NPDES PERMIT NO. NM0024996
FACT SHEET

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

APPLICANT

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DATE PREPARED

April 10, 2017

PERMIT ACTION

Proposed reissuance of the current National Pollutant Discharge Elimination System (NPDES) permit issued September 17, 2008, with an effective date of November 1, 2008, and an expiration date of October 31, 2013.

RECEIVING WATER – BASIN

Mora River - Canadian River Basin

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
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 limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
F&WS	United States Fish and Wildlife Service
ug/l	Micrograms per litter (one part per billion)
mg/l	Milligrams per liter (one part per million)
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
O&G	Oil and grease
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
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

As used in this document, references to State water quality standards and/or rules, regulations and/or management plans may mean the State of New Mexico and/or Tribal or both.

I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued on September 17, 2008, with an effective date of November 1, 2008, and an expiration date of October 31, 2013 include

1. Limit for percent removal of BOD has been added;
2. Limit for percent removal of TSS has been added;
3. Continuous effluent flow measurement meter installation requirement has been added;
4. New serpentine chlorine contact chamber and dechlorination unit installation requirement has been added;
5. TRC limit has been revised;
6. Phosphorous limits have been revised;
7. Nitrogen limits have been revised;
8. Minimum Quantification Level and Sufficiently Sensitive Methods requirements have been added; and,
9. DMRs electronic reporting requirements have been added.

II. DISCHARGE LOCATION AND ACTIVITY

As described in the application, the Mora Mutual Water and Sewerage Association wastewater treatment facility is located approximately 1 mile east of the Village of Mora on State Highway 3, on the north side of Mora River in Mora County, New Mexico. The wastewater system currently consists of a collection system with approximately 130 service connections and a lagoon treatment system.

Under the Standard Industrial Classification (SIC) Code 4952, the applicant currently operates a lagoon system treating domestic wastes. The facility has a design flow capacity of 0.052 million gallons per day (MGD), which serves about 500 people. The facility has not had a continuous effluent flow measurement. The draft permit proposes that the facility shall install a continuous effluent flow measurement meter (i.e., open channel Parshall flume with staff gauge and with a secondary ultrasonic sensor.)

The facility waste treatment system consists of two lagoons, North and South, and a Moving Bed Biofilm Reactor (MBBR) system. The MBBR, which includes a multi tank and multi train design with each train treating 30,000 gallons per day (GPD) with a peaking factor of 60,000 GPD per train, currently is not operational.

The single outfall of the facility is located at Latitude - 35^{o} 59' 48.12" North and Longitude – 105^{o} 18' 57.6" West. The facility discharges to the Mora River in the Canadian River Basin in Water Quality Segment 20.6.4.307 of 20.6.4 NMAC *State of New Mexico Standards for Interstate and Intrastate Surface Water*.

III. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A received on May 3, 2013, are presented below:

POLLUTANT TABLE - 1

Parameter	Max	Avg
	(mg/l unless noted)	
Flow, million gallons/day (MGD)	0.54 MGD	0.33 MGD
pH, minimum, standard units (SU)	7.00 su	N/A
pH, maximum, standard units (SU)	7.45 su	N/A
Biochemical Oxygen Demand, (BOD)	2.8	2.43
Total Suspended Solids (TSS)	4.7	---

A summary of the last 36 months of available pollutant data (i.e., January 2013 through January 2016) taken from DMRs indicates Total Residual Chlorine had one reported daily maximum exceedances; April 2013. BOD_5 had one reported 7-day average exceedance, March 2013; and, one reported 30-day average exceedance; August 2014. Total Phosphorus and Total Kjeldahl Nitrogen had numerous reported exceedances of limited parameters.

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 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.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

1. Reason for Permit Issuance

It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The previous permit was expired on October 31, 2013. The application was

received on May 3, 2013. The existing permit is administratively continued until this permit is issued.

2. 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_5. Water quality-based effluent limitations are established in the proposed draft permit for E. coli bacteria, pH and TRC.

