



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: May 6, 2014

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Contract For Preliminary Design Services For Recommissioning The Charles E. Meyer Desalination Facility

RECOMMENDATION: That Council:

- A. Authorize the Public Works Director to execute a City Professional Services Contract, subject to approval as to form by the City Attorney, with Carollo Engineers, Inc., in the amount of \$746,025 for preliminary design services for recommissioning the Charles E. Meyer Desalination Facility, and authorize the Public Works Director to approve expenditures of up to \$74,603 for extra services of Carollo Engineers, Inc., that may result from necessary changes in the scope of work;
- B. Authorize the City Administrator to negotiate and execute a City Professional Services contract, subject to approval as to form with the City Attorney, with McCabe and Company, Inc., in an amount not to exceed \$90,000 for support services related to the City's existing Coastal Development Permit for the Desalination Plant;
- C. Authorize the City Attorney to negotiate and execute a City Professional Services contract with Hanson Bridgett LLP, in an amount not to exceed \$25,000 for legal support services related to contracting for services to design, build, and operate the Desalination Plant, and other contractual requirements as needed.

EXECUTIVE SUMMARY:

After three years of below-average rainfall, the City declared a Stage One Drought on February 11, 2014. Lake Cachuma and Gibraltar Reservoir, which provide the majority of the City's water supply, are at low levels due to record low rainfall in the last year. According to the City's 2011 Long Term Water Supply Plan, in this situation, the City would consider using "Drought Supplies" such as banked State Water during dry periods or purchasing of water to fill in short term needs during the critical drought period. However, considering the unprecedented nature of the current statewide drought, the City needs to be prepared to bring the desalination plant back on-line to ensure reliable drought supplies should the dry weather persist through additional years.

DISCUSSION:

BACKGROUND

In the face of a challenging water supply crisis in the late 1980s, the City of Santa Barbara (City) constructed the Charles E. Meyer Desalination Facility, a seawater desalination facility, as an emergency supply. The desalination facility was constructed through a public-private partnership under which a private company designed, built and operated the facility in return for which the City, along with Montecito Water District and Goleta Water District, committed to purchase an agreed-upon amount of water. The production capacity of the facility was 7,500 acre feet per year (AFY), with the potential for an expansion up to 10,000 AFY. During the five-year contract period, the City agreed to purchase 3,181 AFY, the Montecito Water District agreed to purchase 1,250 AFY and the Goleta Water District agreed to purchase 3,069 AFY.

After the facility was constructed, it was in operation between March and June of 1992. After abundant rainfall in the 1991-1992 winter and subsequent winters, the City's drought condition was relieved, and the facility was placed in a standby mode. Despite being on standby mode, the \$34 million total construction cost was paid to the contractor during the initial five-year contract period by the City, along with the Montecito and Goleta Water Districts, with the City's share being approximately \$14.5 million. The other participating districts paid a share in proportion to their water entitlement. The Montecito and Goleta Water Districts elected to terminate their interest in the desalination facility after the initial five-year contract period.

On June 4, 1991, City voters elected to make desalination a permanent part of the City's water supply portfolio. With the approval of the Long Term Water Supply Program on July 5, 1994, the City added the facility to its permanent sources of water. A corresponding Environmental Impact Report was certified on May 24, 1994. On October 15, 1996, the California Coastal Commission issued a Coastal Development Permit to the City for permanent desalination facilities up to a maximum capacity of 10,000 AFY. The permit provided for intermittent or on-going operation.

The City's intention, as presented in the City's 2011 Long Term Water Supply Plan, is to use the facility as a drought relief measure, on an as-needed basis. A facility capacity of 3,125 AFY was used for purposes of analysis related to the 2011 plan. However, it is recommended that the capacity of the Facility be re-evaluated based on circumstances of the current drought.

Assuming a continuation of current weather conditions, staff is preparing to have a Design-Build-Operate contract for Council to consider for award as early as April 2015, which would tentatively have the desalination facility in operation by 2016. The scope of this preliminary design contract will include providing a detailed project delivery schedule for planning purposes. The findings of the preliminary design contract are

anticipated to be presented to Council in early Fall 2014. City staff continues to recommend deferring the substantial cost of reactivating the facility as long as reasonably possible, depending on water supply and demand factors.

