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June 8, 2020

U.S. Bureau of Reclamation
ATTN: NM Unit EIS
6150 West Thunderbird Road
Glendale, AZ 85306-4001

Submitted electronically to: NMUnitEIS@empci.com

RE: New Mexico Unit of the Central Arizona Project, draft Environmental Impact Statement

Dear Sir or Madam,

On behalf of the New Mexico Environment Department (NMED), attached please find our comments on the April 2020, New Mexico Unit of the Central Arizona Project, draft Environmental Impact Statement.

Please do not hesitate to contact me to discuss further.

Sincerely,

Jennifer J. Pruett
Deputy Cabinet Secretary

Attachment (1)

cc: Courtney Kerster, Director of Federal Affairs, Office of Governor Michelle Lujan Grisham
Sarah Cottrell Propst, Secretary, Energy, Minerals and Natural Resources Department
John R. D'Antonio Jr., P.E., State Engineer
Sandra Ely, Director, Environmental Protection Division
Rebecca Roose, Director, Water Protection Division
Stephanie Stringer, Director, Resource Protection Division

Attachment

Introduction

In the April 2020 New Mexico Unit of the Central Arizona Project, draft Environmental Impact Statement (EIS), the preliminary conclusion is to evaluate “a proposal by the New Mexico Central Arizona Project (CAP) Entity to construct and operate a New Mexico Unit of the Central Arizona Project (NM Unit) through a series of water diversion, storage, conveyance, and delivery components.” The NM Unit would divert water from the Gila River or its tributaries in New Mexico, including the San Francisco River, and underground water sources in southwestern New Mexico. The NM Unit would provide an additional supply of water in accordance with the Arizona Water Settlements Act of 2004 (AWSA) (Public Law 108-451) and the Colorado River Basin Project Act of 1968 (CRBPA) (Public Law 90-537).

The Joint Leads of the project, U.S. Department of the Interior and the New Mexico Interstate Stream Commission, have not identified a preferred alternative in the draft EIS, and will consider public comment before identifying a preferred alternative in the Final EIS in accordance with the Council on Environmental Quality’s regulations.

Comments

1. No Action Alternative A is preferred by the NMED.

Per the draft EIS, Alternative A is described as follows: “the NM Unit would not be constructed. While New Mexico’s rights to access AWSA water would not be legally affected if no NM Unit was built at this time, it is not known how the ISC would vote to use the money in the NM Unit Fund. Since 2014, the ISC has allocated funding to 16 water utilization projects in southwest New Mexico that are not associated with the NM Unit project. These non-NM Unit projects include ditch improvement, effluent reuse, and municipal water conservation activities. Reclamation has no authority over the non-NM Unit projects, and they are not part of the Proposed Action or alternatives. Current non-NM Unit projects would continue under Alternative A.

Under Alternative A, and in accordance with existing laws and agreements, the diversion of water for irrigation and other uses in the Gila and San Francisco River Basins would continue. Proposed NM Unit infrastructure would not be built; however, individuals, irrigation districts, and other entities would continue improvement and maintenance of existing facilities or could propose new facilities under different authorities. Funded non-NM Unit projects that are reasonably foreseeable and within the project area are considered under the cumulative impact analysis in this EIS.”

NMED prefers this option for the following reasons:

- (1) Surface water quality for multiple parameters will diminish under alternatives B through E.
- (2) Alternatives B through E will adversely affect aquatic life (i.e., fish) by diminished surface flow and potential loss of habitat and refugia.

(3) Alternatives B through E replace localized and time limited water quality concerns resulting from maintenance of temporary push-up dams in the river with long-term and chronic habitat degradation through flow reduction, poorer water quality and loss of wetland acreage below the diversions.

(4) Surface and groundwater in the Cliff-Gila area are connected by a shallow alluvial fill aquifer with high hydraulic conductivity (p. 3-25), meaning that surface water diversions are highly likely to affect both quantity and quality of groundwater used for drinking water supplies.

(5) Alternatives B through E propose the greatest streamflow reductions between August and February. This timeframe could inhibit aquifer recharge during monsoonal rainfall in August and September.

(6) Groundwater levels have fallen over the last 35 years at all proposed project locations. Streamflow reductions and groundwater pumping (Alternative B) are likely to exacerbate this trend.

(7) Climate change in the southwestern U.S. can reduce streamflow and snowpack amounts.

In conjunction with decreasing trends in agricultural water usage and ongoing water conservation efforts, No Action Alternative A is considered the most protective of surface water and drinking water quality and quantity.

2. Clarify surface-water quality issues in the Draft EIS.

EIS Volume 1, Section 3.3.1 Affected Environment: Designated uses on page 102 should also include primary contact.

EIS Volume 1, Section 3.3.1 Affected Environment: Impairments listed on page 103 should also include impaired benthic macroinvertebrate communities in the San Francisco River.

