



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: October 10, 2017
Placement: Administrative
Estimated Tme: N/A
Continued Item: No
If Yes, date from:
Vote Required: Majority

TO: Board of Directors, Water Agency

FROM: Department Scott D. McGolpin, Public Works Director, 568-3010
Director(s)
Contact Info: Thomas D. Fayram, Deputy Public Works Director, 568-3436

SUBJECT: Cloud Seeding Program 2017-18, All Supervisorial Districts

County Counsel Concurrence

As to form: Yes

Auditor-Controller Concurrence

As to form: Yes

Other Concurrence: Risk Management and
Planning & Development
As to form: Yes

Recommended Actions:

- a) Approve the 2017-2018 Cloud Seeding Program and authorize the Chair to execute the agreement with North American Weather Consultants (not a local vendor) for cloud seeding for the period of October 10, 2017 through June 30, 2018 unless earlier terminated, in an amount not to exceed \$147,300;
- b) Consider the 2017 Addendum to the Mitigated Negative Declaration 13NGD-00000-00011 which the Board adopted on October 15, 2013; and
- c) After considering the Mitigated Negative Declaration and the 2017 Addendum to the Mitigated Negative Declaration, determine pursuant to California Environmental Quality Act Guidelines Section 15162(a) that no subsequent Environmental Impact Report or Negative Declaration is required for this project because: 1) No substantial changes are proposed in the project which require major revisions of the Mitigated Negative Declaration; 2) No substantial changes have occurred with respect to the circumstances under which the project is undertaken which require major revisions of the Mitigated Negative Declaration; and 3) No new information of substantial importance concerning the project's significant effects or mitigation measures exists which was not known and could not have been known with the exercise of reasonable diligence at the time that the Mitigated Negative Declaration was adopted on October 15, 2013. The Mitigated Negative Declaration is located at:

<https://santabarbara.legistar.com/LegislationDetail.aspx?ID=1488396&GUID=8B49D500-ED74-4C50-BB4A-AEDBCBA813BE>

Summary Text:

This item is on the agenda in order to approve and execute the agreement for this year's cloud seeding program. The agreement with North American Weather Consultants (NAWC) provides for a five month ground based cloud seeding program for the Twitchell Reservoir Watershed. Programs conducted during the last 37 years (excluding the 1985-1986 winter after the Wheeler Fire and the 2007-2008 winter after the Zaca Fire) included ground and air based seeding for both the Twitchell and Lake Cachuma watersheds. As a result of the Whittier Fire, all parties to the Santa Ynez River watershed agreed to not conduct a program for the Lake Cachuma Watershed this winter to address concerns over potential increased erosion and sedimentation. The program was bid in 2017 as a "professional services contract" with the option to re-hire the contractor without re-bidding for five years and NAWC was awarded the contract. There are no local cloud seeding vendors. Seeding operations will be conducted November 15, 2017 – April 15, 2018 given suitable conditions. Should suitable conditions occur and provided NAWC's setup is complete, operations may proceed prior to November 15.

Alignment with other River System Interests and Safety Concerns

Special suspension criteria have been established to avoid any undesirable effects from the program. No targeting of or seeding operations which affect urbanized areas will be conducted, only backcountry watersheds behind Twitchell Reservoir. When it is apparent that Twitchell Reservoir will fill or flows on the Cuyama and other tributaries that feed into the Reservoir approach significant volume, seeding operations shall be suspended. The program includes operational constraints designed to preclude or limit seeding effects over burn and flood sensitive areas. For example, cloud seeding operations shall be suspended in the Twitchell Reservoir Watershed when Water Agency staff project the potential of adverse results following the Alamo Fire. Additionally, selective targeting procedures in the Twitchell Reservoir Watershed may be used to avoid the Alamo Fire burn area completely. The Flood Control District's existing storm-monitoring capabilities are augmented by the meteorological monitoring services provided by the contractor's certified meteorologist using sophisticated radar capability. As a standard practice, the Flood Control District retains final decision-making authority over all seeding operations for safety reasons.

Compliance with the California Environmental Quality Act

On October 15, 2013, your Board approved Mitigated Negative Declaration (MND) 13NGD-00000-00011 pursuant to the CEQA Guidelines. The Planning and Development Department reviewed the proposed 2017-2018 program and made the finding that CEQA Guidelines Section 15164 is applicable. CEQA Guidelines Section 15164 allows an addendum to be prepared when only minor technical changes are proposed in the project or changes which would not create new significant impacts. Thus no additional review is required.

Background:

The cloud seeding program uses state of the art methods accepted by the Department of Water Resources to augment rainfall in designated target areas by injection of silver iodide into the cloud mass. Acting as artificial condensation nuclei, the silver iodide promotes the formation of raindrops in addition to those forming by natural processes. Cloud seeding has long been recognized as a cost effective

supplemental water supply alternative and, for that reason, has been an ongoing operational program of the County Water Agency since 1981. Due to its ideal setting for certain types of operations, Santa Barbara has been the focus of numerous cloud seeding research programs dating back to the early 1950s. Local research programs have been sponsored by the University of California, National Science Foundation, U.S. Forest Service, Naval Weapons Center China Lake, U.S. Weather Bureau, and the National Science Foundation. Policy statements by both the American Meteorological Society in 1998 and World Meteorological Organization in 2007 support the effectiveness of winter orographic cloud seeding projects.

Currently, Twitchell Reservoir is rapidly releasing water for groundwater recharge and has approximately 48,100 acre-feet of water conservation pool storage space available. As a result of the ongoing release of stored water, the available pool storage will be significantly larger at the start of the cloud seeding program on November 15, 2017. Twitchell Reservoir reclaims storm runoff for recharge of the Santa Maria Groundwater Basin.

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			
Federal			
Water Agency Funds	\$ 73,650.00		
Local Water Districts	\$ 73,650.00		
Total	\$ 147,300.00	\$ -	\$ -

Narrative:

The program cost continues to be 50/50 cost share between the Water Agency and the participating local water districts with the Water Agency staff providing administration of the project. This arrangement is considered equitable because the areas in the county located outside of water districts' service areas derive much of the benefit from the cloud seeding program.

This program was included in 2017-18 adopted budget under the Water Resources Division of the Public Works Department as identified on page D-325 in the budget book.

No General Fund monies will be utilized with this program.

Special Instructions:

Direct the Clerk of the Board to send two originals of the Agreement with NAWC and a copy of the minute order to the Water Agency office, Attn: Christina Lopez.

Attachments:

- Attachment A - Agreement for Services of Independent Contractor w/NAWC includes contract summary (3 originals include)
- Attachment B - 2017 Addendum to MND 13-NGD-00000-00011 (CEQA Determination from P&D)

Authored by:

Matthew C. Scrudato, Senior Hydrologist, 739-8781