1) TECHNOLOGY BASED EFFLUENT LIMITATIONS

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, 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 facility is a POTW treating sanitary wastewater. POTW's have technology-based ELG's established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are BOD, TSS and pH. BOD 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 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(b). ELG's for pH are between 6-9 s.u. and are found at 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 POTW's, 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 * 8.345 lbs/gal * design flow in MGD

30-day average BOD_5/TSS loading = 30 mg/l * 8.345 lbs/gal * 0.052 MGD
30-day average BOD_5/TSS loading = 13.018 lbs

7-day average BOD_5/TSS loading = 45 mg/l * 8.345 lbs/gal * 0.052 MGD
7-day average BOD_5/TSS loading = 19.527 lbs

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

Final Effluent Limits - 0.052 MGD design flow.

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			
	lbs/Day		mg/l (unless noted)	
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.
Flow	N/A	N/A	Measure MGD	Measure MGD
BOD_5	13.018	19.527	30	45
TSS	13.018	19.527	30	45
BOD_5, % removal (*1)	≥ 85	---	---	---
TSS, % removal (*1)	≥ 85	---	---	---
pH	N/A	N/A	6.0 - 9.0 standard units	

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

2) WATER QUALITY BASED LIMITATIONS

i. 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 applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained, or attained.

ii. 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.

iii. Water Quality Standards

The discharge is located approximately 1 mile east of the Village of Mora on State Highway 3, on the north side of Mora River in Mora County, New Mexico. The WWTP effluent enters the Mora River Water Quality Segment 20.6.4.307 of the Canadian River Basin. The designated uses of the receiving stream are marginal coldwater, aquatic life, warmwater aquatic life, irrigation, livestock watering, wildlife habitat, and primary contact. This segment of the Mora River is 303(d) listed as not supporting marginal coldwater aquatic life. Probable causes of impairment include nutrient/eutrophication, biological indicators and dissolved oxygen.

iv. 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).

a. BACTERIA

Primary contact currently is one of the designated uses of the Mora River. The standards of 126 MPN/100 ml daily monthly geometric mean and 410 MPN/100 ml daily maximum for E. coli from the previous permit will be continued in the draft permit. The E. coli monitoring frequency requirement in the previous permit also remains in the draft permit.

b. Dissolved Oxygen

A steady state model (LA-QUAL) was used to evaluate the biochemical oxygen demand of the discharge. A complete characterization of the receiving water was not available. The evaluation demonstrated that the discharge would not cause an excursion of the in-stream standard of 5 mg/L (see Appendix 1).

c. pH

Segment specific WQS for pH, 6.6 to 9.0 standard units, are more restrictive than the technology-based limits presented earlier. The pH limits in the previous remain in the draft permit.

d. NUTRIENTS

The Mora River, Segment No. 20.6.4.307, United States Geological Survey gage east of Shoemaker to Hwy 434 had an updated TMDL developed for plant nutrients, which was approved by EPA on July 22, 2015. The updated TMDL developed Summer and Winter waste load allocations (WLAs) for the two distinct NPDES dischargers into the reach of the Mora River; Mora National Fish Hatchery and Technology Center and the Mora Mutual Domestic Water and Sewerage Works. Based on the updated TMDL, the draft permit proposes the following limitations for Mora Mutual Domestic Water and Sewerage:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			
	lbs/day		mg/L	
POLLUTANT	30-Day Avg.	Daily Max	30-Day Avg.	Daily Max
Phosphorus, Total ▪ Summer (May 1 – September 30) ▪ Winter (October 1 – April 30)	 0.54 0.17	 0.81 0.26	 Report Report	 Report Report
Nitrogen, Total [*1] ▪ Summer (May 1 – September 30) ▪ Winter (October 1 – April 30)	 3.94 1.33	 5.91 2.0	 Report Report	 Report Report

FOOTNOTE:

[*1] Total Nitrogen is defined as Total Kjeldahl Nitrogen plus Nitrate and Nitrite as defined in the TMDL

e. 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 reasonable potential to cause an in-stream excursion above a water quality criterion, 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. 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 amount of information required for minor facilities was limited to specific sections of these forms. Supporting information for this decision was published as "Evaluation of the Presence of Priority Pollutants in the Discharges of Minor POTW's", June 1996, and was sent to all state NPDES coordinators by EPA Headquarters. In this study, EPA collected and evaluated data on the types and quantities of toxic pollutants discharged by minor POTW's of varying sizes from less than 0.1 MGD to just under 1 MGD. The Study consisted of a query of the EPA Permit Compliance System (PCS) database from 1990 to present, an evaluation of minor POTW data provided by the State agencies, and on-site monitoring for selected toxics at 86 minor facilities across the nation. The facility is designated as a minor, and does not need to fill out the expanded pollutant testing section Part D of Form 2A. There are no toxics that need to be placed in the draft permit except for TRC.

