

**NAVAJO-GALLUP WATER SUPPLY PROJECT**  
**PROJECT CONSTRUCTION COMMITTEE MEETING NO. 55**  
**THURSDAY, APRIL 21, 2022 9:00 AM**  
**HYBRID at EL MORRO CONFERENCE CENTER & via MICROSOFT TEAMS**  
**SUMMARY**

1. Review and approve agenda (Reclamation) - [approved](#)
2. Review and approve January 27, 2022 PCC Meeting Summary *Handout* (Reclamation) - [approved, no more approvals of future meeting summaries. Summaries will be posted to SharePoint and website shortly after meetings. If changes are required after update, please let USBR know.](#)
3. Review of PCC Action Item List – *Handout* (Reclamation)
  - a. [Item 161 - MOU does not expire but is reviewed every 5 years but in place until constructed.](#)
4. Other Related Navajo-San Juan NM Settlement Issues (BIA/Navajo Nation)
  - a. [Conjunctive Groundwater Use Plan - see slides](#)
  - b. [San Juan River Navajo Irrigation Projects - see slides](#)

**CONSTRUCTION UPDATE**

5. [Block 4C-8 \(Reclamation\) - see slides](#)
6. [Pumping Plants No. 4 and 7 \(Reclamation\) - see slides](#)
7. [Navajo Code Talkers Sublateral \(Reaches 12.1/12.2\) \(Reclamation\) - see slides](#)
8. [Reach 27.11 \(Gallup\) - see slides](#)

**SAN JUAN LATERAL- ISSUES / DESIGN UPDATE**

9. Value Planning Update
  - a. [Study completed in 2021](#)
  - b. [Many proposals have already been incorporated](#)
  - c. [Cost-risk analysis did not anticipate the amount of inflation seen the last two years. The cost-risk analysis will not be updated but the report will instead be finalized with the information included at the time of the report.](#)
10. San Juan Lateral Intake (aka Reach 1) – Status/Schedule (Reclamation)
  - a. [SJR Intake Pumping Plant Rehab and SJGS Reservoir Modifications](#)
    - i. [Still in process of collecting design data. Designing gate system for both the intake and return structure for river flows between 500 cfs and 10,000 cfs \(looking at 9' radial gate paired with different style of gates on either side to center the radial gate, dual leaf for return\). Designers are performing hydraulic modeling \(CFD\) of the existing pumping plant to determine feasibility of using existing plant sump without expansion for 71cfs \(existing 56.4 cfs capacity\). Next will perform model of proposed expanded 4-bay plant.](#)
  - b. [Reservoir Sedimentation Analysis](#)
    - i. [April 11, Design Focus Call – Reservoir Sediment Trap/Removal Efficiency – To determine capability to function as a sediment trap to remove sediment and provide suitable water the SJLWTP. Find turbidity thresholds for riverside plant shutdown. Ran Trap Efficiency Estimate Method for variety of scenarios at different phases. Trap efficiency at peak when reservoir is full, at highest depth, shortages could limit sedimentation removal and require de-rating the plant or a plant shutdown with turbidities above a certain level. This would only be a handful of days over 50 years and not until 2050 timeframe in worst case scenarios \(full demand from EE/CoF\). Model and PNM experience resulted in similar removal percentages \(PNM 93.7%, Model 95%\).](#)
  - c. [River Pumping Plant Physical Model](#)

- i. Will use data from Hydraulic Modeling/CFD to run physical model. Physical model required to analyze pumping plant hydraulic performance. We are evaluating an intake structure that does not meet the defined parameters of the pre-configured intake structures as laid out in (ANSI/HI 9.8-2018). When varying from pre-configured, time-tested, Hydraulic Institute intake designs, a physical model should be performed. Ensure acceptable uniformity of flow conditions within the pump intake structure. Prevent vortex formation that may be detrimental to pump performance and service life. Provide adequate velocity distribution and minimize velocity fluctuation within the pump bell
  - d. SJGS Land/Facilities Acquisition Update
    - i. Land Purchase Contract: negotiations are on-going and finalizing pending easement inclusion
      - i. Asset/Improvement Purchase Contract: awaiting completion of Land Purchase Contract
      - ii. Appraisal: appraiser scheduled to be on-site week of April 25 with appraisal complete in June/July
      - iii. PNM Water Conveyance: next negotiation April 27
      - iv. Enchant/CoF Water Conveyance: negotiations awaiting completion of PNM agreement
      - v. CoF power supply: in discussion with City regarding power supply to river and potentially PP1 location
  - e. NEPA Compliance – Update and Schedule
    - i. Draft EA for Reach 1-4b about 2/3 complete
    - ii. Admin draft for cooperating agencies late-April/early-May
    - iii. Public comment version by end-of-May
    - iv. Will be sent to PCC list and other entities

