# NPDES PERMIT NO. NM0030627 FACT SHEET

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

#### APPLICANT

Town of Springer Water Treatment Plant P.O. Box 488 Springer, NM 87747

#### **ISSUING OFFICE**

U.S. Environmental Protection Agency Region 6 1445 Ross Avenue Dallas, Texas 75202-2733

#### PREPARED BY

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#### DATE PREPARED

August 1, 2018

#### PERMIT ACTION

Proposed reissuance of the current NPDES permit issued September 25, 2013, with an effective date of November 1, 2013, and an expiration date of October 31, 2018.

#### **RECEIVING WATER - BASIN**

None classified arroyo thence to Cimarron River - Canadian River Basin

#### DOCUMENT ABBREVIATIONS

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

102	
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
ELG	Effluent limitations guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
F&WS	United States Fish and Wildlife Service
mg/L	Milligrams per liter
μg/L	Micrograms per liter
MGD	million gallons per day
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
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
0&G	Oil and grease
PCB	Polychlorinated Biphenyl
POTW	Publically owned treatment works
RP	Reasonable potential
SIC	Standard industrial classification
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	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQCC	Water Quality Management Plan
WWTP	Wastewater treatment plant
** ** 11	music water reatment plant

In this document, references to State WQS and/or rules shall collectively mean the State of New Mexico.

# I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued September 25, 2013, with an effective date of November 1, 2013, and an expiration date of October 31, 2018, are:

- 1. Total Aluminum and Total Nickel limits have been modified.
- 2. Total Zinc limit has been removed from draft permit. Please see Page 10.
- 3. Dissolved Selenium limit has been added to draft permit.
- 4. Nutrients monitor and report only requirements have been added to draft permit.
- 5. Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16.

# II. APPLICATION LOCATION and ACTIVITY

As described in the application, the plant is located at 128 Highway 468, Springer, Colfax County, New Mexico. The effluent from the treatment plant is discharged into a non-classified arroyo, thence to Cimarron River in Waterbody Segment No. 20.6.4.306 of the Canadian River Basin, New Mexico Assessment Unit NM\_2305.1.1\_A. The discharge is located on that water at latitude 36° 22' 42" N and longitude 104° 37' 06" W, in Colfax County, New Mexico.



Under the SIC Code 4941, the applicant's activities are surface water treatment operations. As described in the Compliance Evaluation Inspection (CEI) report dated, July 22, 2016 the treatment processes for the facility is as follows:

The Town of Springer Water Treatment plant (WTP) has a 1 MGD design capacity to treat surface water from two reservoirs using a conventional treatment process (coagulation,

flocculation, sedimentation, filtration, disinfection). Aluminum sulfate and cationic polymer are injected into the raw water within the intake pipes. Additionally, copper sulfate is used in the reservoirs in the warmer months (June, July, August and sometimes September) to control algae for taste and odor. According to the permittee's on-site representative during the CEIs, approximately 75 pounds of copper sulfate is broadcast into each reservoir per month (3-4 months a year).

The Town of Springer WTP has a design flow capacity of 0.28 MGD and is classified as a minor industrial discharger under the federal Clean Water Act, Section 402, of the NPDES permit program. Filter backwashing begins automatically at pre-set intervals based on continuously monitored effluent turbidity levels; however, operators may manually backwash filter media. Backwash water is flushed to a backwash detention pond approximately 60 ft by 40 ft. Emergency overflows from the plant, prior to disinfection, also flow to the backwash pond, as well as floor drains inside the treatment plant. An outlet pipe installed near the top of the detention pond decants and conveys wastewater to Outfall 001. Solids are removed from the pond annually, allowed to dry on the banks of the backwash pond, then placed in a drum for storage on site.

# III. RECEIVING STREAM STANDARDS

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC, amended through) August 11, 2017. The facility discharges to a non-classified arroyo, thence to Cimarron River in Waterbody Segment No. 20.6.4.306 of the Canadian River Basin. The Canadian River Basin has designated uses of irrigation, livestock watering, wildlife habitat, warmwater aquatic life and primary contact; public water supply on the Cimarroncito Creek.