ii. TRC

The facility uses chlorine to control bacteria. The facility currently has a chlorine contact chamber that is severely undersized and incorrectly designed. It is an approximately 8 feet square by 6 feet deep basin, and the resident time is likely less than 10 minute. The EPA requires the facility to install a new serpentine chlorine contact chamber and dechlorination unit.

The NMWQS for total residual chlorine (TRC) are 11 ug/l for chronic and 19 ug/l for acute conditions. In addition, wildlife habitat criteria for TRC is 11 µg/l pursuant to 20.6.4.900.G NMAC. The draft permit proposes to limit TRC as follows: "Prior to final disposal, the effluent shall contain NO MEASURABLE total residual chlorine (TRC) at any time. NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40 CFR 136. If during the term of this permit, the minimum quantification level for TRC becomes less than 11 ug/l, then 11 ug/l shall become the effluent limitation. The maximum TRC shall be monitored by instantaneous grab sample on a daily basis."

3) MONITORING FREQUENCY FOR LIMITED PARAMETERS

Regulations require that permits 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)). For consistency, the monitoring frequencies are the same as those used by EPA R6's Implementation Procedure for NM, taking into account the nature of the facility and its design flow. A frequency of 1/month is established for BOD_5, total nitrogen, total phosphorous and E. coli, and the pH and TRC daily monitoring frequency from the previous permit will be continued in the draft permit.

4) WHOLE EFFLUENT TOXICITY (WET) TESTING

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. As required in the previous permit, the facility conducted one-time WET tests. The result shows no reasonable potential to cause toxicity.

The discharge is to Mora River. The critical Summer (May to September) and Winter (October to April) low flows of Mora River in that segment, which were obtained from the mentioned EPA approved Mora River plant nutrients TMDL, are 10.98 MGD and 3.17 MGD, respectively. The design flow of the facility is 0.052 MGD. For consistency with the WET monitoring and reporting requirement between November 1 and April 30, the Winter critical flow of 3.17 MGD was used to derive the critical dilution of the discharge to the receiving stream, which is approximately 1.61%. Since the critical dilution is equal to or less than 10%, the procedures in the letter from Marcy Leavitt, NMED, to Claudia Hosch, EPA, December 16, 2005, NMED provided Narrative Toxics Implementation Guidance – Whole Effluent Toxicity, (NTIG-WET) provide that in lieu of the more expensive 7-day chronic test, a 48-hour acute test may be run using a 10:1 acute to chronic ratio; 16.1% rounded to the nearest whole number 16%. The WET

testing requirements in the previous permit remain in the draft permit. The draft permit will not propose any WET limits. The facility shall conduct a 48-hour acute test using Daphnia pulex at a once per permit term and a 48-hour acute test using Pimephales promelas at a once per permit term frequency. The test series will be 7%, 9%, 12%, 16 % and 21%.

The permittee shall conduct separate whole effluent toxicity tests in accordance with the following table:

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY TESTING (48-Hr. Static Non-Renewal)	30-DAY AVG	48-HR MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Daphnia pulex	Report	Report	1/5yrs *1	Grab
Pimephales promelas	Report	Report	1/5yrs *1	Grab

FOOTNOTE:
*1 Monitoring and reporting requirements begin on the effective date of this permit, between November 1 and April 30.

VI. FACILITY OPERATIONAL PRACTICES

A. SEWAGE SLUDGE

The sludge produced at the facility is discharged into a large lagoon for aerated treatment. The lagoon is designed for 10 years plus disposal.

B. WASTE WATER POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute or continue programs directed towards pollution prevention. The facility shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility.

C. INDUSTRIAL WASTEWATER CONTRIBUTIONS

The treatment plant has no non-categorical Significant Industrial User's (SIU) and no Categorical Industrial User's (CIU). The EPA has tentatively determined that the permittee will not be required to develop a full pretreatment program. However, general pretreatment provisions have been required. The facility is required to report to EPA, in terms of character and volume of pollutants any significant indirect dischargers into the POTW subject to pretreatment standards under §307(b) of the CWA and 40 CFR Part 403.

