins. During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily Asclepias spp.), larvae emerge after two to five days. Larvae develop through five larval instars (intervals between molts) over a period of 9 to 18 days, feeding on milkweed and sequestering toxic chemicals (cardenolides) as a defense against predators. The larva then pupates into a chrysalis before emerging 6 to 14 days later as an adult butterfly. In many regions where the monarchs are present, they breed year long. Monarchs in temperate climates such as western North America, undergo long-distance migration, and live for an extended period. In the fall, monarchs begin migrating to their respective overwintering areas. This migration can take monarchs distances over 3,000 km and last over two months. Overwintering areas in California include coastal areas between Mendocino County and San Diego. Monarchs tend to cluster in groves of eucalyptus, Monterey Cypress, or Monterey pines during the winter. This species may be exposed to the treated effluent in stream P1 and Russian River directly through drinking from the treated effluent. These activities are unlikely to cause an adverse response because the species primarily resides in coastal areas and is sufficiently mobile to leave the area of the discharge if desired. Additionally, the action area does not appear to contain suitable habitat for the Monarch Butterfly. For these reasons, EPA has determined that the discharge from the treatment plant would have no effect on the Monarch Butterfly.

c. **Burke's Goldfields** (*Lasthenia burkei*)

Burke's Goldfields is a small annual herb that grows in vernal pools and swales. Most occurrences have been found in the Santa Rosa Plain area of Sonoma County, but population records exist from Napa, Lake, and Mendocino counties. Aside from being listed as endangered under the federal Endangered Species Act, it is also listed as an endangered plant species under

the California Endangered Species Act (CESA). Populations of vernal pools plants such as Burke's Goldfields are typically discontinuous and fragmented due to differences in climate, substrate, and topography, and are often restricted to very specific habitats and locations. This species is also sensitive to land use changes that cause variations in hydrology and the duration of vernal pool inundation. The range of Burke's Goldfields includes the action area, but the action area does not appear to contain suitable habitat for the species. Therefore, EPA has determined that the discharge from the treatment plant would have no effect on Burke's Goldfields.

d. **Green Sea Turtle** (*Chelonia mydas*)

The Green sea turtles is the largest hard-shelled sea turtle with a typical adult being 3 to 4 feet long and weighing 300 to 350 pounds. They have dark brown-, grey-, or olive-colored shells and a much lighter, yellow-to-white underside. Green sea turtles must surface to breathe and lay their eggs on land. After hatching and emerging from their nest, hatchlings swim to offshore areas, where they live for several years in pelagic habitat. As juveniles they eventually leave the open ocean habitat and travel nearshore to shallow coastal habitat for foraging grounds, where they mature to adulthood and spend the reminder of their lives. As adults' green sea turtles migrate every 2 to 5 years from their coastal foraging areas to the waters off the nesting beaches where they originally hatched to reproduce. Green sea turtles are the only herbivorous species of sea turtle, with their diet mainly consisting of algae and seagrasses. Green sea turtles are found worldwide with juvenile and adult green sea turtles being present along the coast of Southern California in many of the bays, lagoons, and coastal inlets, where they come to take advantage of the productive coastal ecosystems which are rich in seagrass, algae, and invertebrates. The Green Sea Turtle is not likely to be exposed to the treated effluent in stream P1 and Russian River directly because it does not reside in freshwater, therefore, the reissuance of the Dry Creek Rancheria permit will have no effect on this species.

e. **Northwestern Pond Turtle** (*Actinemys marmorata*)

