



## U.S. Department of the Interior PRIVACY IMPACT ASSESSMENT

### Introduction

The Department of the Interior requires PIAs to be conducted and maintained on all IT systems whether already in existence, in development or undergoing modification in order to adequately evaluate privacy risks, ensure the protection of privacy information, and consider privacy implications throughout the information system development life cycle. This PIA form may not be modified and must be completed electronically; hand-written submissions will not be accepted. See the [DOI PIA Guide](#) for additional guidance on conducting a PIA or meeting the requirements of the E-Government Act of 2002. See Section 6.0 of the DOI PIA Guide for specific guidance on answering the questions in this form.

NOTE: See Section 7.0 of the DOI PIA Guide for guidance on using the DOI Adapted PIA template to assess third-party websites or applications.

**Name of Project:** Evaluating Public Values for Water Quality in the Susquehanna River in Pennsylvania

**Date:** March 2, 2017

**Bureau/Office:** U.S. Geological Survey/Fort Collins Science Center

**Bureau/Office Contact Title:** Branch Chief

#### Point of Contact

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### Section 1. General System Information

#### A. Is a full PIA required?

- Yes, information is collected from or maintained on
  - Members of the general public
  - Federal personnel and/or Federal contractors



- Volunteers  
 All

No: *Information is NOT collected, maintained, or used that is identifiable to the individual in this system. Only sections 1 and 5 of this form are required to be completed.*

## **B. What is the purpose of the system?**

The purpose of the system is to store data that will be collected from a mail survey of approximately 2,500 members of the general public conducted by the Social and Economic Analysis Branch, Fort Collins Science Center, U.S. Geological Survey (USGS). The survey will assess the private citizens' awareness, perceptions, and values associated with water quality, as well as measure participation in recreational activities and demographics. This data collection effort has the purpose of investigating public values for changes in water quality within the Susquehanna River Basin located in Pennsylvania. An economic survey of private households in Pennsylvania will be used to review perceptions, uses, and values of local residents. This information will be gathered via a mail survey instrument. No such prior analysis has been conducted in the Susquehanna River Basin.

The USGS Ecosystems Mission Area is funding this effort as it aligns with their mission to "work with others to provide the scientific understanding and technologies needed to support the sound management and conservation of our Nation's biological resources." Specifically, the USGS Ecosystems Mission Area "enters into partnerships with scientific collaborators to produce high-quality scientific information and partnerships with the users of scientific information to ensure this information's relevance and application to real problems." The project also supports the Department of the Interior's mission to "protect and manage the Nation's natural resources and cultural heritage" and to "provide scientific and other information about those resources."

## **C. What is the legal authority?**

The Clean Water Act (33 U.S.C. §1251 et seq. (1972)) requires the classification of surface waters with regard to beneficial use and to establish water-quality criteria to meet those uses.

The Safe Drinking Water Act (42 U.S.C. §300f et seq. (1974)) was established to protect all waters designed for drinking use. Further, in 1991, the U.S. Congress established the USGS National Water-Quality Assessment Program to develop long-term, nationally consistent information on the quality of the Nation's streams and groundwater. Congress recognized the critical need for this information to support scientifically sound management, regulatory, and policy decisions concerning the increasingly stressed water resources of the Nation. A recent report by the President's Council of Advisors on Science and Technology (PCAST) calls on the Federal government to better prioritize funds spent each year on ecological restoration and biodiversity preservation (Executive Office of the President, President's Council of Advisors on



Science and Technology, 2011). The 2011 PCAST report specifically recommended improving the capabilities of Federal agencies to promote consideration of ecosystem services and valuation in decision making.

In support of the Clean Water Act, Safe Drinking Water Act, and legislation authorizing the USGS to study the Nation’s streams, the proposed data collection is being conducted to conform to the Office of Management and Budget Memorandum M-16-01, which requires that all Federal agencies incorporate ecosystem services in Federal planning and decision making. This project is an important step for the USGS to take toward demonstrating the feasibility of measuring ecosystem service values in the context of water resources.