D. OPERATION AND REPORTING

The applicant is required to operate the treatment facility at maximum efficiency at all times; to monitor the facility's discharge on a regular basis; and report the results quarterly. Reporting requirements and the requirement of using EPA-approved test procedures (methods) for the analysis and quantification of pollutants or pollutant parameters are contained in 40 CFR

122.41(l) and 40 CFR 122.21 (e), respectively. All Discharge Monitoring Reports (DMRs) shall be electronically reported per 40 CFR 127.16. The monitoring results will be available to the public.

VII. 303(d) LIST

The receiving stream, Mora River in the WQ Segment 20.6.4.307 was listed in State 303d list for not fully supporting marginal coldwater aquatic life. The probable causes of impairment are nutrient, entrophication biological indicators, and dissolved oxygen. EPA approved TMDL limitations for total phosphorus and total nitrogen on July 22, 2015. A standard reopener clause is established in the permit that would allow additional conditions if the TMDL is revised, and/or new water quality standards established and/or a new TMDL developed.

VIII. 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 limitation and monitoring requirements set for the in the proposed permit are developed from the State water quality standards and are protective of the designated uses. Furthermore, the policy sets 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, NMAC Section 20.6.4.8.A.2.

IX. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet anti-backsliding provisions of the Clean Water Act, Section 402(o) and 40 CFR §122.44(l)(i)(A), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. The proposed permit maintains the discharge limitation requirements in the previous permit for BOD_5, TSS, and pH. The proposed permit is slightly more restrictive than the previous permit since BOD_5 and TSS percent removal limits have been established in the draft permit. It, also, includes the revised Total Phosphorous and Total Nitrogen limits for consistency with the approved Mora River TMDL. All of the changes represent permit requirements that are consistent with the State WQS and WQMP.

X. ENDANGERED SPECIES CONSIDERATIONS

Six species (Yellow-billed Cuckoo, Southwestern willow flycatcher, Mexican spotted owl, Canada Lynx, North American wolverine and New Mexico meadow jumping mouse) in Mora County are listed as Endangered or Threatened, according to the U.S. Fish & Wildlife Service's (USFWS) website, https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=3503.

Yellow-billed Cuckoo (*Coccyzus americanus*) : The yellow-billed cuckoo is a Neotropical migrant bird that winters in South America and breeds in North America. The yellow-billed cuckoo has been listed as endangered. The primary cause of loss and degradation of yellow-billed cuckoo is the loss and degradation of riparian breeding habitat, which is believed to have caused the declines in the distribution and abundance of the species Conversion to agriculture and other land uses, urbanization, dams and river flow management, stream channelization and bank stabilization, and livestock grazing are the causes of riparian habitat losses. The permit does not authorize activities that may cause destruction of the yellow-billed cuckoo habitat, and issuance of the permit will have no effect on this species.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*) : Southwestern Willow Flycatchers habitat occurs in riparian areas along streams, rivers, and other wetlands where dense willow, cottonwood, buttonbush and arrow weed are present. The critical habitats for Southwestern willow flycatcher include: (1) Gila River and the East and West Forks of the Gila River in Catron and Grant Counties; (2) Gila River in Grant and Hidalgo Counties; (3) San Francisco River in Catron County; and (4) Tularosa River and Apache Creek, Catron County. The discharge is not within the designated critical habitats.

Several factors have caused the decline in Southwestern willow flycatcher populations. Extensive areas of suitable riparian habitat have been lost due to river flow-regulation and channelization, agricultural and urban development, mining, road construction, and overgrazing. As a result of habitat fragmentation, cowbird parasitism has increased. The invasion of the exotic salt cedar has also altered the riparian ecosystem in the Southwest. Salt cedar is less favorable than native riparian vegetation to the flycatchers. The proposed action does not result in any modification of flycatcher habitat.

Mexican Spotted Owl (*Strix occidentalis lucida*): Mexican spotted owls have the largest geographic distribution of all spotted owl subspecies. They can be found in forested mountains and canyons from southern Utah and Colorado to the mountains of Arizona, New Mexico, west Texas and even into the mountains of northern and central Mexico.

