

**SUPPORTING STATEMENT**  
**U.S. Department of Commerce**  
**National Oceanic & Atmospheric Administration**  
**Weather Modification Activities Reports**  
**OMB Control No. 0648-0025**

**Abstract**

This is a request for extension, without change, of a currently approved collection of information.

NOAA collects reports on weather modification activities (e.g., cloud-seeding) for archive, to meet legislative requirements originating in 1971, and to respond to requests for information. Reports consist of an initial, an interim form if needed, and a final form which summarize planned and concluding location and project type. NOAA maintains these records in a publicly-accessible archive and provides summaries and responses to queries when requested.

**Justification**

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

P.L. 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 through the National Oceanic and Atmospheric Administration (NOAA). NOAA has implemented the Act and the current reporting requirements are published in the Code of Federal Regulations ([15 CFR 908](#)).

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

Respondents to this data collection are organizations and companies affiliated with cloud-seeding and other related activities in an attempt to modify the weather, i.e., to increase precipitation, mitigate hail, and disperse fog. They are required to file two one-page reports annually: each project must file with NOAA an initial report (Form 17-4) and a final report (Form 17-4A) – or an interim report on the same form if the project continues beyond December 31. The collection requirement and form has not changed since last renewal.

NOAA retains records of reported weather modification activities, and makes the records publicly available to the fullest extent practicable. The intent of the program is to increase expertise in the field of weather modification, to allow the public 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, NOAA requests the following information from the submitter;

1. location and size of the target area,
2. names and addresses of sponsors and operators,
3. beginning and ending dates of the project,

4. specific purpose,
5. description of apparatus and seeding agents to be used,
6. number of days of operations,
7. number of hours of operations of each type of weather modification apparatus, and
8. total amount of seeding agent used.

The reports of weather modification activities on file with NOAA as a result of the reporting program furnish useful information for several purposes: (1) Historical Accuracy- Persons planning projects, writing news articles, or preparing term papers request historical and current data for individual states, regions, or the United States as a whole. (2) Statistical Accuracy – Congressional staffs, Federal and State officials, and private citizens inquire about weather modification activities that are thought to be associated with adverse weather conditions. (3) Legal Accuracy - On occasion, plaintiffs, defendants, or their lawyers ask for records of activities in connection with lawsuits. Summary reports have been prepared (upon request) for publication in an associated journal in the years when an official NOAA report has not been published. The data contained in the reports are also used to provide information (1) required by a March 26, 1975, U.S.-Canada agreement to exchange information on weather modification activities within 200 miles of our common boundary, and (2) to the World Meteorological Organization (WMO) for publication in its yearly “Register of National Weather Modification Projects”.

NOAA will retain control over the information according to the NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines, as well as the cited legal requirement. Results may be used in scientific, management, technical or general informational publications.

**Table: Information Requirements and Needs and Uses of Information Collected**

Item #	Requirement	Statute	Regulation	Form #	Needs and Uses
1	Initial Report	315 U.S.C. Ch. 9A §330	15 CFR §908.1 - 21	17-4	Used by the public to submit initial reports of planned activities. Used by the BUREAU to maintain a record of intended activities.
Item #	Requirement	Statute	Regulation	Form #	Needs and Uses
2	Final Report	315 U.S.C. Ch. 9A §330	15 CFR §908.1 - 21	17-4A	Used by the public to submit interim reports if activities extend past December 31, and final reports of activities.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g. permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also, describe any consideration of using information technology to reduce burden.**

Beginning in 2000, the NOAA Forms 17-4 and 17-4A became available on the Internet at <http://www.corporateservices.noaa.gov/~noaaforms/eforms/> in order for the respondents to have the

capability of filling out and printing forms on-line. The forms may be emailed to [weather.modification@noaa.gov](mailto:weather.modification@noaa.gov). This capability is unchanged since last request.

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Question 2**

NOAA is the only organization/activity collecting this information.

**5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.**

A small percentage (under 5%) of the annual reports are submitted from small businesses. Only minimal information is required and the forms are designed to minimize the burden on all reporting entities.

**6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

Current information is needed to respond to Congressional and public requests for information, and most projects require only an initial and final report each year. Lack of this information would render the Government unable to comply with requests for data as outlined in Question 2, and the data that is used for so many purposes would be unavailable.

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with OMB guidelines.**

Weather modification activities are typically driven by season, such as summer cloud seeding for reservoir management or winter cloud seeding for snowpack management. Respondents are required to report information more frequently than quarterly only if the duration of the project is less than a quarter, or if the project begins shortly prior to 31 December. Interim reports should be submitted not later than 45 days following 1 January. Final reports should be submitted no later than 45 days following project completion.

All other collection of information is consistent with OMB guidelines.

**8. If applicable, provide a copy and identify the date and page number of publications in the Federal Register of the agency's notice, required by 5 CFR 1320.8 (d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.**

A Federal Register Notice published December 22, 2020 (85 FR 83523) solicited public comment on this renewal.

