

1 Supporting Statement A

Nonindigenous Aquatic Species Sighting Reporting Form and Alert Registration Form

OMB Control Number 1028-0098

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 U.S. Geological Survey (USGS) is responsible for tracking the status and distribution of introduced aquatic organisms. The purpose of the bureau's Nonindigenous Aquatic Species Program is to monitor and provide information concerning the status, distribution and potential impacts of non-native aquatic organisms in a timely manner for purposes of research, management, and education. The Nonindigenous Aquatic Species (NAS) database (<http://nas.er.usgs.gov/>) housed at the USGS research facility in Gainesville, Florida, functions as a repository and central clearinghouse for accurate and spatially referenced biogeographic accounts of nonindigenous aquatic species from across the country. The NAS database was created to obtain, maintain, and disseminate information on exotic introductions and serves as a centralized source of data for aquatic invasive species in the United States. It provides a listing of collections and personal observations of aquatic invasive species at a national scale and serves as an information exchange base for monitoring distribution, rate of dispersal, and potential range expansion of established populations. The database is available to individuals, non-government organizations, and to local, state and federal agencies to enhance awareness of exotic species introductions and facilitate decisions concerning their management.

Information is collected from the public regarding the distribution of nonindigenous aquatic species, primarily fish, in open waters of the United States. This information is vital for early detection and rapid response for the possible eradication of organisms that may be considered invasive in a natural environment such as a lake, river, stream, and pond. Nonindigenous species, by definition, are not native to the environment where they are now found and oftentimes have negative impacts on native species and the environment. In addition to these ecological impacts, there can be significant deleterious economic impacts such as the cost of managing or mitigating harmful invasions. Therefore, early detection is a major focus of the Bureau. This system is used by invasive species biologists, as well as by federal, state and local natural resources managers who rely on its up-to-date information concerning the appearance and spread of new species in

their area, or a nearby area, in order to respond quickly to the threat. Conversely, these managers are encouraged to use the NAS database to report any new occurrences of their own.

The public can help by serving as the “eyes and ears” for the Survey’s NAS Program. This “crowdsourcing” is extremely important. USGS scientists’ resources are limited, making it impossible to monitor all open waters for nonindigenous aquatic species.

To collect reports of potential sightings, a web-form is posted on the USGS NAS website (<http://nas.er.usgs.gov/SightingReport.aspx>). The form is designed to allow users to submit biologic, geographic and simple contact information. It is completely voluntary and information is received only when the public has encountered a nonindigenous aquatic organism, usually through fishing or some other outdoor recreational activity, and chooses to inform USGS. The website is tailored to provide wildlife managers the information they request to help them plan and manage the impact of invasive species on native species and habitats in their states, parks or conservation areas. It is also used by people interested in research and conservation, as well as by those simply interested learning about the spread of invasive aquatic animals.

NAS program staff maintains an alert system that contacts individuals via e-mail when species occurrences are new to a county, drainage (HUC8), or state. The alerts contain information on the specimen occurrence, such as the date and location of the occurrence, where the species is newly introduced, and any comments included by the reporter. USGS developed the NAS Alert System to track the spread of invasive species nationwide. The system is flexible, providing two different perspectives – to a user interested in an area and a species – whether the user chooses automatic alerts or prefers to search the site.

Before an alert is generated, the occurrence information is checked against the NAS database that tracks aquatic introductions to make sure it is a new occurrence. An alert is then sent to those who signed up for alerts from that taxonomic group, species, or state. In order for individuals (private or public citizens) to receive these alerts, they must register their first and last name (fictitious or real), e-mail address, and a password on our alert registration form (<https://nas.er.usgs.gov/AlertSystem/Register.aspx>).

This system has been needed, and requested for a long time by invasive species biologists, particularly those with federal agencies, and is an important component in building a rapid response system. Managers need to know what is new to their area, or new to a nearby area, in order to respond quickly. Conversely, managers are encouraged to report these new occurrences to the NAS database so the information can be disseminated. The alert system is tailored to provide wildlife managers the information they request to help them plan and manage the impact of invasives on native species and habitats in their states, parks or conservation areas. It is also used by people interested in research and conservation, or those simply interested in the spread of invasive aquatic animals.

The NAS website currently contains information on more than 1,900 species including plants, fishes, amphibians, reptiles, crayfish, mussels, and snails introduced as early as 1765.