The main threats to the Mexican spotted owl are starvation, fire and loss of habitat due to logging, which also causes a greater risk of predation by great horned owls as a result of increased open space. Adverse effects are not expected to result from the proposed action because issuance of the permit does not authorize construction or any other activities which might disturb owl habitat.

North American Wolverine (*Gulo gulo luscus*): The wolverine is the largest terrestrial member of the family Mustelidae. It resembles a small bear with a bushy tail. It has a round, broad head; short, rounded ears; and small eyes. In North America, wolverines occur within a wide variety of alpine, boreal, and arctic habitats, including boreal forests, tundra, and western mountains throughout Alaska and Canada. The southern portion of the species' range extends into the contiguous United States, including high-elevation alpine portions of Washington, Idaho, Montana, Wyoming, California, and Colorado. Climate changes and human disturbance in the contiguous United States has likely resulted in the loss of some wolverine habitat, although this loss has not yet been quantified. Potential sources of human disturbance to wolverines include winter and summer recreation, housing and industrial development, road corridors, and extractive industry such as logging or mining. The permit does not authorize activities that may cause destruction of the wolverine habitat, and issuance of the permit will have no effect on this species.

Canada Lynx (*Lynx canadensis*) : The lynx is a medium-sized cat with long legs, large, well-furred paws, long tufts on the ears, and a short, black-tipped tail. The distribution of lynx in North America is closely associated with the distribution of North American boreal forest. In Canada and Alaska, lynx inhabit the classic boreal forest ecosystem known as the taiga. The range of lynx populations extends south from the classic boreal forest zone into the subalpine forest of the western United States, and the boreal/hardwood forest ecotone in the eastern United States. Forests with boreal features extend south into the contiguous United States along the North Cascade and Rocky Mountain Ranges in the west, the western Great Lakes Region, and northern Maine. Within these general forest types, lynx is most likely to persist in areas that receive deep snow and have high-density populations of snowshoe hares, the principal prey of lynx. In all regions within the range of lynx in the contiguous U.S., timber harvest, recreation and their related activities are the predominant land use affecting lynx habitat. The permit does not authorize activities that may cause destruction of the lynx habitat, and issuance of the permit will have no effect on this species.

New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*) : The jumping mouse 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 and the Rio Grande Valley from Española to Bosque del Apache National Wildlife Refuge, and into parts of the White Mountains in eastern Arizona. Ongoing and future habitat loss is expected to result in additional extirpations of more populations. Research indicates that the primary sources of past and future habitat losses are from grazing pressure (which removes the needed vegetation) and water management and use (which causes vegetation loss from mowing and drying of soils), lack of water due to drought (exacerbated by climate change), and wildfires (also exacerbated by climate change). Additional sources of habitat loss are likely to occur from scouring floods, loss of beaver ponds, highway reconstruction, coal-bed methane development, and unregulated recreation. The issuance of this permit is found to have no impact on the habitat of this species.

The proposed permit does not authorize constructions and land development, nor will cause release of toxic pesticides or spread of disease. Based on the information available to EPA, that

the reissuance of this permit will have *no effect* on these federally listed threatened or endangered species.

XI. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological sites because no construction activities are planned in the reissuance.

XII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State Water Quality Standards 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.

XIII. VARIANCE REQUESTS

No variance requests have been received.

XIV. CERTIFICATION

The permit is in the process of certification by the State Agency following regulations promulgating at 40 CFR §124.53. EPA will send a draft permit and a draft public notice to the District Engineer, Corps of Engineers, Regional Director of the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service prior to the publication of that notice.

XV. FINAL DETERMINATION

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

XVI. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Forms 2A received on December 17, 2014.

