

1 Supporting Statement A

HydroAdd Tool

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 mission of the National Geospatial Program (NGP) is to provide National topographic information to advance science, support government, enlighten citizens, and enable decision making. The NGP provides a foundation of digital geospatial data representing the topography, natural landscape, and manmade environment of the United States. Accessible through The National Map Data Download, customers can incorporate NGP geospatial products and services into their decision making and operational activities.

NGP is the OMB A-16 National Geospatial Data Asset Co-lead for the Water-Inland Theme, including the National Hydrography Dataset and Watershed Boundary Dataset. OMB Circular A-16 provides direction for Federal agencies to “coordinate work in partnership with federal, state, tribal and local government agencies, academia and the private sector to efficiently and cost-effectively collect, integrate, maintain, disseminate, and preserve spatial data, building upon local data wherever possible.” Executive Order 12906¹ accompanies Circular A-16. Geospatial Data Act of 2018 (GDA)² puts all the previous Circular A-16 (revised 2002) into law.

The U. S. Geological Survey (USGS) manages the National Hydrography Dataset (NHD), Watershed Boundary Dataset (WBD), and National Hydrography Dataset Plus High

¹ https://www.fgdc.gov/policyandplanning/executive_order

² <https://www.fgdc.gov/gda>

Resolution (NHDPlus HR). All three hydrography datasets are user-driven data, where states and local governments, through the NHD and WBD Stewardship Program, take an active role in directly editing and maintaining the data to support data accuracy. The local knowledge, editing skills, and availability of a steward have guided the data quality and completeness of local areas throughout the Nation.

In 2016 USGS completed the National Hydrography Requirements and Benefits Study to review and understand current and future user requirements and the associated benefits for improved hydrography data. Over 500 USGS hydrography data users from local, state, Federal, and Tribal governments, nonprofit organizations, academia, and the private sector participated in the study. Eighty-two percent of the agencies said that they would use web-based tools with a quick and easy way to identify errors and submit proposed changes to the national datasets. The study also suggested that open source and crowdsourced data editing will improve data quality.

The Hydrography Addressing Tool (HydroAdd) is a web tool built by the USGS NGP. HydroAdd will support users by providing a mechanism for referencing, or addressing, diverse external datasets to the National Hydrography Dataset (NHD). As an example, a user could use HydroAdd to reference the geographic locations and other details of field observations of fish presence to the NHD. HydroAdd will provide a framework for the management of addressed data, as well as will enable upstream and down-stream analyses within the context of the stream network itself. Any type of information could be addressed to the stream network in this way, making this tool highly useful for a broad range of purposes that benefit the Nation.

Users cannot edit the NHD with the HydroAdd application. HydroAdd can only display the NHD as a read-only reference layer. Users must make their own datasets available to HydroAdd as a web feature service, either from their own server hardware or from a third-party service, and all edits take place in their own web feature service.

To use HydroAdd, users must have an existing Department of Interior (DOI) account or an Esri ArcGIS.com account. DOI or ArcGIS.com provide an open authorization (OAuth) token for login to HydroAdd. OAuth does not provide any contact information. HydroAdd requires the user to select a username for their profile. The user profile contains the username and their DOI or ArcGIS.com email. HydroAdd does not collect any other information about the user. HydroAdd does not disseminate the information in the user profile.

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.

HydroAdd users will be Federal employees, or members of the public, such as state, local, private sector, academic, or other users with knowledge of GIS and knowledge of how to create a web feature service. HydroAdd allows users to edit the geometry of the features in

the users' web feature services to be coincident with NHD features.

Users register for HydroAdd with a user-selected username, and a DOI or Esri ArcGIS Online account. DOI or Esri provide an open authorization (OAuth) token for login to HydroAdd. OAuth does not provide any contact information. The user profile contains the user-selected username and email. HydroAdd tool does not collect any other information about the user. HydroAdd does not disseminate the information in the user profile.

This information is stored in the application database. A user's profile is visible only to themselves and by HydroAdd administrators. HydroAdd administrators are a limited group of USGS staff. User name and email are collected because they enable HydroAdd administrators to contact and help the user if needed, to help to protect the user's data from edit by anyone who is not the user, and to enable tracking on the editing history for the datasets through reporting.

- 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.**

As the National Hydrography Requirements and Benefits Study demonstrated, users of the National Hydrography Datasets requested web-based tools to support data maintenance. The combination of improved technologies and wide public access to the internet has allowed USGS to build web-based tools to allow move forward with crowd-sourcing applications to maintain datasets efficiently with more citizen involvement.