The is a medium-sized semi-aquatic freshwater species. They can have olive brown to black coloring on their carapace and faint light reticulations often radiate from its scutes. As omnivorous predators and scavengers, northwestern pond turtles forage and mate in a variety of intermittent and permanent aquatic habitats during the spring and summer breeding season, including rivers, streams, lakes, ponds, wetlands, and vernal pools. The Northern Pond Turtle is primarily found within the Sacramento Valley and surrounding foothills, as well as in the North Coast Range and Klamath Basin. This species is vulnerable to stressors that impact terrestrial and aquatic habitats, including changes in precipitation amount and timing, increased drought, altered streamflow, warmer air and water temperatures, heat waves, and sea level rise. Additionally, changes in hydrology and warmer air and water temperatures are likely to impact the turtle's development. The range of the Northern Pond Turtle includes the action area, and the species is likely to reside in stream P1 and the Russian river. This species may be exposed to the treated effluent in stream P1 and Russian River directly through drinking or bathing in the treated effluent, while indirect exposure could come from eating prey that have been in frequent contact with the treated effluent or a reduction in prey abundance. However, the Northwestern Pond Turtle is a proposed species and conference consultation for this proposed species is not necessary as this permit issuance is not likely to jeopardize the continued existence of the Northwestern Pond Turtle. On September 18, 2025, the Sacramento Fish and

Wildlife Office confirmed that they are currently not doing conference opinions in regard to the proposed Northwestern pond turtle.

f. **Central California Coast Steelhead** (*Oncorhynchus mykiss) and* **California Coastal Chinook Salmon** (*Oncorhynchus tshawytscha)*

Central California Coast (CCC) Steelhead and California Coastal (CC) Chinook Salmon are anadromous fish that spend most of their adult life in the ocean and spawn and rear in freshwater streams and rivers. Salmon requires cold, clean, clear freshwater which is characterized by low temperature, circumneutral pH, high dissolved oxygen, low bacteria, low nutrients, low TSS, low turbidity, and low levels of bioaccumulating parameters. There are several factors contributing to species decline, including overfishing, loss of freshwater and estuarine habitat, hydropower development, poor ocean conditions, and hatchery practices.

The Russian River is designated critical habitat for CCC steelhead and CC Chinook salmon. Based on the conversation with the NMFS, it is infeasible that CCC steelhead and CC Chinook salmon may come into contact with the effluent due to no direct discharge to downstream waterbodies, only land application onsite, and sufficient distance from the spray fields to the Russian River. EPA has included the following requirements in the permit to ensure the protection of aquatic life downstream of the discharge, including salmon throughout their life cycle. The NPDES permit:

- Requires the permittee to minimize discharge by maximizing water reuse.
- Prohibits discharges from May 15 – October 30 annually.
- Prohibits discharges greater than 1% of the receiving water flow.
- Requires tertiary treatment which minimizes pollutants in the discharge.
- Establishes effluent limitations for BOD, TSS, pH, chlorine, bacteria, nutrients, settleable solids, TDS, and turbidity and monitoring requirements for temperature and conductivity.
- Requires a chronic toxicity test and priority pollutant scan at least once per permit term.

Conclusion

Based on a review of the best scientific and commercial data available and the facility's efforts to maximize recycling water and land application, EPA has determined the wastewater discharges from the proposed permit will have no effect on any listed species or critical habitat, including Northern Spotted Owl, Green Sea Turtle, Monarch Butterfly, Burke's Goldfields, CCC Steelhead, and CC Chinook Salmon, and will not jeopardize the continued existence of the proposed Northwestern Pond Turtle species. On September 18, 2025, both Services (NMFS and USFWS) provided no concerns regarding impacts to federally ESA-listed species resulting from the reissuance of the NPDES permit for the Dry Creek Rancheria WWTP since the wastewater is land-applied onsite and there has been no discharge due to sufficient distance from the spray fields to the receiving water bodies.

EPA will provide the USFWS and NMFS with copies of the draft factsheet and the draft permit during the public notice period.

B. Impact to Essential Fish Habitat

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act (MSA) set forth a number of new mandates for the National Marine Fisheries Service, regional fishery management councils and other federal agencies to identify and protect important marine and anadromous fish species and habitat. The MSA requires Federal agencies to make a determination on whether Federal actions that may adversely impact Essential Fish Habitat (EFH).

The draft permit does not authorize direct discharges to areas of essential fish habitat. Therefore, EPA has determined that the permit will not adversely affect essential fish habitat.

C. Impact to Coastal Zones

The Coastal Zone Management Act (CZMA) requires that Federal activities and licenses, including Federally permitted activities, must be consistent with an approved state Coastal Management Plan (CZMA §§ 307(c)(1) through (3)). Section 307(c) of the CZMA and implementing regulations at 40 CFR § 930 prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the activity complies with the State (or Territory) Coastal Zone Management program, and the State (or Territory) or its designated agency concurs with the certification.