B. 40 CFR CITATIONS

Citations to 40 CFR Sections 122, 124, 125, 133, 136

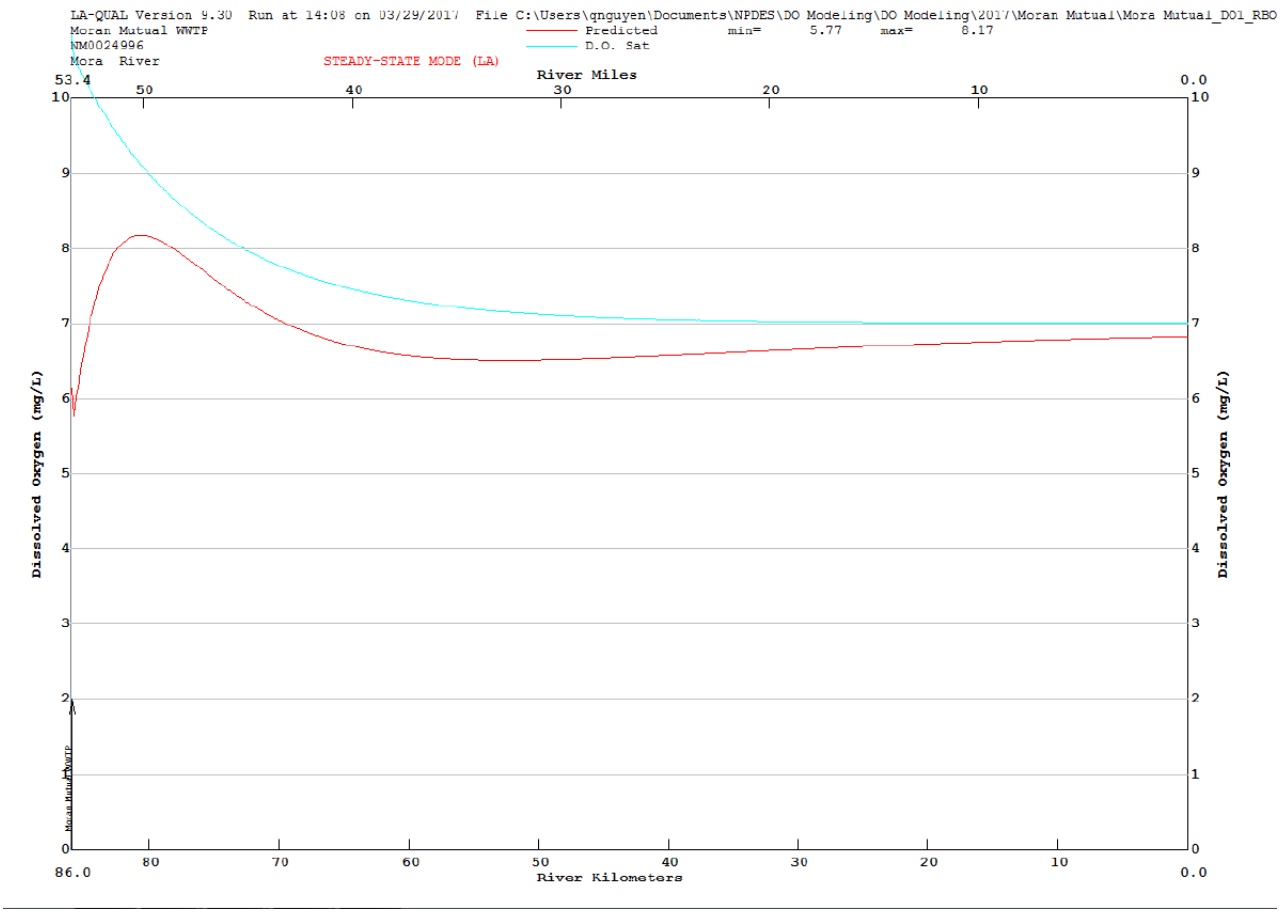
C. MISCELLANEOUS

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico, March 2012.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2014 -2016.

USEPA-Approved Total Maximum Daily Load (TMDL) for the Mora River (USGS Gage East of Shoemaker to Hwy 434), July 22, 2015

Appendix 1


LA-QUAL Version 9.30 Run at 14:08 on 03/29/2017 File C:\Users\qnguyen\Documents\NPDES\DO Modeling\DO Modeling\2017\Moran Mutual\Mora Mutual_D01_RBO
Moran Mutual WWTP
NM0024996
Mora River
STEADY-STATE MODE (LA)
Predicted min= 5.77 max= 8.17
D.O. Sat
River Miles
53.4
0.0
Dissolved Oxygen (mg/L)
River Kilometers
86.0
0.0