PROJECT DESCRIPTION

The preliminary design service work consists of three phases, each of which will be conducted to the extent necessary, based on evolving water supply conditions:

Phase 1: Study

- Capacity alternatives
- Distribution analysis
- Define permit and regulatory requirements
- Reactivation plan
- Detailed facility inspection and documentation, detailed cost estimate
- Detailed project delivery schedule
- Financing alternatives

Phase 2: Performance Specification

- Develop performance specification contract documents
- Prequalify contractors to submit proposals/bids to design, permit, construct, operate, and maintain the facility

Phase 3: Proposal/Bid Evaluation

- Develop bid evaluation criteria
- Respond to bid phase questions
- Assist City in bid evaluation

Discussions will occur in the Study Phase between the Coastal Commission, the Regional Water Quality Control Board, Carollo Engineers, and City staff regarding the existing CDP. Also, the State Water Resources Control Board is developing Ocean Plan amendments which may affect requirements concerning the facility's ocean intake. The effect of these items, if any, is unknown at this time. Staff will keep Council informed as information becomes available.

PERMITS

As mentioned above, in 1996, the City obtained the necessary permits to make the desalination facility a permanent part of the City's water supply portfolio, including a Coastal Development Permit. The City has maintained the facility in such a manner that it could be restarted in accordance with the conditions of the permit. In March 2014, Staff sent a letter to the Coastal Commission advising them of the City's intentions of restarting the facility. In April 2014, Staff received a response from Coastal Commission staff stating they believed a new permit would be required. As part of the scope of

services recommended, staff has put together a team of experts on this issue to work with Coastal Commission staff to fully understand the scope of the existing permits and determine what, if any, additional studies or permits might be needed.. Staff anticipates having a much more defined path on this issue at the conclusion of the preliminary design study in early Fall 2014.

At this time, there are limited guidelines for the construction and operation of desalination facilities in California. The State Water Resources Control Board has been working on updates to the California Ocean Plan to establish standards for desalination plants. Staff has been told that a draft of the Ocean Plan Amendments and substitute environmental document are anticipated in late 2014. When made available, staff, along with our consultant team, will review these documents to better understand how they may impact our facility. Ocean Plan amendments are not anticipated until 2015.

PRELIMINARY DESIGN PHASE CONSULTANT SERVICES

A request for proposals was sent to 11 firms, with three qualified firms responding. A review panel consisting of five City employees and two representatives from the Montecito Water District evaluated the proposals and interviewed the three firms. The panel determined that Carollo was experienced in this type of work and most responsive to the City's needs. Therefore, staff recommends that Council authorize the Public Works Director to execute a contract with Carollo in the amount of \$746,025 for preliminary design services and \$74,603 for potential extra services, for a total amount of \$820,628. At their meeting on April 14, 2014, the Water Commission voted 4/0 to concur with staff's recommendation.

Considering the complexities surrounding the City's existing Coastal Development Permit, staff recommends contracting with McCabe and Company for services related to lobbying the Coastal Commission to clarify the permitting requirements. Staff recommends that Council authorize the City Administrator to negotiate and execute a contract with McCabe and Company in an amount not to exceed \$90,000.

The original facility was built through a design-build-operate contract in the early 1990s. This type of contracting method allows the design and construction to occur in parallel, which has the effect of expediting the delivery schedule while making the contractor responsible for the timely production and operation of the facility. Because of the unique and complex nature of design-build-operate contracts, staff recommends contracting with a legal firm who specializes in such contracts. Staff recommends that Council authorize the City Attorney to negotiate and execute a legal services contract with Hanson Bridgett LLP in an amount not to exceed \$25,000. Hanson Bridgett is experienced with this method of procurement. The firm has worked on some of the largest public infrastructure projects in the state.

Because of the severe nature of this drought, the Montecito Water District board president has expressed an interest in joining Santa Barbara in its effort to reactivate the Facility. Once Staff has a better understanding of the issues involved, it will be in a better position to discuss what options might available to partner with Montecito Water District.

