

Casitas Municipal Water District  
WATER RESOURCES COMMITTEE  
Baggerly/Spandrio

**November 19, 2019 – 10:00 A.M.**

at

Casitas Municipal Water District  
1055 Ventura Ave.  
Oak View, CA 93022

AGENDA

1. Roll Call
2. Public Comments
3. Board Comments.
4. Manager Comments.
5. Discussion and Update of the Comprehensive Water Resources Plan.
6. Review and Discussion of the Matilija Deep Wells Technical Advisory Committee Outline Recommendations.

Right to be heard: Members of the public have a right to address the Board directly on any item of interest to the public which is within the subject matter jurisdiction of the Board. The request to be heard should be made immediately before the Board's consideration of the item. No action shall be taken on any item not appearing on the agenda unless the action is otherwise authorized by subdivision (b) of ¶54954.2 of the Government Code.

If you require special accommodations for attendance at or participation in this meeting, please notify our office in advance (805) 649-2251, ext. 113. (Govt. Code Sections 65954.1 and 54954.2(a). Please be advised that members of the Board of Directors of Casitas who are not members of this standing committee may attend the committee meeting referred to above only in the capacity of observers, and may not otherwise take part in the meeting. (Govt. Code Section 54952.2(c)(6)

# MEMORANDUM

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TO: Water Resources Committee  
From: Michael L. Flood, General Manager  
RE: **Review and Discussion of the Matilija Deep Wells Technical Advisory Committee Outline Recommendations**  
Date: November 15, 2019

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## RECOMMENDATION:

Staff present the recommended outline to WREA for further development and consideration at future Water Resources Committee meeting.

## BACKGROUND:

In April of this year, the Board of Directors engaged Pueblo Water Resources to gather a technical advisory committee (TAC) that would do a feasibility review of the Matilija Deep Wells Project.

Mike Burke, Martin Feeney and other hydrologists met and reviewed an array of information on the Matilija Deep Wells Project including project reports, drilling logs of nearby wells, and other items.

The TAC produced a draft report and delivered it to the District in July.

The report was presented by Mike Burke of Pueblo Water Resources at the October Water Resources Committee meeting.

## DISCUSSION:

The Matilija Deep Wells Project is one of several water security projects that the District has been working on over the last three years.

Originally named the Horizontal Bore or HoBo Project, a Vertical Bore or VerBo was added to the project concept in 2018.

The projected cost of nearly \$2M to complete a test bore for the project created concern for the District in the overall feasibility of the project and thus the TAC was engaged.

During the October Water Resources Committee Meeting, Mike Burke was asked to have the TAC develop an outline of project issues that should be covered by the project engineer for further consideration by the Committee and subsequently the Board of Directors.

Staff recommends that the outline be considered by the Committee and this outline along with any additions/revisions be presented to the project engineer WREA for comment and further development. This might include additional costs that are not currently budgeted.

## Outline Recommendations for Proposed Matilija Groundwater Supply Project Basis of Design Report

In Memorandum #1 (attached) from the Matilija Formation Groundwater Supply Project Technical Advisory Committee (TAC) dated July 1, 2019, a fundamental recommendation was made that a Basis Of Design (BOD) report for the proposed Matilija Groundwater Supply Project (also referred to as VerBo for Vertical Bore) should be prepared and submitted to the Casitas Municipal Water District (CMWD) for approval prior to proceeding further with the project. This BOD report would be the foundation by which the CMWD can objectively and comprehensibly review and consider moving forward with the Pilot Project, currently referred to as the Robles Deep Vertical Bore (RDVB) Test Well. It is the consensus of the TAC that the BOD report, at a minimum, must address the following list of topics and considerations. The outline below is structured so that the BOD report will allow inclusion of responses to address preliminary questions 1 through 7 in the TAC's Memorandum #1.

- I. **PROJECT PURPOSE.** An overall project description for the full scale project should be provided, and should include reconnaissance-level preliminary estimates of costs and schedule, in the event the project were to be advanced from the pilot-scale to full-scale. This discussion should also provide examples of existing deep well sources, with associated costs and reference contacts, if available.
- II. **HYDROGEOLOGIC ANALYSIS.** A background discussion clearly articulating the hydrogeologic setting and the status of research work that has been conducted to date should be provided. This should include description of the target aquifer, discussion of existing data and limitations, consideration of geologic structure and location variability, evaluation of water quality information and potential water quality and treatment issues that may be encountered with the full-scale project. The BOD report needs a discussion of the amount of uncertainty in the interpretation of the geologic structure at depth and how this uncertainty impacts the prediction of the depth of the borehole and, ultimately, the estimated cost range of construction.
- III. **RDVB Test Well Pilot Project.** This section of the BOD report should include a comprehensive evaluation of the following topics.
  - a. **Pilot Project Objectives** (describe goals and relation to full-scale project)
  - b. **Site Description** (including size, layout requirements)
  - c. **Permitting Requirements** (including fees, time requirements, CEQA compliance, agency approvals needed)
  - d. **Exploration Techniques** (including drilling techniques, type of equipment needed, drill string requirements to maintain vertical bore in steeply dipping indurated sediments, etc.)
  - e. **Drilling, Well Construction, Development** (including discussion of downhole survey requirements and methods, well design, materials description, BOPs,

screens, seals and seal placement techniques, cuttings and drilling and development fluid disposal, wellhead features, development techniques, etc.)

- f. **Other Construction Logistics** (including site preparation, water supply, operational hours and total construction period, noise abatement, vehicle traffic, discharge monitoring plan)
- g. **Testing Program** (including pumping methods, artesian control, type of tests to be performed, test water disposal, etc.)
- h. **Monitoring Program** (including parameters, frequency, duration, reporting)
- i. **Metrics** (i.e., how will it be determined that the Pilot Project supports moving forward to the full-scale project?)
- j. **Costs** (for all elements of the Pilot Project, including consideration of potential contingency costs due to the geologic uncertainty. This section should also include preliminary quotes from potential drilling contractors and any other subcontractors required to complete the Pilot Project.)