# IV. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2C received May 2, 2018 are presented below in Table 1:

Parameter	Max Daily	Max 30 Day	Long Term
	Value	Value	Avg Value
	(mg/l unless noted)		
Flow, million gallons/day (MGD)	0.0582	0.032	0.0187
pH, minimum, standard units (SU)	7.7 min	8.6 max	N/A
Biochemical Oxygen Demand (BOD)	3.0 / 0.345 lb	N/A	N/A
Chemical Oxygen Demand (COD)	19.9 / 2.29 lb	N/A	N/A
Total Organic Carbon	4 / 0.460 lb	N/A	N/A
Total Suspended Solids (TSS)	24.8 / 6.02 lb	11.7 / 2.46 lb	8.13
Ammonia (as N)	0	N/A	N/A
Temperature, winter	9.1°C	8.2°C	8.2°C
Temperature, summer	22.1°C	21.7°C	21.6°C

POLLUTANT TABLE – 1

Parameter	Maximum Daily Value		Long Term Avg. Value	
	Concentration	Mass (lb)	Concentration	Mass (lb)
	(mg/L unless noted)		(mg/L unless noted)	
Chlorine, Total	0 ppb	0	0 ppb	0
Residual				
Phosphorus (as P)	0.20	0.002	N/A	N/A
Alpha, Total	3.8 pCi/L	0.001	N/A	N/A
Beta, Total	3.9 pCi/L	0.001	N/A	N/A
Radium, Total	0.52 pCi/L	0.000	N/A	N/A
Radium 226, Total	0.542 pCi/L	0.000	N/A	N/A
Sulfate (as SO4)	240	27.62	N/A	N/A
Aluminum, Total	2.6	0.299	N/A	N/A
Barium, Total	0.068	0.008	N/A	N/A
Boron, Total	0.043	0.005	N/A	N/A
Iron, total	0.18	0.021	N/A	N/A
Magnesium, total	37	4.258	N/A	N/A
Molybdenum, Total	0.0091	0.001	N/A	N/A
Manganese, Total	0.016	0.002	N/A	N/A
Copper, Total	0.0044	0.0006	0.002208	0.055
Nickel, Total	0.039*	0.004	N/A	N/A
Zinc, Total	0.044*	0.005	N/A	N/A

#### POLLUTANT TABLE – 2

\*From DMR

A summary of the last 36 months of available pollutant data from May 2015 through May 2018, taken from DMRs, shows no exceedances of permit limits for nickel, zinc, TSS, pH, or TRC. However, seven 30-day average and three daily maximum exceedances of aluminum limits were reported.

# V. 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 technologybased 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 EPA administered 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. The applicant submitted a complete permit application on May 2, 2018. It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The existing NPDES permit initially issued September 15, 2013, with an effective date of November 1, 2013, and an expiration date of October 31, 2018.

#### VI. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

# A. OVERVIEW OF TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

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

Technology-based effluent limitations are established in the draft permit for TSS. Water qualitybased effluent limitations are established in the proposed draft permit for TRC, DO, pH, temperature, total aluminum, total nickel, total zinc, and total copper.

#### B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

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<sub>5</sub>, TSS, fecal coliform, 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.

The Town of Springer Water Treatment plant is a publicly owned facility which treats surface water. Discharges from similar facilities (e.g City of Santa Fe, Village of Ruidoso, Village of Cuba, City of Bloomfield, etc) are required to meet 30-day average and daily maximum TSS limitations of 20 mg/l and 30 mg/l, respectively. Therefore, BPJ-based effluent limitations for TSS are established. ELGs for pH are between 6-9 s.u. Additionally, regulations at 40 CFR §122.45 (f)(1) require all pollutants limited in permits to have limitations expressed in terms of mass, such as pounds per day. However, discharge of filter backwash water and filter-to-waste

water is not continuous. Because discharge occurs only when the operation of backwash takes place, mass limitations are not established in this proposed permit.

