



AGENDA

SPECIAL MEETING –STUDY SESSION OF THE SANTA FE SPRINGS WATER UTILITY AUTHORITY AND CITY COUNCIL

**May 24, 2018
5:00 P.M.**

Council Chambers
11710 Telegraph Road
Santa Fe Springs, CA 90670

Jay Sarno, Mayor
Juanita Trujillo, Mayor Pro Tem
Richard J. Moore, Councilmember
William K. Rounds, Councilmember
Joe Angel Zamora, Councilmember

Public Comment: The public is encouraged to address City Council on any matter listed on the agenda or on any other matter within its jurisdiction. If you wish to address the City Council, please complete the card that is provided at the rear entrance to the Council Chambers and hand the card to the City Clerk or a member of staff. City Council will hear public comment on items listed on the agenda during discussion of the matter and prior to a vote. City Council will hear public comment on matters not listed on the agenda during the Oral Communications period.

Pursuant to provisions of the Brown Act, no action may be taken on a matter unless it is listed on the agenda, or unless certain emergency or special circumstances exist. The City Council may direct staff to investigate and/or schedule certain matters for consideration at a future City Council meeting.

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Please Note: Staff reports, and supplemental attachments, are available for inspection at the office of the City Clerk, City Hall, 11710 E. Telegraph Road during regular business hours 7:30 a.m.-5:30 p.m., Monday-Thursday and every other Friday Telephone (562) 868-0511.

1. CALL TO ORDER

2. ROLL CALL

Richard J. Moore, Councilmember
William K. Rounds, Councilmember
Joe Angel Zamora, Councilmember
Juanita Trujillo, Mayor Pro Tem
Jay Sarno, Mayor

WATER UTILITY AUTHORITY/CITY COUNCIL

STUDY SESSION

3. Critical Water Issues

Recommendation: That the City Council provide:

- Direction to Staff regarding the installation of a water treatment system for Water Well No. 12;
- Direction to Staff regarding the installation of well packers in Water Well No. 12;
- Direction to Staff regarding plans and specifications for the design and construction of Water Well No. 18;
- Direct to Staff to meet with City of Whittier Staff to discuss purchasing water and a collaborative approach to install a water supply high pressure transmission line through the City to connect with the MWD system; and;
- Direction to Staff to meet with City of Downey Staff to discuss purchasing water and, if there is interest, to prepare an Action Plan for City Council review and approval.

4. ADJOURNMENT

I hereby certify under penalty of perjury under the laws of the State of California, that the foregoing agenda was posted at the following locations; Santa Fe Springs City Hall, 11710 Telegraph Road; Santa Fe Springs City Library, 11700 Telegraph Road; and the Town Center Plaza (Kiosk), 11740 Telegraph Road, not less than 72 hours prior to the meeting.



Janet Martinez, CMC
City Clerk

May 17, 2018
Date



City of Santa Fe Springs

Water Utility Authority/City Council Meeting

May 24, 2018

STUDY SESSION

Critical Water Issues

RECOMMENDATIONS

That the Water Utility Authority/City Council provide:

- Direction to Staff regarding the installation of a water treatment system for Water Well No. 12;
- Direction to Staff regarding the installation of well packers in Water Well No. 12;
- Direction to Staff regarding plans and specifications for the design and construction of Water Well No. 18;
- Direct to Staff to meet with City of Whittier Staff to discuss purchasing water and a collaborative approach to install a water supply high pressure transmission line through the City to connect with the MWD system; and;
- Direction to Staff to meet with City of Downey Staff to discuss purchasing water and, if there is interest, to prepare an Action Plan for City Council review and approval.

BACKGROUND

The City Council held a Study Session on October 18, 2017 to discuss critical water issues. This is a follow up to the direction provided at that meeting. The objective of the City Council Study Session is to review critical water supply issues facing the City and to provide direction to Staff on next steps.

CRITICAL WATER ISSUES

1. Water Well No. 12


Following completion of Water Well No. 12 in June 2015, the well was operated to test the water quality for State of California Division of Drinking Water (DDW) standards. The initial water quality tests met DDW standards.

Subsequent water quality tests results revealed high levels of Hydrogen Sulfide (producing an undesirable odor), Iron (producing a "brownish" color) and high water temperature (approximately 84°F). Continued testing and flushing has not resulted in a change in the water quality. Staff recommended not pumping water from Water Well No. 12 into the City's water distribution system until these issues could be addressed and corrected.

Staff reviewed several alternatives for addressing the Iron and Hydrogen Sulfide issues. One alternative that was considered was to install a well packer which is an expandable plug used to isolate perforated sections of the well casing that may be contributing to the identified water quality issues. This was based on a report by a water quality consulting firm

Report Submitted By:

Noe Negrete, Director
Department of Public Works

 Date of Report: May 17, 2018

retained to review the test results and develop a work plan to modify the well in-take structure and address the identified water quality issues.

