AGENDA REPORT

Meeting Date:	January 13, 2015
Item Number:	F-2
To:	Honorable Mayor & City Council
From:	Trish Rhay, Assistant Director of Public Works Services – Utilities
	Michelle Tse, Senior Management Analyst MT
Subject:	WATER ENTERPRISE PLAN STATUS REPORT
Attachments:	None

RECOMMENDATION

The following is the preliminary recommendation on the Water Enterprise Plan ("Plan") presented by City staff and Psomas to the Public Works Commission ("Commission") during their January 8, 2015 meeting. The Commission had a lengthy discussion on this item and felt they needed additional time to further discuss the Plan. As such, the Commission will have a Special meeting on January 22, 2015 for further evaluation and discussion. A formal recommendation about the Water Enterprise Plan from the Commission will be presented for City Council's consideration at a future meeting.

Based on City staff's work with Psomas, a 25% non-Metropolitan Water District sourced supply reliability target is the recommendation for the initial 10 year plan window. To reach this target, the following actions are recommended:

1. Increase Current Hollywood Basin Production – Increase the existing Reverse Osmosis plant production to match the current Hollywood Basin well production potential of 1,120 AFY acre-feet ("AF") per year ("AFY"); this should be achievable pending corrective actions at the plant and shallow groundwater development now being studied by other consultants under City staff direction. This action is achievable within a two year time frame. There is currently $2 million in the budget to develop the shallow ground water well at 342 Foothill Road. This project is considered an early action item and is not addressed in the 10 year plan.

2. Develop New Central Basin Wells – Develop approximately 1,700 AFY of new groundwater in the unadjudicated portion of the Central Basin near Interstate 10,

approximately four miles from Beverly Hills. Developing new wells in this area will be considerably more economical than developing new wells in the Hollywood Basin due primarily to anticipated low production rates in the Hollywood Basin (approximately 200-300 gallons per minute (gpm) per well vs. about 800 gpm in the Central Basin). Developing three new Central Basin wells including retaining a design consultant; acquiring land for an initial site; drilling a pilot test hole that will be converted to a production well; addressing California Environmental Quality Act ("CEQA") requirements; acquiring land for designing, drilling, and equipping two additional production wells; designing expanded treatment facilities and 24,000 feet of transmission pipelines; constructing all of the above facilities; and testing and permitting all three wells and treatment facilities will take approximately seven to eight years. The estimated cost for this project may range from $23 million to $39 million (in 2015 dollars).

3. Increase Water Conservation – Meet current established SBx7-7 conservation goals by 2020 and strive to achieve additional conservation beyond mandated goals. Implementing a multi-pronged strategy including public/quasi-public analytic engagement programs (for parks, schools, civic center, greenbelts, hotels, etc.), residential analytic engagement programs, system loss reduction and operations programs, and enhanced rebate programs, the City should be able to realize nearly 1,200 AF in additional conservation over the next five years. All of the aforementioned conservation programs can be commenced over a six to twelve month period. Estimated costs may range from $1 million to $1.5 million (in 2015 dollars).

   Related to this item is that staff is working with the Conservation Subcommittee of the Public Works Commission to analyze and develop a water rate structure that inherently promotes water conservation. The proposed structure will be presented to the City Council at a meeting in April 2015.

4. Water Banking – Invest in a groundwater storage bank such as Willow Creek Bank, located in Antelope Valley, to address a potential two year shortage of 3,400 AF. This would provide the City with reserves in the event Metropolitan Water District supplies are severely impacted by a lengthy drought. Subject to the availability of purchased water (to place into the bank); this program can be set up within two years. Preliminary cost estimates for this approach is $4.5 million to $5.5 million (in 2015 dollars).

5. MWD – Continue to rely on Metropolitan Water District ("MWD") for purchase of 75% (approximately 8,485 AFY) of City supplies. The estimated cost for this supply will be $8 to 10 million annually.

