

TO: James L. App, City Manager
FROM: Meg Williamson, Acting Public Works Director
SUBJECT: Emergency Well Repairs – Status Report
DATE: August 3, 2004

Needs: For the City Council to receive an update on emergency well repair and development.

Facts:

1. The City has 16 production wells operating within the City limits. Their performance during peak demand months (June through October) is critical to meeting the City's water demands.
2. Damage to the City's Golden Hill Road Water Tanks amplifies the need to keep production wells in operation.
3. Routine preventative maintenance is costly and necessitates taking wells off line. The City's Capital Projects list includes a number of annual well repairs per year, with priority for scheduled repairs generally being based on the age of the well. Routine repairs are scheduled for winter months when impacts to water supply are less critical, but despite budgeted maintenance schedules, emergency repair needs arise.
4. Over the last several months several of the City's wells have experienced unexpected mechanical problems that required emergency repair. Additionally, in response to the City's water storage emergency this summer, development of additional water production has been made a priority.
5. This report is intended as an update on expenditures from the City's Water Utility fund to facilitate emergency repairs and explore new water production opportunities.
6. Both the Osborne Well (450-500 gpm) located off Cedarwood Drive near Oak Creek park, and the Borchardt Well (300 gpm) located off South River Road at Charoloais Road, underwent emergency repairs at a combined cost of approximately \$70,000. It was critical to keep these wells on line to meet summer demand.
7. The Butterfield Well (200 gpm) located off Buena Vista Road, is now exhibiting signs of possible failure. A repair has been planned that will involve salvaging parts from another lesser producing well and investing another \$10,000 to bring it back on line. If after initiating the repair it is determined the casing is damaged, the cost could run upward towards \$50,000.
8. Public Works staff has also been focusing efforts to reactivate two wells (Ronconi #1 and Ronconi #4) that are located in the Salinas River basin. It is estimated that these wells could cost up to \$50,000 each to bring back on line (a new well can cost in the neighborhood of 10 times that amount). Each well is anticipated to produce up to 400 gpm (combined 800 gpm). The first of the two will be on line the first week of August. Their operation will be a key factor in meeting peak use demands this summer.

9. The aforementioned Ronconi Wells have been out of use since 1992 based on a “surface water rule” that relates to their location near a live stream. It has since been determined that these wells can be reactivated for portions of the year. Additionally, a permit to temporarily exceed the extraction rate of 8 cubic feet per second is being applied for from the State Water Resources Board. There is an approximate \$2,500 cost for this temporary permit.
10. Additionally, a new well prospect in the vicinity of the Ronconi wells is being explored. A test hole is scheduled to be drilled outside of the area subject to the “surface water rule,” but still in the vicinity of the Salinas River. If the test hole is favorable, it is estimated that a new well at this location could be completed for approximately \$100,000 - \$200,000. The depth of the water source at his location makes this a less expensive well to develop than others already listed on the City’s Capital Project list.

Analysis and
Conclusion:

It is critical to meeting our water production needs to keep all 16 of our existing wells in operation. Based on peak summer demands and reduced water storage capabilities, we cannot afford to have wells down. The repairs have been necessary to provide this assurance. The reactivation of the Ronconi Wells and the exploration of an additional well source are also critical steps towards meeting the City’s water demands this summer and beyond.

Policy

Reference: City Purchasing Policies and Procedures.

Fiscal

Impact: The estimated impact to the Water Fund resulting from affected repairs to two existing wells is \$70,000, and \$10,000 for a planned repair. The estimated cost of reactivation of two additional wells (Ronconis) is \$100,000. The estimated cost to establish an additional new well in the vicinity of the Ronconi wells is \$100,000 - \$200,000.

The City has three (3) well projects scheduled in its Capital Project’s list for \$500,000 each. The Tower Road well is proceeding forward, but the Erskine and Olsen wells are not far enough along to proceed.

These well repairs, well reactivations and testing for an additional well in the River bed, are cost effective expenditures for return of water production capabilities.

Options:

- a. Receive and file the report on emergency well repair and production development.
- b. Amend, modify, or reject the above option.