The following legal authorities also apply to this project:  
43 U.S.C. 31 et seq., as amended, Organic Act of March 3, 1879; 44 U.S.C. 3501 et seq., Paperwork Reduction Act of 1980; 44 U.S.C. 2904 and 3102, Federal Records Act of 1950; and 5 CFR part 1320, Controlling Paperwork Burdens on the Public.

**D. Why is this PIA being completed or modified?**

- New Information System
- New Electronic Collection
- Existing Information System under Periodic Review
- Merging of Systems
- Significantly Modified Information System
- Conversion from Paper to Electronic Records
- Retiring or Decommissioning a System
- Other: *Describe*

**E. Is this information system registered in CSAM?**

- Yes: *Enter the UII Code and the System Security Plan (SSP) Name*

010-000001013 System Security Plan for Science & Support Systems

- No

**F. List all minor applications or subsystems that are hosted on this system and covered under this privacy impact assessment.**

Subsystem Name	Purpose	Contains PII (Yes/No)	Describe <i>If Yes, provide a description.</i>
None			



**G. Does this information system or electronic collection require a published Privacy Act System of Records Notice (SORN)?**

Yes: *List Privacy Act SORN Identifier(s)*

Censuses, Household Surveys, and Opinion Polls – Interior, GS-29 (Pending)

No

**H. Does this information system or electronic collection require an OMB Control Number?**

Yes: *Describe*

We will be collecting voluntary responses of private citizens through a random sample of household mailing addresses. We will be asking the same set of questions to more than nine respondents.

No

## Section 2. Summary of System Data

**A. What PII will be collected? Indicate all that apply.**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Name                          | <input type="checkbox"/> Credit Card Number                |
| <input type="checkbox"/> Citizenship                              | <input type="checkbox"/> Law Enforcement                   |
| <input checked="" type="checkbox"/> Gender                        | <input checked="" type="checkbox"/> Education Information  |
| <input checked="" type="checkbox"/> Birth Date                    | <input type="checkbox"/> Emergency Contact                 |
| <input checked="" type="checkbox"/> Group Affiliation             | <input type="checkbox"/> Driver's License                  |
| <input type="checkbox"/> Marital Status                           | <input checked="" type="checkbox"/> Race/Ethnicity         |
| <input type="checkbox"/> Biometrics                               | <input type="checkbox"/> Social Security Number (SSN)      |
| <input type="checkbox"/> Other Names Used                         | <input type="checkbox"/> Personal Cell Telephone Number    |
| <input type="checkbox"/> Truncated SSN                            | <input type="checkbox"/> Tribal or Other ID Number         |
| <input type="checkbox"/> Legal Status                             | <input type="checkbox"/> Personal Email Address            |
| <input type="checkbox"/> Place of Birth                           | <input type="checkbox"/> Mother's Maiden Name              |
| <input type="checkbox"/> Religious Preference                     | <input type="checkbox"/> Home Telephone Number             |
| <input type="checkbox"/> Security Clearance                       | <input type="checkbox"/> Child or Dependent Information    |
| <input type="checkbox"/> Spouse Information                       | <input checked="" type="checkbox"/> Employment Information |
| <input checked="" type="checkbox"/> Financial Information         | <input type="checkbox"/> Military Status/Service           |
| <input type="checkbox"/> Medical Information                      | <input type="checkbox"/> Mailing/Home Address              |
| <input type="checkbox"/> Disability Information                   |  |
| <input type="checkbox"/> Other: <i>Specify the PII collected.</i> |  |



**B. What is the source for the PII collected? Indicate all that apply.**

- Individual
- Federal agency
- Tribal agency
- Local agency
- DOI records
- Third party source
- State agency
- Other: *Describe*

**C. How will the information be collected? Indicate all that apply.**

- Paper Format
- Email
- Face-to-Face Contact
- Web site
- Fax
- Telephone Interview
- Information Shared Between Systems
- Other: *Describe* Through an Internet search

**D. What is the intended use of the PII collected?**

A random list of names and mailing addresses will be obtained from a third party in order to send out surveys to a representative sample of the general public. Names and addresses will not be used for any other purposes other than mailing surveys.

