AGENDA DATE: April 9, 2019

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Approval Of Task Order Consulting Services Contract For Water Conservation Program

RECOMMENDATION:

That Council authorize the Public Works Director to execute a five-year Task-Order Agreement with Maddaus Water Management in an amount not to exceed $150,000.

DISCUSSION:

The City’s primary water supply management tool is its Long Term Water Supply Plan (LTWSP). The goal of the last LTWSP update (2011) was to evaluate the adequacy and reliability of the City’s water supplies and provide a long-term view of how the water supplies should be managed. The City’s LTWSP water conservation policy states that the City will operate a water conservation program aimed at minimizing the use of potable water supplies, meeting the requirements of the California Urban Water Conservation Council Best Management Practices, and achieving compliance with 20 X 2020 per capita water use limitations.

In 2010, in support of the LTWSP update, the City worked with Maddaus Water Management (MWM) to complete a quantitative, technical cost/benefit analysis of the future options for the City’s Water Conservation Program using the Least Cost Planning Demand Management Decision Support System (DSS Model). Upon completion of the modeling effort, a technical memo was developed outlining a water conservation program designed to meet the goals of the City’s LTWSP. Since then, the City worked with MWM in 2014 to update the DSS Model to reflect changing water supply and community needs to ensure the City’s water conservation remained cost-effective and successful.

Staff recommends the execution of a task-order agreement, which authorizes a maximum billable amount for a period of time but does not have a pre-determined scope of work for the total contract amount. In the case of MWM’s contract, there are portions that have set pricing, scope of work, and delivery terms, whereas other portions are on a task-order basis. City staff will negotiate the deliverables and pricing of these tasks prior to authorizing the work from MWM. The City is not obligated to use the task-order provisions in the agreement and may choose to solicit other proposals for task-order work.
Selection Process

MWM is staffed by registered engineers and takes a technically rigorous approach to water management planning using proven engineering estimates of water savings and cost-effectiveness analysis, including detailed financial analysis of utility costs and benefits. MWM was selected because it is widely recognized for its expertise and capabilities in water resources management, drought and water conservation planning evaluations, and for innovative contributions in demand management technology and integrated water resources planning. MWM has helped more than 200 California utilities prepare demand forecasts and water conservation plans since 1990. In addition, the City has worked with MWM on an ongoing basis using its proprietary DSS Model and for technical expert support using its Commercial, Institutional, and Industrial (CII) water conservation program, described below.

MWM’s proposed rates are reasonable and comparable to those of other professional engineers and technical staff performing similar work. Additionally, the tasks related to the DSS Model and CII Program are at a significantly reduced cost compared to contracting with similar consultants since these programs have already been developed with MWM through previous contracts as a result of Requests For Proposals. The DSS and CII items in this task-order contract are considered updates to the existing programs staff has developed with MWM. For the above reasons, staff recommends that Council authorize the Public Works Director to execute a five-year task-order agreement with MWM in an amount not to exceed $150,000.

DSS Model

The City originally used MWM’s DSS Model to develop a water conservation program for the LTWSP update in 2011. In 2014, the City worked with MWM again to update the DSS Model in response to changing water supply conditions. The City recently experienced record drought conditions that exceeded the “design drought” in the 2011 LTWSP. In addition, state regulatory agencies are proposing new statewide regulations related to water conservation. In light of the changed water supply situation and these new regulations, the City wishes to update the DSS Model again in order to re-evaluate the City’s water conservation program, ensuring it remains both cost-effective and successful at reducing the City’s potable water demand to meet state regulations.