The permit does not affect land or water use in the coastal zone; therefore, CZMA does not apply to this permit.

D. Impact to National Historic Properties

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effect of their undertakings on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. Pursuant to the NHPA and 36 CFR § 800.3(a)(1), EPA is making a determination that reissuing this draft NPDES permit does not have the potential to affect any historic properties or cultural properties. As a result, Section 106 does not require EPA to undertake additional consulting on this permit issuance.

E. Water Quality Certification Requirements (40 CFR §§ 124.53 and 124.54)

Certification under section 401 of the CWA shall be in writing and shall include the conditions necessary to assure compliance with referenced applicable provisions of sections 208(e), 301, 302, 303, 306, and 307 of the CWA and appropriate requirements of Territory law. EPA cannot issue the permit until the certifying Tribe has granted certification under 40 CFR § 124.53 or waived its right to certify.

Dry Creek Rancheria Band of Pomo Indians has authority to administer Clean Water Act (CWA) Section 401. EPA and Dry Creek Rancheria had a prefiling meeting on March 30, 2026. During the public comment period, EPA requested Clean Water Act (CWA) Section 401 certification from Dry Creek Rancheria that the permit will meet all applicable water quality

standards and requirements. Dry Creek Rancheria will provide written certification or a waiver notification on Date, 2026. See Attachment G of the permit.

F. Government-to-Government Consultation

EPA's Policy on Consultation and Coordination with Indian Tribes[1] states that consultation could be appropriate when actions and decisions may affect Tribal interests. EPA offered the Dry Creek Rancheria Band of Pomo Indians the opportunity to consult on EPA's issuance of the permit on June 20, 2023. Dry Creek Rancheria did not ask for Government-to-Government consultation. Dry Creek Rancheria is the permittee and has been involved throughout the permit renewal process.

XI. STANDARD CONDITIONS

A. Reopener Provision

In accordance with 40 CFR §§ 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.

B. Clean Water Act Section 402(k)

The permittee is authorized to discharge from the identified facility at the outfall location(s) specified in the permit, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in the permit. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process. Any discharges not expressly authorized in the Permit cannot become authorized or shielded from liability under CWA section 402(k) by disclosure to EPA, State, or local authorities after issuance of the Permit via any means, including during an inspection.

Any wastestream or pollutant loading greater than or different than the proposed discharge (the "proposed discharge" is based on the chemical-specific data and the facility's design flow as described in the permit application, or any other supplemental information provided to EPA during the permitting process) is not authorized by this Permit

EPA notes that such other discharges or increases may be allowable, but Permittee must first submit a request to EPA to authorize such other discharge or increase. request. This request will allow EPA to conduct an updated reasonable potential analysis to reassess whether a WQBEL is needed for the newly proposed discharge. Permit modification or reissuance may be required before the discharge would be authorized.

[1] EPA Policy on Consultation and Coordination with Indian Tribes: https://www.epa.gov/tribal/epa-policy-consultation-indian-tribes

C. Standard Provisions

The permit requires the permittee to comply with EPA Region 9 Standard Federal NPDES Permit Conditions.

XII. ADMINISTRATIVE INFORMATION

A. Public Notice (40 CFR § 124.10)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application.

B. Public Comment Period (40 CFR § 124.10)

Notice of the draft permit will be placed on the EPA website, with a minimum of 30 days provided for interested parties to respond in writing to EPA. The draft permit and fact sheet will be posted on the EPA website for the duration of the public comment period. After the closing of the public comment period, EPA is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

C. Public Hearing (40 CFR § 124.12)

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if EPA determines there is a significant amount of interest expressed during the 30-day public comment period or when it is necessary to clarify the issues involved in the permit decision.

XIII. CONTACT INFORMATION

Comments, submittals, and additional information relating to this permit may be directed to:

Julie Song, (415) 972-3035
song.julie@epa.gov
EPA Region 9
San Francisco, California

XIV. REFERENCES

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