

1 Supporting Statement A

Assessing Community Needs for Terrestrial Analog Studies

OMB Control Number 1028- NEW

Terms of Clearance: None

Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.

The survey is designed to gather feedback from community members that have a self-described interest in the use of terrestrial analogs. The survey is intended to assess the obstacles that exist related to training, research, sample collections, and data archiving within analog projects, the need for coordination across the community, and what products and services might be needed to further terrestrial analog use and support exploration. This information cannot be obtained without a community survey.

NASA provides funding to the USGS for products and services related to supporting terrestrial analog work. To identify community needs is part of our contractually obligated duties. The Organic Act of March 3, 1879, authorizes the USGS to conduct this research.

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. Be specific. If this collection is a form or a questionnaire, every question needs to be justified.

Information will be analyzed by the USGS Astrogeology Science Center to identify community needs. The web-based questionnaire contains a total of 33 questions and is designed to take 30 minutes to complete. The questionnaire is divided into four sections: (1) "Respondent Details," (2) "Field Analog Use," (3) "Data Portal Use," and (4) "Geologic Materials Collection Use." Each question was carefully selected to address the details of terrestrial analog activities and to enable cross-correlation.

The question asks...	So that we can...
Q1: Organization?	Understand participant background
Q2: Stage of career?	Understand participant background
Q3: Discipline?	Understand participant background
Q4: Type of Work?	Understand participant background
Q5: Funding Sources?	Understand participant background
Q6: Office geographic location?	Understand participant background
Q7: Involvement in mission operations?	Understand participant background
Q8: Relevant planetary bodies/systems?	Understand participant background

Q9: Relevant planetary processes?	Understand participant background
Q10: Field experience?	Understand participant background
Q11: Conduct analog field studies?	Assess field analog use
Q12: Frequency of analog work for research?	Assess field analog use
Q13: Frequency of analog work for teaching?	Assess field analog use
Q12: Frequency of using data/results from other analog studies?	Assess field analog use
Q15: Reasons for not conducting own analog field studies?	Assess field analog use, identify obstacles
Q16: Factors important in choosing field location?	Assess field analog use, identify obstacles
Q17: Primary audience for fieldwork?	Assess field analog use, identify obstacles
Q18: Using field sites that were previously visited?	Assess field analog use, identify obstacles
Q19: Importance of field guides for certain locations?	Assess field analog use, identify needs for field guides
Q20: Would like field guides for following locations?	Assess field analog use, identify needs for field guides
Q21: Kinds of field data you collect?	Understand the most common data types and range of data types
Q22: What have you done with data and samples for archiving?	Assess data use
Q23: How easy to locate data from others' field studies?	Assess data use, identify obstacles
Q24: Preferred way to search for data?	Assess data use, identify needs for archive capabilities
Q25: What kinds of data for digital archive?	Assess data use
Q26: Main limitations for archiving your data?	Assess data use, identify obstacles
Q27: Frequency of using online repository for samples and data?	Assess data use
Q28: Value of analog rock samples for planetary science?	Assess sample priorities
Q29: Likelihood of requesting rock samples or lab data from public archive?	Assess sample use
Q30: What kinds of physical materials are important to archive?	Assess sample use
Q31: Types of rock samples most useful to your work?	Assess sample use, identify priorities
Q32: Likelihood of archiving physical	Assess sample use

samples in long-term archive?	
Q33: Open for additional comments	Identify community needs

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 and specifically how this collection meets GPEA requirements.

The survey will be available in an electronic fillable format. It is estimated that 100% of participants will use this format. This format was selected because it is the primary means of communication in our field and is expected to reach the widest audience. The results of the information collection will also be made available to the public in electronic form (USGS Open File Report, when published).

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 Item 2 above.

There is no duplication. The information requested is site/activity specific and is not otherwise available in the agency.

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

This information collection does not impact small businesses or other small 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.

