

NPDES PERMIT NO. NM0031233

FACT SHEET

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT

Bishop's Lodge Resort Wastewater Treatment Facility
1297 Bishops Lodge Rd.
Santa Fe, NM 87506

ISSUING OFFICE

U.S. Environmental Protection Agency
Region 6
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PREPARED BY

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DATE PREPARED

May 1, 2023

PERMIT ACTION

Proposed issuance of a permit for a new facility.

RECEIVING WATER – BASIN

Little Tesuque Creek – Rio Grande Basin (20.6.4.121 NMAC)

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
DO	Dissolved oxygen
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
lbs	Pounds
MG	Million gallons
MGD	Million gallons per day
ML	Method minimum level
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NOEC	No observable effect concentration
NPDES	National Pollutant Discharge Elimination System
ML	Minimum quantification level
O&G	Oil and grease
PFAS	Per- and Polyfluoroalkyl Substances
POTW	Publicly owned treatment works
RP	Reasonable potential
SIC	Standard industrial classification
SS	Settleable solids
SSM	Sufficiently Sensitive Method
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USGS	United States Geological Service
WLA	Waste Load allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT

Not applicable since it's a newly issued permit.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility (Outfall 001: Latitude 35° 43' 54.3" North and Longitude 105° 54' 41.3" West) is located at 1297 Bishops Lodge Rd., Santa Fe, Santa Fe County, New Mexico.

Under the SIC code 7011, the applicant privately operates Bishop's Lodge Resort Wastewater Treatment Facility (WWTF), which has a design flow of 0.06 MGD (total in two phases) serving resort occupants. Construction of phase 1 (0.03 MGD) is expected completing in May 2024. The proposed WWTF will be built out from its existing plant, which is approximately 30 years old. The WWTF mainly consists of two package plants (membrane bioreactors in phases) treating domestic wastewater. Effluent is ultra-violet disinfected before disposed via surface water, irrigation and/or supplement water to a trout farm. This new NPDES permit authorizes the discharge to surface water only. The effluent is discharged via Outfall 001 to Little Tesuque Creek, Rio en Medio and Santa Fe River (20.6.4.121 NMAC of the Rio Grande Basin). Sewage sludge is accumulated in a reed bed and will be removed approximately once every 10 years. Upon removal, these fully stabilized and dewatered biosolids is expected effectively used as soil amendment for gardens and grounds throughout the resort. A map of the facility is attached.

III. EFFLUENT CHARACTERISTICS

No discharge data is available since it's a proposed facility.

IV. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water"; more commonly known as the "swimmable, fishable" goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

It is proposed that the permit be issued for a 5-year term following regulations promulgated at 40 CFR §122.46(a).

V. DRAFT PERMIT RATIONALE AND CONDITIONS**A. OVERVIEW of TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS**

Regulations contained in 40 CFR §122.44 NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

Technology-based effluent limitations are established in the proposed draft permit for TSS and BOD and removal percent for each. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, pH and TRC.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR §122.44(a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

BPT - The first level of technology-based standards generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants, including BOD, TSS, *E. coli* bacteria, pH, and O&G.

BAT - The most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limits represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

2. Effluent Limitation Guidelines

ELG is not applicable for this facility. However, effluent limitation is implemented using BPJ as mentioned above. The facility is a POTW/POTW-like that has technology-based limits established at 40 CFR Part 133.102, Secondary Treatment Regulation. Pollutants with limits established in this regulation are BOD₅, TSS and pH. BOD₅ limits of 30 mg/l for the 30-day average and 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a). TSS limits; also 30 mg/l for the 30-day average and 45 mg/l for the 7-day average, average and 85% percent (minimum) removal are found at 40 CFR §133.102(b). The limit for pH is 6-9 s.u. based on 40 CFR §133.102(c).

Regulations at 40 CFR §122.45(f)(1) require all pollutants limited in permits to have limits expressed in terms of mass such as pounds per day. When determining mass limits for POTWs or similar, the plant's design flow is used to establish the mass load. Mass limits are determined by the following mathematical relationship:

Loading in lbs/day = pollutant concentration in mg/l * 8.34 (lbs)(l)/(mg)(MG) * design flow in MGD

30-day average BOD₅/TSS loading = 30 mg/l * 8.34 (lbs)(l)/(mg)(MG) * 0.06 MGD = 15.0 lbs./day

7-day average BOD₅/TSS loading = 45 mg/l * 8.34 (lbs)(l)/(mg)(MG) * 0.06 MGD = 22.5 lbs./day

A summary of the technology-based limits for the facility is:

Parameter	30-day Avg, lbs./day, unless noted	7-day Max, lbs./day, unless noted	30-day Avg, mg/l, unless noted	7-day Max, mg/l, unless noted
BOD ₅	15.0	22.5	30	45
BOD ₅ , % removal ¹	≥ 85	---	---	---
TSS	15.0	22.5	30	45
TSS, % removal ¹	≥ 85	---	---	---
pH	N/A	N/A	6.0 to 9.0 s.u.	6.0 to 9.0 s.u.