Taxa include foreign species as well as those native to North America that have been transported outside of their historic natural range. In addition to the on-line reporting form, sightings data are also obtained from many other sources including referenced literature; state, federal, and local monitoring programs; museum accessions; other on-line databases; websites; and professional communications. All of these data are compiled and entered into the NAS database to allow creation of maps which show the locations and spread of these organisms across the US. Because of the nationwide extent of the problem, the importance of early detection benefits greatly from the general public's many observation opportunities through recreational activities such as fishing.

Relevant legislation:

1. *Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, 16 U.S.C. 4701.*

The Act established the Aquatic Nuisance Species Task Force – which then formalized our program as the developer and maintainer of the national database. The Act requires the Task Force to develop and implement a program for the waters of the United States to prevent introductions and dispersal of aquatic nuisance species; to monitor, control, and study such species; and to disseminate related information. Research is to be conducted concerning:

- (a) the environmental and economic risks associated with the introduction of aquatic nuisance species into waters of the United States;*
- (b) the principal pathways by which aquatic nuisance species are introduced and dispersed;*
- (c) possible methods for the prevention, monitoring and control of aquatic nuisance species; and*
- (d) the assessment of the effectiveness of prevention, monitoring, and control methods.*

The purposes of the Act are -

- (1) to prevent unintentional introduction and dispersal of nonindigenous species* into waters of the United States through ballast water management and other requirements;*
- (2) to coordinate federally conducted, funded or authorized research, prevention control, information dissemination and other activities regarding the zebra mussel and other aquatic nuisance species**;*
- (3) to develop and carry out environmentally sound control methods to prevent, monitor and control unintentional introductions of nonindigenous species from pathways other than ballast water exchange;*
- (4) to understand and minimize economic and ecological impacts of nonindigenous aquatic nuisance species that become established, including the zebra mussel; and*
- (5) to establish a program of research and technology development and assistance to states in the management and removal of zebra mussels.*

**Nonindigenous species means any species or other viable biological material that enters an ecosystem beyond its historic range, including any such organisms transferred from one country into another.*

***Aquatic nuisance species means a nonindigenous species that threatens the diversity or abundance of native species or the ecological stability of infested waters, or commercial, agricultural, aquacultural or recreational activities dependent on such waters.*

2. *Executive Order 13112 on Invasive Species (Feb 3, 1999).*

Section 2 - Federal Agency Duties:

(a) Each Federal agency whose actions may affect the status of invasive species shall, to the extent practicable and permitted by law,

(1) identify such actions;

(2) subject to the availability of appropriations, and within Administration budgetary limits, use relevant programs and authorities to: (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; (v) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and (vi) promote public education on invasive species and the means to address them.

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.

The information collected is used by the USGS to document public sightings of the occurrences of any aquatic species outside of its native historic range. Specifically, the NAS Program uses the information to support the following Program goals, which are to:

- Develop and provide an accurate ongoing assessment of the status and distribution of nonindigenous aquatic species nationwide;
- Identify geographic gaps in knowledge of the distribution of introduced aquatic organisms; and
- Gain an understanding of the scope and scale of aquatic introductions in the United States.

The following information is collected when a report is submitted to the USGS NAS Database using the on-line form:

Item #1: What is being reported? What is the common name? What is the genus/species names (if known)? A drop down list is available and the respondent chooses from several taxonomic categories (*e.g.*, fish, amphibian/reptile, mollusk/crustacean, plants, or ‘others’) to describe what they are reporting. The USGS uses this information to categorize the type of organisms being reported so that the sighting can be evaluated and verified by the appropriate USGS expert.

Item #2: When was it found? The respondent uses the space provided to indicate the date of the observation. The USGS uses this information to have a record of organisms’ first appearance or continued appearance at a location in order to establish a timeline for the possible invasion.

Item #3: Where was the observation made? Respondents have two boxes in which to indicate the state and county where they observed the species. There is an additional box available to describe the specific location of the observation. A map is also provided for the users to accurately report latitude and longitude coordinates. The USGS will use this information to maintain a list of locations in order to create distribution maps of sightings.

Item #4: Who made the observation? (Name, E-mail, Telephone Number, and Address). The USGS uses this information to identify and communicate with the respondent in the event that more information is needed about the observation for purposes of taxonomic or geographic verification. None of the personally identifiable information listed is required to submit a report. The USGS uses this information to verify valid submissions in order to filter out spurious entries from automated “bots” that would otherwise disrupt the system by flooding it with spam submissions and to be able to follow up on reports requiring additional information.