Water Quality Technical Memorandum, Section 4.2.3 Assessment and Listing Basis: Listing categories are missing Category 5B "Impaired for one or more designated or existing uses and a review of the water quality standard will be conducted."

Water Quality Technical Memorandum, Section 4.2.3 Assessment and Listing Basis, Table 3: Mogollon Creek (Perennial portions USGS Gage 09430600 to headwaters) is Category 4A and listed as impaired for Chronic Aluminum. (NMED 2018-2020 IR).

Water Quality Technical Memorandum, Section 4.2.3 Assessment and Listing Basis, Table 3: Assessments and listings should be based on the most recent WQCC-approved and Environmental Protection Agency (EPA)-approved Integrated Report (NMED 2018-2020 IR).

Water Quality Technical Memorandum, Section 4.3.1.4: This section explains that "irrigation drainage water which has moved through the soil has quality characteristics different from the surface runoff" dependent on application of agricultural chemicals. The EIS should describe the potential impacts of fertilizers, herbicides, pesticides, etc. on water quality and how increases in concentrations of these agricultural products could lead to exceedances of water quality standards.

Water Quality Technical Memorandum, Section 4.3.1.4: Page 23 explains "Specific constituents that may be picked up in the irrigation delivery system or additional heat from greater exposure to sunlight may result in increased loading to the river." How would this be mitigated in temperature impaired stream reaches (e.g., Gila River below Cliff)? Mitigation measures to prevent further degradation of water quality limited waters should be discussed.

Water Quality Technical Memorandum, 4.4.1.1 NMED Water Quality Studies: NMED is currently conducting a two-year water quality survey (2019-2020) in the Gila River and San Francisco River watersheds. The 2022-2024 Integrated Report (Summer 2022) will include an assessment of these data. An update to the project's Water Quality Technical Memorandum is recommended, prior to construction planning as some impairments may affect permitting (see last three comments in this section below).

Water Quality Technical Memorandum, Section 5.1 Surface Water Quality & Volume 1, p.285: NMED requests that the basis for the reported exemption from Clean Water Act section 404 dredge-and-fill permitting as described in Chapter 4, Section 4 be further explained. This activity may not be exempt because section 404(f) cites only the maintenance of diversion structures (dams, dikes, levees), not new construction. Alternatives B, C and E would replace existing diversion structures with wholly new units that are structurally and functionally quite different from the extant diversions on the San Francisco and Gila Rivers. Furthermore, exemptions do not apply if the activity does not meet the 2-part test under section 404(f)(2): 1) convert an area of waters of the US to a new use and 2) impair the flow or circulation of waters of the US or reduce the reach of waters of the US. BOR modeling of downstream effects under Alternatives B, C, and E show a clear reduction of reach as evidenced by reduced water surface elevation and flooded acres (Tables 3-4, 3-5), and reduced average monthly flow at the USGS gage near Redrock, NM downstream of the Cliff-Gila diversion (Table 3-3). NMED requests information from the BOR and U.S. Army Corps of Engineers (Corps) on the decision to exempt this activity from section 404 permitting.

EIS Volume 1, Section 3.3.1 Affected Environment: Page 105 explains that the frequencies of project diversions during channel-forming events was used as a measure of changes in river forms. Diversions may also affect the natural flow regime by altering the magnitude, timing, duration, and rate of change—the EIS also should consider changes in river forms expected to occur from potential changes to the natural flow regime, as appropriate.

EIS Volume 1, Section 4.3.2 Environmental Consequences: The state definition for wetlands also should be considered when evaluating potential impacts. Wetlands are included in the State's definition of "surface water(s) of the state" and are further defined in 20.6.4 NMAC as:

"areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico."

The State definition does not require that all three wetland attributes (i.e. hydric soils, hydrophytic plants, and supporting hydrology) be present at the same time for classification of an area as a surface water of the state and therefore subject to State

surface water quality standards. This is an important consideration for semi-arid and arid regions where sparse water resources may not always support the presence of all three wetland attributes at the same time during frequent drought conditions, yet such areas may still be capable of providing wetland benefits under normal circumstances that include, but are not limited to, water storage and drought resilience, flood attenuation, water quality purification, and wildlife habitat.

Water Quality Technical Memorandum, Section 5.1.1.2 Salinity Constituent Concentration Effects: This section goes into detail regarding the in-stream effects of salinity indicators for irrigation uses under the five alternatives. However, this section does not provide any information on potential impacts to other designated uses. How might the proposed project potentially impact other designated uses (e.g., aquatic life, wildlife habitat, livestock watering)? Potential impacts to other designated uses should be included in this section.