A summary of the technology-based limits for the Town of Springer Water Treatment facility is:

EFFLUENT	DISCHARGE LIMITATIONS			
CHARACTERISTICS				
	lbs/Day		mg/l (unless noted)	
Parameter	30-Day	7-Day	30-Day Avg.	7-Day Avg.
	Avg.	Avg.		
Flow	N/A	N/A	Measure	Measure
			MGD	MGD
TSS	N/A	N/A	20	30
pH	N/A	N/A	6.0 - 9.0 s.u.	

Technology-Based Effluent Limits – 0.28 MGD Design flow.

# 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 WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with the State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained, or attained. Permit limits will ensure downstream WQS will be met in accordance with 40 CFR §122.4(d).

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 narrative and numerical water quality standards are used in conjunction with EPA criteria 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, amended through August 11, 2017). The facility discharges into a non-classified arroyo, thence to Cimarron River in Waterbody Segment No. 20.6.4.306 of the Canadian River Basin. The Canadian River Basin designated uses are irrigation, livestock watering, wildlife habitat, warmwater aquatic life and primary contact; and public water supply on Cimarroncito creek.

4. Permit Action – Water Quality-Based Limits

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

a. Total Dissolved Solids (TDS)

The State of New Mexico WQS criteria applicable to Waterbody Segment No. 20.6.4.306 require TDS to be no more than 3,500 mg/l or less at flows above 10 cfs. Because the facility's flows are below 10 cfs, a TDS monitoring requirement only will be maintained in this draft permit.

b. Dissolved oxygen (DO)

The State of New Mexico WQS criteria applicable to the warmwater aquatic life designated use require dissolved oxygen to be no less than 5 mg/l. A minimum limit of 5.0 mg/l will be maintained in this draft permit.

c. pH

The WQS criteria applicable to the warmwater aquatic life designated use require pH to be between 6.6 and 9.0 s.u. This is more limiting than the technology-based limit presented above. Therefore, the draft permit will maintain a limit of 6.6 to 9.0 s.u.

d. Total Residual Chlorine

The WQS for TRC is 11  $\mu$ g/l for both chronic aquatic life and wildlife habitat, and 19  $\mu$ g/l for acute aquatic life. State implementation procedures allow for a mixing zone to be used for chronic standards, while acute standards must be met at end-of-pipe. The NM Implementation Plan strategy for TRC requires the most limiting of the critical dilution/chronic criteria concentration of 11  $\mu$ g/l or end-of-use/acute criteria concentration of 19  $\mu$ g/l be used in determining the limit. The non-classified arroyo has a 4Q3 of 0 MGD; therefore, the critical dilution is 100%. The 11  $\mu$ g/l would be the most limiting and will be the TRC limit proposed in the draft permit.

e. Temperature

The WQS criteria applicable to the warmwater aquatic life designated use require temperature to be no more than 32.2 °C (90°F). A maximum limit of 32.2 °C (90°F) for any single sample will be the temperature limit proposed in the draft permit.

f. Nutrients - Total Phosphorus & Total Nitrogen

Currently there's a TMDL for Nutrients in the Cimarron River and the current NPDES does not have limitations or monitoring requirements for nutrients. However, because there is a TMDL

for nutrients, NMED has suggested that the permittee monitor and report results for Total Phosphorus and Total Nitrogen, just to establish a baseline if needed for future permitting.

g. Dissolved Selenium

The State of New Mexico WQS criteria applicable to irrigation and irrigation storage applicable to Waterbody Segment No. 20.6.4.900 requires dissolved selenium to be 0.13 mg/l or 0.25 mg/l in presence of more than 500 mg/l of sulfate (SO<sub>4</sub>). Since the sulfate result in the application was 240 mg/l, a 0.13 mg/l dissolved selenium limit will be added to the draft permit.

- h. Toxics
  - i. General Comments

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 reasonable potential 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 2C for Industrial Activity. 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. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

The facility is designated as a minor, and does not need to fill out the expanded pollutant testing section Part D of Form 2C. However, certain toxics, aluminum, nickel, and copper, have been identified as being present at concentrations that exceed RP and will be discussed below.

ii. Critical Conditions

Critical conditions are used to establish certain permit limitations and conditions. The State of New Mexico WQS allows a mixing zone for establishing pollutant limits in discharges. Both the NMWQS and NMIP establish a critical low flow designated as 4Q3, as the minimum average four consecutive day flow which occurs with a frequency of once in three years. The draft permit establishes a critical dilution based on the 4Q3 utilized in the current permit.

