NPDES PERMIT NO. NM0000108
FACT SHEET

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

APPLICANT:	El Paso Electric Company- Rio Grande Power Plant P.O. Box 982 El Paso, TX 79960
ISSUING OFFICE:	U.S. Environmental Protection Agency Region 6 1445 Ross Avenue Dallas, Texas 75202-2733
PREPARED BY:	Isaac Chen Environmental Engineer NPDES Permits Branch (6WQ-P) Water Quality Protection Division VOICE: 214-665-7364 FAX: 214-665-2191 EMAIL: chen.isaac@epa.gov
PERMIT ACTION:	Proposed reissuance of the current permit issued June 28, 2013, with an effective date of August 1, 2013, and an expiration date of July 31, 2018.
DATE PREPARED:	June 25, 2018

40CFR CITATIONS: Unless otherwise stated, citations to 40CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of March 30, 2018.

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, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service; and to the National Marine Fisheries Service prior to or during the publication of that notice.

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

CHANGES FROM PREVIOUS PERMIT

There are changes from the current permit issued June 28, 2013, with an effective date of August 1, 2013, and an expiration date of July 31, 2018.

1. Add an internal Outfall 109; and

2. Add monitoring and reporting requirements for dissolved boron at Outfalls 001 and 002.

I. APPLICANT ACTIVITY

Based om information provided in the application, the El Paso Electric Company (EPE) operates a natural gas fueled power generation station called the Rio Grande Power Station (RGPS) that is located at 3501 Doniphan Drive, Sunland Park, New Mexico. Power station is categorized under Standard Industrial Classification (SIC) Code(s) 4911. EPE operates three steam electric units (Unit Nos. 6, 7, and 8) and a simple cycle gas turbine (Unit No. 9), that generate up to 340 megawatts of electricity. RGPS has two outfalls (001 and 002) that are permitted to discharge cooling tower blowdown and storm water. Outfall 001 is designed to discharge directly into the Rio Grande Segment No. 20.6.4.101 of the Rio Grande Basin. However, Outfall 001 has not discharged since 2010. EPE maintains this outfall in their permit for emergency purposes only, such as times of extreme flooding conditions within the plant. EPE claims that the overall quality of the Outfall 001 discharge would be similar to the cooling tower blowdown and/or storm water discharged through Outfall 002. Outfall 002 discharges to an unclassified receiving water named Montoya Drain thence to receiving water named Rio Grande in Segment No. 20.6.4.101 of the Rio Grande Basin.

II. DISCHARGE LOCATION

The locations of the two outfalls based on the application package are:
Outfall 001 - Latitude 31° 48' 13" North, Longitude 106° 32' 47" West
Outfall 002 - Latitude 31° 48' 16" North, Longitude 106° 32' 59" West

III. RECEIVING STREAM USES

The designated uses of the receiving water(s) in Segment 20.6.4.101 of Rio Grande Basin are irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat, and primary contact.

IV. STREAM STANDARDS

The general and specific stream standards are provided in “New Mexico State Standards for Interstate and Intrastate Surface Waters” (the NMWQS), 20.6.4 NMAC, as amended through August 11, 2017.

V. DISCHARGE DESCRIPTION

Outfall 001: Currently, the storm water runoff within the drainage area of the Lower Canal flows into the Lower Canal where it is held for evaporation. On an emergency basis, storm water may be pumped from the Lower

Canal to a surface depression located south of the Lower Canal where the water is held for evaporation. There are no internal outfalls to the Lower Canal which will require monitoring. The Lower Canal can receive water from the Upper Canal via a gate valve separating the Upper Canal from the Lower Canal. The Upper Canal receives water from the sources discussed in Outfall 002 below. The water in the Lower Canal can be pumped to the Upper Canal. EPE discharges through Outfall 001 only on an emergency basis to the Rio Grande River.

Outfall 002: Outfall 002 is utilized for discharging cooling tower blowdown from the cooling towers for Units 6, 7 and 8. Unit 9 Cooling Tower blowdown and first pass Reverse Osmosis (RO) reject is used as cooling tower makeup for Cooling Tower 8 or it may be discharged directly to Outfall 002. The cooling tower blowdown (550 gpm) is discharged through Outfall 002 to the Montoya Drain, thence to the Rio Grande River.

