

DNR - AMERICAN RESCUE PLAN ACT (ARPA) FUNDING REQUEST
NN Minerals Department

We, the Navajo Nation Minerals Department (NNMD), prepared the following multi-phase work task to evaluate the existing mine production wells on the Peabody Western Coal Company (PWCC) mine lease Numbers 14-20-20033580 & 14-20-2603-2910 and the surrounding Navajo Nation (NN) lands. We, NNMD further understand that the NN wishes to also evaluate the various shallow monitor wells on the PWCC lease, but that the immediate need is to assess the designated NAV Wells, (refer to PWCC map). This preliminary proposal addresses only the NAV Wells and associated facilities which supply power to the water distribution system.

The work will be performed in 4 phases and will consist of the following:

Phase 1 – Well and Hydrogeologic Data Collection and Analysis (Data Sources: files from PWCC, NN, and the Office of Surface Mining Reclamation and Enforcement (OSMRE).

- Collection and analysis of well specific information (construction, production, pumped water quality, water levels and well videos (historic and most recent data).
- Collection and analysis of the well power systems (pump, motor, and power sources).
- Evaluation of the well water distribution systems (pipelines, booster pumps and storage tanks).
- Well specific evaluations (video, production testing and water quality sampling) to establish current well conditions with emphasis on well water production and quality.
- Prepare scope, cost, and schedule to conduct Phase 2-NAV Well Evaluation and Testing.

Phase 2 – NAV Well Evaluation and Testing

- Pull current pumping equipment, video well, clean/open perforations, test, and sample wells. (May not apply to NAV 8 as we understand it was recently rehabilitated)
- Recommendations to convert one or more of the wells to public supply, agricultural, and/or livestock use.
- Prepare scope, cost, and schedule to conduct Phase 3 well rehabilitation.

Phase 3 – Well Specific Rehabilitation (Scope and costs to be provided following completion of Phase 2).

- Rehabilitate one or more of the wells casing (blank and perforations) condition, power system, and distribution system as necessary to efficiently operate the wells for their future designated use.
- Prepare scope, cost, and schedule to conduct Phase 4 well specific operation.

Phase 4 – Well Specific Operation (Scope and costs to be provided following completion of Phase 3).

- Design pumping and discharge systems to meet the needs of the well(s) as determined by its proposed use (Phase 3).
- Test wells for operational integrity.

NNMD understands there are nine (9) NAV wells associated with the PWCC operations. Of the nine wells, NAV 1 was a test well, NAV 4 and 5 are abandoned, and NAV 9 is on Hopi lands. As a result, NAV 2, 3, 6, 7, and 8 will be evaluated as part of the Phase 1 effort. The reported as-built condition of the Navajo NAVs are presented in Attachment 1.

5 wells

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Table 1 - COST ESTIMATE FOR PWCC NAVAJO PRODUCTION WELLS			
WORK TASK	CONSULTING FEES	SUBCONTRACTOR	TOTAL
Phase 1: Hydrogeologic and Well Data Collection and Anaylsis			
Well Site Visit	\$20,300	\$4,400	\$24,700
Well Data Collection	\$53,250	\$6,000	\$59,250
Evaluate Wells Power Systems	\$13,400	\$6,100	\$19,500
Evaluate Wells Water Distribution Systems	\$8,700	\$0	\$8,700
Phase 1 Report	\$25,800	\$0	\$25,800
TOTAL	\$121,450	\$16,500	\$137,950
Phase 2 - WELL EVALUATION AND TESTING (per well)			
Remove Pumping Evaluation and Evaluate Condition of pump, motor, cable	\$5,800	\$32,900	\$38,700
Well Color Video Survey with TM	\$5,300	\$1,250	\$6,550
Well Cleaning and 2nd Video	\$8,700	\$30,200	\$38,900
Well Testing (Equipment Installation, Testing, Sampling, Analysis)	\$42,000	\$86,800	\$128,800
Well Report	\$20,500	\$0	\$20,500
Phase 2 - Subtotal (per well)	\$82,300	\$151,150	\$233,450
Phase 2 Sub Total (5 Wells: 2, 3, 6, 7, and 8)	\$411,500	\$755,750	\$1,167,250
TOTAL (Phase 1 and Phase 2)	\$532,950	\$772,250	\$1,305,200