NOAA FORM 17-4 (4-81) — U.S. DEPARTMENT OF COMMERCE — NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Form Approved OMB Control No. 0648-0025
Expires 05/31/2021

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
Wind River Range Weather Modification Project (WRRWMP)

2. DATES OF PROJECT
a. DATE FIRST ACTUAL WEATHER MODIFICATION ACTIVITY IS TO BE UNDERTAKEN: 11/8/2022
b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES: 4/22/2023

3. PURPOSE OF PROJECT OR ACTIVITY
Increase snowpack in the Wind River & Sierra Madre Ranges, WY.

4. (a) SPONSOR

NAME	Wyoming Water Development Office, Attn: Ms. Julie Gondzar
AFFILIATION	State of Wyoming
PHONE NUMBER	307-777-7626
STREET ADDRESS	6920 Yellowtail Road
CITY	Cheyenne
STATE	WY
ZIP CODE	82002

4. (b) OPERATOR

NAME	Bruce A. Boe
AFFILIATION	Weather Modification LLC
PHONE NUMBER	7012355500
STREET ADDRESS	3802 20th Street North
CITY	Fargo
STATE	ND
ZIP CODE	58102

5. TARGET AND CONTROL AREAS (See Instructions)

TARGET AREA		CONTROL AREA	
LOCATION	West-Central Wyoming	LOCATION	none
SIZE OF AREA	~1,426 SQ. MI	SIZE OF AREA	SQ. MI

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

Up to 12 (twelve) remote-controlled ice nucleus generators sited west, southwest, and southeast of the range will be used to seed clouds upwind of the range, targeting higher elevations to increase snowpack. The locations of the generators are shown on the attached map. In any seeding event, the generators actually used will be determined by the prevailing wind speed and direction. The number used will depend upon the extent of the seedable conditions over the range. The silver iodide-based seeding agent will be released at a rate of about 25 grams per hour from each active generator. Seeding will be guided by an on-site meteorologist, aided by weather observations and four-dimensional (x, y, z, t) prognostic numerical models.
Seeding will occur only when the following conditions are met over the range: (1) the temperature at the 700 mb pressure (approximately 10,000 ft msl) is less than or equal to -6 degrees C, (2) the wind direction is such that the proper transport of the ice nuclei will occur, from the ground-based generators to the target, and (3) liquid water is observed and/or predicted to exist over the range.

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

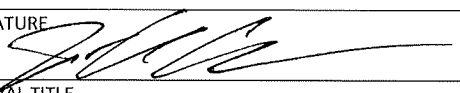
NAME	Mr. Jake Van Ornum
AFFILIATION	Weather Modification LLC
PHONE NUMBER	(701) 235-5500
STREET ADDRESS	3802 20th Street North
CITY	Fargo
STATE	ND
ZIP CODE	58102

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	Jake Van Ornum
AFFILIATION	Weather Modification LLC
SIGNATURE	
STREET ADDRESS	3802 20th Street North
OFFICIAL TITLE	Client Services Assistant
CITY	Fargo
STATE	ND
ZIP CODE	58102
DATE	10/31/2022
PHONE NUMBER	(701) 235-5500


Gannett Peak
WIND RIVER RESERVATION
Green River
Morton
134
WIllow Lake
26
132
Cora
Daniel
191
Meadow Lake
Fort Washakie
Pinedale
Boulder Lake
Arapahoe
Boulder Flats
East Fork
189
Boulder
353
789
Lander
Pocket Creek
Enterprise
131
350
351
Big Piney
Big Sandy Opening
287
28
Block & Tackle
191
White Acorn Ranch
235
Atlantic City
Google Earth
10 km


Saratoga
High Savery
Tullis West
Encampment
Baggs
Savery
Google Earth
Image Landsat / Copernicus
20 km
N