Complete in accordance with instructions on reverse and forward copy:

TO: National Oceanic and Atmospheric Administration
Office of Oceanic and Atmospheric Research
1315 East-West Highway SSMC-3 Room 11554
Silver Spring, MD 20910

Form Approved: OMB No. 0648-0025 Expires 01/31/2018

NOAA FORM 17-4 (4-81) U.S. DEPARTMENT OF COMMERCE
NAT'L OCEANIC AND ATMOSPHERIC ADM.

INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES (P.L. 205, 92ND. CONGRESS)

1. PROJECT OR ACTIVITY DESIGNATION, IF ANY
Santa Barbara and San Luis Obispo Counties, CA

2. DATES OF PROJECT
a. DATE FIRST ACTUAL WEATHER MODIFICATION ACTIVITY IS TO BE UNDERTAKEN: 12/1/2020
b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES: 03/31/2021

3. PURPOSE OF PROJECT OR ACTIVITY
Augment winter precipitation

4. (a) SPONSOR

NAME			
Matthew Scrudato			
AFFILIATION		PHONE NUMBER	
Santa Barbara County Water Agency		8055683582	
STREET ADDRESS			
130 E Victoria St.			
CITY	STATE	ZIP CODE	
Santa Barbara	CA	93101	

4. (b) OPERATOR

NAME			
Stephanie Beall			
AFFILIATION		PHONE NUMBER	
North American Weather Consultants		8019429005	
STREET ADDRESS			
8180 South Highland Dr Ste B-2			
CITY	STATE	ZIP CODE	
Sandy	UT	84093	

5. TARGET AND CONTROL AREAS (See Instructions)

TARGET AREA		CONTROL AREA	
LOCATION	SIZE OF AREA	LOCATION	SIZE OF AREA
see map .	200 SQ.MI	Various sites in southern California	NA SQ.MI.

6. DESCRIPTION OF WEATHER MODIFICATION APPARATUS, MODIFICATION AGENTS AND THEIR DISPERSAL RATES, THE TECHNIQUES EMPLOYED, ETC. *(See Instructions)*
Three ground-based cloud nuclei generators will be used to seed convective bands during storm periods. The ground-based sites are equipped with 150-gram silver iodide flares.

7. LOG BOOKS: *Enter name, affiliation, address, and telephone number of responsible individual from whom log books or other records may be obtained.*

NAME		
Stephanie Beall		
AFFILIATION		PHONE NUMBER
North American Weather Consultants		8019429005
STREET ADDRESS		
8180 South Highland Dr Ste B-2		
CITY	STATE	ZIP CODE
Sandy	UT	84093

THIS REPORT IS REQUIRED BY PUBLIC LAW 92-205; 85 STAT 735; 15 U.S.C. 330b. KNOWING AND WILLFUL VIOLATION OF ANY RULE ADOPTED UNDER THE AUTHORITY OF SECTION 2 OF PUBLIC LAW 92-205 SHALL SUBJECT THE PERSON VIOLATING SUCH RULE TO A FINE OF NOT MORE THAN $10,000, UPON CONVICTION THEREOF.

8. SAFETY AND ENVIRONMENT

X YES NO Has an Environmental Impact Statement, Federal or State been filed? If yes, please furnish a copy as applicable.

X YES NO Have provisions been made to acquire the latest forecasts, advisories, warnings, etc. of the National Weather Service, Forest Service, or others when issued prior to and during operations? If yes, please specify on a separate sheet.

X YES NO Have any safety procedures *(operational constraints, provisions for suspension of operations, monitoring methods, etc.)* and any environmental guidelines *(related to the possible effects of the operations)* been included in the operational plans? If yes, please furnish copies or a description of the specific procedures and guidelines.

9. OPTIONAL REMARKS *(See Instructions. Use Separate Sheet.)*

NAME			**CERTIFICATION:** I certify that the above statements are true, complete and correct to the best of my knowledge and belief.	
Garrett Cammans				
AFFILIATION			SIGNATURE	
North American Weather Consultants				
STREET ADDRESS			OFFICIAL TITLE	
8180 South Highland Dr Ste B-2			President	
CITY	STATE	ZIP CODE	DATE	PHONE NUMBER
Sandy	UT	84093	10/19/2020	8019429005

INSTRUCTIONS FOR INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES

One completed copy of this form is to be received 10 days* or more prior to actual modification activities. A NOAA file number will be assigned by the Administrator after receipt of the initial report for each project or activity.

A supplemental report in a letter form referring to the appropriate NOAA file number must be made to the Administrator if the "Initial Report" is found to contain any material inaccuracies, misstatements, and omissions, or if there are changes in plans for the project or activity.

*For exceptions, see Sections 908.4(b) and (c), Part 908 of Title 15, Code of Federal Regulations.

Item 1. Enter designation, if any, used by operator for the project or activity.

Item 2. Enter: (a) Date first actual weather modification activity is to be undertaken;
(b) Date on which final weather modification activity is expected to occur.

