

TO: Scott Mitnick, City Manager

FROM: Jay T. Spurgin, Public Works Director

DATE: February 23, 2016

SUBJECT: Conejo Valley Groundwater Study Approval (MI 2104)

RECOMMENDATION:

Approve the Conejo Valley Groundwater Study.

FINANCIAL IMPACT:

No Additional Funding Requested. \$1.2 million for related projects is included in the adopted FY 2015-16 and FY 2016-17 Water Fund Capital Improvement Budget. Staff will return to City Council for authorization to expend funds as specific projects are identified and are ready to move forward.

BACKGROUND:

Groundwater was the sole source of water supply for the Conejo Valley prior to arrival of imported water in the late 1960s. Almost 500 wells had been drilled throughout the valley, with yield, quality, and pumping levels varying significantly depending on location. Groundwater levels dropped significantly by the early 1970s due to prior pumping, but have recovered since then as evidenced by present water seeps in many locations. Most wells have been abandoned over the years, with only a few remaining in service, including several owned by the City.

The City's current potable water supply is essentially 100 percent imported water delivered by the County's wholesale agency Calleguas Municipal Water District (Calleguas). There are three water purveyors serving Thousand Oaks: City of Thousand Oaks, California American Water Company, and California Water Service Company. The cost of imported water has increased significantly in recent years; in fact, water costs have doubled in just the past seven years. These rising costs, along with growing uncertainty as to the reliability of imported water due to drought and environmental conditions, have resulted in many Ventura County water purveyors looking at developing local water resources.

Reclaimed water use is limited to the east end of the City through infrastructure owned by the Las Virgenes Municipal Water District (MWD)/Triunfo Sanitation District JPA and Calleguas. Reclaimed water from the City's Hill Canyon Wastewater Treatment Plant is fully re-used downstream by the Camrosa Water District.

In June 2014, City Council approved an agreement with CDM Smith of Los Angeles to study the viability of groundwater and other local water supplies in the Conejo Valley. The overall conclusion from the completed study is that groundwater can be developed as a new local supplemental supply for the City.

DISCUSSION/ANALYSIS:

A copy of the completed study report is available for review in the City Council reading area in the City Manager's Office, the City Clerk Department and online at www.toaks.org/groundwater study. The executive summary is attached (Attachment #1). The study reviewed groundwater in the Conejo Valley, including available quantity, quality, and location. Potential customers for non-potable water were identified. The viability of expanding reclaimed water was reviewed in conjunction with a study recently completed by the Las Virgenes Municipal Water District. Costs and feasibility of treatment options were evaluated, including desalting groundwater for non-potable and potable use. Groundwater and reuse supply options were evaluated using objectives and metrics that assessed and scored water reliability, cost effectiveness, ease of implementation, operational and environmental considerations, and water quality. An adaptive phased implementation strategy incorporating the study results is recommended for near-, mid- and long-term options that build on information developed and successes from prior projects.

The safe yield of the Conejo Valley Groundwater Basin is estimated to be 3,500 acre-feet per year. This is approximately ten percent of the total water use within the City. The quality of groundwater in the valley varies significantly; from about 500 mg/l total dissolved solids (TDS) in the Newbury Park area to well over 1,000 TDS in the eastern City area. The TDS level of imported water is about 400. Costs for new groundwater wells and treatment, as well as other alternative water supply projects, have lower life cycle costs than continuing with imported state water supply.

The City worked closely with key stakeholders including the Conejo Recreation and Park District, Conejo Valley Unified School District, California American Water Company, California Water Service Company, Calleguas, Las Virgenes MWD and the County Watershed Protection District. Going forward, collaboration with these stakeholders will be essential for successful implementation of recommended local supply projects. Additionally, as required by the Sustainable Groundwater Management Act enacted by the state in 2014, a Sustainable Groundwater Agency must be formed for our basin to oversee groundwater use

to ensure it is not over drafted. Close collaboration with all the stakeholders will be critical for successful governance by the Groundwater Sustainability Agency.

This project has been successful in that opportunities for local, more reliable, and less expensive water sources for all City of Thousand Oaks residents and businesses have been identified.

COUNCIL GOAL COMPLIANCE:

Meets City Council Goals B and E:

- B. Operate City government in a fiscally and managerially responsible and prudent manner to ensure that the City of Thousand Oaks remains one of California's most desirable places to live, work, visit, recreate, and raise a family.
- E. Provide and enhance essential infrastructure to ensure that the goals and policies of the Thousand Oaks General Plan are carried out and the City retains its role and reputation as a leader in protecting the environment and preserving limited natural resources.

Attachment:

Attachment #1 – Groundwater Study Report Executive Summary

Document Provided Under Separate Cover:

#1 – Completed Groundwater Study Report