



BOARD OF SUPERVISORS
AGENDA LETTER

Agenda Number:

Clerk of the Board of Supervisors
105 E. Anapamu Street, Suite 407
Santa Barbara, CA 93101
(805) 568-2240

Department Name: Water Agency
Department No.: 054
For Agenda Of: 11/06/07
Placement: Administrative
Estimated Tme:
Continued Item: No
If Yes, date from:
Vote Required: Majority

TO: Board of Directors, Water Agency

FROM: Department Scott McGolpin, Public Works Director, 568-3010
Director(s)
Contact Info: Thomas D. Fayram, Deputy Public Works Director

SUBJECT: **Agreement with MNS Engineers Inc. to Provide Aerial Survey of Twitchell Reservoir, Fifth Supervisorial District**

County Counsel Concurrence

As to form: Yes

Auditor-Controller Concurrence

As to form: Yes

Other Concurrence: Risk Management

As to form: Yes

Recommended Actions:

- a) Approve and authorize the Chair to execute an Agreement with MNS Engineers Inc. to perform an aerial survey and produce updated area capacity tables for Twitchell Reservoir in the amount of not to exceed \$124,800 for the period of November 6, 2007 through January 31, 2008; and
- b) Approve a 10% contingency with MNS Engineers Inc. in the amount \$12,480 for any work needed to complete the project.

Summary Text:

The attached agreement would provide for an aerial topography survey to be performed on Twitchell Reservoir and updated area-capacity tables to be generated. The area-capacity tables are important to be able to relate water surface elevation to the volume of water in the facility and accurately calculate inflow to and outflow from the reservoir.

Background:

Twitchell Reservoir, located seven miles northwest of the City of Santa Maria, captures storm runoff from the 1,135 square mile Cuyama River watershed which augments recharge to the Santa Maria groundwater basin as well as providing flood protection to the Santa Maria Valley. The last topographical survey was completed in 2000 and is out of date due to sediment deposited during the winters of 2001 and 2005. Updated area-capacity tables are needed to accurately relate water surface

elevation to the volume of water in the facility and make precise calculations of inflow and outflow. Precise inflow and outflow numbers are needed not only for monitoring of storm events and design of projects in or near the Cuyama and Santa Maria River watercourses but also to determine the long-term yield of the reservoir. In addition, the survey will also aide with sediment management alternatives as it will enable calculations of sediment flux during the past seven years.

Water Agency staff has been working with the Bureau of Reclamation, Corps of Engineers, and Santa Maria Valley Water Conservation District on several improvements to data collection and management at Twitchell Dam. Additional instrumentation has been installed that will telemeter lake level and gate opening to interested agencies. A digital operations spreadsheet has been constructed to allow digital storage and automated calculations of inflow and outflow. The proposed survey would aide in overall progress of these other projects and is a key component of accurate data acquisition and dissemination at Twitchell Reservoir.

Fiscal and Facilities Impacts:

Budgeted: Yes

Fiscal Analysis:

<u>Funding Sources</u>	<u>Current FY Cost:</u>	<u>Annualized On-going Cost:</u>	<u>Total One-Time Project Cost</u>
General Fund			
State			
HUD Grant (federal)	\$ 137,280.00		
Fees			
Other:			
Total	\$ 137,280.00	\$ -	\$ -

Narrative:

This project was included in the 2007-08 Adopted Budget under the Water Agency cost center of the Water Resources Division of the Public Works Department as shown on page D-318 in the budget book. Funds will be paid from the Reservoir Administration program: 3011, Profession Services line item account: 7460, Fund: 3050.

Special Instructions:

Direct the Clerk of the Board to return to originals of the Agreement with MNS Engineers Inc. along with a copy of the minute order of these actions to the Water Agency office; Attn: Christina Lopez.

Attachments:

Contract Summary
 Agreement with MNS Engineers Inc. (three originals)

Authored by: Dennis Gibbs, Hydrologist, SR., 739-8781