

1 Supporting Statement A

Assessment Of The Business Requirements And Benefits Of Enhanced Geospatial Water Data

OMB Control Number 1028-NEW

Terms of Clearance: None

General Instructions

A completed Supporting Statement A must accompany each request for approval of a collection of information. The Supporting Statement must be prepared in the format described below, and must contain the information specified below. If an item is not applicable, provide a brief explanation. When the question "Does this ICR contain surveys, censuses, or employ statistical methods?" is checked "Yes," then a Supporting Statement B must be completed. OMB reserves the right to require the submission of additional information with respect to any request for approval.

Specific Instructions

Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. The U.S. Geological Survey (USGS) in partnership with the Natural Resources Conservation Service is considering an expanded program to significantly improve the availability and consistency of hydrographic data for the United States and its territories, including the coastline. Hydrographic data can include lakes, streams, culverts, dams, irrigation features, wetlands, and levees, among others. Hydrographic data are collected by Federal, State, local, and tribal governments to meet a wide range of mission critical government needs, from flood mapping to hazards assessments, resource management and climate science. The National Hydrography Dataset (NHD) has met many user needs for the past 20 years, but is fundamentally based on technology, approaches, and user requirements from the late 1990s. The proposed information collection and study would provide information on current user requirements for hydrography data and the benefits associated with meeting those requirements.

The USGS will use the study results to refine requirements, identify implementation alternatives, and associated benefits and costs for an improved National Hydrography program designed to meet many Federal, State, and other national business needs. The USGS has lead-agency responsibility for maintaining national hydrography data under authority of the Office of Management and Budget (OMB) Circular A-16. The USGS and NRCS will manage the

Assessment including the information collection process and provide the final report to the Federal Geographic Data Committee (FGDC), the OMB and other officials and interested stakeholders.

The National Hydrography Dataset (NHD) has existed in approximately its current form for more than 20 years. Analysis software, user requirements, and alternative sources of information have all changed during that time. The U.S. Geological Survey, as the theme lead for Inland Waters under Office of Management and Budget Circular A-16 endeavors to understand the current and future needs of users for hydrography data to inform future dataset design.

This information collection supports USGS' mandates and programmatic requirements related to its role as the lead civil mapping agency and other core science responsibilities. Specifically, this surveying effort will provide information required by the following laws, regulations, policies and statutes:

OMB Circular A-16

Executive Order 12906 - Coordinating Geographic Data Access

U.S. Code Title 43, Chapter 2, Section 36d. (43 U.S.C. 36d)

Government Performance Results Act (GPRA) (1993)

Organic Act of March 3, 1879

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.

As the lead Federal government agency, USGS is designated to collect digital hydrographic data under the OMB Circular A-16. This Circular outlines USGS responsibilities regarding coordination of Federal surveying, mapping, and related spatial data activities that are financed in whole or in part by Federal funds. The USGS is using this opportunity to supplement ongoing data collection activities in response to changing national requirements for geospatial data general and hydrographic data specifically, and to maximize efficient data collection partnerships across Federal and State agencies.

USGS will use a questionnaire to collect information about current and future Federal, State and other national business uses for hydrographic data, and the current and expected benefits from their use. Business uses are defined as those mission critical activities of Federal and State agencies that require hydrographic data, e.g., flood risk mapping as performed by FEMA; coastal mapping as performed by NOAA, USACE, and some States; water rights management as performed by DOI bureaus and some States; conservation planning as performed by the NRCS, etc. The business uses and benefits will be used in benefit-cost analyses to develop optimal programmatic approaches for more fully meeting national needs for hydrographic data.

Questions on ...	Provide information about ...	Which is used to ...
Demographic characteristics (name, organization, job title, etc.)	Factors influencing participation and demand	Provides contact information for follow-up with respondents in completing questionnaires
Business uses	Which categories of applications provide the highest benefits	Plan and develop programs to effectively meet the most and highest priority requirements possible.
Mission Critical Activities	User data needs in the context of their specific job function.	Plan and develop programs that address key agency mission functions.
Functional Requirements	Details of user data requirements to do their job. Includes feature content, attribute content, functionality, interoperability, and access requirements.	Ensure that proposed programs are planned to provide the highest possible data quality.
Geographical Area Requirements	Geographic areas for which hydrographic data meeting the functional requirements are needed	Ensure that proposed programs are tuned to address requirements that may vary by region.
Benefits of Hydrographic Data	Operational, customer service and other public/societal benefits of hydrographic data	Ensure that proposed programs balance costs and benefits.

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.

Information will be collected electronically through an on-line questionnaire. All respondents will receive an e-mail message providing a URL link to the survey. We will follow the most up-to-date methods for conducting a web-based survey. All instruction and the survey instrument will be available on-line. We will use Survey Monkey™ to develop, serve, collect, store, and analyze the information collected during this study.