VI. TENTATIVE DETERMINATION

On the basis of preliminary staff review and after consultation with the State of New Mexico, the Environmental Protection Agency has made a tentative determination to issue a permit for the discharge described in the application.

VII. PROPOSED EFFLUENT LIMITATIONS

The proposed effluent limitations for those pollutants proposed to be limited are as follows:

Please see the proposed draft permit.

VIII. DRAFT PERMIT RATIONALE

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other necessary explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under 40 CFR 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed:

A. REASON FOR PERMIT

The current permit was issued June 28, 2013 with an effective date of August 1, 2013 and an expiration date of July 31, 2018. The permit renewal application was sent to EPA dated January 15, 2018 and received by EPA dated January 19, 2018. The application was determined to be administratively complete. It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a).

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND/OR CONDITIONS

Regulations promulgated at 40 CFR 122.44(a) require technology-based effluent limitations to be placed in NPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two.

The technology-based effluent limitations guidelines (ELG) in the current permit are retained. The ELG of TSS, oil & grease, total copper and total iron are retained for metal cleaning waste sources at internal outfalls 106, 107, and 108. The ELG of TSS and oil & grease for low volume wastes apply at two main Outfalls 001 and 002. The discharge at Outfall 002 is cooling tower blowdown which consists of various sources of water. Part 423.13 requires that the maximum concentration and the average concentration for 126 priority pollutants (except for total chromium and total zinc) contained in chemicals added for cooling tower maintenance are not detectable in the final discharge. According to the Development Document for the Steam Electric (EPA-440/1-82/029), the sources of those priority pollutants are chemical additives (p. 328). And the Document states: "The discharge of 124 toxic pollutants is prohibited in detectable amounts from cooling tower discharges if the pollutants come from cooling tower maintenance chemicals. (p.493)" This permit renewal will retain the current permit condition that prohibits the use of any tower maintenance chemicals which contain any of the 126 priority pollutants.

A National Pollutant Discharge Elimination System (NPDES) permit for any new or existing facility (see special definitions at 40 CFR 125.83 and 125.133) operating a cooling water intake structure (CWIS) must contain permit conditions meeting the requirements applicable to CWISs under section 316(b) of the Clean Water Act (CWA). Section 316(b) of the CWA requires that the location, design, construction, and capacity of CWISs reflect the best technology available (BTA) for minimizing adverse environmental impact (AEI). Under current regulations, existing facilities are subject to section 316(b) conditions that reflect BTA for minimizing AEI on a case-by-case, best professional judgment (BPJ) basis (40 CFR 125.90(b) and 401.14). The facility does not employ "once through cooling water" instead relaying on "recirculated cooling water' as defined in Part 423. The facility has used cooling tower technology and the make-up water is from municipal water supply and water well. Therefore, the facility is not subject to section 316(b). The facility is required to operate the cooling tower properly. The operator must not turn off the recirculation feature and then run the cooling tower as an once-through cooling system.

El Paso Electric is requesting to authorize the discharge of non-chemical cleaning wastewater from pressure washing or cleaning equipment associated with Unit No. 9 through Internal Outfall 109. The volume of wastewater generated is approximately 4,000 gallons per event. Unit No. 9 non-chemical cleaning wastewater will be collected in a tank and analyzed prior to discharge to Cooling Tower 9 to be reused as makeup water or discharged to the Upper Canal to be used as cooling tower makeup. Otherwise, the wastewater will be shipped offsite for disposal.

Discharges at Internal Outfall 109 is not authorized in the current permit. In order that the permittee may reuse treated non-chemical metal cleaning effluent, EPA proposes to authorize the discharge of non-chemical cleaning wastewater from pressure washing or cleaning equipment associated with Unit No. 9 through Internal Outfall 109 to Cooling Tower 9 as makeup water if the effluent quality meets applicable ELG effluent limitations established for Internal Outfalls 106, 107 and 108. The permittee must monitor effluent at Internal Outfall 109 prior to reuse or discharge. The term chemical metal cleaning waste means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS AND/OR CONDITIONS

1. GENERAL COMMENTS

The NPDES permit contains 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.

