



STAFF REPORT UTILITIES COMMISSION

Agenda Date: 12/4/2024
Agenda Section: Information Only

Department Origination: Public Works

Agenda Item: 2024 Well Rehabilitation Project Update

Approval Required: No Action Required

BACKGROUND

The City of Baxter contracted with Thein Well Company (Thein) to complete rehabilitation of Well Nos. 1R, 2R, 3, and 4R because the 2024 annual inspection report indicated that all the wells had a reduction in specific capacity throughout 2023, with Wells 2 and 3 experiencing the worst reduction. Well specific capacity is the volume of water that can be pumped from a well per foot of decreased water level during pumping, measured in gallons per minute per foot of drawdown (gpm/ft), and it can be used as an indicator of well condition. Generally, the higher the specific capacity value the more water a well can pump without negatively affecting aquifer water levels.

Well No. 3 was rehabilitated from April 12 to April 25, 2024. Due to limited success of the first rehabilitation, a second rehabilitation was approved via Change Order 1 and was performed in June 2024. Well No. 2 was rehabilitated from April 26 to May 9, 2024. Well No. 4 was rehabilitated from September 9, 2024 to September 16, 2024. Well No. 1 was rehabilitated from September 23, 2024 to September 30, 2024.

The results of the rehabilitation efforts are summarized below. Each rehabilitation was successful in restoring some specific capacity in the wells, but the post-rehabilitation specific capacity is still only 60-70% of the historical average specific capacity.

	Well 1	Well 2	Well 3	Well 4
Pre-Rehabilitation Specific Capacity	18.9 gpm/ft	19.8 gpm/ft	12.9 gpm/ft	13.8 gpm/ft
Post-Rehabilitation Specific Capacity	22.2 gpm/ft	21.0 gpm/ft	18.0 gpm/ft	21.1 gpm/ft

Work Completed Since Last Meeting

SEH prepared the enclosed project summary memorandum and presentation to provide recommendations for operation and maintenance of the existing well field in 2025.

Thein Well submitted the first and final pay application for the project as well as close out documents.

Work to Be Completed

It is anticipated that this will be the final monthly update for the 2024 Well Rehabilitation Project.

FINANCIAL IMPLICATIONS

The 2024 Well Rehabilitation project expenses will be covered by the City's water fund.

The City was awarded a \$50,000 grant for rehabilitation of Well Nos. 1 & 4.

STAFF RECOMMENDATIONS

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COUNCIL ACTION REQUESTED

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