



FENNER VALLEY WATER AUTHORITY
MEETING HANDOUT

Meeting: Board Meeting

Date: April 25, 2019

Item: 5.2 Consideration and Action on Implementation of Groundwater Management, Monitoring, and Mitigation Plan for the Cadiz Groundwater Conservation, Recovery and Storage Project

Revisions to the staff report and recommendation are provided in redline.



FENNER VALLEY
WATER AUTHORITY

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MEMORANDUM

REVISED

TO: Board of Directors

DATE: April 25, 2019

FROM: Daniel Ferons, Executive Director

SUBJECT: Consideration and Action on Implementation of Groundwater Management, Monitoring, and Mitigation Plan for the Cadiz Groundwater Conservation, Recovery and Storage Project

SUMMARY

Issue: At the February Board meeting, the Authority received a presentation on an independent review of the Groundwater Management, Monitoring, and Mitigation Plan for the Cadiz Groundwater Conservation, Recovery and Storage Project (GMMMP). The report concluded the GMMMP is appropriate to identify potential undesirable results and the monitoring thresholds that trigger mitigation are appropriate. In addition, the panel provided complementary recommendations to supplement the GMMMP in an effort to address any remaining doubt as to whether the project can avoid or mitigate undesirable results.

Under the GMMMP the Fenner Valley Mutual Water Company (FVMWC) ~~is responsible for collection of data and preparation of the monitoring reports for submittal to a Technical Review Panel (TRP), Santa Margarita Water District and the Authority.~~ FVMWC shall assess technical data and responsive actions, and corrective measures regarding compliance with the provisions of the Management Plan, and prepare and submit various annual and periodic technical reports, all in consultation with Santa Margarita Water District (District) and the Technical Review Panel (TRP) and subject to the oversight of the County of San Bernardino. The TRP is formed by the County of San Bernardino and ~~FVMWC-the District.~~ Additionally, FVMWC is responsible for proposing refinements to the monitoring plan and submitting a written proposal describing the refinement along with supporting data to the TRP for review and recommendation to SMWD and County of San Bernardino.

Monitoring under the GMMMP is done in three phases. The pre-operational phase will commence upon start of construction and will last a minimum of 12 months. Cadiz will complete and deliver all needed permits for monitoring facilities prior to the pre-operational phase

Recommendation:

1. Request County of San Bernardino and ~~Fenner Valley Mutual Water Company~~ Santa Margarita Water District to appoint the Technical Review Panel.
2. Request Cadiz and Fenner Valley Mutual Water Company to commence preparation and deliver all needed permits for monitoring facilities prior ~~initiate monitoring under the GMMMP,~~ in anticipation that pumping construction may commence under the project within one year.
3. Request Fenner Valley Mutual Water Company to review the Report of the Independent Peer Review Panel for the Groundwater Monitoring, Management and Mitigation Plan for the Cadiz Project prepared for Three Valleys Municipal Water District and Jurupa Community Services District and provide a proposal on refinements as appropriate.

Fiscal Impact: Technical review services are included in the annual budget for the Authority and under the project structure, the Authority provides oversight of GMMMP Compliance as shown on the attached flow chart.

DISCUSSION

Cadiz, Inc. is actively pursuing development of the Project and work is underway to review the options for treatment and delivery of water. There is significant engineering and planning work remaining as well as development of agreements. A formal project start date has not been selected nor has the construction scheduled been promulgated. Additionally, questions about the project and its potential impacts to local resources are still being generated.

Three Valleys Municipal Water District and Jurupa Community Services District, agencies that are considering participation in the project, contracted for a peer review panel to review the GMMMP to verify it was adequate to protect the resources. The review panel concluded the monitoring and mitigation proposed under the GMMMP were in fact appropriate to ensure no undesirable results would occur due to operation. The panel also suggested the following refinements to add to the GMMMP to further enhance the monitoring:

1. Prepare a detailed monitoring plan including quality assurance plan and identification of data repository
2. Consider additional geophysics investigations at Bonanza Spring and Fenner Gap
3. Consider construction of monitoring wells at Bonanza Spring
4. Consider additional assessment of weather conditions including installation of a rain-gauge at Bonanza Spring
5. Consider installation of a transducer at Bonanza Spring
6. Prepare detailed vegetation mapping at springs with a plan to update it over time
7. Consider higher frequency of groundwater monitoring at the project and at third party wells
8. Consider additional geophysics investigation along the saline interface with the dry lakes
9. Consider use of increased InSAR analysis (radar imaging) for subsidence monitoring
10. Prepare a formal process for groundwater modeling with defined updates and recalibration

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~~FVMWC-the District~~ and County of San Bernardino are required to appoint the TRP members which are responsible for reviewing the data developed under the plan and any refinement. The Authority is recommending those entities be requested to establish the TRP, appoint members, and develop procedures for convening, making determinations and reporting to the agencies.

Under the terms of the GMMMP, the ~~FVMWC is responsible for~~ implementation of the monitoring commences with construction activity. Cadiz is responsible for obtaining permits and constructing facilities prior to the start of construction for the pre-operation of the project and preparation of the annual reports beginning one year after commencement of project construction. Monitoring is essential to making informed decisions regarding the prospective impacts and to ensure background data is available and the facilities are in place for collection of the data to develop the first annual report a year after the commencement of construction. The Authority is proposing to recommend that Cadiz and the FVMWC:

- Initiate the GMMMP monitoring and submit a detailed monitoring plan to the TRP and Authority
- Review the above suggested refinements and consider submittal of a proposal to the TRP as appropriate