If we do not collect the information or if we collect the information less frequently, we will not achieve our contractually obligated duties with NASA to serve the community and provide the best support for terrestrial analog work, because we will not know what the community needs.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

- * **requiring respondents to report information to the agency more often than quarterly;**
- * **requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- * **requiring respondents to submit more than an original and two copies of any document;**
- * **requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;**

- * in connection with a statistical survey that is not designed to produce valid and reliable results that can be generalized to the universe of study;
- * requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
- * that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- * requiring respondents to submit proprietary trade secrets, or other confidential information, unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

There are no circumstances that require us to collect the information in a manner inconsistent with OMB guidelines.

8. **If applicable, provide a copy and identify the date and page number of publication 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 in response to the PRA statement associated with the collection over the past three years, and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.**

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every three years — even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

On February 16, 2022, we published a 60-Day *Federal Register* notice 87 FR, 8869. We did not receive any comments in response to that notice.”

Table 1: Commenters on the Survey

USGS Space Scientist Flagstaff, AZ	USGS Research Geologist Flagstaff, AZ
USGS Research Physical Scientist Flagstaff, AZ	

9. **Explain any decision to provide any payment or gift to respondents, other than**

remuneration of contractors or grantees.

We will not provide payments or gifts to respondents

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

We do not provide any assurance of confidentiality.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and 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.

We do not ask questions of a sensitive nature

12. Provide estimates of the hour burden of the collection of information. The statement should:

- * Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- * If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**
- * Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here.**

We estimate that there will be approximately 300 respondents and approximately 300 responses annually, totaling 150 annual burden hours. The completion time for each information collection varies as shown in Table 2 below.

We are using the Bureau of Labor Statistics *Employer Costs for Employee Compensation*, USDL-22-1176, published on 06/16/2022, to determine our dollar value for burden hours. The value used is \$38.61 per hour for public respondents (private industry) and \$55.47 for State, local and Tribal government respondents.

Table 2: Respondent Burden

Participant / Activity	Number of Responses	Minute per response	Burden Hours	Dollar Value for Burden Hr
Public individual reads announcement or instructions	300	1	5	\$193.05
Public individual completes survey	300	29	145	\$5,598.45
Subtotal				
Subtotal				
Total	300	30	150	\$5,791.50

13. Provide an estimate of the total annual non-hour cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected in item 12.)

- * The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information (including filing fees paid for form processing). Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.
- * If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.
- * Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or

(4) as part of customary and usual business or private practices.

We estimate the total annual nonhour burden cost to be \$0

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.

The total annual cost to the Federal Government is \$19,906. This includes salary and benefits for federal employees to process the responses. We used the Office of Personnel Management Salary Table 2022 (https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2022/DCB_h.pdf) to determine the hourly rate (Table 3). We used the DOI USGS Budget and Science Information System Plus (BASIS+) to determine the fully loaded hourly rate, which is the cost of employee salary and benefits.

Table 3: Federal Government Expenses

Position	Grade/ Step	Hourly Rate	Annual Hrs	Fully Loaded Hr Rate (* 1.6)	Total Labor Value
Project Lead	14/3	\$64.19	80	\$102.70	\$8,216.00
Research Geologist	13/2	\$40.21	80	\$64.34	\$5,147.20
Research Geologist	13/7	\$46.70	20	\$74.72	\$1,494.40
Geologist	11/7	\$32.76	20	\$52.42	\$1,048.40
				Total:	\$15,906.00

Table 4 Other Federal Government Expenses

Journal publication costs	\$4,000
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15. Explain the reasons for any program changes or adjustments in hour or cost burden.

This is a new collection, in use without OMB approval.

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 survey results will be compiled and analyzed using a web-based survey platform to look for cross-correlations. No complex analytical techniques will be used. The survey will be open for data collection for a duration of at least one month. Survey results are expected to be published in an Open File Report, with an expected publication time within one year of survey approval.

- 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.**

We will display the OMB Control Number and expiration date on appropriate materials.

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

There are no exceptions to the certification statement.