The proposed installation of well packers was intended to mitigate, to varying degrees, the identified water quality issues. The complete elimination of the water quality issues was not anticipated and therefore may require the installation of a water treatment system thereafter.

However, the installation of well packers may significantly impact the size and complexity of the water treatment system required. A significant cost savings in the installation costs, as well as on-going operating and maintenance costs was projected as a result of the well packers.

The effect on the wells water production by installing well packers would be a loss of overall water production, a change in the pump configuration, and the permit to operate governed by the DDW would have to be altered to conform to the new water production capacity. Currently, the well is designed to operate at a maximum of 2,000 gallons per minute and with the installation of a packer, the overall production will be diminished to potential ranges of 1,200 – 1,500 gallons per minute. A well producing water at a range of 1,200 – 1,500 gallons per minute is adequate to sustain water demands (peak flows, daily demands, and fire suppression) within Zone II.

Current estimated costs to install the well packers, test pump the well, and to provide an additional pilot study to determine any changes to the quality of water produced is approximately \$300,000-\$400,000. The estimated time to install the screens and test the water quality is approximately three (3) to six (6) months.

It was determined that installation of a water treatment system retrofit to Water Well No. 12 was the most viable alternative. The bids received to provide a water treatment system came in just under \$3.8 million. Based on the most recent bids received, the cost to fabricate and install the ground water treatment system for Water Well No. 12 is approximately \$4.5 to \$5 million (including construction management, inspection and contingency costs). To date, the City has invested approximately \$4.5 million to construct Water Well No. 12.

2. Water Well No. 18

The City Council, at their May 26, 2016 meeting, awarded a Consultant contract to perform a water well siting study for Zone 1.

The Consultant performed hydrogeological and engineering studies for the three (3) potential water well sites, including but not limited to identifying aquifers, identifying potential contamination, a capture zone study, and determining feasibility of developing and building a well. Based on the

evaluation of the three (3) sites, the Consultant recommended the former Ashmun well site and the former Jessup well site as potential well sites. Based on Staff's review and recommendation, the City Council approved the Ashmun well site location for a new water well in Zone 1. The site is a large City-owned parcel located adjacent to the San Gabriel River.

The Ashmun well site study was selected for further study and complete plans and specifications for drilling, developing, and constructing a new water production well are ready for bidding purposes. The estimated cost for installing a well at this site is approximately \$5 to \$5.5 million.

3. Purchasing Water from the City of Whittier

Option 1: Discussions have taken place between City Staff and Whittier Staff regarding purchasing water from the City of Whittier. The City of Whittier is interested in an emergency water supply connection to the Metropolitan Water District system located in the City. A connection to the MWD system would enhance Whittier's water supply. Access to the MWD system would be through a water supply high pressure transmission line through the City's system. The proposed water transmission line connection would begin in the area of Lambert Road and Painter Avenue to Carmenita Road and Imperial Highway. The distance is approximately 2.8 miles. The City would benefit by having an additional drinking water entry source for Zone 1 and Zone 2 from Whittier. The proposed transmission line would also create connection points between Zones 1 and 2 for greater operational flexibility and reliability enhancing the City's water supply. A preliminary cost estimate to install the water transmission line is approximately \$5 million. The cost per acre foot of purchasing finished water from Whittier is currently set at \$593 per acre foot. In fiscal year 2018/19 that cost will increase to \$605 per acre foot. The current cost for imported surface water from MWD is \$1128 per acre foot and in fiscal year 18/19, the cost will increase to approximately \$1195 per acre foot. Pursuant to Whittier's interest in a MWD connection, it is anticipated that a cost-sharing proposal for installing the water transmission line would be open for discussion.

Option 2: Install an upsized Cla-val flow control valve at the existing Whittier Connection to allow for greater flow capacity within Zone 1. The existing infrastructure surrounding the Whittier Connection is a 12 inch A.C. water main that is reduced down to a 6 inch Cla-val flow control valve feeding potable water from the City of Whittier to zone 1. This interconnect is known as the Water Quality Protection Program (WQPP). Increasing the flow control valve size from a 6 inch to a 12 inch valve will allow for the connection to be utilized at full capacity which will deliver a higher amount of water through the connection servicing customers in Zone 1. The cost to increase the flow control valve is approximately \$270,000.00.

4. Purchasing Water from the City of Downey

All infrastructure is in place to purchase water from the City of Downey, except for flow control, chlorine treatment, and metering equipment. This equipment must be located near Florence Avenue and Studebaker Road. The site for equipment and chemical room is privately held and would have to be purchased from the owner. The estimated cost of the equipment required to connect to the Downey water system is \$250,000. The estimated cost of purchasing the site (approximately 5,000 square feet) for equipment is approximately \$200,000. The City of Downey have expressed interest in the idea upgrading the existing water interconnect with the City, and have indicated that they may be able to provide up to 1,000 acre feet of water on an annual basis. The costs of water per acre foot have not been worked out at this time.

Raymond R. Cruz
Executive Director/
City Manager

Attachments:

None