For permitting purposes of certain parameters such as WET, the critical dilution of the effluent to the receiving stream is determined. The critical dilution, CD, is calculated as:

 $CD = Qe/(F \cdot Qa + Qe)$ , where:

Qe = facility flow (0.28 MGD/0.43 cfs) Qa = critical low flow of the receiving waters (0 MGD/0 cfs) F =fraction of stream allowed for mixing (1.0)

 $CD = 0.28 \text{ MGD/}[(1.0)(0) + 0.28] \\= 1 \\= 100 \%$ 

iii. Aluminum

The facility's water master provided an effluent hardness concentration of 150 mg/l on August 21, 2018. The previous permit established a 30-day average limit of 1.7 mg/l and a daily maximum limit of 2.6 mg/l for total aluminum. After running Reasonable Potential (RP) with current and updated data, a 30-day average of 1.6 mg/l and a daily maximum limit of 2.4 mg/l is proposed.

iv. Nickel

The previous permit established a 30-day average limit of 3.07 mg/l and a daily maximum limit of 4.6 mg/l for total nickel. These limits were based on then current NMWQS. After running RP with current data, a 30-day average limit of 0.15 mg/l and a daily maximum limit of 0.22 mg/l will be proposed in the draft permit. No compliance schedule is needed for this pollutant since previous results from DMR's are well below the proposed limit.

v. Zinc

The previous permit established a 30-day average limit of 17.3 mg/l and a daily maximum limit of 26 mg/l for total zinc. These limits were based on then current NMWQS. After running RP with current data from the facility there is no reasonable potential and, thus far, there is no demonstrated need for a WQBEL. No limit will be proposed at this time for total zinc.

vi. Copper

The Water Treatment plant uses copper sulfate in the reservoirs during warmer months to control algae for taste and odor. Current NPDES permit require a 30-day average limit of 0.3 mg/l and a daily maximum limit of 0.5 mg/l for total copper. That limit will be maintained in this draft permit.

5. 303(d) List Impacts

Although the non-classified arroyo has not been identified as impaired in the "2016-2018 State of New Mexico Integrated Clean Water Act Section 303(d) / 305(b) Report," the Cimarron River from Canadian River to Cimarron Village has been identified as impaired for nitrogen and phosphorus. According to the 2010 "Final Draft TMDL for the Cimarron River Watershed," the Canadian River has nutrient targets of 0.03 mg/l for total phosphorus and 0.45 mg/l for total nitrogen (Table 5.1). However, the 2010 TMDL states that effluent from the water treatment plant has never been noted to be a significant source contributor of nutrients and should not have an impact on nutrient concentrations in the stream, thus the WLA for the WTP is zero (Table

5.8). Additionally, aluminum was de-listed from the 2010-2012 CWA §303(d) List of Assessed Waterbodies.

EPA has determined the established limitations do not cause or contribute to further impairment. The Cimarron River is classified as Category 4A with irrigation, livestock watering, wildlife habitat, and primary contact as fully supporting; and, warmwater aquatic life as not supporting (Nutrient/Eutrophication). The monitoring schedule was set for 2015. The standard reopener language in the permit allows additional permit conditions if a future TMDL is established.

# D. MONITORING FREQUENCY FOR LIMITED 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). Technology based TSS pollutants are proposed to be monitored one (1) time per week. Flow is proposed to be monitored two (2) times per week, when discharging. These frequencies are consistent with the current permit. The sample type for TSS shall be by grab, also consistent with the current permit.

Water quality-based pollutant monitoring frequency for TDS shall be monitored one (1) time per quarter by grab sample. Total aluminum, nickel, and copper shall be monitored one (1) time per month by grab sample. Temperature, DO and TRC shall be monitored daily by instantaneous grab sample. The pH shall be monitored one (1) time per week by grab sample, consistent with the previous permit. Regulations at 40 CFR §136 define instantaneous grab as being analyzed within 15-minutes of collection.