FUNDING

There are sufficient funds appropriated for various projects in the Water Capital Fund approved by Council in the June 2013 budget adoption process. On May 13, 2014, as part of the City's 3rd Quarter Budget Review, staff will be requesting Council's approval for a comprehensive reprogramming of some existing budgeted capital projects to fund this and other extraordinary and unplanned drought related projects.

PREPARED BY: Joshua Haggmark, Acting Water Resources Manager/RLR/mh

SUBMITTED BY: Rebecca J. Bjork, Public Works Director

APPROVED BY: City Administrator's Office



Preliminary Design Services for Reactivation of the Charles E. Meyer Desalination Facility



May 6, 2014

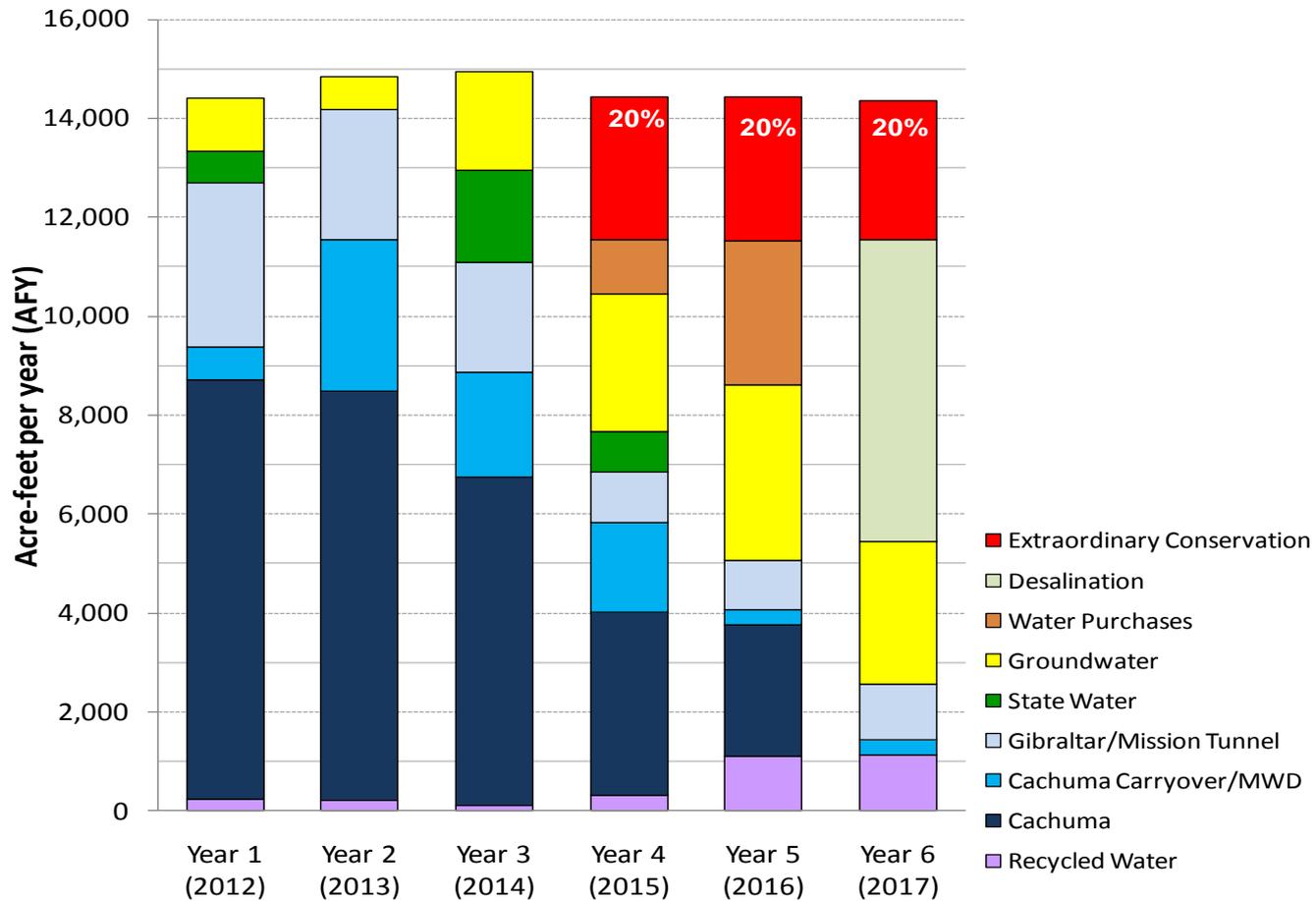


Outline

- ◆ Water Supply Update
- ◆ Desalination Facility History
- ◆ Consultant Selection Process
- ◆ Scope/Schedule/Cost
- ◆ Project Uncertainties
- ◆ Recommendation

Current Supply Strategy

(based on no reservoir inflows, no State Water)





Water Shortage Contingency Plan

- ◆ Supplemental Water Purchases
- ◆ Extraordinary Conservation
 - Regulations
 - Rates
- ◆ Desalination



History

- ◆ Charles E. Meyer Desalination Facility was completed in 1992
- ◆ Placed in Long Term Standby Mode in 1994
- ◆ Permanent Permitting was Completed in 1996
- ◆ Desalination Facility has been part of the Long Term Water Supply Plan since 1994
- ◆ LTWSP was updated and adopted in 2011



Consultant Selection

- ◆ RFP went to 11 firms
- ◆ Three qualified firms responded
- ◆ Seven person review panel



Scope

- ◆ Phase 1: Study
 - Capacity
 - Evaluate Technology
 - Permits
 - Financing Alternatives



Scope

- ◆ Phase 2: Performance Design/Build/Operate (DBO) Specifications
 - Develop Contract Documents
 - Design
 - Permitting
 - Construction
 - Operate and Maintain
 - Benefits of DBO
 - Accelerated Schedule
 - Reduced Risk



Scope

- ◆ Phase 3: DBO Proposal Evaluation
 - Assist the City with evaluation of proposals and alternatives