HydroAdd supports users by providing a mechanism for referencing, or addressing, diverse external datasets to the NHD. As an example, a user could use HydroAdd to reference the geographic locations and other details of field observations of fish presence to the NHD. HydroAdd will provide a framework for the management of addressed data, as well as will enable upstream and down-stream analyses within the context of the stream network itself. Any type of information could be addressed to the stream network in this way, making this tool highly useful for a broad range of purposes that benefit the Nation.

- 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.**

USGS has a desktop GIS application called the HEM tool. It allows users to address their data to the NHD. The HEM tool relies on older technology and is not web-based. It is not slated for further development and is scheduled for retirement when HydroAdd is released to the public.

USGS also has a first-generation web-based addressing tool called HydroLink. The

functionality of HydroLink is similar to HydroAdd but has limited functionality. It does not offer many of the functions as HydroAdd. It is not slated for further development and is scheduled for retirement when HydroAdd is released to the public.

Users of the National Hydrography Datasets have requested web-based tools to support data maintenance. As web-based application technology improves, USGS is able to offer more robust web-based tools. HydroAdd utilizes the most recent advances in web-based technology to allow our partners to address their data to the NHD more efficiently than with any other addressing tool.

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

This information does not affect 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.

Not collecting this information would hamper the Federal Government's efforts to effectively map hydrography data for the Nation and would prevent citizens from efficiently and effectively participating in improving those data and in hydrographic addressing their own data.

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 information in a manner inconsistent 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 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 Feb 3, 2021, we published a 60-day Federal Register notice (86 FR 8030) announcing that we would submit this ICR to OMB for approval. In that notice we solicited public comments for 60 days. 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 or gifts are provided to the respondents.

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

No assurance of confidentiality is given to respondents.

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.**

The collection does not include sensitive or private questions.

HydroAdd minimizes the collection of PII by limiting user information to username and a

token that links the user to his/her DOI, or Esri ArcGIS Online account. As such, a PIA was not required.

The user profile contains the username and their DOI or ArcGIS.com email. HydroAdd does not collect any other information about the user. HydroAdd does not disseminate the information in the user profile.

The user profiles enable HydroAdd administrators to contact and help the user if needed, help to protect the user's data from edit by anyone who is not the user, and enable tracking on the editing history for the datasets through reporting.

HydroAdd administrators are a limited group of USGS staff.

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 anticipate approximately 100 users will register for HydroAdd each year and estimate that it takes 6 minute to complete the registration form and edits, by entering a username unique to their HydroAdd profile. Users must have a preexisting DOI account or an ArcGIS.com account.

We estimate the dollar value of the annual burden hours to be \$52.94 for State or Government respondents, based on the Employer Costs for Employee Compensation-March 2020 (USDL-20-2266) published by the Bureau of Labor Statistics, US Department of Labor³.

Table 1: Estimated Dollar Value of Annual Burden Hours

| Description of Respondents | Number of annual Responses | Estimated Completion Time per Response (minutes) | Total Annual Burden Hours | Hourly Pay Rate (\$/hr est.) | Total Dollar Value of Annual Burden Hours* |
|----------------------------|----------------------------|--|---------------------------|------------------------------|--|
| User registration | 100 | 1 | 2 | \$52.94 | \$106 |
| Complete edits | 100 | 5 | 8 | \$52.94 | \$424 |
| Total | | 6 | 10 | | \$530 |

³ [Employer Costs for Employee Compensation - September 2020 \(bls.gov\)](https://www.bls.gov/news.release/ncp202009.pdf)

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 that the annual non-hour burden cost will be zero.

- 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.**

We used the Office of “Personnel Management Salary Table 2021-GS, Incorporating the 1% General Schedule Increase Effective January 2021” (no locality) to determine the hourly wages for federal employees. To calculate benefits, we multiplied the hourly rate by 1.6 to account for benefits.

We estimate the total annual cost to the Federal Government is at least \$86,313.76.

Table 2: Estimated Dollar Value of Annual Burden Hours for Federal Employees

| Federal Position | Grade/ Step | Hourly Rate | Hourly Rate incl. Benefits (1.6 x hourly pay rate) | Estimated Time Spent by Federal Employees (annualized hours) | Estimated Federal Employee Salary/Benefit Annualized Costs |
|---------------------------------|-------------|-------------|--|--|--|
| Project Lead (0.6 FTE) | 12/5 | \$36.29 | \$ 58.06 | 1,248 | \$ 72,458.88 |
| Development Team Lead (0.1 FTE) | 12/10 | \$41.63 | \$66.61 | 208 | \$13,854.88 |
| Total | | | | 1,456 | \$86,313.76 |

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

This is a new collection.

- 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 from the collection will not be published as a reference.

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.

Not applicable for this request.

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.