Water Quality Technical Memorandum, Section 5.1.2 Water Quality Parameters Excluding Salinity: The section does not describe how estimates of changes to water quality parameters were calculated nor to what reference value percentage changes apply (average, maximum, etc.). Parameter units are missing as well (i.e. Is temperature in Fahrenheit, Celsius, Kelvin?)

Water Quality Technical Memorandum, Section 5.1.2 Water Quality Parameters Excluding Salinity: The analysis appears to only consider water quality impacts from return flow and not consequences of reduction in flow as quantified in Volume 1, tables 3-3, 3-4, and 3-5. The potential impacts to water quality that may result from reductions in flow should be considered as well.

Water Quality Technical Memorandum, Section 5.1.2 Water Quality Parameters Excluding Salinity: This section should discuss the implications of New Mexico's Antidegradation Policy (20.6.4.8 NMAC) for all waterbodies, which states, "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected in all surface waters of the state." Increases above existing baseline values for temperature, nutrients, metals, pH, turbidity, and other parameters not listed in this section have the potential to adversely affect existing and designated uses and therefore should be included in this section.

Water Quality Technical Memorandum, Section 5.1.2 Water Quality Parameters Excluding Salinity: Also related to the NM Antidegradation Policy, this section should identify impacts to parameters of concern for the water quality limited waterbodies listed in Section 4.2.3. Water quality limited waterbodies are classified as Tier I, with no further degradation allowed. Under the NM Antidegradation Policy, NMED "encourages, in conjunction with other state agencies, implementation of the best management practices (BMPs) set forth in the New Mexico statewide water quality management plan and the nonpoint source management program" (20.6.4.8(B)(13) NMAC). While the Antidegradation Policy states that "such implementation shall not be mandatory except as provided by federal or state law," it also states that "the state shall assure ... all cost-effective and reasonable BMPs for nonpoint source control." This section should discuss implementation of BMPs to prevent further degradation of water quality in water quality limited waters. 20.6.4.11(I) NMAC states that numeric criteria for temperature, dissolved solids, dissolved oxygen, sediment, or turbidity do not apply when changes to these parameters are due to the reasonable

operation of irrigation and flood control facilities that are not subject to federal or state water pollution control permitting. NMED's position is that reasonable operation includes the implementation of BMPs to minimize or prevent further degradation of water quality.

Volume 2, Appendix C: NMED recommends the inclusion of additional BMPs to achieve permanent stabilization of disturbed soils. For example, NMED recommends incorporating native riparian vegetation whenever practicable.

Volume 2, Appendix C: The EIS does not appear to identify or clearly identify all operators for construction activity. The U.S. Environmental Protection Agency (EPA) requires that all "operators" obtain NPDES permit coverage for stormwater discharges to waters of the U.S. from construction activity including support areas. Generally, this means that at least two parties (e.g., one or both of the Joint Lead Agencies and General Contractor) will require permit coverage. Operators include those that have operational control over project specifications, and those who have day-to-day operational control of those activities at the site, which are necessary to ensure compliance with the stormwater pollution plan and other permit conditions, and possibly other "operators" will require National Pollutant Discharge Elimination System (NPDES) permit coverage. EPA's re-issued Construction General Permit (CGP) clarifies individual operator responsibilities in multiple operator scenarios effective June 27, 2019.

Volume 2, Appendix C: The EIS should discuss Joint Lead Agency activities to ensure that EPA CGP requirements, including state and tribal requirements, are incorporated into Stormwater Pollution Prevention Plan (SWPPP) documents. For example, the CGP has additional requirements for discharges to a sediment or nutrient impaired water or to a water that is identified by the State of New Mexico, tribe, or EPA as Tier 2, Tier 2.5 (not applicable in the State of New Mexico), or Tier 3 for antidegradation purposes. Among other things, the CGP requires that a SWPPP be prepared for the site and that appropriate BMPs be installed and maintained both during and after construction to prevent, to the extent practicable, pollutants (primarily sediment, oil & grease, and construction materials from construction sites) in stormwater runoff from entering waters of the U.S.

Volume 2, Appendix C: State of New Mexico Ground and Surface Water Protection regulations in 20.6.2NMAC include requirements for when to file a Notice of Intent to Discharge for any person intending to discharge a new water contaminant or to alter the character or location of an existing discharge. The notice must be filed with the NMED Ground Water Quality Bureau for discharges that may affect groundwater and/or the Surface Water Quality Bureau for discharges that may affect surface water. This is a state requirement separate and independent from NPDES permitting required by the EPA under the Clean Water Act.

3. Report all spills as required by state law.

The draft EIS discusses the possibility that spills of motor oil, gasoline or other contaminants may occur, and contains best management practices for spill cleanup, but does not discuss the notification requirements for unauthorized discharges as specified at 20.6.2.1203 NMAC. These notification requirements must be discussed in the final EIS.