Effluent limitations and/or conditions established in the draft permit are in compliance with State water quality standards and the applicable water quality management plan. Data from the following sources are used to calculate initial dilution, in-stream waste concentrations, and effluent limitations:

2. STATE STANDARDS

The applicable State Water Quality Standards are "New Mexico Standards for Interstate and Intrastate Surface Waters," effective on August 11, 2017. The effluent discharges to the Rio Grande in Segment No. 20.6.4.101 of the Rio Grande Basin. Aquatic life criteria and all applicable chronic criteria are also applied.

3. DILUTION CALCULATIONS

Below is flow information for Rio Grande gage below facility:

USGS 08364000 Rio Grande at El Paso, Texas
El Paso County, Texas
Hydrologic Unit Code 13030102
Latitude 31°48'10", Longitude 106°32'25" NAD27
Drainage area 32,210.00 square miles
Contributing drainage area 29,270 square miles
Gage datum 3,722.30 feet above NGVD29

NMED has provided an updated 4Q3 and Harmonic Mean for Rio Grande (Outfall 001) obtained using BASINS4 DFLOW software with International Boundary and Water Commission (IBWC) mean daily discharge data at station 08-3640.00 Rio Grande at El Paso, Texas.

4Q3 = 22.439 cfs, Harmonic Mean = 30.271 cfs

The Rio Grande at El Paso, TX gauge station is below the discharge from El Paso Electric Company Outfall 001 and the 4Q3 and Harmonic Mean flow must therefore be adjusted to represent flows above Outfall 001. In accordance with NMED's comment on the 2013 EPA proposed permit renewal, the maximum 30-day flow from Outfall 002 (0.73 million gallons per day (MGD) or 1.131 cfs) reported in EPA Application Form 2C was used in the adjustment as follows:

Rio Grande above Outfall 001
Adjusted 4Q3 = 22.439 cfs – 1.131 cfs = 21.308 cfs
Adjusted Harmonic Mean = 30.271 cfs – 1.131 cfs = 29.140 cfs

As discussed above, the adjusted critical low flow (4Q3) is 21.308 cfs. The maximum flow at Outfall 002 is 1.131 cfs, so the critical dilution is 5.0%.

4. REASONABLE POTENTIAL ANALYSIS

EPA had used ambient data from RIO GRANDE AT SUNLAND PARK BRIDGE - 42RGrand004.3 to perform "reasonable potential" ("RP") analysis when EPA developed previous permit conditions. The Sunland Park Station is located upstream of the El Paso discharge Outfall 001. Outfall 001 is authorized for discharge during emergency situation and therefore, the permittee did not have effluent characteristics data for the Application. BecauseNMED had a concern that if a discharge occurs at Outfall 001, the ambient water quality data may not represent ambient water quality at Outfall 002. In order to address the concern, EPA evaluated the downstream ambient water data from NMED SWQB MAS station 42RGrand002.7 which is located approximately 600 feet downstream of El Paso Electric Company collected in December 2010 through April 2012. Using NMED SWQB MAS hardness calculator spreadsheet, the geometric average concentrations for dissolved Calcium and dissolved Magnesium has a calculated hardness as CaCO3 = 320 mg/L. Calculated geometric means for Total Suspended Solids (TSS) = 94 mg/L, pH = 8.2 su, and Temperature range 8 - 25 °C. EPA found.

