

Supporting Statement A Classification of Biogeomorphic Attributes And Imagery of Coastal Habitats

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 Department of the Interior's mission is tasked with the protection and management of the Nation's natural resources, cultural heritage and to provide scientific information about resources to aid in their management.

The purpose of the information collection is to collect geographic location information, date and time of observation, site information and images, and a simple landscape classification including geomorphology and vegetation characteristics. The data collected will be used as input into research models of habitat utilization by beach-dependent species. This includes principally shorebirds, but may also include plants and other fauna depending on the management need and research question. Model outputs will be used to understand habitat utilization and availability in the future as the coast changes in response to storms, sea-level rise, climate change, and other factors. This information is used to inform land and species management decisions tasked to several Department of the Interior agencies, as well as state and local governments.

Relevant acts include: Fish and Wildlife Coordination Act, 1934; Migratory Bird Treaty Act, 1918; Endangered Species Act, 1973; National Wildlife Refuge System Improvement Act of 1997; National Environmental Policy Act of 1969; National Park Service Organic Act of 1916; Executive Order 13653 – Preparing the United States for the Impacts of Climate Change.

- 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 will be used as input into research being done collaboratively by scientists at the USGS Woods Hole Coastal and Marine Science Center, in collaboration with the USGS Center for Integrated Data Analytics, Virginia Polytechnic Institute and State University, and the U.S. Fish and Wildlife Service. The focus of the current research is coastal change impacts on habitat, and other natural resources. The research outputs are used to provide decision support resources for Department of the Interior agencies that have management responsibilities for many species, including those that are listed as threatened or endangered. The output will also produce information regarding rangewide habitat availability, including the attributes and distribution of breeding and foraging areas.

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.

In partnership with the US Geological Survey's Center for Integrated Data Analytics, we have developed and manage an HTML5 web application that permits the collection of information using a mobile device (e.g., smartphone). The application allows users to collect data about nest sites and other details while in the field, and when the user has a satisfactory data/internet connection, will allow them to transmit their data to a central database.

The basis for adopting this strategy for data collection is to facilitate and standardize the collection and analysis of scientific data using a single low-cost sensor (smartphone) that integrates the data collection capabilities of several separate pieces of equipment and functionality (GPS; digital camera; laptop computer; spreadsheet or data recording software). This provides scientists access to centralized data, standardized observations through a data entry form, in a timely manner across a vastly expanded spatial domain. Previous to this effort, data collection occurred over an entire season in paper notebooks or entered periodically into computer spreadsheet files, which had to be manually integrated and standardized after a season of collection. The test phase of the project conducted in 2014 with ten Federal employees generated almost 700 standardized data entry points, which were available to scientists throughout the season as inputs into a research model. This record management workflow fully embraces and enables all steps the [USGS science data lifecycle](#) best practices for data management, preservation and delivery.

The use of a single device with a simple protocol and user interface is highly efficient, and captures a standard set of observations from each respondent.

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.

A subset of this information has been gathered on paper by the National Park Service during

several periods in the 1990s and the 2000s. These data were used to inform the aforementioned research models and identify the scientifically critical additional information that is currently collected.

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

There will be no impacts to small businesses or other small entities as a result of this information collection.

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.

The reduction or prevention of this information collection will diminish the quality and accuracy of decision support products produced for DOI agencies tasked with managing habitat and monitoring species. Without the quantity and quality of data produced by the users and the application, the models will not have as useful input data with which to provide more accurate predictions.

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;**

Voluntary electronic information collection is estimated to be done throughout the species of interest's growing and breeding season. This monitoring and information collection activity occurs occasionally between May and September of the year.

- * **requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**

NA

- * **requiring respondents to submit more than an original and two copies of any document;**

NA

- * **requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;**

NA

- * **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;**

NA

- * **requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**

NA

- * **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**

NA

- * **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.**

NA

- 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.**

On September 12, 2014, we published the 60-day Federal Register notice announcing that we would submit an information collection activity for approval (79 FR 54742). This notice included a request for public comment, but no comments were received.

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.

We consulted with other scientists at the USGS Woods Hole Coastal and Marine Science Center and the USGS St. Petersburg Coastal and Marine Science Center, and collaborated with the USGS Center for Integrated Data Analytics, Virginia Polytechnic Institute and State University, the U.S. Fish and Wildlife Service, and the National Park Service. Dialogues occurred in teleconferences, in-person meetings and planning workshops, as well as in the field. The collection methodology and research approach is supported enthusiastically by these groups for its responsiveness to the research needs and its efficiency.