The personally identifiable information (PII) collected on the survey will be used to determine if certain groups within the general public differ statistically in regards to the activities and issues asked about on the survey. Standard demographics, such as gender, education level, income, and race/ethnicity, will be asked to enable analysis by group of other variables on the survey, including awareness and perceptions of water quality and participation in recreational activities. For example, one analysis will determine if there is a statistically significant difference between the percentages of men and women participating in certain recreation activities, such as boating and fishing. All analyses will be conducted using aggregated data; at no time will any analysis be conducted on data from a single individual. These analyses will help the USGS better understand and meet the needs of different groups of stakeholders.

**E. With whom will the PII be shared, both within DOI and outside DOI? Indicate all that apply.**

- Within the Bureau/Office: *Describe the bureau/office and how the data will be used.*



The Social and Economic Analysis Branch, Fort Collins Science Center, U.S. Geological Survey leads projects that integrate social, behavioral, economic, and natural science in the context of human-natural resource interactions. Our research provides scientific understanding and support for the management and conservation of our natural resources in support of multiple agency missions. The research team for this survey is contained within the Social and Economic Analysis Branch, and the data will not be shared outside of the branch. The PII collected on the survey will be used to determine if certain groups within the general public differ statistically in regards to the activities and issues asked about on the survey. Standard demographics such as gender, education level, income, and race/ethnicity will be asked to enable analysis by group of other variables on the survey, including awareness and perceptions of water quality and participation in recreational activities.

Other Bureaus/Offices: *Describe the bureau/office and how the data will be used.*

Other Federal Agencies: *Describe the federal agency and how the data will be used.*

Tribal, State or Local Agencies: *Describe the Tribal, state or local agencies and how the data will be used.*

Contractor: *Describe the contractor and how the data will be used.*

Other Third Party Sources: *Describe the third party source and how the data will be used.*

The Social and Economic Analysis Branch of the USGS Fort Collins Science Center has established a Cooperative Ecosystems Studies Unit agreement with a professor in the Department of Agricultural and Resource Economics at Colorado State University (CSU). This professor has a wealth of experience conceptualizing, designing, and managing technical economic valuation studies, including those that estimate the value of ecosystem services related to water resources. This partnership between the USGS and CSU is necessary for this data collection effort as a way to increase research capabilities and leverage research experience in understanding the economics of water quality. Sharing of coded and screened response data is necessary in order to meet the work requirements of this research project. Sharing and dissemination of all data and reporting will follow USGS Fundamental Science Practices guidelines for data management and peer review, and will be done in a collaborative manner between CSU and the USGS.

**F. Do individuals have the opportunity to decline to provide information or to consent to the specific uses of their PII?**



- Yes: *Describe the method by which individuals can decline to provide information or how individuals consent to specific uses.*

All responses to the survey are voluntary. No individuals are required to answer the questions. A cover letter will be included with every survey, which clearly states there is no requirement to respond to the survey, as well as what the data collected will be used for. In addition, the survey itself will have a statement on it with the same information. All the data will be used in the same way; there are no specific uses beyond this demonstration project.

- No: *State the reason why individuals cannot object or why individuals cannot give or withhold their consent.*

**G. What information is provided to an individual when asked to provide PII data? Indicate all that apply.**

- Privacy Act Statement: *Describe each applicable format.*

Privacy Act Statement for Project Titled “Evaluating Public Values for Water Quality in the Susquehanna River in Pennsylvania”

- (1) **AUTHORITY:** The Clean Water Act (33 U.S.C. §1251 et seq. (1972)), the Safe Drinking Water Act (42 U.S.C. §300f et seq. (1974)), and the Office of Management and Budget Memorandum M-16-01.
- (2) **PURPOSE:** The information that we collect in this survey will reveal the general public’s experiences with and views on water quality in the Susquehanna River Basin.
- (3) **ROUTINE USES:** The information will be used by U.S. Geological Survey researchers.
- (4) **DISCLOSURE:** Voluntary.