In this task, MWM will update the DSS Model with up to 25 water conservation measures, assist staff with conservation measure screening, review the water savings values associated with each conservation measure, update the City’s avoided cost of water within the model based on current water supply costs, and update the model to reflect the most current codes and standards in order to project associated water savings. At the end of the modeling process, MWM will provide a Technical Memorandum summarizing the modeling results.
CII Audits and Technical Support

The CII Water Use Survey and Custom Incentive Program (CII Program) was developed through technical analysis and modeling of the City’s Water Conservation Program using the DSS Model, which developed cost-effective water conservation measures. The CII Program targets the City’s high-water-using commercial, industrial, and institutional customers, providing them with water use surveys and custom incentives for conservation. For the past six years, MWM’s water use efficiency experts have assisted with implementation of CII water use surveys. As a result of the surveys, recommendations for potential methods and/or equipment that a CII business can employ to reduce its site’s water consumption, specific to the type of business being evaluated, are provided. Once the survey has been completed, the City, with assistance from MWM, analyzes the recommended project’s cost/benefit ratio using the CII Water Audit Tool to determine if the site qualifies for a financial incentive. The goal is for the CII customer to implement the suggested conservation methods and therefore reduce its potable water consumption. MWM will conduct up to five specialized CII water audits and provide technical services related to the CII Water Audit Tool. The CII Water Audit Tool is a proprietary product of MWM, and this task also includes an annual license for the City’s use of the tool.

On-Call Support for Long Term Water Supply Plan and State Legislation

On June 14, 2011, the City adopted an update to its LTWSP in order to analyze water supply for the City’s 2011 General Plan Update. Since 2011, the City has experienced the most severe and long-lasting drought on record, exceeding the “design drought” used in the 2011 LTWSP analysis. The community has responded with dramatic reductions in demand through conservation, yet the City was still required to reactivate its Charles E. Meyer Desalination Plant as an additional source of supply. Additionally, several issues have arisen since 2011 that have the potential to affect the availability of the City’s current water supplies moving forward. The City desires to update its LTWSP to reassess the adequacy, reliability, and cost of its water supplies with respect to these issues. MWM will provide as-needed on-call support to the City as it works to update the LTWSP. This support may include, but is not limited to:

- Creation and/or revision of water demand forecasts
- Creation and/or revision of conservation savings forecasts
- Assistance with text chapters in the plan as requested by the City
- Assistance with graphics for the plan as requested by the City

In addition, MWM will provide as-needed on-call support to address any requirements determined by new California state legislation as set forth in Executive Order B-37-16. Released by Governor Brown on April 7, 2015, Executive Order B-37-16, “Making Water Conservation a California Way of Life,” establishes new long-term water conservation measures for California. The order directs five separate state agencies to develop permanent water conservation regulations, as well as new water efficiency targets for urban water suppliers, in order to use water more wisely, eliminate water waste,
strengthen local drought resistance, and improve agricultural water use efficiency and
drought planning. The state agencies continue to develop the new regulations and
targets, and MWM will assist the City in determining how it can meet new requirements
as they arise.

**BUDGET/FINANCIAL INFORMATION:**

There are sufficient appropriated funds in the Water Supply Management Fund to fund
these professional consulting services. The cost for each individual project and task will
be negotiated in advance of and encumbered prior to the start of the work. The cost of all
work under this task-order agreement will not exceed $150,000 over the course of five
years.

**SUSTAINABILITY IMPACT:**

The City of Santa Barbara is a long-term leader in water conservation. Updating the DSS
Model and the LTWSP provides the community a long-term view of how the City's water
supplies should be managed and conserved. Current and new conservation measures
that reduce future water demand will be identified and coupled with an evaluation of the
costs and water savings of these programs. These updates ensure that the City continues
to operate a cost-effective water conservation program that meets or exceeds current and
future state regulations.

The Water Commission reviewed this item at a special meeting on March 28, 2019 and
voted X-X in support of staff’s recommendation.

A copy of the contract/agreement is available for public review in the City Clerk’s Office.

**PREPARED BY:** Madeline Wood, Water Conservation Supervisor/DC/js

**SUBMITTED BY:** Rebecca J. Bjork, Public Works Director

**APPROVED BY:** City Administrator’s Office