Pollutants Detected	Ambient Value	Applicable Criteria	Exceedance of WQS
Total (T-) Aluminum	0.2096 mg/l	6.7268	No
T- Arsenic	0.0064 mg/l	0.009	No
Dissolved (D-) Barium	0.0919	Not Applicable-NA	No
D- Baron	0.3552 mg/l	0.750	No
T- Bromide	0.3120 mg/l	NA	No
T- Chloride	211.01 mg/l	400	No
T- Chloromethane	0.5197 µg/l	NA	No
T- Di(2-ethylhexyl) phthalate	0.2511 µg/l	22	No
E. coli	111.13 cfu/100 ml	NA	No
T- Gross Alpha	6.2 pCi/L	15	No
T- Gross Beta	11.4 pCi/L	NA	No
D- Manganese	0.0250 mg/l	2.429	No
T- Phosphorus	0.332 mg/l	NA	No
T- Sulfate	282.08 mg/l	500	No
Total Dissolved Solid	1022 mg/l	2000	No
Temperature	17 °C	34 °C	No
D- Uranium	0.006 mg/l	NA	No
D- Vanadium	0.0045 mg/l	0.100	No

Based on the analysis shown above, EPA believes that discharges from El Paso Plant does not cause exceedance of water quality criteria in the receiving water.

After EPA consulted with NMED on this downstream water quality approach, NMED requested that EPA also uses upstream ambient data for RP screening purposes. Therefore, EPA used ambient data from RIO GRANDE AT SUNLAND PARK BRIDGE - 42RGrand004.3 to perform the RP analysis.

AU ID: NM-2101_00
AU NAME: Rio Grande (International Mexico bnd to Anthony Bridge)
WQS CITATION NUMBER: 20.6.4.101
MLOC ID: 42RGrand004.3
MLOC NAME: RIO GRANDE AT SUNLAND PARK BRIDGE - 42RGrand004.3
MLOC LATITUDE: 31.7983
MLOC LONGITUDE: -106.554

Using NMED SWQB MAS hardness calculator spreadsheet, the geometric average concentrations for dissolved Calcium and dissolved Magnesium had a calculated hardness as CaCO3 = 237 mg/L. Calculated geometric means for Total Suspended Solids (TSS) = 41 mg/L, pH = 8.3 su, and Temperature range 11.6 – 23.6 °C.

EPA performed RP screening based on upstream ambient sampling results from the RIO GRANDE AT SUNLAND PARK BRIDGE - 42RGrand004.3 station, and found no RP for detected pollutants in the discharge at Outfall 002. Based on RP analyses of both upstream and downstream ambient data, EPA determines that discharges from El Paso Electric have no RP to cause exceedance of State WQS at WQS segment 20.6.4.101. Therefore, EPA is not proposing new additional WQ-based effluent limitations. The following Equation taken from NMIP is used to determine RP. If Cd, the calculated downstream ambient concentration, is greater than the applicable WQS, then the discharge has demonstrated RP.

$Cd = [(FQa \times Ca) + (Qe \times 2.13 \times Ce)] + (FQa + Qe)$

Where:
F is the fraction of the stream allowed for mixing and unless conditions require a different value, F = 1.0.
2.13 is a statistical factor used to account for variability in the effluent data.
Qa and Ca are upstream ambient flow and concentration, respectively.
Qe and Ce are effluent flow and effluent concentration, respectively.

5. PERMIT EFFLUENT LIMITATIONS AND CONDITIONS

The current permit has WQ-based effluent limitations for copper and total residual chlorine (TRC) at Outfall 001 and TRC at Outfall 002. No effluent characteristics data were reported for Outfall 001 in the Application and TRC was reported as non-detectable for Outfall 002. EPA proposes to retain TRC monitoring requirement and effluent limitation in case chlorine products are used in the system. Total copper limitations at Outfall 001 are also retained because the Effluent Limitation Guidelines of 1.0 mg/l at internal outfalls is greater than the WQ-based limits at Outfall 001 and EPA deems that a discharge at Outfall 001 will have RP if a discharge contains TRC at the ELG level. The site-specific pH standard of 6.6 – 9.0 is established at the end-of-pipe. The NMIP requires site-specific pH standard to be applied at end-of-pipe for all dischargers.

The Segment No. 20.6.4.101 has site-specific WQS for total dissolved solids (TDS) 2,000 mg/l or less, sulfate 500 mg/l or less, and chloride 400 mg/l or less, when the stream mean monthly flow is above 350 cfs. When EPA reissued the permit in 2013, EPA established monitoring requirements for TDS and chloride. Because the downstream stream monitoring data have indicated those criteria may be exceeded in the stream, EPA decides to retain these monitoring requirements in the permit.

