



## County of Santa Barbara Planning and Development

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To: Board of Directors  
Santa Barbara County Water Agency

From: Dianne Black, Assistant Director  
Planning and Development

Staff Contact: Matthew C. Scrudato, Senior Hydrologist

Date: September 21, 2017

Re: **CEQA Determination for the Santa Barbara County/Twitchell Reservoir Cloud Seeding Program:** Addendum to previous Negative Declaration (13NGD-00000-00011).

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. Negative Declaration 13NGD-00000-00011 was prepared in October 2013 for the 2013-2014 Santa Barbara County and Twitchell Reservoir Cloud Seeding Program. This 15164 letter hereby amends 13NGD-00000-00011 for the proposed 2017-2018 Santa Barbara County/ Twitchell Reservoir Cloud Seeding Program.

Location: The Santa Barbara County portion of the cloud seeding program is located along the Santa Ynez River watershed, upstream of Lake Cachuma reservoir. The Twitchell Reservoir portion of the cloud seeding program is located along the border of Santa Barbara and San Luis Obispo counties in the Twitchell Reservoir watershed.

Physical structures involved in the project are stationary land-based generators used to disperse silver iodide into the atmosphere. These generators are located along ridgelines adjacent to the Twitchell reservoir and Santa Ynez River watersheds.

### **BACKGROUND:**

The Santa Barbara County Water Agency proposes to continue the cloud seeding program that has been conducted in Santa Barbara County since 1981 (excluding 1985-86 and 2007-2008). In 1992, the program was expanded to include the Twitchell Reservoir watershed. Runoff water accumulated in Twitchell Reservoir is periodically released to recharge the Santa Maria Groundwater Basin. Impacts of the cloud seeding program are described in Negative Declaration 13NGD-00000-00011 as finalized on October 15, 2013.

## PROJECT DESCRIPTION:

The project description has been modified to include the specific 2017-2018 “Suspension Criteria” proposed by the County Water Agency. *Suspension criteria are subject to revision when deemed necessary by the Santa Barbara County Water Agency (Agency) and Santa Barbara County Flood Control District (District).* The proposed suspension criteria are presented below:

### 2017-2018 CLOUD SEEDING PROGRAM SUSPENSION CRITERIA

#### **A. General Criteria for the Entire Project Area in both Santa Barbara and San Luis Obispo Counties**

*Criteria in this category apply to the entire project area including all of Santa Barbara County and the Twitchell Reservoir Drainage of Southern San Luis Obispo County.*

1. Whenever the National Weather Service (NWS) issues a severe storm, precipitation, flood warning or flash flood warning that affects any part of the project area, the project meteorologist shall suspend operations which may affect that part. Operations will be suspended at least for the period that the warning is in effect.
2. The Project Meteorologist or District/Agency personnel shall retain independent authority to suspend cloud seeding operations for any part, or all of the project area in the event that unforeseen conditions develop during storm events which in their best judgment have the potential to cause flooding or other adverse conditions anywhere within the project area.

#### **B. Specific Criteria for Individual Areas/Watersheds**

##### **South Coastal Areas:**

1. No targeting of or seeding operations which affect the urbanized areas of the South Coast of Santa Barbara County south of the Santa Ynez Mountains Ridgeline will be conducted.

##### **Santa Ynez River Watershed:**

1. As a result of the Whittier Fire, the Santa Ynez River Watershed will not be seeded this year thus no special suspension criteria are needed.



**Cuyama, Sisquoc and Santa Maria River Watersheds:**

1. Cloud seeding operations shall be suspended in the Twitchell Watershed when District/Agency project that the conservation pool of Twitchell Reservoir will fill. The conservation pool is full at elevation 622.13' (105,971 acre-feet of storage). This leaves 89,000 AF of Flood Control Capacity.
2. Seeding operations shall be suspended if the current or projected flow on the Cuyama River is 15,000 CFS or greater at Buckhorn Canyon, as determined by the District/Agency using information supplied by the California-Nevada River Forecast Center.
3. Seeding operations shall be suspended if the current or projected flow on the Sisquoc River is 10,000 CFS or greater at Garey, as determined by the District/Agency using information supplied by the California-Nevada River Forecast Center.
4. Cloud seeding operations shall be suspended in the Twitchell Watershed when District/Agency project the potential of adverse results following the Alamo Fire. Additionally, selective targeting procedures in the Twitchell Watershed may be used to avoid this burn area completely.

**Special suspension criteria for the Twitchell Watershed due to the Alamo Fire:**

1. Cloud seeding will be suspended during the earlier season storm events. This will provide an opportunity for Santa Barbara County personnel to monitor the effect of precipitation on the burn area and determine how the intensity, distribution, and quantity of precipitation impact the watershed. This information will allow for a better understanding of the type of storm which can safely be seeded without adverse consequences. Additionally, early season program suspension will allow the ground cover time to respond.
2. Following early season precipitation and monitoring, low-intensity events will be seeded in order to enhance rainfall. Storms that are predicted to produce precipitation quantities below 2.0 inches in a 24 hour period will be seeded. These predications are based on National Weather Service (NWS) forecasts. As the season progresses, progressively higher-intensity events may be seeded and will depend on ground cover response and slope erosion.
3. Cloud seeding will be suspended if high intensity precipitation events of 0.8 inches per hour or greater are predicted or observed in the target area. These predications are made by the NWS and observed using a network of real-time precipitation gages

monitored by Santa Barbara County Flood Control personnel.

***Note: All suspension criteria are subject to revision should hydrologic conditions warrant it. All revisions must be documented in writing and be approved by District/Agency representatives with notification provided to the project meteorologist.***

#### **CHANGES IN PROJECT IMPACTS:**

The proposed modifications in project description are intended to minimize the potential for cloud seeding activities to contribute to potential flood hazards along the Santa Ynez and Santa Maria rivers. These modifications would restrict cloud seeding operations to a level of activity equal to or less than has occurred in the past. Potential impacts of the revised cloud seeding program would be no greater than those disclosed in the previous environmental document, 13NGD-00000-00011, based on the added restrictions. Therefore, no new impacts would be anticipated due to the proposed modification of the project.

#### **FINDINGS:**

It is the finding of the Planning and Development Department that the previous environmental document as herein amended may be used to fulfill the environmental review requirements of the current project. Because the current project meets the conditions for the application of State CEQA Guidelines Section 15164, preparation of a new EIR or ND is not required.

Discretionary action by the Board of Directors of the Santa Barbara County Water Agency on the proposed 2017-2018 Santa Barbara County/Twitchell Reservoir Cloud Seeding Program may now proceed with the understanding that any substantial changes in the proposal may be subject to further environmental review.