In the event the above program does not result in Beverly Hills meeting its supply demands during a severe drought, the City could still purchase additional Metropolitan Water District water at penalty rates (approximately 2.5 times the current rate). While this water would be fairly expensive, it would nevertheless be less expensive than developing water under other short-term options.

INTRODUCTION

At the May 20, 2014 Formal meeting, the City Council approved an agreement to retain Psomas to evaluate potential water supply alternatives for increasing the reliability of the City's water supply system. Nineteen (19) potential alternatives were initially identified

through a collaborative workshop process with the Public Works Commission and City staff. Evaluation of those 19 alternatives resulted in a recommendation to focus efforts and proceed with additional detailed studies for the following nine (9) alternatives:

1. Metropolitan Water District (MWD);
2. Water Banking;
3. Conservation – Tailored to Unique City of Beverly Hills Characteristics;
4. Groundwater – Develop Central Basin (CB) Wells;
5. Conservation – Comply with SBx7-7[1];
6. Drought Insurance;
7. Potable Water Exchanges;
8. Ocean Desalination; and
9. Groundwater – Develop Hollywood Basin (HB)

This brief staff report summarizes the results of Psomas's detailed studies. A more in-depth presentation of the findings will be provided during the January 13, 2015 City Council Formal Session.

DISCUSSION

Since the mid-1970s, the City of Beverly Hills has obtained approximately 90 to 100 percent of its water supply from MWD with the remaining approximately ten percent pumped from four wells in the Hollywood Basin since the early 2000s. Water from those wells is then pumped to the City's Reverse Osmosis ("RO") Treatment Plant on Foothill Road prior to distribution to City residents and businesses. Total water use from 1996 through 2014 has varied from about 11,500 acre-feet[2] (AF) per year (AFY) to about 14,000 AFY. During the most recent 2013-14 Fiscal Year, the City required a total of 12,269 AF to supply demands within its service area, with all but 747 AF of that amount purchased from MWD.

In most years, MWD's water supply has been very reliable, with only three previous periods of cutbacks in allocated water (10% in 1976-77 and in 2007-09, and 17% in 1987-92). However, the ongoing drought has reduced MWD's available supplies and lessened its reliability as a dependable water supply source. With that in mind, the City has opted to evaluate other water supply alternatives aimed at increasing the City's overall system reliability. While MWD will remain a predominant supply source for Beverly Hills, it would be wise for the City to seek alternative water supply sources and increase its current non-MWD sourced supplies to 25%, from current levels of less than 10%.

FISCAL IMPACT

Based on the preliminary recommendation described above, the overall cost to implement the capital portion as outlined in Items 2 through 4 in the Recommendation section of this report will range from approximately $28.5 Million to $46 Million (in 2015

[1] This 2009 legislative package requires a statewide 20% reduction in urban per capita water use by 2020. It requires that urban water retail suppliers determine baseline water use and set reduction targets according to specified requirements, and requires agricultural water suppliers prepare plans and implement efficient water management practices (definition extracted from the Association of California Water Agencies website).

[2] An Acre-Foot is a common volumetric measure in the water industry; it is the amount of water that can be stored in one acre of land to a depth of one foot and is equivalent to approximately 325,900 gallons.

dollars) depending on final design specifics and system enhancement locations. Once fully implemented, the City would need to add 11 additional full time staff positons to support the recommended program. These positions include one Water Conservation Coordinator, one Water Resources Manager, three Engineering Project Managers, three new Water Treatment Plant Operators, one Water Well Pump Mechanic, one Water Well Pump Electrician and one Water Distribution Operator. Annual loaded salaries for these eleven positions are estimated at approximately $1.6 million annually in 2015 dollars. Only the alternatives to increase the City's water reliability have been explored at this time.

The next phase of the study is to conduct a financial analysis on how to appropriately fund these projects, including an analysis on how water rates will be impacted, capacity fee projections, as well as seek available funding opportunities. Based on the analysis, the projects will be re-evaluated based on financial feasibility.

George Chavez
Approved By