6. AQUATIC TOXICITY TESTING

In a letter from Marcy Leavitt, NMED, to Claudia Hosch, EPA, December 16, 2005, NMED provided "Narrative Toxics Implementation Guidance – Whole Effluent Toxicity" (WET Guidance), an update to the 1995 Implementation Guidance. The discharge is to Rio Grande and the critical dilution of the discharge at Outfall 002 to the receiving stream is about 5%. Because the critical dilution is below 10%, an acute-to-chronic ratio of 10:1 is used to allow acute WET testing. Data from the last permit cycle indicates there were no WET test failures. There is no reasonable potential for this effluent to exceed the water quality standards based on the data available. No WET limit is required; however, biomonitoring will continue to be required. In accordance with the WET Guidance, the facility is required to conduct WET test once per 6 months using a 48-hour acute test with Daphnia pulex and Pimephales promelas and a 50% critical dilution. WET test at Outfall 001 is not required unless emergency discharges are released to Lower Canal, which will discharge via Outfall 001. The new testing dilution series are 21%, 28%, 38%, 50%, and 67%.

7. SCHEDULE OF COMPLIANCE

None.

IX. 303(d) LIST

The EPA-approved 2016-2018 Clean Water Act section 303(d) list for New Mexico indicates the stream segment number 20.6.4.101 is not supporting primary contact and Escherichia coli is the probable cause of impairment. The proposed permit does not authorize discharges of domestic wastewater and the nature of discharge does not have a reasonable potential to contribute E. coli. The list also indicates that the segment is impaired for irrigation use and the cause is dissolved boron. The anticipated date for TMDLs is 2019. Because dissolved boron has been detected and reported in the application, monitoring requirements for dissolved boron are proposed at Outfalls 001 and 002. The permit may be reopened to establish effluent limitations for boron if a boron TMDL is developed for ELE during the permit term.

X. REOPENER CLAUSE

In accordance with 40 CFR Part 122.44(d), the permit may be reopened and modified during the life of the permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, or State of New Mexico water quality standards are established and/or remanded or/and if any changes are made to the Texas surface water quality standards applicable to the stream segment.

In accordance with 40 CFR Part 122.62(a)(2), the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance. Permit modifications shall reflect the results of any of these actions and shall follow regulations listed at 40 CFR Part 124.5.

XI. ANTIBACKSLIDING AND ANTIDEGRADATION

The proposed permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water

Act, Section 402(0) 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. EPA is not proposing for any less stringent effluent limitation.

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 proposed permit are developed from the 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. Because the receiving stream has been impaired by dissolved boron not to support irrigation use, NMED may perform an antidegradation screening prior to issuance of the final permit decision.

XII. ENDANGERED SPECIES

US Fish and Wildlife Service (FWS) stated in the letter dated January 26, 1987 (Cons. #2-22-87-I-017) that no listed species would be affected by the proposed permit when EPA issued a public notice for the current permit in December 1986.

When EPA processing permit renewal in 2000, the permittee provided information about endangered species in the area. A letter from the US Fish & Wildlife Service (FWS) to Geo-Marine Inc. dated April 13, 2000, stated that “As the Mexican spotted owl occupies forested mountain habitat and the least tern and northern aplomado falcon occur very sporadically in West Texas, these three species would not likely be impacted by the power plant. The southwestern willow flycatcher is of probable occurrence along the Rio Grande, however, particularly in areas with dense riparian vegetation such as willow, cottonwood, buttonbush, tamarisk, and other deciduous trees and shrubs. The Sneed pincushion cactus typically occupies limestone ledges and grassland from 3,900 to 7,000 feet in elevation and thus is not likely to be impacted by the power plant; however, this cactus is known to occur in northwestern El Paso County not far from the Rio Grande and should be taken into account in your assessment of endangered species in the proximity of the power plant. The cactus is known from an area roughly delimited by Interstate I 0 to the west, the Texas-New Mexico state line to the north, State Highway 20 to the south, and Ranch Road 3255 and U.S. Highway 54 to the east. We have enclosed a map of the approximate known range of the Sneed pincushion cactus in El Paso County for your review.”