¹ % removal is calculated using the following equation: [(average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration] * 100.

3. Pretreatment Regulation

Not applicable due to a POTW-like with 0.06 MGD with no industrial wastewater.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality-based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on Federal or State/Tribe WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State/Tribe WQS and applicable State/Tribe water quality management plans to assure that surface WQS of the receiving waters are protected and maintained or attained.

2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State/Tribe narrative and numerical water quality standards are used in conjunction with EPA criterion and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC approved on February 8, 2023). The wastewater flows from the outfall to Little Tesuque Creek, perennial stream, (Segment 20.6.4.121 NMAC of the Rio Grande Basin). The stream designated uses are domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact, and public water supply. NMED calculates the 4Q3 as 0.064 MGD.

4. Permit Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. pH

For high quality coldwater aquatic life, the criterion for pH is between 6.6 – 8.8 s.u., 900.H(1) NMAC.

b. Bacteria

Criteria for E. coli bacteria is at 126 cfu (or MPN)/100 ml monthly geometric mean and 235 cfu (or MPN)/100 ml daily maximum pursuant to 20.6.4.121 NMAC.

c. TRC

For wildlife habitat, criterion for TRC is 11 µg/l pursuant to 20.6.4.900.G NMAC. This criterion is applicable only if chlorine product is used in the treatment process, including equipment cleaning. However, if a test result is less than the MQL specified in Part II.A of the permit it can be reported as zero for compliance purpose.

d. Toxics

The CWA in Section 301(b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44(d) state that if a discharge poses the RP to cause an in-stream excursion above a water quality criteria, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are similar to POTWs, but which do not meet the regulatory definition of “publicly owned treatment works” (like private domestics, or similar facilities on Federal property). The forms were designed and promulgated to “make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities,” per the summary statement in the preamble to the Rule.

The facility is a proposed minor-discharger, Tables B, C and D of Form 2A is not applicable and no data is available to be evaluated.

e. DO

For high quality coldwater aquatic life, criterion for DO is 6 mg/L or greater pursuant to 20.6.4.900.H(1) NMAC. There is no data to evaluate the discharge currently since this is a new facility. EPA propose to monitor DO in the effluent (monthly due to potential discharge) for next renewal permit process as required by 40 CFR 121.21(j)(4)(i).

f. PFAS

As explained at <https://www.epa.gov/pfas>, PFAS are a group of synthetic chemicals that have been in use since the 1940s. PFAS are found in a wide array of consumer and industrial products. PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and military installations can be contributors of PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Exposure to some PFAS above certain levels may increase risk of adverse health effects.¹ EPA is collecting information to evaluate the potential impacts that discharges of PFAS from wastewater treatment plants may have on downstream drinking water, recreational and aquatic life uses. Although the New Mexico Water Quality Standards do not include numeric criteria for PFAS, the 2022 New Mexico Water Quality Standards narrative criterion for toxic substances at 20.6.4.13(F)(1) NMAC states:

“Except as provided in 20.6.4.16 NMAC, surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, duration, concentrations, or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.”

The 2022 New Mexico Water Quality Standards includes a narrative criteria for monitoring of emerging contaminants at 20.6.4.13(F) that states:

“Emerging Contaminants Monitoring: The department may require monitoring, analysis and reporting of emerging contaminants as a condition of a federal permit under Section 401 of the federal Clean Water Act.”

Since PFAS chemicals are persistent in the environment and may lead to adverse human health and environmental effects, the draft permit requires that the facilities conduct influent, effluent, and sludge sampling for PFAS according to the frequency outlined in the permit.

The purpose of this monitoring and reporting requirement is to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a facility-specific basis. EPA is authorized to require this monitoring and reporting by CWA § 308(a), which states:

“SEC. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act— the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require;”

¹ EPA, *EPA’s Per- and Polyfluoroalkyl Substances (PFAS) Action Plan*, EPA 823R18004, February 2019. Available at: https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf

EPA notes that there is currently not an analytical method approved in 40 CFR Part 136 for PFAS. As stated in 40 CFR § 122.44(i)(1)(iv)(B), in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters. Therefore, the draft permit specifies that until there is an analytical method approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Method 1633. The Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with Method 1633, if appropriate. This is consistent with the December 5, 2022 USEPA Memorandum, *Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs*, from Radhika Fox.²

In October 2021, EPA published a PFAS Strategic Roadmap³ that described EPA’s commitments to action for 2021 through 2024. This roadmap includes a commitment to issue new guidance recommending PFAS monitoring in both state-issued and federally-issued NPDES permits using EPA’s recently published analytical method 1633. In anticipation of this guidance, EPA has included PFAS monitoring in the draft permit using analytical Method 1633. In January 2024, the EPA released final EPA Method 1633, a method to test for 40 PFAS in wastewater, surface water, groundwater, soil, biosolids, sediment, landfill leachate, and fish tissue and final EPA Method 1621, which can broadly screen for the presence of chemical substances that contain carbon-fluorine bonds, including PFAS, in wastewater.

