



Agenda Report

Fullerton City Council

MEETING DATE: MAY 7, 2024

TO: CITY COUNCIL / SUCCESSOR AGENCY

SUBMITTED BY: STEPHEN BISE, P.E., PUBLIC WORKS DIRECTOR

PREPARED BY: DAVID GRANTHAM, CITY ENGINEER / ASSISTANT DIRECTOR OF PUBLIC WORKS
RICHARD ARMENDARIZ, ASSISTANT DIRECTOR OF PUBLIC WORKS – MAINTENANCE
GAR HUANG, ASSOCIATE ENGINEER

SUBJECT: CHRISTLIEB WELL 15A REHABILITATION CHANGE ORDER

SUMMARY

City Council approval to appropriate \$1,000,000 from Water Fund Balance to the Christlieb Well 15A Rehabilitation Project.

PROPOSED MOTION

1. Approve \$1,000,000 Water Funds (Fund 44) budget appropriation from Fund Balance to Project 53034 Christlieb Well 15A Rehabilitation Project within the Water Fund (Fund 44).
2. Authorize Director of Public Works, or designee, to approve change order(s) with Best Drilling and Pump, Inc. to keep the Christlieb Well 15A in service within project budget.

ALTERNATIVE OPTIONS

- Approve the Proposed Motion
- Replace lost water well production with import water from Metropolitan Water District of Southern California
- Other options brought by City Council.

STAFF RECOMMENDATION

Staff recommends the Proposed Motion.

CITY MANAGER REMARKS

The City Manager recommends approval.

PRIORITY POLICY STATEMENT

This item matches the following Priority Policy Statements:

- Fiscal and Organizational Stability
- Infrastructure and City Assets.

FISCAL IMPACT

Water Fund Balance has water funds available for this item. Staff recommends a \$1,000,000 budget transfer and appropriation from Water Fund Balance to Project 53034 Christlieb Well 15A Rehabilitation Project within the Water Fund (Fund 44).

Staff estimates the Alternative Option to replace lost water well production with import water from Metropolitan Water District of Southern California would cost the City \$10 million over five years.

Staff attached a Budget Data Sheet for reference (Attachment 1).

BACKGROUND AND DISCUSSION

City Council awarded a construction contract for the Christlieb Well 15A Rehabilitation to Best Drilling and Pump, Inc. on May 3, 2022. Long lead times delayed project start until October 2, 2023.

An unexpected and unusual amount of sand accumulated at the bottom of the well casing during the well rehabilitation process. Staff performed a video inspection to determine any failure points to the well casing and could not identify an intrusion point. The contractor performed additional flushing on the well to clear out the sand. The additional flushing did not provide satisfactory results with large amounts of sand particulates still present. The project hydrogeologist, ENGEO's, opines that water wells perform in this manner when nearing the end of service life. City staff has begun planning for Christlieb Well 15A replacement based on the video findings and the project hydrogeologist recommendations. New well installation takes several years to design and build, leaving the City without valuable drinking water resources to serve residents. The City needs to prolong well life until the City has a replacement well in service.

The City could supplement the water system with import water from Metropolitan Water District of Southern California (MWD). However, MWD water costs substantially higher than well water. Staff estimates the City could spend an additional \$10 million over five years to supplement groundwater loss at the well with MWD imported water. Staff believes exploring options to extend the life of the well in the short term could provide a more cost-effective option than abandoning the well until completing the replacement well.

ENGEO has offered a few options to keep the well in service. One option would install a Swage Patch to seal the point of intrusion. This option costs around \$30,000 per intrusion point. Another option would install a Sand Separator filter to remove the sand from the

water which costs up to \$600,000. Staff would need to perform additional work to determine the best option(s) to implement, including a dynamic (during pumping operation) well casing video inspection. The original project scope did not include this proposed additional work to keep the well in service and needs additional funds. Staff estimates this additional work totals \$1,000,000 but, due to the unknown and variables to troubleshoot the issue, staff may request additional funds in the future. Staff will continue to weigh the benefits of additional work compared to the costs.

Attachments:

- Attachment 1 – Budget Data

cc: City Manager Eric J. Levitt