Item #5: Additional Comments: The USGS uses this information to gather any other pertinent information that would be useful about the species that was observed or its location. This information is used to further elaborate on the sighting and complete details about the record for which there was no accommodation in the submission form.

The following information is collected when a user registers to the USGS NAS Alert System using the on-line form:

Item #1: Contact information: (Name and E-mail). The USGS uses this information to communicate alerts to registered users. An e-mail address is required to login to the NAS Alert System to create custom alerts.

Item #2: Security protocols: (Password and Challenge-response test). The USGS uses this

information to maintain the security of users' personally identifiable information (name and e-mail address) and to filter out false identities from individuals and spurious entries from non-human, automated "bots". Passwords are kept encrypted on our internal database. Users must enter their passwords along with their registered e-mail address to create custom alerts.

Compiled and aggregated respondent observation data, including only species names, observation dates, and locations, are shared on the NAS website, <http://nas.er.usgs.gov/>. Personally identifiable information submitted by respondents (*e.g.*, names, postal addresses, phone numbers and email addresses) are not made publically available via the website or in related documents or publications. This information may, however, be shared with other government agencies in the local area to further the verification process, but only with the respondent's permission.

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 USGS NAS Program encourages and relies upon the use of the NAS Sighting Reporting Form. The respondent can use the Print Screen function of their computer once the form is completed and before it is submitted to preserve a hard copy version of the data for their personal use. Upon submission, the dates and locations of the identified species are sent, along with the contact information, as e-mails to USGS NAS staff experts. After evaluation and verification, the anonymized sighting information is added to the NAS database and public website. Users registered to the NAS Alert System are notified via e-mail when an occurrence in our database is alert-worthy based on the custom alert settings of the user.

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.

The breadth of information that USGS collects through the online submission form is not available from any other single source. USGS can take advantage of the public's frequent opportunities to access a multitude of aquatic habitats over space and time as an informal "citizen science" monitoring for invasive species. Other than the general respondent identifying information (name, postal address, telephone number, and e-mail address), the information collected is unique.

The voluntary nature of the Alert System requires users to provide their personal preferences (alert type) and contact information (e-mail address). While an e-mail address is required for the NAS Alert System Registration form, users of the NAS Sighting Reporting form may not wish to

register with the Alert System, and vice-versa.

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

The collection of these data will impose no burden on small businesses.

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 it did not have this information, the USGS could not as effectively or efficiently carry out the mandate of the National Invasive Species Act of 1996. Specifically the USGS would not be able to:

- provide comprehensive information that could be used to prevent the introduction of invasive species;
- detect, respond rapidly to, and control populations of such species in a cost-effective and environmentally sound manner;
- assist in monitoring invasive species populations accurately and reliably;
- provide for restoration of native species and habitat conditions in ecosystems that have been invaded;
- conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and
- promote public education on invasive species and the means to address them.

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 the information to be collected 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.

The 60-day FRN was published 10/5/2016 at 81 FR 69074.

We consulted with the individuals listed in the table below to obtain their feedback regarding the structure and time to completion of our two forms. They agreed that the time to use the Sighting Reporting form is around 3 minutes, down from 10 minutes in 2013, and they agreed that the Alert Registration form takes about 1 minute to complete. Several modifications to the format and design of the application were suggested during the testing period and some were incorporated, such as changing the user’s e-mail response from mandatory to optional in the Sighting Reporting form.

<p>Review #1 Sam Chan Oregon Sea Grant Extension 1600 SW Western Blvd. Corvallis, OR 97333 503-679-4828 samuel.chan@oregonstate.edu</p>	<p>Review #2 Kevin Irons Illinois Dept. of Natural Res. One Natural Resources Way Springfield, IL 62702 217-557-0719 kevin.irons@illinois.gov</p>	<p>Review #3 Mike Pursley Mississippi Dept. of Marine Res. 1141 Bayview Ave. Biloxi, MS 39530 228-523-4113 mike.pursley@dmr.ms.gov</p>
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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 in this collection.