In a letter of March 13, 2000, from Geo-Marine to the permittee, El Paso Electric, stated that “A reconnaissance-level survey of the site was conducted on March 6, 2000 to determine the vegetation habitat and if suitable habitat is present at the site for federal and state listed species that may occur in the area. Species to be evaluated include: Brown pelican, Bald eagle. Aplomado falcon, Whooping crane, Mountain plover, Interior least tern, Mexican sponed owl, and Southwestern \Villo\v flycatcher. Attached is a list of habitat requirements and general information for the subject species that potentially occur in El Paso County, Texas and Dona Ana County, New Mexico. This list was compiled from the US Fish and Wildlife Service (USFWS).

New Mexico Game and Fish Department (NMGFD) and from previous Geo-Marine reports. The Rio Grande Power Plant is located in Sundland Park, New Mexico. Sundland Park is located just west of the city limits of El Paso, Texas. This area falls into the Chihuahuan biotic province. The Chihuahuan biotic province covers the desert region of south central Ne\v Mexico and extends into the northern Mexico and western Texas.

Characteristic vegetation includes thorny shrubs (e.g .• creosote bush. mesquite and ocotillo) in open stands and trees (e.g., cottonwood and oak) along rivers.

Based on observations conducted in the area. the vegetation habitat is dominated by small stands of saltcedar *(Tamarix chinensiszJ* present in and adjacent to the area and along the associated drainages. Other common associates include screwbean mesquite *(Prosopis pubescens),* sagebrush *(artenzisa spp),* and scattered small grasses. Vegetation along the stream banks in the Rio Grande includes desert willow *(Chi/apsis /inearis)* and saltcedar.

Based on the habitat present in the area. suitable habitat for federally listed endangered and threatened species *to* be evaluated would not be present at this location. Although presence/absence of the listed animals cannot be determined at this time because they do not become active until spring, Federally listed endangered and threatened species would not reside permanently in the area. Even transient occurrence of the species listed above is considered to be remote. Surveys for listed animal species, if possible, could be done when these animals become more active (May)."

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. According to the most recent county listing of species as of May 11, 2018, for the State of New Mexico, the following species may be present in the Dona Ana County where the proposed NPDES discharge occurs: the yellow-billed cuckoo (T), least tern (E), southwestern willow flycatcher (E), and Sneed pincushion cactus (E).

Yellow-billed Cuckoos- Yellow-billed Cuckoos use wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes. In the Midwest, look for cuckoos in shrublands of mixed willow and dogwood, and in dense stands of small trees such as American elm. In the Southwest, Yellow-Billed Cuckoos are rare breeders in riparian woodlands of willows, cottonwoods and dense stands of mesquite to breed.

Caterpillars top the list of Yellow-Billed Cuckoo prey: individual cuckoos eat thousands of caterpillars per season. On the East coast, periodic outbreaks of tent caterpillars draw cuckoos to the tentlike webs, where they may eat as many as 100 caterpillars at a sitting. Fall webworms and the larvae of gypsy, brown-tailed, and white-marked tussock moths are also part of the cuckoo's lepidopteran diet, often supplemented with beetles, ants, and spiders. They also take advantage of the annual outbreaks of cicadas, katydids, and crickets, and will hop to the ground to chase frogs and lizards. In summer and fall, cuckoos forage on small wild fruits, including elderberries, blackberries and wild grapes. In winter, fruit and seeds become a larger part of the diet.

