



CITY OF BEVERLY HILLS
PUBLIC WORKS DEPARTMENT

MEMORANDUM

TO: PUBLIC WORKS COMMISSION

FROM: Vince Damasse, Water Resources Manager
Trish Rhay, Assistant Director of Public Works

DATE: September 8, 2016

SUBJECT: WATER ENTERPRISE PLAN (WEP) UPDATE

ATTACHMENT: None

In December 2015, the City Council adopted a Water Enterprise Plan (WEP). The purpose of the WEP was to evaluate a water portfolio that would enable the City to reduce its dependence from Metropolitan Water District (MWD) imported water. The recommended portfolio that was determined to be the most feasible and viable consisted of the following major components: groundwater water supply development in the La Brea Sub-Basin of the unadjudicated Central Basin, water conservation, water staffing, and water banking. Staff has prepared a brief update summary below of the major components of the WEP. Additionally, staff's consultant, Michael Baker International (MBI) will be providing a brief PowerPoint presentation on the status of the La Brea Sub-Basin Wells, Transmission Main, and Treatment Project that currently is underway.

Water Enterprise Plan Update:

1. Groundwater Development (La Brea Sub-Basin of the Unadjudicated Central Basin)

The ultimate goal of the Wells, Water Treatment, and Transmission Mains Project (Project) is to develop 1700 AFY of new potable water supply from groundwater in the La Brea Subarea by drilling new wells near Interstate 10, located approximately 4 miles south of the City boundary. In accordance with the WEP, the ultimate major project components will include:

- Groundwater wells in the La Brea Subarea near Interstate 10, located approximately 4 miles south of the City boundary. The WEP assumed three (3) new wells would be required.
- Conveyance facilities from the well sites to the City's distribution system such as a transmission main, rehabilitation of existing pipelines or, a water exchange with LADWP.
- Water treatment facilities at the well sites, at a central location, or expanding treatment capacity at the existing City Water Treatment Plant.

To date, the following components of the Preliminary Design Report (PDR) phase of the Project that are in progress or that will be completed include:

- Baseline Documentation Study
- Property Acquisitions
- Property Investigations at Lower La Cienega Sedimentation Basin
- Exploratory Borehole Investigation at 1945 La Cienega Boulevard
- Existing La Cienega Transmission Main Investigation
- Transmission Main Corridor Study
- LADWP Water Exchange

Baseline Documentation Study

The purpose of the Baseline Documentation Study was to define the project approach on several key project components, and provide an overall feasibility summary for each respective focus topic. The study is the starting point for the detailed analysis to be conducted under subsequent tasks of the Project. The Baseline Documentation Study has been completed.

Property Acquisitions

The Project requires multiple properties to be acquired outside the City boundary. There is a preferred area to site future production wells which represents the optimal area for groundwater production. This area is colloquially referred to as the “sweet spot.”

Several potential properties were identified to site future production wells and/or a future treatment plant. A production well site requires an area of approximately 5,000 SF to 10,000 SF. A treatment plant site requires a minimum area of approximately 20,000 SF.

A potential property was identified as 1945 La Cienega Boulevard, in the City of Los Angeles. The property is currently being negotiated between the City’s legal team and the property owner. The property acquisition process includes a due diligence period where an exploratory borehole investigation will be conducted to confirm the site’s potential for groundwater production. Further details are included in a later section.

Several other potential properties in the City of Los Angeles and Culver City have been identified, however, negotiations for acquisition have not been conducted at this time. The team continues to conduct research to identify available properties that meet the project criteria.

Property Investigations at Lower La Cienega Sedimentation Basin

The City of Beverly Hills owns a property on La Cienega Boulevard in the City of Los Angeles, immediately north of Interstate 10. The site was formerly operated as the Lower La Cienega Sedimentation Basin, and it is currently inactive. The site is optimally located within the “sweet spot”; however, the site square footage is slightly lower than the minimum area required. In order for this site to be used as a well site, encroachment

into the public right-of-way via an alley behind the site is required for construction of the well, as well as future maintenance.

To investigate the feasibility of utilizing the site for the purpose of the Project, a Phase 1 Environmental Site Assessment was conducted. The conclusion of the report identified a REC (Recognized Environmental Condition) based on two nearby properties – a gas station, and a dry cleaners. The next step is to conduct the Phase 2 Environmental Site Assessment, which will soon commence.

Exploratory Borehole Investigation at 1945 La Cienega Boulevard

The City is entering into a due diligence period on a property at 1945 La Cienega Boulevard. The purpose of the due diligence period is to conduct property investigations to determine the suitability of the site for the purposes of the Project – specifically, in order to determine the groundwater production potential at the site. Groundwater quality will also be determined in order to evaluate treatment requirements to better define project costs.

The City went out to bid in August 2016 to a pre-qualified list of well drilling contractors to drill an exploratory borehole at the site. The bids are due in early September 2016 with anticipated contract award date in mid to late September 2016. Construction work on the pilot exploratory borehole is anticipated to begin in October 2016. The exploratory borehole drilling will take a total of approximately five (5) months, however, preliminary determination of the site's groundwater production potential and water quality characteristics may potentially be determined after four (4) months, barring any unexpected construction or permitting delays.

Additional work being conducted associated with this property include:

- CEQA Categorical Exemption for the exploratory borehole drilling
- Phase 1 Environmental Site Assessment (ESA), potential Phase 2 ESA depending on results
- Permit processing

Existing La Cienega Transmission Main Investigation

The City formerly operated an 18" transmission main in La Cienega Boulevard from Interstate 10 to the City of Beverly Hills water system. The pipeline is generally located under the western sidewalk. The existing pipeline is optimally located to be used for the purposes of the Project. It could be potentially rehabilitated to be used as the transmission main for the Project. The benefits include minimizing excavation and disruption within the City of Los Angeles, and lower construction costs as compared to constructing a new transmission main.