# E. WHOLE EFFLUENT TOXICITY REQUIREMENTS

In Section V.C.4.f.ii above; "Critical Conditions", it was shown that the critical dilution, CD, for the facility is 100%. Based on the nature of the discharge; drinking water treatment plant, the production flow; 0.28 MGD (0.43 cfs), the nature of the receiving water; intermittent, and the critical dilution; 100%, the Table 12 of the NMIP directs the WET test to be a 7 day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas* at a once per permit term frequency for the permit term. According to the NMIP, when a test frequency is 1 time a year or less, the test should occur in winter or springtime when most sensitive juvenile life forms are likely to be present in receiving water and colder ambient temperatures might adversely affect treatment processes. This will generally be defined as between November 1 and April 30 when discharge occurs.

The draft 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 shall be 32%, 42%, 56%, 75%, and 100%. The low-flow effluent concentration (critical low-flow dilution) is defined as 100% effluent. During the period beginning the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 001 - the discharge to the non-classified arroyo thence to Cimarron River in Waterbody Segment No. 20.6.4.306 of the Canadian River Basin. Discharges shall be limited and monitored by the permittee as specified below.

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
Whole Effluent Toxicity Testing (7 Day Static Renewal) 1/	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia	Report	Once/Permit Term	24-hr Composite
Pimephales promelas	Report	Once/Permit Term	24-hr Composite

#### FOOTNOTES

1/ Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.

# VII. ANTIDEGRADATION

The State of New Mexico has antidegradation requirements to protect existing uses through implementation of their WQS. The limitations and monitoring requirements set forth in the draft permit are developed from the appropriate State WQS and are protective of those designated uses. Furthermore, the policy's set forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the limits are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water.

# VIII. ANTIBACKSLIDING

The draft permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR 122.44(l)(1), 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. The draft permit maintains the effluent limitations of the previous permit for TSS, Temperature, DO, total aluminum, total copper, TRC and pH.

The draft permit amends the effluent limitations of the previous permit for total nickel and eliminates the effluent limitation of total zinc. The permit writer has determined that this change meets the exception to the antibacksliding provisions established at 40 CFR 122.44(l)(i)(B)(1).

# IX. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS, Southwest Region 2 website, <u>http://www.fws.gov/endangered/</u>, seven species in Colfax County are listed as endangered or threatened. The Southwestern willow flycatcher (*Empidonax traillii*), Black-footed ferret (*Mustela nigripes*), and New Mexico meadow jumping mouse (*Gulo gulo luscus*) are listed as endangered. The Mexican spotted owl (*Strix occidentalis lucida*), Yellow-billed Cuckoo (*Coccyzus americanus*), Piping Plover (*Charadrius melodus*), and Canada Lynx (*Lynx canadensis*) are listed as threatened.

The southwestern willow flycatcher (*Empidonax traillii extimus*) breeds in dense riparian habitats in southwestern North America, and winters in southern Mexico, Central America, and northern South America. Its breeding range includes far western Texas, New Mexico, Arizona, southern California, southern portions of Nevada and Utah, southwestern Colorado, and possibly extreme northern portions of the Mexican States of Baja California del Norte, Sonora, and Chihuahua. The subspecies was listed as endangered effective March 29, 1995. Approximately 900 to 1100 pairs exist.

The black-footed ferret (Mustela nigripes) was listed as endangered in 1967 and was "grandfathered" into the Endangered Species Act of 1973. The black-footed ferret depends on prairie dogs for food and on their burrows for shelter. The historical range of the ferret coincided with the ranges of the black-tailed prairie dog, Gunnison's prairie dog and white-tailed prairie dog. The ferret's close association with prairie dog occupied habitat and prairie dog numbers were dramatically reduced by conversion of native grasslands to cropland, poisoning, and disease. The ferret population declined precipitously as a result.