The selection of this approach is based on the technical nature of the population being sampled. These professional users of hydrographic data are highly reliant on, and conversant with, computer and web technology in their fields. The method used for identifying the sample

suggests that they all have access to email and web technology. Data collection methods will follow Dillman (2007) for web-based surveys. Reports will be available on the USGS Fort Collins Science Center web site.

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.

This assessment is national in scope, and requirements and benefits information for hydrographic data have not been collected at a national level. This data will be complementary to other surveys of more limited scope, and no duplication will occur.

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

We have made efforts to keep the amount of information requested to a minimum for all of the respondents. This collection is not expected to have a significant impact on small business or small entities. We have attempted to minimize the burden to all respondents by developing an on-line survey.

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.

Failure to collect the information would make it difficult for the USGS and its partner agencies to adequately understand and respond to the business uses and needs of Federal, State and other national customers who rely on hydrographic data. USGS has limited information about current and future data needs which limits its ability to effectively evolve its programs to increase the benefits of hydrographic data, and to expand partnerships for collecting and sharing data for multiple uses. .

There are no technical or legal obstacles to reducing burden for this collection.

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.**

This request contains no special circumstances that would require this information collection to be conducted in a manner that is 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 March 25, 2014, we published a 60-day Federal Register notice (79 FR 16368) announcing that we would submit this information request to OMB for approval. In that notice we solicited public comments for 60 days, ending May 27, 2014. We did not receive any comments in response to that notice.

In addition to our Federal Register Notice, we solicited comments from users of hydrographic data within the U.S. Environmental Protection Agency, the U.S. Forest Service, the Natural

Resources Conservation Service, the Bureau of Land Management, Consortium of Universities for the Advancement of Hydrologic Science, Inc., the Minnesota Pollution Control Agency, and the Arkansas Department of Environmental Quality. We asked them to provide feedback about the clarity of instruction and the estimated time to complete a prototype of an on-line version of the questionnaire. The individuals provided comments concerning the structure and approximate length of time it would take to complete the survey; they also concurred with our estimated burden time for the application to be about 1 hour or less. We made minor editorial changes to the final version survey based on the reviewer suggestions.

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

There are no payments or gift giving associated with this collection.

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

Names and contact information (e.g. email address, address and phone number) will be maintained only for the purpose to clarify responses. Our primary purpose for collecting contact information is to follow-up with selected respondents to verify the submission as a valid and reliable entry. Respondent names or e-mail addresses will not be used in any of our reports.

The records for this collection will be maintained in accordance to Privacy Act System of Records identified as Computer Registration System. (INTERIOR/USGS-20) published at 74 FR 23430 (May 19, 2009).

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.

No questions of a sensitive nature will be asked.

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 the total dollar value of the annual burden hours for this collection to be \$12,921 (Table 2). We used the Bureau of Labor Statistics news release USDL 14-1673, September 10, 2014, Employer Costs for Employee Compensation—June 2014 (<http://www.bls.gov/news.release/pdf/ecec.pdf>), to estimate average hourly wages and calculate benefits for:

- **State/local/tribal Government** - We used the total compensation costs for state and local government workers (\$43.07) calculate costs.

Table 2. Estimated Dollar Value of Annual Burden Hours

	Estimated Number of Responses	Average Time (minutes)	Annual Burden Hours	Dollar Value of Burden Hour	Value Of Respondent Burden Hours
Invitation to survey	375	5	31	\$43.07	\$ 1,346
Survey State, Local, Tribal Governments	300	60	300	\$43.07	\$12,921
Total	675	65	331		\$14,267

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.

There are no non-hour burden costs.

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 \$351,581. This cost includes Federal employee salaries and benefits. The table below shows Federal staff and grade levels performing various tasks associated with this information collection. We used the Office of Personnel Management Salary Table 2014-RUS. We multiplied the hourly rate by 1.5 to account for benefits.

Table 3. Federal Employee Salaries and Benefits

Position	Grade/ Step	Hourly Rate	Hourly Rate incl. benefits (1.5 x hourly pay rate)	Estimated time (hours) per task	Annual Cost
Project Manager	14/4	56.01	84.02	80	\$6722
Senior Project Advisor	15/10	75.28	112.92	80	\$9034
User Engagement Chief	15/4	65.88	98.82	80	\$7,906
Project Support	12/4	39.86	59.79	80	\$4,783
Geospatial Liaisons (Forty individuals at 120 hours each)	13/5	44.88	67.32	4800	\$323,136
Total				5120	\$351,581

15. Explain the reasons for any program changes or adjustments in hour or cost burden.

This is a new request.

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.

Data collected during this study will be coded directly in to the Survey Monkey TM. The software will automatically provide statistics like percent, response total, and response average. Data analysis will include frequency distributions, cross tabulation and multivariate analysis to report the findings from the survey. The reports will also synthesize business uses, requirements and benefits for each organization participating in the study. A summary report will be made publically available in electronic form.

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 the information collection instruments.

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.