- Privacy Notice: *Describe each applicable format.*

- Other: *Describe each applicable format.*

In the cover letter and on every survey, we include a statement concerning privacy such as this one: “The Paperwork Reduction Act requires us to tell you why we are collecting this information, how we will use it, and whether or not you have to respond. The information that we collect in this survey will help us understand the general public’s experiences with and views on water quality in the Susquehanna River Basin. Your response is voluntary. An agency may not conduct or sponsor and you are not required to respond to a collection of



information unless it displays a valid OMB Control Number. We estimate it will take an average of 15 minutes to complete this survey. You may send comments concerning the burden estimate or any aspect of the survey to the Information Collection Clearance Officer, U.S. Geological Survey, 12201 Sunrise Valley Dr. 807, Reston, VA 20192. OMB CONTROL #1028-XXXX EXPIRATION DATE XX/XX/20XX”

None

**H. How will the data be retrieved? List the identifiers that will be used to retrieve information (e.g., name, case number, etc.).**

Data will be retrieved from the system manually through aggregate analyses in Stata, a statistical program. Each set of an individual’s responses to the survey will be identified by an identification (ID) number, but there will be no retrieval of individual data, only data in aggregate.

**I. Will reports be produced on individuals?**

Yes: *What will be the use of these reports? Who will have access to them?*

No

### Section 3. Attributes of System Data

**A. How will data collected from sources other than DOI records be verified for accuracy?**

Since this survey will be confidential, no names or addresses will be associated with the data. As such, verifying individual data for accuracy and reliability cannot (and should not) be done if confidentiality is to be maintained. Verifying the accuracy and reliability of the aggregate data will be done through comparison with U.S. Census data. By statistically comparing the demographic variables from the survey and the Census, the representativeness of the sample can be determined.

**B. How will data be checked for completeness?**

All data will be quality controlled by a project researcher who will look at each record to check for completeness. Further, all information will be quality controlled through double entry by two or more researchers of at least 5% of randomly selected survey responses. Those responses selected for double entry will be screen for outliers and to check for accurate data entry by the researcher.



**C. What procedures are taken to ensure the data is current? Identify the process or name the document (e.g., data models).**

The data will be collected only once and is only intended to be representative for that point in time. The month and year the data are collected will be clear in all file names. Reporting on the results of the data will take place within a year's time of the collection of the data, and further reporting will not be needed. The data are not connected to other data through a warehouse or other system, so how current the data are will not affect other data.

**D. What are the retention periods for data in the system? Identify the associated records retention schedule for the records in this system.**

Under the USGS General Records Disposition Schedule 101-02, the retention period for these data is seven years or when superseded, obsolete, or no longer needed, whichever is later.

**E. What are the procedures for disposition of the data at the end of the retention period? Where are the procedures documented?**

At the end of the retention period, any paper copies of data will be shredded and disposed of by a company certified in disposing of sensitive information. Because this is research data, all electronic files containing data from the survey will remain stored on secure servers as reference materials until no longer needed by the researchers. All other electronic files will be deleted.

**F. Briefly describe privacy risks and how information handling practices at each stage of the "information lifecycle" (i.e., collection, use, retention, processing, disclosure and destruction) affect individual privacy.**

If someone were to steal the data, the privacy risks are minimal. The names and addresses for the people to whom the survey was sent are already public record, and the PII collected on the survey will not be associated with an individual's name or mailing address. On its own, the PII is not specific enough for someone to be able to identify an individual. Additionally, none of the information collected by the survey is of a sensitive nature.