EPA proposes to monitor the PFAS pollutants in the influent, effluent and sewage sludge at once per permit term based on the plant design flowrate.

5. Monitoring Frequency for Limited/Monitored Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to assure compliance with permit limitations, 40 CFR §122.44(i)(1). Sample frequency is based on Table 9 (page 34 of the NMIP) for design flow less than 0.1 MGD.

Parameter	Frequency (when discharge occurs)	Sample Type
Flow	Daily	Instantaneous Grab
pH	5/week	Instantaneous Grab
BOD ₅ /TSS	Once/month	Grab
% Removal	Once/month	Calculation
TRC	5/week	Instantaneous Grab
E. coli Bacteria	Once/month	Grab
DO	Once/month	Instantaneous Grab
Copper (in ANTIDEGRADATION below)	Twice (2)/month	Grab
Zinc (in ANTIDEGRADATION below)	Twice (2)/month	Grab
Aluminum (in TMDL below)	Once/month	Grab

D. WHOLE EFFLUENT TOXICITY

² The memo is available at <https://www.epa.gov/newsreleases/epa-issues-guidance-states-reduce-harmful-pfas-pollution>.

³ EPA’s October 2021 PFAS Strategic Roadmap can be found at: <https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024>.

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 (page 42) of the NMIP outlines the type of WET testing for different types of discharges. Critical low flow, 4Q3, of the receiving is 0.1 cfs provided by NMED and the potential discharge is 0.06 MGD. Therefore, the calculated CD is 0.48 or 48%. EPA proposes a WET testing: once per permit term using *Ceriodaphnia dubia* (Cd) and *Pimephales promelas* (Pp) species for this facility.

The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations must be 20%, 27%, 36%, 48% and 64%. The low-flow effluent concentration (critical low-flow dilution) is defined as 48% effluent. The permittee shall monitor discharge(s) as specified below:

WHOLE EFFLUENT TOXICITY TESTING (7-Day Chronic Static Renewal/ NOEC) *	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<i>Ceriodaphnia dubia</i>	Report	Once/Term	Grab
<i>Pimephales promelas</i>	Report	Once/Term	Grab

* Monitoring and reporting requirements begin on the effective date of this permit. See Part II of the permit for WET testing requirements and additional WET monitoring and reporting conditions. Grab samples are allowed per method, if needed. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple test failures. However, upon failure of any WET test, the permittee must report the test results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any.

VI. TMDL REQUIREMENTS

The receiving water, Little Tesuque Creek (Rio Tesuque to headwaters, segment 20.6.4.121 NMAC), is not listed as impaired in the 2022 - 2024 303(d) List. Impact on public water supply is not assessed.

TMDL for aluminum (applied on this receiving water) was dated June 2, 2005. According to this document (page 22), dissolved aluminum concentrations exceeded the aluminum chronic criterion (87 µg/L). The current NMWQS for aluminum is only applicable when receiving water pH is less than 6.5 or greater than 9.0 s.u. pH data (provided by NMED) from 2009 to 2018 shows values between 7.00 and 8.22 s.u.; so, 87 µg/L criterion is not applicable. No WLA for aluminum was specified for this facility in the 2005 TMDL. EPA proposes effluent monitoring (monthly due to potential discharge) for aluminum.

The permit has a standard reopener clause that would allow the permit to be changed if at a later date additional requirements on new or revised TMDLs are completed.

VII. ANTIDegradation

The NMAC, Section 20.6.4.8 “Antidegradation Policy and Implementation Plan” sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the draft permit are developed from the Tribe/State water quality standards and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. NMED reviews the Antidegradation for any new dischargers or existing dischargers with load increase proposals. NMED has determined limits for copper and zinc are needed to protect the water quality using the acute aquatic life criteria accordingly per 20.6.4.900.H NMAC. The acute criteria are calculated as follows [20.6.4.900.I(1)]:

Acute criteria, $\mu\text{g/L} = \exp(\text{mA}[\ln(\text{hardness})] + \text{bA})(\text{CF})$, where: hardness = 69.6527 mg/L

Metal	mA	bA	Conversion factor (CF)	Calculated criteria, $\mu\text{g/L}$	Calc. criteria, mg/L
Copper (Cu)	0.9422	-1.700	0.960	9.55	0.00955
Zinc (Zn)	0.9094	0.9095	0.978	115.15	0.11515

According to 20.6.4.11.E(2), the acute aquatic life criteria must be attained at the point of discharge (i.e., no dilution is allowed, the criteria become effluent concentration limits). Loadings are calculated using the same formula as for calculation of BOD/TSS above. The loading limits are 0.00475 lb./day (copper) and 0.05762 lb./day (zinc).

