



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: 10/13/09
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 McGolpin, Public Works Director, 568-3010
Director(s)
Contact Info: Thomas D. Fayram, Deputy Public Works Director, 568-3436

SUBJECT: **Cloud Seeding Program 2009-10**

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) Concur with the attached Planning and Development Department's finding that CEQA Section 15164 is applicable to 00-ND-29 and that this document is adequate to meet the requirements of CEQA for the Santa Barbara County-Twitchell Reservoir Cloud Seeding Program; and
- b) Approve the 2009-2010 cloud seeding program and authorize the Chair to execute the agreement with North American Weather Consultants Inc. (not a local vendor) for cloud seeding for the period of October 13, 2009 through June 30, 2010 unless earlier terminated, in an amount not to exceed \$168,200.

Summary Text:

The attached agreement with North American Weather Consultants, Inc. (NAWC) provides for a ground-based cloud seeding program, similar to programs conducted during the last 27 years (excluding 1985-1986 due to the Wheeler Fire and 2007-2008 after the Zaca Fire). The program was bid as a "professional services contract" in 2007 with an option to re-hire the contractor without re-bidding for three years. NAWC was awarded the contract with two bids submitted, both from outside the local area. There are no local cloud seeding vendors. This year's proposed program targets both the Twitchell Reservoir Watershed located in San Luis Obispo County as well as the Santa Ynez River Watershed as it has substantially recovered from the Zaca Fire. Ground seeding will be the only delivery method again this year but return to a ground and air based program is anticipated next year with recovery of the Zaca Fire burn area. With the Santa Ynez River Watershed's continued recovery, aerial seeding will again be conducted beginning with the 2010-2011 program. Special suspension criteria have been established to

avoid any undesirable effects from the program, especially in the burned areas of the South Coast and the more recently burned La Brea Fire area. The South Coast and other urban areas are never targeted, just backcountry watersheds behind major reservoirs. Although the La Brea Fire burn area is not included in the program's target areas, criteria provide for the suspension of operations from certain seeding sites under specific meteorological conditions to ensure that there is no adverse impact to the area.

Meteorological monitoring services provided as part of the cloud seeding contract have proved to be invaluable during winter storm events. The program's full-time certified meteorologist (who has access to sophisticated radar capability) is used to augment the Flood Control District's existing storm-monitoring capabilities.

Alignment with other River System interests and Safety concerns

When it is apparent that Lake Cachuma or Twitchell Reservoir will fill or flows on the Santa Ynez River or Cuyama River and other tributaries that feed into the Reservoirs approach significant volume, seeding operations immediately cease in that watershed. The program includes operational constraints designed to preclude or limit seeding effects over flood sensitive areas. Only backcountry areas behind major reservoirs are targeted, no urban areas are seeded. As a standard practice, the Flood Control District retains final decision-making authority over all seeding operations for safety reasons. The Zaca Fire area has recovered substantially but not completely thus only ground based seeding will be utilized this year. High intensity rainfall rate storms will not be seeded in the Zaca Fire area as high intensity rainfall accelerates erosion. Special suspension criteria will be used to ensure that there are no effects of seeding on the Gap, Tea, and Jesusita burn areas of the South Coast and the La Brea burn area in the Sisquoc Watershed. The California Department of Water Resources labels cloud seeding as a "safe and effective means of augmenting local water supplies".

Compliance with the California Environmental Quality Act

On November 28, 2000, your Board approved 00-ND-29 pursuant to the California Environmental Quality Act Guidelines (CEQA). The Planning and Development Department reviewed the proposed 2009-2010 program and made the finding that CEQA Guidelines Section 15164 is applicable thus no additional review is required.

Background:

The cloud seeding program uses state of the art methods accepted by California 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 to form more raindrops. Cloud seeding has long been recognized as a cost-effective supplemental water supply alternative and, for that reason, has been an ongoing program of the County Water Agency since 1982 with the exception of the 1985-1986 winter after the Wheeler Fire and the 2007-2008 winter after the Zaca Fire. Lake Cachuma has 57,000 acre-feet of storage space available and Twitchell Reservoir is empty and has its entire 110,000 acre-feet of water conservation pool storage space available. Twitchell Reservoir reclaims storm runoff and releases it after the storm season at a slow rate to recharge the Santa Maria Ground-water 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 | \$ 84,100.00 | | |
| Water District's share | \$ 84,100.00 | | |
| Total | \$ 168,200.00 | \$ - | \$ - |

Narrative:

The program cost continues to be 50/50 cost share between the Water Agency and local water districts with the Water Agency 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 the 2009-2010 Adopted Budget under the Water Agency cost center of the Water Resources Division of the Public Works Department as identified on page D-344 in the budget book.

Special Instructions:

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

Attachments:

CEQA Determination from Planning and Development
 Agreement for Services of Independent Contractor w/NAWC (3 originals)

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