11. Block 2-3 – Status/Schedule (Reclamation)

- a. VE Study
  - i. Held the week of March 28. Most major VE proposals were looking at pipeline realignments. 5 proposals, 12 design considerations. Awaiting final report. Will be evaluating over the coming weeks. Open Trench replace Boring across Road 6700. Realignment Gravity Option. Realignments to use existing PNM easements and/or pipes. Realignment follow HWY 36 to WTP.
- b. 30% Design
  - i. 30% comments were due in March the week before the VE. No major comments were made. Site visit with TSC did result in a recommendation to shift the reach 2 alignment slightly for constructability purposes, so that is being looked at.

12. SJL Pumping Plants – Status/Schedule (Reclamation)

- a. Pumping Plant #1 – Location Decision PIN
  - i. Decision awaiting power rates
  - ii. Pros and cons north vs. south of the San Juan River
  - iii. PIN expected with recommendation in coming months
- b. Pumping Plants #2 & #3
  - i. Schedule
    - i. Solicitation April 28
    - ii. Bids due July 14
    - iii. TPEC last 2 weeks in July
    - iv. Award in late-fall/NTP end of year
  - ii. ROW
    - i. Submitted in early-February
    - ii. ROW to BIA submission expected in early-fall
    - iii. Hoping ROW approval in November

13. Block 4A-4B – Status/Schedule (Reclamation)

- a. Schedule
    - i. Solicitation late-summer
    - ii. Award in early-2023
    - iii. IFB (1 HDD with 100% design included with external peer review)
14. Reach 27/Pumping Plant #8– Status/Schedule (City of Gallup)
- a. 27.7b
    - i. Pipe size changed from 16" to 18"
    - ii. 90% anticipated end-of-month
    - iii. Solicitation late-fall/early-winter
    - iv. Construction in late-winter/early-spring 2023
  - b. 27.12
    - i. 60%
    - ii. Final leg for the City's Regional System
  - c. PP8
    - i. Dianne working on modification (no additional funding anticipated but may need to index what is existing in the agreement)
    - ii. Beginning to look at land
    - iii. Once mod completed, NEPA, archeology, geotech can begin
    - iv. Energy considerations need to be considered and possible mini-turbine installation
    - v. Need to have conversations regarding power demands
15. Tohlakai Pumping Plant
- a. Interim Groundwater Delivery from Twin Lakes Well (Reclamation/City of Gallup)
    - i. New meter required to be installed at Tohlakai before the City can begin taking water consistently
    - ii. One-time water delivery to Gallup to turnover water in Reach 12B and will be metered based on volume (likely end-of-April)
16. Reach 14 (Indian Health Service)
- a. Reaches 14.1 and 14.2 – Status/Schedule
    - i. Church Rock to Iyanbito
    - ii. Iyanbito water storage tank access may need to be widened and in discussions with NTUA for equipment and materials
    - iii. Wash crossing contractors being considered as well as ROW access to those locations
    - iv. Working toward purchase of water storage tanks for Church Rock and Iyanbito tank
    - v. Construction: working with NECA for crew/schedule
      - i. May not be ready until June
      - ii. Scheduling of pre-con TBD...but anticipated mid-May
  - b. Reaches 14.6a, 14.7a, 14.8a – Status/Schedule
    - i. In ROW phase
      - i. Signatures for allotments, trust, and fee have all been obtained
      - ii. Private land ROWs still underway
      - iii. Survey anticipated late-May/early-June
      - iv. Surveys to be completed prior to ROW grants
      - v. ROW package anticipated in summer-2022
    - ii. Construction anticipated late-2023
17. BBN9/12.3 – Status/Schedule (Navajo Nation/SMA)
- a. Reach 10.1 – 90% Design submitted, comments received Feb. 2022
  - b. Reach 10.1.1 – 90% sent to Reclamation 3/14/2022
  - c. Reach 10.2 – 60% Design submitted Dec 23, 2021
  - d. Reach 10.2.1 – 60% Design submitted Jan 12, 2022

- e. Reach 10.3 – 60% to be sent out in April, 2022
- f. Reach 10.3.1 – 60% Design started
- g. Reach 12.3 – 30% Design March 18, 2023