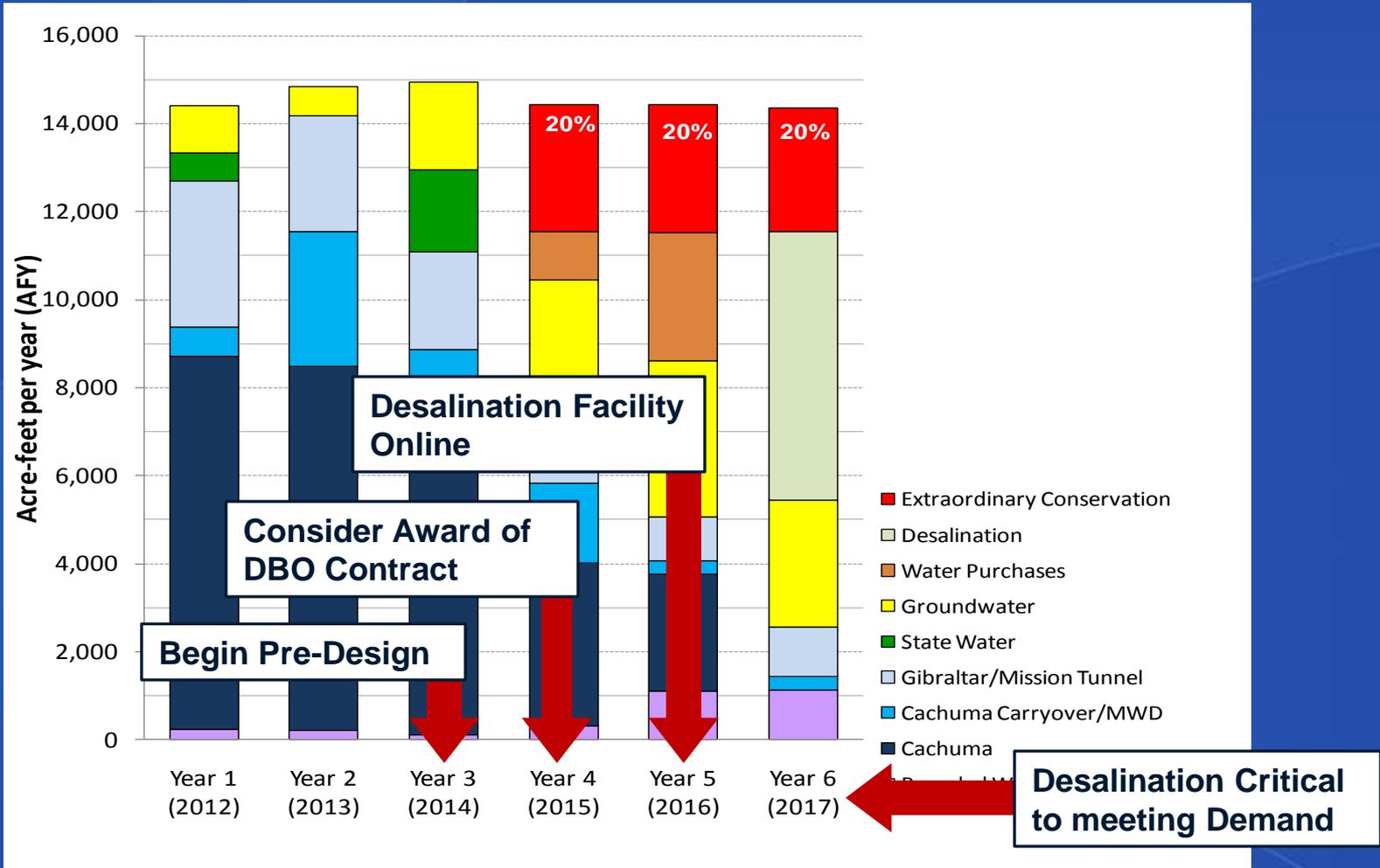


Schedule

- ◆ May 6, 2014 – Award of Preliminary Design and Permitting Services Contracts
- ◆ September 2014 – Present Summary of Findings with Staff Recommendations
- ◆ November 2014 – Release RFP for DBO
- ◆ February 2015 – Receive Proposals for DBO
- ◆ April 2015 – Council to Consider Award depending on Water Supply Status
- ◆ Summer 2016 – Desal Facility could be in Operation

Supply Strategy/Desal Timeline

(based on no reservoir inflows, no State Water)





Cost

- ◆ Preliminary Design and Permitting Services Contracts - \$935,628
- ◆ Reactivate Facility at 3,125 AFY Capacity based on 2009 Carollo Study
 - \$20M - Estimated Reactivation Costs
 - \$3M - 15% Inflation
 - \$5.75M - 25% Contingency
- ◆ \$28.75M - Total Estimated Cost to Reactivate
- ◆ \$5M – Estimated Cost for Annual Operation



Project Uncertainties

- Funding
 - Grants
 - State Revolving Fund Loan
 - Bonds/COPs
- Permits
 - Coastal Development Permit
 - NPDES

Coastal Development Permit History



- Temporary Permit issued in 1991
- Permanent Permit Issued in 1996
- Identified Four Operating Scenarios
 - Scenario 1: Intermittent Operation to meet the drought needs of the City
- March 2014 – Letter to CCC informing them of intentions to reactivate the facility
- April 2014 - Response from CCC



Next Steps in Permitting

- ◆ May 21 – Interagency meeting in Sacramento
 - California Coastal Commission (CCC)
 - California Water Resources Control Board
 - California Ocean Protection Council
 - Central Coast Regional Water Quality Control Board
- ◆ May 22 – Follow-up meeting with CCC in San Francisco



Recommendation

- ◆ Authorize a contract with Carollo Engineers for Preliminary Design Services in the amount not to exceed \$820,628.
- ◆ Authorize a contract for McCabe and Company in an amount not to exceed \$90,000 for lobbying support services.
- ◆ Authorize a contract with Hansen Bridgett in an amount not to exceed \$25,000 for legal support services.