During collection, tracking survey completions is necessary when following standard mail survey protocols, since individuals are sent multiple mailings to give them ample opportunity to complete the survey if they wish. If an individual has already completed the survey or requests to be taken off the mailing list, no further mailings are sent to them. In order to track completions and removal requests, each individual's name and mailing address will be assigned an ID number and stored in a password-protected file on a USGS secure server. The list of random numbers is then loaded into a separate password-protected file on a USGS secure server so the completed surveys can be tracked by the number (names and addresses are not used for tracking). The surveys sent to individuals will have ID numbers on them, but no other identifying information. Completed surveys are returned to the research team in business reply



envelopes so they do not have names and addresses on them. Once the surveys are returned, the data on the survey is entered into another password-protected file, which does not have the names, addresses, or ID number in it. The paper copies of the surveys are kept in locked filing cabinets in a locked room in a USGS secure facility (a USGS Federal ID badge is required to enter the building without an escort) for the duration of the collection. All electronic files will be password-protected and stored on USGS secure servers.

During use, only members of the USGS research team will have access to the files and will be conducting analyses on the data. During retention, all electronic files will be password-protected and stored on USGS secure servers. Once collection is finished, all paper copies of data will be moved to a locked storage room in a secure USGS facility, accessible only by the USGS research team.

Additional processing beyond the analyses of the data will not be done.

During disclosure, the data will only be presented in summaries as results of the analyses done by the research team. A USGS report and journal articles are planned to report the results of the survey outside of the Department. There are no risks associated with this reporting as no individual PII will be included. In the event of a Freedom of Information Act (FOIA) request for the original data, the disclosure of PII gathered on the survey will be evaluated at that time to determine if it should be included with the data. Names and addresses of the survey respondents would not be included in any FOIA request in order to maintain confidentiality.

During destruction, all paper copies of the data will be shredded and disposed of by a company certified in disposing of PII. All electronic files (copies of files or working files) that are not final versions of the data set or reporting out will be deleted. All other electronic files will remain password-protected, stored on USGS secure servers, and only accessible to the USGS research team.

## Section 4. PIA Risk Review

### A. Is the use of the data both relevant and necessary to the purpose for which the system is being designed?

Yes: *Explanation*

The system is designed solely to house the data collected on the survey, and the purpose of collecting the data is to use it to assess private households' awareness and perceptions of water quality issues, outdoor recreational activities, and demographics and to inform current and future management of the Susquehanna River.



This information collection effort is relevant to the U.S. Geological Survey Ecosystems Mission Area's mission to "work with others to provide the scientific understanding and technologies needed to support the sound management and conservation of our Nation's biological resources." Specifically, the Ecosystems Mission Area "enters into partnerships with scientific collaborators to produce high-quality scientific information and partnerships with the users of scientific information to ensure this information's relevance and application to real problems." The project also supports the Department of the Interior's mission to "protect and manage the Nation's natural resources and cultural heritage" and to "provide scientific and other information about those resources."

No

**B. Does this system or electronic collection derive new data or create previously unavailable data about an individual through data aggregation?**

Yes: *Explain what risks are introduced by this data aggregation and how these risks will be mitigated.*

No

**C. Will the new data be placed in the individual's record?**

Yes: *Explanation*

No

**D. Can the system make determinations about individuals that would not be possible without the new data?**

Yes: *Explanation*

No

**E. How will the new data be verified for relevance and accuracy?**

Since this survey will be confidential, no names or addresses will be associated with the data. As such, verifying individual data for accuracy cannot (and should not) be done if confidentiality is to be maintained. Verifying the accuracy of the aggregate data will be done through comparison with U.S. Census data. By statistically comparing the demographic variables from the survey and the Census, the representativeness of the sample can be determined. Standard survey practices will be followed to ensure the sample is representative, including beginning with a random sample of the general public and mailing multiple surveys and reminder postcards to improve the response rate. If the sample is found not to be representative of the population, the



data will be weighted using the U.S. Census data to ensure the results of the analyses are valid. The data is inherently relevant since the survey is designed to provide information specific to water quality objectives.

**F. Are the data or the processes being consolidated?**

- Yes, data is being consolidated. *Describe the controls that are in place to protect the data from unauthorized access or use.*
- Yes, processes are being consolidated. *Describe the controls that are in place to protect the data from unauthorized access or use.*
- No, data or processes are not being consolidated.