Yellow-billed Cuckoo populations declined by 1.6 percent per year between 1966 and 2010, resulting in a cumulative decline of 51 percent, according to the North American Breeding Bird Survey. Partners in Flight estimates the global breeding population at about 9 million, with 84 percent breeding in the U.S., 10 percent in Mexico, and none in Canada. They score a 12 out of 20 on the Partners in Flight Continental Concern Score, and the 2014 State of the Birds Report listed them as a Common Bird in Steep Decline. In the West, much of the Yellow-Billed Cuckoo's riparian habitat has been converted to farmland and housing, leading to significant population declines and the possible extirpation of cuckoos from British Columbia, Washington, Oregon, and Nevada. Once common in the California's Central Valley, coastal valleys, and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers of birds along the

Kern, Sacramento, Feather, and Lower Colorado Rivers. The western population of Yellow-billed Cuckoos is a candidate for federal endangered status. Sites replanted with riparian vegetation in southern California supported breeding birds within three years, demonstrating the potential for habitat restoration. As long-distance, nocturnal migrants, Yellow-Billed Cuckoos are vulnerable to collisions with tall buildings, cell towers, radio antennas, wind turbines, and other structures.

EPA determines that this permitting action will have no effect on the Yellow-billed Cuckoos.

Least Tern- The interior least tern is a feisty, swallow-like bird eight to nine inches long with a wing span of 20 inches. It was once called *sea swallow* for its delicate, graceful and buoyant flight. Interior least terns usually arrive on their breeding grounds in early to mid-May and begin to establish feeding and nesting territories. Least terns nesting at sandpits and other off-river sites often fly up to two miles to forage at river sites. Interior least terns consume small fish captured in the shallow water of rivers and lakes. They hunt by hovering, searching and then diving from a height of a few feet to 30 feet above the surface to snatch small fish in their bill. Fish of one to three inches long are consumed by adults. Young chicks are consistently brought non-spiny fish within the size range of one-half to two inches long. Adults and young birds swallow the fish whole, head first and usually in one gulp.

The occurrence of breeding least terns is localized and is highly dependent on the presence of dry, exposed sandbars and favorable river flows that support a forage fish supply and isolate the sandbars from the riverbanks. Characteristic riverine nesting sites are dry, flat, sparsely vegetated sand and gravel bars within a wide, unobstructed, water-filled river channel. Nests are initiated only after spring and early summer flows recede and dry areas on sandbars are exposed, usually on higher elevations away from the water's edge. Artificially created nesting sites, such as sand and gravel pits, dredge islands, reservoir shorelines and power plant ash disposal areas, also are used.

The lower Platte River from Columbus to the mouth, parts of the Loup River, the lower Niobrara River and a few stretches of the Missouri River below Ft. Randall and Gavins Point dams are the only river segments in Nebraska that still contain naturally occurring sandbar nesting habitat for least terns. Riverine nesting habitat has been so severely reduced in the central and upper Platte River that sand- and gravel pits adjacent to the river now provide the only nesting habitat. Least terns nesting at sand- and gravel pits have low reproductive success because of predation and human disturbance.

Least tern reproductive success also can be limited by human-related disturbances, such as foot traffic, unleashed pets, swimmers, canoeists and off-road vehicles. Least tern eggs and young are extremely vulnerable. When least tern colonies are disturbed, adults leave eggs or chicks unprotected, increasing their vulnerability to predators and severe weather. Prolonged disturbances can lead to destruction or abandonment of the colony. Predation by avian and mammalian predators, such as American crows, American kestrels, great horned owls, raccoons, coyotes, minks and feral dogs and cats, has been documented at nesting colonies.

Studies along the Platte valley have shown that selenium and mercury concentrations were elevated above background levels, and selenium in particular might be affecting the reproductive success of least terns in the Platte valley study area. Agricultural chemical runoff into rivers and tributaries can affect the quality of least tern nesting and foraging habitat. More important, the effects of contaminants combined with the physical degradation of habitat and the increase in human disturbance could further accelerate population declines.

Based on information available to EPA, it is unlikely that the proposed permitting action will have effect on the species.

Southwestern Willow Flycatcher - The Southwestern willow flycatcher is a neotropical migrant. They winter in Mexico, Central America, and possibly in northern South America. Southwestern willow flycatchers begin arriving in breeding territory in mid-May and may continue to be present until August. They build nests and lay eggs in late May or early June and fledge young in late June or early July. Typically, the southwestern willow flycatcher raises one brood per year. Breeding territory for the southwestern willow flycatcher extends from extreme southern Utah and Nevada, through Arizona, New Mexico, southern California, and west Texas to extreme northern Baja California and Sonora, Mexico.