A Closed Circuit Television (CCTV) pipeline investigation was conducted starting at the southern limits (at the Lower La Cienega Sedimentation Basin). The investigation

consisted of running a camera in the pipeline for a length of 200 feet. For the length inspected, the pipeline was found to be in good condition for rehabilitation. An additional investigation is planned to inspect longer reaches of the existing pipeline to confirm the pipeline's suitability for rehabilitation.

Transmission Main Corridor Study

If the existing La Cienega transmission main cannot be rehabilitated, or if the location of the production wells is not centrally located around La Cienega Boulevard, a new transmission main would be required. A pipeline corridor study was conducted to evaluate potential transmission pipeline corridors between the potential well sites and the City of Beverly Hills Water Treatment Plant or future connection point. There are three corridor options classified as the Western Corridor (Beverlywood area), Central Corridor (centered around Robertson Boulevard), and Eastern Corridor (centered around La Cienega Boulevard) that were analyzed through different criteria that would best benefit the City of Beverly Hills.

The general conclusion was that all three of the corridor options would be feasible for construction of a new transmission main for the purpose of the project. There were noted advantages for the Western Corridor (Beverlywood area), which ranked the highest in the evaluation. The Western Corridor has less outside agency and permitting involvement compared to the other options and has relatively less impact to the community, less traffic and utility congestion, and should result in a slightly lower construction cost.

LADWP Water Exchange

A water exchange with Los Angeles Department of Water and Power (LADWP) is being investigated. The water exchange would include providing treated water to LADWP in the vicinity of a future treatment plant, in exchange for LADWP providing water to the City of Beverly Hills from an existing interconnection, or from a new interconnection location.

Meetings and correspondence with LADWP have been conducted on this issue, however, the details are still being discussed within each respective agency. Key discussion points have included among other items:

- a. Water Quality requirements (hydraulic, treatment, and blending requirements).
- b. Financial implications (initial buy-in costs, operations & maintenance costs).
- c. Technical requirements (locations and method of tie-in at potential points of connections).
- d. Legal requirements (MOU or other form of agreement between the two agencies).

- e. Risk management and responsibility (extent of shared risk and responsibility during a main leak, etc.).

The City continues to discuss the potential for a Water Exchange with LADWP. Subsequent meetings will be scheduled once the details of the framework for the water exchange are reviewed internally by the respective agencies.

2. Water Conservation

The WEP recommended both a tailored and state mandated conservation program to minimally meet the requirements of SBx7-7 and to promote long-term water efficiency.

The City of Beverly Hills has a variety of water conservation programs and projects that have been tailored to meet Beverly Hills' unique characteristics. They include:

- a. A vigorous leak detection program where staff actively contacts the top 100 residential customers with continuous flow issues, assists them with awareness, education, and repair. Continuous flow assistance is also provided for multi-family and commercial customers.
- b. Water audits performed for residential customers to provide direction and education on efficient irrigation. Indoor devices are also appraised. Water audits are offered to multifamily and businesses mainly focusing on indoor water use.
- c. Outreach provided via flyers, email, ads, website, social media, and cable TV. Topics include efficient irrigation, watering trees, how to find a leak, and the City's Water Tracker program. Water Tracker is a web-based tool that allows customers to track their water. This program is free to our customers and displays usage as well as continuous flow.
- d. One-on-one technical assistance on how to sign up for Water Tracker, how to read one's meter, how to detect continuous flow, and how to use water more efficiently.
- e. Water saving devices including free hose nozzles with shut-off valves, low-flow showerheads and aerators offered to customers at no charge. The City also provides supplemental rebate funding, in addition to Metropolitan Water District, on devices like premium high efficiency toilets, washing machines, urinals, and weather-based irrigation controllers.
- f. Public outreach at various events, water wise landscaping workshops, and presentations to local groups.
- g. School outreach to the local school district via the PTA, teachers, and students.

Recently, the City updated its 2015 Urban Water Management Plan (UWMP) delineating in detail its conservation efforts, which indicated that the City has met the conservation requirements for SBx7-7 going forward. Additionally, the 2015 UWMP indicated a water loss rate of 6%, which was well within the acceptable range for water utilities of its size.

As a result, the City is not currently pursuing a separate water loss program as recommended by the WEP, as its current water loss ratio is already within best management practices for comparable utilities.

3. Water Staffing

Per the WEP, several key staff positions have already been filled. This includes the Water Conservation Administrator (Debby Figoni) and Water Resources Manager (Vince Damasse) in December 2015 and January 2016, respectively. Two of the three recommended project managers have been hired (Vincent Chee and Derek Nguyen) in 2015. The need for the third recommended remaining project manager and miscellaneous Operations personnel will be re-evaluated to help implement the recommended water supply portfolio from the WEP as the need arises.

4. Water Banking

The City has initiated the concept of formulating water banking as an option. The City has contacted Irvine Ranch Water District (IRWD) to discuss the feasibility of accessing stored water during severe drought conditions. The IRWD has expressed interest in pursuing this discussion with the City, however, due to its current workload; it has deferred this discussion until a later time in the near future. Additionally, the City has begun discussions with MWD regarding water banking as part of its initial discussions with acquiring additional Table "A" water rights. MWD has stated that as a regional wholesaler they could only facilitate such a discussion but not necessarily partake in a water banking option with one of its member agencies. At this time, water banking is still potentially an option that the City may pursue as the opportunity arises.