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

The information provided by respondents will be tabulated and reported in descriptive form, as is the standard procedure for a form of this type. Names and contact information (*e.g.*, e-mail address, postal address, and phone number) will be kept in a temporary database only for the purpose of follow-up contact to clarify responses. Our primary purpose for collecting contact information is to follow-up with the respondents to verify the submission as a valid and reliable entry. The information is first cross-checked with our available data at or near the current sighting location. We will contact the respondent only if the information is grossly inconsistent with other observations in the area.

Our intent is to report the observations in an aggregated form (for instance, in a list of our most popular search engine queries), in partial or edited form (such as in a report summarizing the number of nonindigenous species occurring in a specific geographical area), or verbatim (for example, a complete listing of the comments provided in the “additional comments” box of the form). We will not include respondent names, email addresses, or other personal identifying information in any of our public reports. Users’ passwords for the Alert System are encrypted and held internally on the NAS database.

The records will be maintained in the appropriate Privacy Act System of Records identified as Computer Registration System (INTERIOR/USGS-18) 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.

The collection does not include 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 the total dollar value of this collection to be \$1,170 (Table 1). The estimated dollar value of the burden hours for this collection takes into account the nature of our respondents, *i.e.*, private individuals and state, local, and tribal government natural resources agencies (this includes university employees). We arrived at this figure by multiplying the estimated burden hours by \$32.06 for private industry and \$45.23 for state and local government. This wage figure included a multiplier for benefits and is based on the Bureau of Labor Statistics (BLS) National Compensation Survey report, 'Employer Costs for Employee Compensation – March 2016' (BLS News Release USDL-16-1150, dated June 9, 2016), available at <http://www.bls.gov/news.release/pdf/ecec.pdf>.

Table 1. Estimated Respondent Annual Burden Hours

Participant / Activity	Number of Responses	Minutes per response	Burden Hours	Burden Cost
Private / reads instructions and completes sighting reporting form	400	3	20	\$641
Private / reads instructions and completes alert registration form	50	1	1	\$32
<i>Private Subtotal</i>	450		21	\$673
State, Local, and Tribal / reads instructions and completes sighting reporting form	200	3	10	\$452
State, Local, and Tribal / reads instructions and completes alert registration form	30	1	1	\$45
<i>State, Local, & Tribal Subtotal</i>	230		11	\$497
Total	680		32	\$1,170

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 have identified no reporting and recordkeeping “non-hour cost” burdens associated with this proposed collection of information.

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 \$38,850. This includes salary and benefits for one federal employee to process the responses. We used the Office of Personnel Management Salary Table 2016-RUS (<http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2016/general-schedule/>) to determine the hourly rate (Table 2). We multiplied the hourly rate by 1.6 to account for benefits (as implied by the BLS news release USDL-16-1150).

Table 2. Annual Cost to the Federal Government

Position	Grade/Step	Hourly Rate	Annual Hours Spent	Hourly Rate with Benefits	Total Labor Value
<i>Fishery Biologist</i>	13/7	\$48.56	500	\$77.70	\$38,850.00

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

The number of responses has increased from 400 in FY 2013 to 680 in FY 2016 due to a 200 response increase in the private and the state, local, and tribal responses for the Sighting Reporting Form and the inclusion of the 80 responses from the Alert Registration Form. This increase may be attributed to heightened awareness of our two forms, but this is speculative. The estimated total annual burden hours for this collection have decreased significantly due to a revised estimate of expected completion time of the sighting reporting form from 10 minutes to 3 minutes. This downward adjustment is based upon actual operational experience over the last three years since the collection’s inception and the use of Google Analytics to measure average form usage time.

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.

Reported data will be anecdotally analyzed to examine what proportion of new sighting reports come from the public as opposed to state and local natural resources agencies. Members of the public are often the first ones to encounter invasive species. Therefore, these reports can be useful for early detection and possible subsequent rapid response actions. Because of the ongoing threat posed by invasive species, there is no end date planned for this project. Introductions of nonindigenous species will most likely continue to occur and those already established in US water will continue to expand their ranges until they reach a physical or biological limit. Over time, the USGS hopes to use these data to predict where and when these invaders will migrate to new locations. Scientific reports may be generated as a result of such analyses. The geographic information will be published in the form of species-specific distribution maps at <http://nas.er.usgs.gov/>. These maps are generated automatically on the website as the information is entered into the NAS Database and can be viewed by the general public.

Information collected with this form will be published in internal agency reports. The standard operating procedures for review and approval of USGS publications and reports will be followed.

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 instrument.

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.