

**SANTA BARBARA
COUNTY AGENDA
BOARD LETTER**

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

Agenda Number:
Department: Water Agency/Public Works
Budget Unit: 054-04-3007
Agenda Date: 11/05/02
Placement: Administrative
Estimated Time: N/A
Continued Item: NO
Document Name: Brdnov5.Cloudseedingstudy.Doc

TO: Board of Directors
Santa Barbara County Water Agency

FROM: Phillip M. Demery
Public Works Director

STAFF Thomas Fayram, Deputy Public Works Director, Ext. 3436
CONTACT: Dennis Gibbs, Hydrologist, Ext. 3543

SUBJECT: US Bureau of Reclamation Grant Funding for Cloud Seeding Program Tracer Study

RECOMMENDATIONS: C.A. Recommendation: _____

That the Board of Directors:

- A. Concur with the grant application to the U.S. Bureau of Reclamation prepared by Water Agency Staff (Attachment A) for funding of research activities to improve the Santa Barbara County Cloud Seeding Program and advancement in the science of weather modification; and
- B. Authorize the Public Works Director or his designee to sign the necessary Grant Agreements and documents with the U.S. Bureau of Reclamation to receive funding to implement a tracer study in substantial conformity with the program described in Attachment A.

ALIGNMENT WITH BOARD STRATEGIC PLAN:

The recommendations are primarily aligned with Goal No. 5. Maintain and Enhance the Quality of Life for all Residents.

EXECUTIVE SUMMARY & DISCUSSION:

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. (Santa Barbara County has been the location of research activities and pilot projects since 1951.) In September the United States Department of Interior, Bureau of Reclamation (Reclamation) requested proposals for research and studies sponsored by the Weather Damage Modification Program (WDMP) approved by Congress for FY 2002-03.

Through this program, Reclamation is forming partnerships with states served by Reclamation to address the potential for mitigation of weather damage through weather modification techniques. The goal of the program is to improve and evaluate physical mechanisms to limit damage due to weather phenomena such as hail and drought, and enhance water supplies through a regional weather modification research program, and to transfer validated technologies for implementation on operational programs.

Over the last ten years, there have been significant advances in weather and climate forecasting, as well as computer modeling, remote sensing, chemistry and physics. In addition, limited research on weather modification technologies has been conducted, primarily by other countries. These efforts clearly indicate that there now exists the real potential to develop a new generation of weather modification technologies that will be more effective and less expensive. Specifically, the County program could benefit through lowered costs and/or improved effectiveness from improved seeding techniques and targeting models.

Proposed Program And Agreements

The proposed program would consist of a one-month research effort “piggy backed” on the already approved cloud seeding operational program slated to start on November 15, 2002 and continue through April 15, 2003. The period chosen for the research effort will depend on the date of grant award, long-range forecasting as well as staff perception of weather patterns and hydrologic conditions during the winter season.

In summary, this proposed research effort would consist of scientific mechanisms that would allow us to track the seeding plume from the ground seeding sites and using the most modern meteorological instrumentation determine whether the microphysical processes that produce additional rainfall are occurring in the manner most beneficial to this program. This research would allow us to “fine tune” this program as well as advance the science of weather modification. It may generate more support for the program from the local water purveyors who fund 50% of the operational program each year. The attached proposal describes in detail the research to be undertaken, should we receive this grant.

MANDATES & SERVICE LEVELS:

Cloud seeding is not a mandated program. The proposed program will result in no change in programs or service level compared to last year. The program’s objective is to enhance regional water supplies and thus may lead to improved performance in future implementation of the program. Given the importance of adequate water supplies in the region, this improved effectiveness would be an important public service.

FISCAL IMPACT:

Reclamation has set up this program as a “matching funds” program and will allow in-kind services to be applied to the match. The regular operational program is a cost share between the water purveyors of Santa Barbara County and the County itself and was approved by your board on October 8, 2002. Since the operational program will count towards the match, there is no additional fiscal impact of applying for or accepting this grant. In summary:

Operational Program (approved by board Oct. 8)	match	\$239,260
Grant Request		\$234,903

The cloud seeding program was included in the 2002-03 Adopted Budget in the Water Agency's cost center of the Water Resources Division as identified on page D-300 in the budget book. The program costs will be paid from Dept: 054, Fund: 3050, Acct: 7460, Program: 3009.

SPECIAL INSTRUCTION:

Direct the Clerk of the Board to send a copy of the minute order to the Water Agency office, Attn: Christina Lopez.