### CUTTER LATERAL

- 18. Construction and O&M Update (Reclamation/NTUA/Navajo Nation)
  - a. OM&R Transfer Contract Status Update (WCAO)
    - i. Technical discussions regarding the replacement fund
    - ii. Next negotiation meeting 4/26/2022
    - iii. Transfer of O&M from USBR to NTUA anticipated in June 2022 and contract completion prior to transfer
  - b. Reaches 24 – 26 Construction Closeout and JAN Water Delivery
    - i. Line has been tested and the Nation's portion of the pipeline is nearly complete
    - ii. One portion of construction on the Jicarilla-side that needs to be funded prior to completion
    - iii. A few more months anticipated prior to the Nation's ability to take water
  - c. 24.1 Lybrook
- 4. Area-Wide Optimization Program
  - a. Cutter Lateral Completion Ceremony and Commemoration – June 9th
    - i. Formal invitations have been sent
    - ii. Anticipating large event (if COVID allowed)

### WATER TREATMENT

- s. Regulatory Issues (Reclamation)
  - i. SJL Disinfection By-Product Study Update
    - i. Have decided to include more treatment at the Water Treatment Plant and less reliance of downstream tank aeration
    - ii. Tank aeration being considered at each of the downstream tanks
      - i. Considering costs and efficiencies
    - iii. Pilot Study will also include DBP removal
  - ii. Corrosion Control Study
    - i. Part of the pilot study will look at DBP formation under UF/NF process vs. conventional
    - ii. With pilot study, will also be looking at corrosion potential with change in salt balance
    - iii. City of Gallup has been briefed and Navajo Nation (NTUA) will be briefed in the coming month on groundwater blending and corrosion control
    - iv. Will hold conversations with regulators
      - i. USBR to provide update to NNEPA
- t. San Juan Lateral Water Treatment Plant (Reclamation)
  - i. Appraisal Level Design Update (TSC)
    - i. End of design expected in May
    - ii. Cost estimating through fall/winter (Capital, O&M, and Replacement) for comparison between UF/NF vs. conventional
    - iii. See slides for layout
  - ii. UF/NF Membranes Pilot Study (TSC)
    - i. Taking place in fall 2022
    - ii. Will provide feasibility and design parameters for UF/NF
    - iii. Proposals being reviewed, award anticipated next month
    - iv. Permits being submitted
    - v. USBR to look at additional sediment sampling/requirements during the Pilot Study

- iii. SJLWTP Stakeholder Project Requirements (FCCO)
  - i. Ready for finalization
- iv. SJLWTP Sizing Basis of Design – PIN 022.4 (FCCO)
  - i. Ready to finalize
- v. Project Delivery Method Decision (FCCO)
  - i. USBR to begin moving forward with procurement
  - ii. USBR to make a decision regarding delivery method
    - i. Progressive Design Build
    - ii. Construction...
    - iii. Design
  - iii. Will issue notice
  - iv. Industry day planned Sep/Oct 2022

### **PROJECT WIDE**

- u. Upcoming PINs / Modified PINs (Reclamation)
  - i. PIN 024.3 – Water Storage Tank Materials – Recommend eliminating bolted steel tanks due to ongoing leaks and increased O&M needs on recently installed projects – Circulate for signatures in April
  - ii. PIN 027.1 – Cutter Turnout Flows – Being updated to add start-up flows - needs to be sent in coming months
  - iii. PIN 038.1 – In-Tank Chlorination Systems, Water Quality Sampling, Pre-use Monitoring, and Tank Penetrations – Circulate for signatures in May
  - iv. PIN 022.4 – Add Startup Flows for SJLWTP – To be updated once WTP Sizing Basis of Design is finalized
  - v. PIN 034 – SJ Lateral Storage – FCCO updating to reflect latest designs
  - vi. PIN 039.1 – SJLWTP Site Selection – Draft to be sent out by June
  - vii. PIN 045 – Reallocation of Funds from Shiprock Connection to other Priority Connections – Navajo Nation to send letter rescinding request
  - viii. Pumping Plant #1 Location PIN - draft expected in coming months
- v. Cultural Resources Compliance – Project-Wide (Reclamation)
  - i. Survey work for the entire project almost completed
  - ii. Remaining survey:
    - i. 24.1 Lybrook most recent rerouted line goes thru Navajo TCPs and BLM brought that to our attention and NNHHPD verified they would like to see changes. SMA looking at reroutes now.
  - iii. Data recovery completed for most of Navajo-Gallup
    - i. Reaches 10.1 , 10.2, and 10.3 starting reach by reach as they are designed
    - ii. Remote sensing was started by SRI on 10.1.1.
    - iii. Concurrently virtual site visit filming was conducted for video on the sites going through treatment plan.
  - iv. 4a and 4b will be the next CRC issued in mid May 2022, so we will be cleared for construction.
  - v. TCP studies almost completely wrapped up -1 tribe did not get far before COVID which has greatly impacted their project. Extension of time and funding.
    - i. FAA to NNHHPD to assist with staffing/support on NGWSP
  - vi. Workgroup Meetings-Next PA WG Meeting will be held Late June over Microsoft Teams.
- w. Environmental Compliance – Project-Wide (Reclamation)
  - i. 4A/4B
    - i. Asbestos found on surface from helium pipe
    - ii. Pipe was removed but asbestos was removed and left on the ground
    - iii. 7 locations where this needs to be identified and removed
    - iv. Phase I being completed and Phase II will follow with remediation plan

