

INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES

This report is required by Public Law 92-205; 85 Stat. 735; 145 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.

Complete in accordance with instructions on reverse and forward one copy to:
National Oceanic and Atmospheric Administration
Office of Oceanic and Atmospheric Research
1315 East-West Highway, WWMC-3, Rm 11216
Silver Spring, MD 20910

1. PROJECT OR ACTIVITY DESIGNATION, IF ANY

Kaweah River Cloud Seeding Program

2. DATES OF PROJECT

a. DATE FIRST ACTUAL WEATHER MODIFICATION ACTIVITY IS TO BE UNDERTAKEN

11/1/2023

b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES

4/30/2023

3. PURPOSE OF PROJECT OR ACTIVITY

Snowpack Augmentation

4. (a) SPONSOR

NAME Shane Smith

4. (b) OPERATOR

NAME Richard Stone

AFFILIATION KDWCD

PHONE NUMBER 5599091554

AFFILIATION RHS Consulting, Ltd

PHONE NUMBER 7753574659

STREET ADDRESS

2875 Farmersville Blvd

STREET ADDRESS

2227 Bellanca St

CITY Farmersville

STATE CA

ZIP CODE 93223

CITY Minden

STATE NV

ZIP CODE 89423

5. TARGET AND CONTROL AREAS (See Instructions)

TARGET AREA

CONTROL AREA

LOCATION Kaweah River Basin

SIZE OF AREA 828 SQ. MI

LOCATION Merced, Tule, Cottonwood C

SIZE OF AREA 750 SQ. MI

6. DESCRIPTION OF WEATHER MODIFICATION APPARATUS, MODIFICATION AGENTS AND THEIR DISPERSAL RATES, THE TECHNIQUES EMPLOYED, ETC. (See Instructions)

This is a continuation of the Kaweah Basin Program, a long term winter project that began operations in 1976. During the 2024 water year, winter storms will be seeded using aircraft to disperse seeding materials from end burning and ejectable flares. The operational program office is located at the Fresno Airport (KFAT). Silver iodide type aerosols will be released 20-30 miles upwind of the target area. Seeding material released between 8,000'-17,000' at 500-2000gAgI/hr depending on cloud conditions (temperature, liquid water content, cloud depth). Seeding is conducted at the top of the saturated layer in supercooled cloud or mixed phase clouds. Evaluations are conducted annually based on streamflow data using ratio statistics. Multiple control areas are used that surround the target area to the north, southwest and northeast boundaries of the target area.

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

NAME Richard Stone

AFFILIATION RHS Consulting, Ltd

PHONE NUMBER 7753574659

STREET ADDRESS PO Box 17096

CITY Reno

STATE NV

ZIP CODE 89511

8. SAFETY AND ENVIRONMENT



YES



NO

Has an Environmental Impact Statement, Federal or State, been filed? If yes, please furnish a copy as applicable.



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.



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).

CERTIFICATION: I certify that all statements in this report on this weather modification project are complete and correct to the best of my knowledge and are made in good faith.

NAME OF REPORTING PERSON

Richard Stone

AFFILIATION

RHS Consulting, Ltd

SIGNATURE

OFFICIAL TITLE

Manager

STREET ADDRESS PO Box 17096

CITY Reno

STATE NV

ZIP CODE 89511

DATE 10/22/2023

PHONE NUMBER 7753574659

Kaweah River Basin Supplement to Form 17-4

The following information is provided as requested by item 8 on Form 17-4, Safety and Environment

Environmental Impact Report

An Environmental Assessment was conducted by the sponsor and a Negative Declaration was filed with no dissenting opinions.

Suspension Criteria

The project may be temporarily suspended when one of the following conditions exists

EXCESSIVE SNOWPACK

These snowpack amounts serve as a guide regarding the potential suspension of the seeding program; they are not hard and fast criteria, but rather are designed to prompt close coordination with the water managers. These criteria are based on average target area precipitation amounts as follows:

1. 200% on January 1
2. 180% on February 1
3. 160% on March 1
4. 150% on April 1

Snow sensor observations are available on a daily basis at several locations. Interpolation of these percentages can be made for any given day in order to aid suspension decisions.

FLOODING

1. TARGET AREA- Utilizing quantitative precipitation forecasts (QPF), antecedent indices, and forecast freezing levels, decisions can be made of individual storm event runoff in the area draining into Lake Kaweah. If the estimated storm runoff volume exceeds the available storage (i.e., spill condition), the project may be suspended.
2. RAIN ON SNOW - During periods above average snowpack exists and rising freezing levels and potential for rain on snow events where insufficient storage capacity is available the project may be temporarily suspended until the river flows recede and freezing levels fall below 4,500'.
3. Severe Weather- Severe weather is monitored on a storm-by-storm basis, and even hourly basis during rapidly changing weather conditions. The project may be suspended when a National Weather Service Flash Flood Warning is in effect over any part of the target area until the warning expires.