Item 3. Enter the purpose of the project or activity: e.g., rainfall increase, hail suppression, cold fog dispersal, etc.

Item 4. Enter: (a) Name, phone number, affiliation, and address of the primary person for whom the project is to be performed (sponsor).

(b) Name, phone number , affiliation, and address of the person primarily responsible for carrying out the project (operator).

Item 5. A map should be attached showing size and location of target area, control area, coded number and location of each item of ground-based weather modification apparatus and coded number and location of key raingages, radars, or other precipitation measuring devices. Also show location of airport for airborne operations.

Item 6. Describe the weather modification apparatus, modification agents, and the techniques to be used. This would include type of ground or airborne apparatus to be used, type of modification material to be dispensed, rate of dispensing material in grams per hour or other appropriate units, type of precipitation gages to be used in target and control areas, and any other pertinent information such as type of radars, type of aircraft to be used, techniques to be employed, (e.g., cloud base seeding at 10,000 feet msl).

Item 7. List name, phone number , affiliation, and address of the responsible individual from whom log books or other records may be obtained.

Item 8. Provide applicable answers to questions as indicated.

Item 9. This item is to permit the reporting person to include any information not covered by items 1 through 8 but which he feels is significant or of interest. It is also to be used to include any information not covered elsewhere that the Administrator may request.

INFORMATION PROVIDED UNDER THE PROVISIONS OF THE PAPERWORK REDUCTION ACT OF 1995

The Paperwork Reduction Act of 1995 requires that individuals or organizations be provided with the following information if they provide information on paper forms which are collected by the Federal Government. (This includes reports required of weather modification activities.)

1. Public Law 92-205, enacted December 18, 1971 (amended by Public Law 94-490, Section 6(b), October 15, 1976) requires that all non-federal weather modification activities in the United States and its territories be reported to the Secretary of Commerce. The National Oceanic and Atmospheric Administration has implemented the Act and the current reporting requirements are published in the Catalog of Federal Regulations (15 CFR 908).

2. The intent of the program is to increase expertise in the field of weather modification, to allow scientists and other concerned persons to have access to information on current and past efforts at weather modification, to help avoid unneeded and wasteful duplications, to aid in preventing territorial overlapping of weather modification operations, to provide data to assess possible harmful or dangerous activities, and to furnish information to check both desirable and undesirable atmospheric changes against records of weather modification efforts. To meet this objective, information is collected on the location and size of the target area, names and addresses OF sponsors and operators, beginning and ending dates of the project, specific purpose, description of apparatus and seeding agents to be used, number of days of operations, number of hours of operations of each type of weather modification apparatus, and total amount of seeding agent used.

3. Public reporting burden for this collection of information is estimated to average 40 hours for reporting and 200 hours for record keeping, based on one-half hour per response on Form 17-4 and one-half hour per response on Form 17-4A, and five hours per record keeper. It is estimated that the time per response is approximately the same across all respondents. Send comments regarding this burden estimate or any other aspect of this data collection, including suggestions for reducing this burden to: Ms. Karen King, DOC/NOAA/OAR, 1315 East West Highway, Silver Spring, MD 20910.

4. Reporting of this information under Public Law 92-205, enacted December 18, 1971 (amended by Public Law 94-490, Section 6(b), October 15, 1976) is <u>mandatory</u>.

5. Confidentiality is not a requirement for this reporting; no sensitive information is required.

6. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

September 1, 2000
Expires 09/30/2004



Map of Santa Barbara/San Luis Obispo County target areas and six ground-based seeding flare sites



Map of Santa Barbara/San Luis Obispo County Huasna-Alamo target area and three ground-based seeding flare sites

CLOUD SEEDING PROGRAM SUSPENSION CRITERIA

A. GENERAL CRITERIA FOR SANTA BARBARA COUNTY

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 issues a severe storm, precipitation, 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.

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 in the project area.

B. SPECIFIC CRITERIA

Santa Ynez River Watershed

Prior to and during each storm event the District will make stream flow runoff forecasts for the Santa Ynez River using a hydrologic computer model, Alert telemetered rainfall data, radar, and quantitative precipitation forecasts. If, prior to any storm event the model indicates that the storm has the potential to generate a 15,000 cubic feet per second (cfs) or greater flow in the Santa Ynez River near Lompoc the storm may be seeded *only* if; (1) both the District/Agency and Project meteorologist concur, and (2) measures are taken to continuously monitor the storm event. If stream flow runoff forecasts predict flows of over 15,000 cfs in the Santa Ynez River near Lompoc based on **observed** rainfall data, seeding operations which may impact the Santa Ynez River flow below Bradbury Dam shall be immediately suspended.

Twitchell Reservoir / Cuyama River Watershed

1. Cloud seeding operations shall be suspended in the Twitchell Watershed when seasonal filling of the Conservation Pool (109,314 acre-feet) of Twitchell Reservoir becomes apparent. This leaves 88,784 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, as determined by the District/Agency.