- ii. NEPA
    - i. BBN9
      - i. Draft EA still in review with BIA (since September). Lack of response from BIA on review beginning to influence overall BBN9 project schedule.
    - ii. Upper San Juan Lateral Realignment
      - i. NEPA Sufficiency Review document sent to BIA on 4/5/2022 for review and signature. Have not heard back on review.
      - ii. Administrative Draft EA
      - iii. Proposed Action and preliminary topics for analysis sent to BIA on 3/22/2022 for review and comment on analysis topics. Have not heard back from BIA.
      - iv. Draft document for cooperating agency review planned for early May 2022.
    - iii. Reach 14.6a, 7a, 8a and Reach 24.1 Lybrook Connection
      - i. NEPA on hold until projects progress in design
  - iii. Revegetation
    - i. NGWSP Revegetation Plan
      - i. Remains with BIA and Navajo Nation for signature
    - ii. Revegetation Contract for 4c-8, 9-11, and Miscellaneous Tasks to be awarded in June 2022
      - i. After the PCC (4/22/2022): no bids received on contract so back to figuring out how best to move forward.
- x. Power Transmission (Reclamation)
- i. San Juan Lateral Status (NTUA)
    - i. Power to Pumping Plants #4 and #7
      - i. Waiting for power to PP7 - high priority needed for electrical components
    - ii. Power to Block 9-11 Rectifiers
      - i. Working with WAPA to include in contract
      - ii. Considered solar but changing to utility power
    - iii. Power to Block 4C-8 Rectifiers
      - i. See Blk 9-11
    - iv. 115kV Powerline Construction
      - i. Still in design and ROW acquisition
  - ii. Power Supply Agreements
    - i. Interim power supply agreements have been focus to supply relief with delay of surface water availability through the San Juan Lateral
    - ii. Agreement has been executed and Gallup is receiving CRSP power for groundwater wells
    - iii. Agreement with NTUA anticipated to be completed in coming months
    - iv. Focus will shift back to full power supply agreement once interim agreements are complete
  - iii. Cutter Lateral Renewable Energy Feasibility Study w/NREL (WCAO)
    - i. Considering areas around PP1, PP2 and CLWTP
    - ii. Extra land would likely be required for solar power
- y. SCADA/Cybersecurity (Reclamation)
- i. Working with Jacobs on Cutter Lateral and NTUA for transfer of Reclamation reaches
  - ii. Also applies to NN constructed portions of the Cutter Lateral
  - iii. Site visit planned April 26-27
- z. Budget (Reclamation)
- i. FY2022 Construction Budget: \$185,041,000
    - i. Largest funding received in single year for NGWSP

- ii. Bipartisan Infrastructure Law (Mandatory) - \$123,000,000
      - i. Overseen by Department of the Interior
      - ii. \$123 million allocated to NGWSP
    - iii. Discretionary - \$67,342,000 (incl. \$5,301,000 of O&M funding)
    - iv. Four existing construction projects can be funded in full
    - v. PP2/3 and revegetation to be awarded and fully funded
  - ii. FY2022 Working Cost Estimate Rollout
    - i. May 4th meeting to be held with Project Participants
  - iii. NM Cost-Share Update/Status
    - i. USBR working to complete approval of NM
  - iv. City of Gallup Credit Request Status
    - i. To be sent to USBR follow State's approval
  - v. 3<sup>rd</sup> Quarter FY2022 Bills
    - i. Bills sent April 10 and due May 10
- aa. Design and Procurement Schedule
  - 1. Information Sharing / Public Outreach (Reclamation)
    - a. Quarterly Newsletter
      - i. USBR looking for idea for articles
- 29. Action items and assignments (Reclamation)
- 30. Schedule next PCC meeting – July 28, 2022 - *in-person and virtual hybrid meeting planned*