SPECIAL CIRCUMSTANCES

1. Official emergency response activity within the target area.
2. Other Special Circumstances or unusual circumstances, which may be deemed hazardous. Examples of special circumstances strong winds, heavy snow at low elevations, and other unforeseen conditions that could be hazardous or perceived by the public as hazardous. Reservoir storage levels, soil moisture content, and amounts of precipitation in prior seasons are all factors to consider in assessing whether a temporary program suspension is appropriate

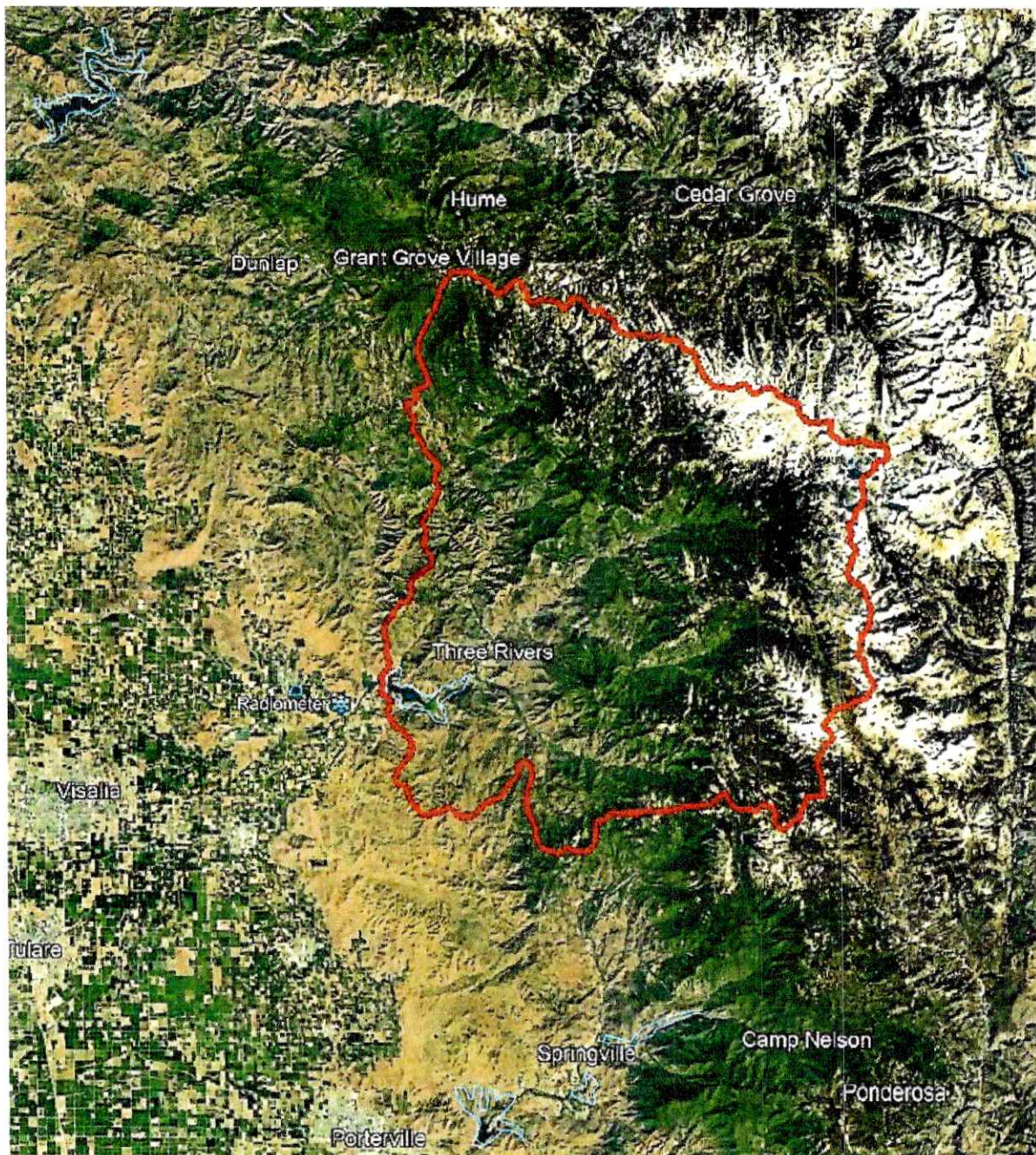


Figure 1. Kaweah River Basin Target Area