Only one comment was received in response to the direct request:

weather modification needs to be notified to all in the area before it is approved to be allowed. all of us suffer from weather and if one profiteers just has to fill out a sneaky form like this, that is not sufficient for public notice. this kind of notice needs to be put in a newspaper or a federal register notice to let public comment happens. why the hell would you let some profiteer who may want flood rain to ruin everything be able to do so surreptitiously and sneakily. this comment is for the public record. we need some accountability here. this comment is for the public record please receipt. jean public [jeanpublic1@gmail.com](mailto:jeanpublic1@gmail.com) (sic)

**Comment:** This response reflects a misunderstanding of the program. NOAA is the only government entity that collects weather modification information. However, NOAA does not conduct any cloud-seeding activities. A response was sent to the commenter.

Additionally, an email request was sent to six recent report respondents for their comments on the availability of data, frequency of collection, clarity of instructions and recordkeeping, disclosure, reporting format, and data elements to be recorded/disclosed/reported. No comments were received.

**9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

No payments, gifts, or remuneration of any kind are provided.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a system of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.**

No confidentiality is promised or provided.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior or attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

No sensitive questions are asked on the report.

**12. Provide estimates of the hour burden of the collection of information.**

We expect approximately 30 respondents annually. They are required to file two one-page reports annually. Each project must file with NOAA an initial report (Form 17-4) and a final report (Form 17-4A - or an interim report on the same form if the project continues beyond December 31). Respondents typically include a map and project description with their Form 17-4, which are created as part of their regular project planning.

The annual burden for these activities is estimated to be:

30 respondents x 1 Form 17-4 x 60 minutes = 30.0 hours

30 respondents x 1 Form 17-4A (Final) x 30 minutes = 15.0 hours

10 respondents x 1 Form 17-4A (interim) x 30 minutes = 5.0 hours

**Totals: 30 unique respondents, 70 responses, and 50 hours.**

Information Collection	Type of Respondent (e.g., Occupational Title)	# of Respondents/year (a)	Annual # of Responses / Respondent (b)	Total # of Annual Responses (c) = (a) x (b)	Burden Hrs / Response (d)	Total Annual Burden Hrs (e) = (c) x (d)	Hourly Wage Rate (for Type of Respondent) (f)	Total Annual Wage Burden Costs (g) = (e) x (f)
Initial Report	Meteorologist	30	1	30	1	30	45.86	1375.80
Interim and Final Report	Meteorologist	40	1	40	.5	20	45.86	917.20
<b>Totals</b>				<b>70</b>		<b>50</b>		<b>2293.00</b>

Hourly wage rate given is median hourly wage for Atmospheric and Space Scientists, occupation code 19-2021.

<https://www.bls.gov/bls/blswage.htm>

**13. Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).**

There are no capital/start-up or ongoing operation/maintenance costs associated with this information collection. Records are electronic and can be sent by email to [weather.modification@noaa.gov](mailto:weather.modification@noaa.gov).

**14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information.**

Cost Descriptions	Grade/Step	Loaded Salary /Cost	% of Effort	Fringe (if Applicable)	Total Cost to Government
Federal Oversight	ZP-V	\$170,800	5.00%		\$8,540.00
Other Federal Positions	ZP-IV	\$103,000	1.15%		\$1,188.46
Contractor Cost		\$200,000	0.385%		\$769.23
Travel					
Other Costs:					
<b>TOTAL</b>					<b>\$10,497.69</b>

Federal oversight tasks include storing/organizing reports for archive and fielding requests for information. Other federal assistance comes from the NOAA library personnel, who maintain the archive on a quarterly basis. Occasional contractor support is needed for scanning and filing the few reports physically mailed in.

**15. Explain the reasons for any program changes or adjustments reported in ROCIS.**

There are no changes to the information collection since the last OMB approval. However, for increased granularity, the information collections have been broken out to better capture the burden information related to each collection.

Information Collection	Respondents		Responses		Burden Hours		Reason for change or adjustment
	Current Renewal / Revision	Previous Renewal / Revision	Current Renewal / Revision	Previous Renewal / Revision	Current Renewal / Revision	Previous Renewal / Revision	
Weather Modification Activities Reports - Initial and Interim		30		60		30	This IC was broken out into the 2 separate reports that are required.  These are not new requirements. Rather, they have been broken out into the 2 separate reports in order to provide additional granularity and accurately capture the burden.
Initial Report	30		30		30		
Interim and Final Report	30		40		20		
<b>Total for Collection</b>	<b>60</b>	<b>30</b>	<b>70</b>	<b>60</b>	<b>50</b>	<b>30</b>	
<b>Difference</b>	<b>30</b>		<b>10</b>		<b>20</b>		

**16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

The data is used by special request, i.e., responses to various queries, except for an annual report which is provided to the National Weather Service (NWS) for transmittal to the World Meteorological Report. This report is a compilation of fiscal year data and is sent to NWS on a spreadsheet.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

The agency plans to display the expiration date for OMB approval of the information collection on all instruments.

**18. Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."**

The agency certifies compliance with [5 CFR 1320.9](#) and the related provisions of [5 CFR 1320.8\(b\)\(3\)](#).