



Legislation Details (With Board Report)

File #: WRAG 21-080 **Name:** Well Destruction Methodology Report
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Title: Consider receiving a report on the methodology for prioritizing wells for destruction under the Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley project.

Sponsors:

Indexes:

Code sections:

Attachments: 1. Board Report, 2. 1994 SGD Report, 3. Criteria and Weighting Approach, 4. Table 5 from 2017 Recommendations Report, 5. Right-of-Entry Agreement Template, 6. Board Order

Date	Ver.	Action By	Action	Result
4/26/2021	1	Water Resources Agency Board of Directors		

Consider receiving a report on the methodology for prioritizing wells for destruction under the Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley project.

RECOMMENDATION:

It is recommended that the Monterey County Water Resources Agency Board of Directors:

Receive a report on the methodology for prioritizing wells for destruction under the Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley project.

SUMMARY:

At the March 15, 2021, Board of Directors meeting, Staff was asked to return with an update on the methodology for prioritizing wells that will be destroyed as part of the Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley project (“Project”).

There are three primary components to determining the order in which wells will be destroyed as part of the Project: well location, well priority, and well owner permission. MCWRA is considering well location and well priority on parallel tracks, while concurrently moving through the notification and appeal process that is required by Ordinance No. 3790 for all wells in Zone 2B, regardless of priority. Obtaining well owner permission to enter the property is the final component that must be addressed before well destruction work begins. Ultimately, the order in which wells are destroyed will consider destruction priority, ability to locate and identify the well, and responsiveness of the well owner.

DISCUSSION:

Well Location

At the onset of the Project, MCWRA mapped all available Global Positioning System (GPS) data from the Water Resources Agency Information Management System (WRAIMS) for wells that were identified in the Project grant application.

In September 2020, MCWRA conducted a field reconnaissance effort to ground truth the GPS location data associated with each well, confirm the location and identity of each well, and document current conditions at each site. Confirmation of a well's identity relies on multiple pieces of information available in WRAIMS such as the owner's name for the well; description of the location; and serial numbers of installed electric meters, pumps, and/or water meters.

MCWRA subsequently conducted two additional rounds of field reconnaissance in January and April 2021, to identify additional wells and revisit sites where new information was obtained from well owners. Additional wells have been added to the reconnaissance effort due to the fact that some well owners have appealed the decision to destroy wells from the original list in the grant application, so additional wells need to be substituted.

Following three rounds of field reconnaissance, MCWRA has visited 153 well sites. Of the 153 sites visited, MCWRA has been able to locate and confirm the identity of 66 wells (43%) and locate but not confirm the identity of 53 wells (35%). MCWRA has been unable to locate or access 33 wells (22%). MCWRA will continue outreach efforts with well owners and operators to confirm the identity of wells and locate those wells that have not been found during past field efforts.

Well Priority

In order to establish a prioritization for wells to be destroyed, MCWRA gathered data from the 1994 *Castroville Seawater Intrusion Project Well Destruction Priority List* prepared by Staal, Gardner, and Dunne ("SGD Report"); the 2017 MCWRA report *Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin* ("2017 Recommendations Report"); and the initial well prioritization that was included in the grant application, which considered proximity to locations where nitrate exceeded the drinking water standard of 45 milligrams per liter as Nitrate. Data from all three sources is being considered in prioritizing the wells for destruction.

SGD Report

The SGD Report placed wells in Zone 2B into seven (7) destruction priority categories:

1. Wells completed in more than one aquifer;
2. Wells suspected of interaquifer leakage based on water quality data;
3. Wells of unknown completion (design);
4. Wells constructed by rotary methods with inadequate interaquifer seals;
5. Wells of cable tool construction perforated in the 400-foot aquifer;
6. Wells of rotary construction with adequate seals; and,
7. Wells completed only in the Shallow or 180-Foot aquifers (Attachment 1).

Nine of the fourteen wells that the SGD Report identified as being completed in more than one aquifer are on the list to be destroyed under the Project. MCWRA has not been able to correlate the remaining five wells in this category to an existing Well Completion Report or GPS location. One of the four wells identified in the SGD Report as having suspected interaquifer leakage is on the list to be destroyed under the Project; MCWRA has not been able to identify the remaining three wells in this category of the SGRD Report.

2017 Recommendations Report

The 2017 Recommendations Report prioritized wells within Zone 2B based on the well's construction, degree of hydraulic separation between aquifers at the well location, the well's location relative to the seawater intrusion front in the 400-Foot Aquifer, and the 2015 chloride concentration at the well. A relative ranking value

was assigned to each criterion, providing a mechanism for weighting each well (Attachment 2). The final rankings were distributed among five categories: urgent, high, medium, low, and minimal (Attachment 3).

The 2017 Recommendations Report characterized eight (8) wells as having an “urgent” prioritization. All eight (8) of these wells are on the list of wells to include in the Project. Three (3) of the eight (8) have been located and positively identified; the remaining five (5) have been located but MCWRA is seeking additional information to confirm the identity of the well. Six (6) of the “urgent” wells correspond with wells that were identified in the SGD report as being completed in multiple aquifers.

Well Owner Permission

MCWRA’s grant agreement for the Project requires that a Right-of-Entry (ROE) agreement be completed for each well, and signed by the well owner, before well destruction activities can begin (Attachment 4). MCWRA has distributed twenty-six (26) ROE agreements; as of April 12, 2021, two ROE agreements have been returned.

OTHER AGENCY INVOLVEMENT:

The Proposition 1 Implementation Grant that funds a portion of this project is from the SWRCB.

FINANCING:

Project totals \$9,125,524 over a three-year period. The Project is funded in part (54%) by the SWRCB (\$4,927,729) with the remaining 46% of the funding as local match from MCWRA. MCWRA is satisfying the match through a combination of in-kind services (\$1,534,495) and additional funds (\$2,663,300).

MCWRA was originally responsible for the full \$2,663,300 in additional funds, but that amount has been reduced to \$2,198,801 due to contributions from the Monterey County Cannabis Assignment (\$399,499) and Monterey One Water (\$65,000). MCWRA has identified reserves in Fund 134 to cover any portion of the remaining \$2,198,801 in additional funds that is not covered by contributions from outside sources.

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Attachments:

1. 1994 Castroville Seawater Intrusion Project Well Destruction Priority List
2. Criteria and Weighting Approach from 2017 Recommendations Report
3. Table 5 from 2017 Recommendations Report
4. Right-of-Entry Agreement Template