Individuals	Contact information
Dr. Anne Hecht, U.S. Fish and Wildlife Service	anne_hecht@fws.gov
Dr. Sarah Karpanty, Virginia Tech	karpanty@vt.edu
Dr. James Fraser, Virginia Tech	fraser@vt.edu
Tami Pearl, National Park Service	tami_pearl@nps.gov
Dr. Brooke Maslo, Rutgers University	brooke.maslo@rutgers.edu
Alexandra Wilke, The Nature Conservancy	awilke@tnc.org
Dr. Jonathan Cohen, SUNY College of Environmental Science and Forestry	jcohen14@esf.edu

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.

Field biologists are encouraged to provide feedback throughout the duration of information collection and at other times throughout the year. Feedback and questions or technical help requests are made to a shared email mailbox which delivers copies of the messages received to six scientists involved in the project representing developers, project managers, supervisors and agency partners. Annual summaries of the contributed data are provided to collaborators.

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

NA

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 information collection activity does not include any sensitive or private questions.

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.**

Affected Public: Employees of non-governmental organizations, non-federal cooperators/collaborators (e.g., academic scientists, resource managers), other State, or Local entities (state agencies, counties, towns).

Respondent's Obligation: None. Participation is voluntary.

Frequency of Collection: Data will be collected on an occasional basis, typically during the active growing and breeding season (May-September).

Estimated Annual Number of Respondents: 100.

Estimated Total Number of Annual Responses: 4000.

Estimated Time per Response: 20 minutes first time including training and setup, 5 minutes per response thereafter.

Estimated Annual Burden Hours: (4000 responses) * (5 minutes/response on average) = 364 hours/year estimate.

Activity	Number of Responses	Minutes per response	Burden Hours	Dollar Equivalent
Training on use of form, public	45	20	15	\$2452
Record observation, public	2000	5	167	\$5,028
Training on form, state local govt	45	20	15	\$646
Record observation, state local govt	2000	5	167	\$7,178
Total			364	\$13,304

- * If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**

There is only one application form.

- * 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 dollar equivalent value to be \$13,304 based upon the document, *Employer Costs*

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.

For 13(a), there are no capital equipment costs. For 13(b), we estimate the non-hour cost burden to be \$0. The data collection app will be available free on the Apple App Store and Google Play. Both platforms also offer a means for free store access without use of a credit card. Users are instructed to synchronize data using wifi networks, which are provided by employers or available widely at no cost.

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 estimate the total annual cost to the Federal government to be \$97,226, based on figures from the following table.

Position	Grade	Hourly	Annual	Fully Loaded	Estimated Federal
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	/Step	Rate	Hours	(1.5 x hourly rate)	annualized costs
Research Geologist	14/7	\$49.19	240	\$73.79	\$19,923
Data Scientist	12/1	\$29.17	520	\$43.76	\$22,755
Biological Scientists (10)	7/1	\$16.44	333	\$24.66	\$8,219
Contractor (GIS specialist)	-	\$33.17	520	\$49.76	\$25,875
Contractor (coordinator)	-	\$29.06	520	\$43.59	\$22,667
Total			2133		\$97,226

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.

The application collects standardized data that are saved into a USGS database. The data will be published in appropriate U.S. Geological Survey publication series, as well as in products distributed to wildlife refuges, national park lands and other participating entities. Summary reports will be published in scientific journals or other USGS outlets. All published reports are compliant with USGS Fundamental Science Practices. The technical methods will be published in a forthcoming peer-reviewed journal article. Data collection is envisioned to continue annually from May to September during growing and breeding seasons, reported on annually or as required by funding agencies. The technical methods paper is envisioned to be published by the end of 2015. Presentations may be made at scientific workshops and meetings or via the web as appropriate.

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. The application splash screen contains the following:

Privacy and Paperwork Reduction Act statements: 16 U.S.C. 1a7 authorized collection of this information. This information will be used by the U.S. Geological Survey to better serve the public. Response to this request is voluntary. No action may be taken against you for refusing to

supply the information requested. We will not distribute responses associated with you as an individual. We ask you for some basic organizational and contact information to help us interpret the results and, if needed, to contact you for clarification.

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.