The Southwestern willow flycatcher is an insectivore. It forages within and above dense riparian vegetation taking insects on the wing and gleaning them from the foliage. It also forages along water edges, backwaters, and sandbars, adjacent to nest sites.

In New Mexico, the State Game and Fish Department estimated fewer than 200 pairs remained in 1988. Surveys conducted in 1993-1995 found only about 100 pairs, with some 75% occurring in one local area. Within the San Juan River Basin in New Mexico, those surveys detected no Southwestern willow flycatcher breeding sites and only one male flycatcher was identified with an established territory.

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 permitting action is not within federally designated critical habitat areas and the authorized discharge is unlikely to contribute any above mentioned factors which have caused the decline in Southwestern willow flycatcher populations. Therefore, EPA determines that the proposed permitting action has no effect on the species.

Sneed Pincushion Cactus- The Sneed pincushion cactus, *Coryphantha sneedii* var. *sneedii*, grows in clumps of as many as 100 or more cylindrical or spherical stems, 1-3 in (2.5-7.5 cm) long and 0.4-1.2 in (1-3 cm) in diameter. The central spines, 6-17 per areole, are white, tipped with pink or brown; radial spines, 35-90 per cluster, are white. Spines often grow nearly parallel to the stem. This cactus grows in cracks on cliffs or ledges in semi-desert grasslands of the Chihuahuan Desert. These limestone outcrops support only sparse vegetation, such as low shrubs, some rosette-forming perennials, cacti, and herbs. Habitat elevation is between 3,900-7,700 ft (1,200-2,350 m); annual rainfall varies from 8-16 in (20-40 cm) per year.

Sneed pincushion cactus was once fairly widespread in the Franklin, Guadalupe, and Organ mountains- between Las Cruces and Carlsbad, New Mexico and south into Hudspeth, Culberson, and El Paso counties, Texas. Its range may well have extended into Mexico. It was first collected from Anthony Gap, Texas. It is still locally abundant in the Franklin Mountains (El Paso County, Texas, and adjacent Dona Ana County, New Mexico), where nine populations are known. There are two smaller populations in the Organ Mountains north of El Paso

(Dona Ana County, New Mexico); and nine in the Guadalupe Mountains (Hudspeth and Culberson counties, Texas). Another population was recently discovered at Carlsbad Caverns (Eddy County, New Mexico). Seven populations are on private lands; other sites are in Lincoln National Forest, Guadalupe Mountains National Park, and Carlsbad Caverns National Park. In 1986, the total population was estimated to be in excess of 10,000 plants.

Although not showy, some collectors prize the Sneed cactus for its unusual appearance, and it is systematically collected from the wild. Collectors visit privately owned sites on a regular basis. Population sites in the Franklin Mountains are accessible from the roads and, if located by collectors, could be depleted. Access to other localities is more difficult, affording a measure of natural protection. Recovery will depend on enforcing existing prohibitions against collection and on increasing the number of plants on protected land. Several sites in the Guadalupe Mountains and Carlsbad Caverns National Park are under federal protection. All populations are covered by the endangered species plant laws of New Mexico and Texas.

This proposed permitting action does not authorize collections of the cactus nor the authorized discharges reach the plant habitats. Therefore, it has no effect on the species.

After review previous information and recent information available to EPA, EPA has determined that the reissuance of Permit No. NM0000108 will have “no effect” on listed threatened and endangered species nor will adversely modify designated critical habitat.

XIII. ADMINISTRATIVE RECORD - The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by 40 CFR Part 124.9:

A. PERMIT(S)
NPDES permit No. NM0000108 issued to El Paso Electric Company on June 28, 2013.

B. APPLICATION(S)
Application for NPDES Permit No. NM0000108 received by EPA dated January 18, 2018.

C. STATE WATER QUALITY STANDARDS
New Mexico State Standards for Interstate and Intrastate Surface Waters, 20.6.4 NMAC, as amended through August 11, 2017