EPA establishes these limits (concentrations and loadings) for copper and zinc in the draft permit. They are set as daily-maxima limits due to acute criteria. EPA allows a compliance schedule (12 months) for these limits as stated in Part I.B of the permit. The limits are protective of the receiving water, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

VIII. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet Antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR 122.44(l)(2)(i)(B), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless information is available which was not available at the time of permit issuance. This is a new proposed facility.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to a report updated on April 11, 2023, for discharge flowpath in Santa Fe County, NM obtained from <http://ecos.fws.gov/ipac>, there are four endangered (E)/threatened (T) species: New Mexico meadow jumping mouse (E, mammal), Mexican Spotted Owl (T, bird), Southwestern Willow Flycatcher (E, bird) and Yellow-billed Cuckoo (T, bird). According to the report, there are no designated critical habitats for any of these species downstream from the proposed facility.

Recovery Plan for New Mexico Meadow Jumping Mouse (January 2023) states it is a habitat specialist that requires dense herbaceous riparian vegetation with a minimum height of 61 cm (24 in) associated with seasonally available or perennial (persistent) flowing water, moist soils, and adjacent uplands that can support the vegetation characteristics needed for foraging, breeding, and hibernating. Loss of suitable habitat is the greatest threat that endangered the species. According to Mexican Spotted Owl Recovery Plan (First Edition, September 2012), the owl’s habitat is in both forested and rocky-canyon. Fatality factors have been identified as potentially important to the Mexican spotted owl, including predation, starvation, accidents, disease, and parasites. Final Recovery Plan Southwestern Willow Flycatcher (August 2002) shows the species breeds in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes (e.g., reservoirs). Most of these habitats are classified as forested wetlands or scrub-shrub wetlands. The flycatcher has experienced extensive loss and modification of breeding habitat. Destruction and modification of riparian habitats have been caused mainly by: reduction or elimination of surface and subsurface water due to diversion and groundwater pumping; changes in flood and fire regimes due to dams and stream channelization; clearing and controlling vegetation; livestock grazing; changes in water and soil chemistry due to disruption of natural hydrologic cycles; and establishment of invasive non-native plants. Concurrent with habitat loss have been increases in brood parasitism by the brown-headed cowbird (*Molothrus ater*). There has been no recovery plan for Yellow-billed cuckoo. Per Federal Register 77 FR 69993 70060 on 11/21/12, identified threats of the cuckoo include introduced predators

at nesting colonies, oil spills and oil pollution, reduced prey availability, human disturbance, and artificial light pollution. More information is being gathered.

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. The scope of the Federal Action is limited to the effects of authorizing the discharge and does not include the permittee's decision to cease discharging. After review, EPA has determined that the reissuance of this permit will have "no effect" on listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following:

1. There are no critical habitats for the listed species. EPA believe flowpath of the proposed discharge does not contain suitable habitats for the species.
2. EPA finds no information that the proposed discharge may directly harm the species or cause destruction of their existing habitats, if any.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

Construction of the proposed facility will not have an adverse effect on cultural resources per New Mexico Historical Preservation Division letter dated February 8, 2023.

XI. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if NMWQS are promulgated or revised. In addition, if the State develops a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. Modification of the permit is subject to the provisions of 40 CFR §124.5.

XII. VARIANCE REQUESTS

None

XIII. CERTIFICATION

The permit is in the process of certification by the State Agency following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the District Engineer of COE, to the Regional Director of FWS and to the National Marine Fisheries Service prior to the publication of that notice.

XIV. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

XV. ADMINISTRATIVE RECORD

The following information was used to develop the draft permit:

A. APPLICATION(s)

EPA Application Forms 2A and 2S dated March 15, 2023.

B. 40 CFR CITATIONS

Sections 122, 124, 125, 133, 136, 434

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, effective July 24, 2020 and February 8, 2023

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2022-2024

TMDL for the Upper Rio Grande Watershed (Part 2), June 2, 2005

D. MISCELLANEOUS

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico – NMIP, March 15, 2012

NMED email dated February 21, 2024 and May 2, 2024