



# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** April 9, 2013

**TO:** Mayor and Councilmembers

**FROM:** Water Resources, Public Works Department

**SUBJECT:** Approval Of Contract For Bathymetric Survey Of Gibraltar Reservoir

### RECOMMENDATION:

That Council authorize the Public Works Director to execute a professional services contract to MNS Engineers, Inc., in the amount of \$28,510 and in a form of agreement acceptable to the City Attorney, to perform a bathymetric survey of Gibraltar Reservoir, and approve expenditures of \$2,851 for extra services that may result from necessary changes in the scope of work, for a total of \$31,361.

### DISCUSSION:

The City of Santa Barbara owns and operates the Gibraltar Reservoir (Reservoir), which provides approximately 35 percent of the City's water supply through Mission Tunnel. The Reservoir has been losing storage capacity at a rate of approximately 76 acre-feet per year from the influx of silt and debris. A bathymetric survey has been performed every three years over the past two decades to determine the remaining storage capacity of the Reservoir. The survey is conducted by measuring the depth of the Reservoir at various locations and then using the measurements to calculate the remaining storage capacity relative to the top of Gibraltar Dam.

The Zaca Fire burned more than 60 percent of the Reservoir watershed, and the subsequent winter rains have caused significant debris flows into the Reservoir, which has accelerated the rate at which the Reservoir was being filled in with debris. MNS Engineers, Inc., (MNS) performed a bathymetric survey of the Reservoir in October 2007, after the Zaca Fire, but prior to the winter rains. The 2007 survey determined the Reservoir had approximately 7,500 acre feet of remaining storage capacity. MNS performed a follow-up bathymetric survey in 2008, after the first winter following the Zaca Fire. The 2008 survey demonstrated that the Reservoir had lost approximately 30 percent of its 2007 capacity and had only 5,300 acre feet of capacity remaining. The 2010 bathymetric survey determined that the amount of storage capacity continued to be reduced by 1 percent after two additional winters following the Zaca Fire. The proposed 2013 bathymetric survey will continue to monitor the amount of storage capacity that is remaining.

MNS was selected for consistency in reporting, since they have performed the surveys at Gibraltar for the past 18 years and are one of the consultants on the City's three-year, pre-approved engineering consultant list, which was created using a competitive qualification-based process for engineering services. MNS has submitted an acceptable proposal in the amount of \$28,510 to complete the proposed work, which is lower than their 2010 rate of \$28,535 for similar services. Staff is also requesting \$2,851 in change order authority to cover any unanticipated expenses, for a total amount of \$31,361.

### **BUDGET/FINANCIAL INFORMATION**

Water Resources conducts bathymetric surveys at Gibraltar Reservoir every three years. There are sufficient appropriated funds in the Water Fund to cover the project costs.

### **SUSTAINABILITY IMPACT**

The bathymetric study helps to determine the amount of available water in the Reservoir. The data gained by the study is necessary to develop and manage the City's water supply and to mitigate the effects of drought.

**PREPARED BY:** Cathy Taylor, Water System Manager/AF/mj

**SUBMITTED BY:** Christine F. Andersen, Public Works Director

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