**G. Who will have access to data in the system or electronic collection? Indicate all that apply.**

- Users
- Contractors
- Developers
- System Administrator
- Other: *Describe*

**H. How is user access to data determined? Will users have access to all data or will access be restricted?**

All access to the data will be restricted to the USGS research team, a group of three to five users. Of the research team, one will be an undergraduate student, responsible for tracking survey completions and entering survey data. She/he will not have access to the data, only to forms where the data is entered. Once survey administration is finished, they will no longer have access to any of the data. At that point, the rest of the team will be analyzing the survey data as needed. Only the research project leader will have access to the files that contain names and addresses; the other researchers will have access to only the data collected on the survey.

The local system administrator at the Fort Collins Science Center would have access to any file that is not password-protected, but all files including PII will be password-protected.

**I. Are contractors involved with the design and/or development of the system, or will they be involved with the maintenance of the system?**

- Yes. *Were Privacy Act contract clauses included in their contracts and other regulatory measures addressed?*
- No



**J. Is the system using technologies in ways that the DOI has not previously employed (e.g., monitoring software, SmartCards or Caller ID)?**

Yes. *Explanation*

No

**K. Will this system provide the capability to identify, locate and monitor individuals?**

Yes. *Explanation*

The system has the ability to identify and monitor individual's actions in a system through server logs, which record log on attempts, user names, files accessed, dates and times of access, and success or failure of actions taken. For example, if an individual attempts to access a password-protected file and fails, that action is logged.

No

**L. What kinds of information are collected as a function of the monitoring of individuals?**

Log on attempts, user names, files accessed, dates and times of access, and success or failing of actions taken are all collected.

**M. What controls will be used to prevent unauthorized monitoring?**

Business rules, internal instructions, Privacy Act Warning notices, audit logs, and least privileges are all in place. For example, all users see a banner when they log in consenting to monitoring and warning of unauthorized access. Users also do not have administrative privileges, though the system administrator does. Additionally, as described previously, server logs are kept but are only accessible by the system administrator.

The online survey software company will also have audit logs and least privileges in place. Only USGS researchers will be able to access the email addresses and data collected on the survey; USGS researchers must give electronic permission for employees of the software company to be able to access the data. This is not anticipated to be necessary at any time.

**N. How will the PII be secured?**

(1) Physical Controls. Indicate all that apply.

Security Guards

Key Guards



- Locked File Cabinets
- Secured Facility
- Closed Circuit Television
- Cipher Locks
- Identification Badges
- Safes
- Combination Locks
- Locked Offices
- Other. *Describe*

(2) Technical Controls. Indicate all that apply.

- Password
- Firewall
- Encryption
- User Identification
- Biometrics
- Intrusion Detection System (IDS)
- Virtual Private Network (VPN)
- Public Key Infrastructure (PKI) Certificates
- Personal Identity Verification (PIV) Card
- Other. *Describe*

(3) Administrative Controls. Indicate all that apply.

- Periodic Security Audits
- Backups Secured Off-site
- Rules of Behavior
- Role-Based Training
- Regular Monitoring of Users' Security Practices
- Methods to Ensure Only Authorized Personnel Have Access to PII
- Encryption of Backups Containing Sensitive Data
- Mandatory Security, Privacy and Records Management Training
- Other. *Describe*

**O. Who will be responsible for protecting the privacy rights of the public and employees? This includes officials responsible for addressing Privacy Act complaints and requests for redress or amendment of records.**

Chris Huber, one of the project leaders and system owner, will be responsible for protecting the privacy rights of the public. The USGS Privacy Act Officer will be responsible for addressing complaints and requests for redress of amendment of records according to the processes outlined in the USGS Guide for Handling Privacy Act Records.



**P. Who is responsible for assuring proper use of the data and for reporting the loss, compromise, unauthorized disclosure, or unauthorized access of privacy protected information?**

Chris Huber, one of the project leaders and system owner, will be responsible for assuring proper use of the data and for reporting the loss, compromise, unauthorized disclosure, or unauthorized access of privacy-protected information to the USGS Computer Security Incident Response Team, preferably by the assigned Security Point of Contact, within one hour of discovery in accordance with Federal policy and established procedures.