The New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) is a small, nocturnal, solitary mammal and an obligate riparian subspecies. Its historical distribution likely included riparian wetlands along streams in the Sangre de Cristo and San Juan Mountains from southern Colorado to central New Mexico, including the Jemez and Sacramento Mountains. Based on historical and current data, the distribution and abundance of the New Mexico meadow jumping mouse has declined significantly range wide. The majority of local extirpations have occurred since the late 1980s to early 1900s; recent surveys have indicated that about 70 formerly occupied locations are now considered to be extirpated. Nearly all of the current populations are isolated and widely separated, and all of the 29 populations located since 2005 have patches of suitable habitat that are too small to support resilient populations of jumping mice.

Yellow-billed Cuckoos (*Coccyzus americanus*) are fairly large, long, and slim birds. The mostly yellow bill is almost as long as the head, thick and slightly downcurved. They have a flat head, thin body, and very long tail. Wings appear pointed and swept back in flight. Yellow-billed Cuckoos are warm brown above and clean whitish below. Their blackish face mask is accompanied by a yellow eyering. In flight, the outer part of the wings flash rufous. From below, the tail has wide white bands and narrower black ones.

Unlike most owls, Mexican spotted owls (*Strix occidentalis lucida*) have dark eyes. They are an ashy-chestnut brown color with white and brown spots on their abdomen, back and head. Their brown tails are marked with thin white bands. They lack ear tufts. Young owls less than 5 months old have a downy appearance. Females are larger than males. The primary threats to its population in the U.S. (but likely not in Mexico) have transitioned from timber harvest to an increased risk of stand-replacing wildland fire. Recent forest management now emphasizes sustainable ecological function and a return toward pre-settlement fire regimes, both of which are more compatible with maintenance of spotted owl habitat conditions than the even-aged management regime practiced at the time of listing.

The piping plover (*Charadrius melodus*) is a small shorebird that breeds in three geographic regions of North America. In January 1986, the piping plover was listed under the provisions of

the ESA as endangered in the Great Lakes watershed of both the U.S. and Canada, and as threatened in the remainder of its range. All piping plovers are classified as threatened on their shared migration and wintering range outside of the watershed of the Great Lakes.

The Canada lynx (*Lynx canadensis*) are medium-sized cats that have large feet adapted to walking on snow, long legs, tufts on the ears, and black-tipped tails. They are highly adapted for hunting snowshoe hare, the primary prey, in the snows of the boreal forest. Lynx in the contiguous United States are at the southern margins of a widely-distributed range across Canada and Alaska. Lynx occur in mesic coniferous forests that have cold, snowy winters and provide a prey base of snowshoe hare. These forests are generally described as boreal forests.

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. 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. No additions have been made to the USFWS list of threatened and endangered species and critical habitat designation in the area of the discharge since prior issuance of the permit.
- 2. EPA has received no additional information since the previous permit issuance which would lead to revision of its determinations.
- 3. EPA determines that Items 1 and 2 result in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have "no effect" on listed species and designated critical habitat.

# X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of this permit should have no impacts on historical properties since no construction activities are proposed during its reissuance.

# XI. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of the State WQS are revised or remanded. In addition, the permit may be reopened and modified during the life of the permit if relevant procedures implementing the State Water Quality Standards are either revised or promulgated. Should the State adopt a new WQS, and/or develop or amend a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that approved State standard and/or water quality management plan, in accordance with 40 CFR 122.44(d). Modification of the permit is subject to the provisions of 40 CFR 124.5.

### XII. VARIANCE REQUESTS

No variance requests have been received.

# XIII. CERTIFICATION

The permit is in the process of certification by the State of New Mexico following regulations promulgated at 40 CFR §124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service 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 Form 2C received May 2, 2018.

#### B. 40 CFR CITATIONS

Citations to 40 CFR as of August 1, 2018.

Sections 122, 124, 125, 133, 136

# C. STATE WATER QUALITY REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended through August 11, 2017.

Final US EPA-Approved Total Maximum Daily Loads for the Cimarron River Watershed [Canadian River to Headwaters], September 3, 2010.

Procedures for Implementing NPDES Permits in New Mexico, March 15, 2012.

Statewide Water Quality Management Plan, December 17, 2002.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2016-2018.

#### D. OTHER

Compliance Evaluation Inspection of the Town of Springer Water Treatment Plant NPDES Permit No. NM0030627, July 22, 2016.

https://ecos.fws.gov/endangered/