

1Supporting Statement A

Phragmites Adaptive Management Framework

OMB Control Number 1028-NEW

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 *Phragmites* Adaptive Management Framework (PAMF) is a collaborative effort to confront and reduce the spread of invasive *Phragmites* grass in the Great Lakes watershed. PAMF uses the principles of adaptive management, a learning-based form of management in which data gathered following a treatment action are used to improve the predictive models that inform the decision-making process itself. Participants in PAMF enroll lands on which *Phragmites* invasion is occurring, and they receive treatment guidance annually. As a condition of participation, participants are required to conduct data collection (monitoring) on their lands prior to receiving a potential treatment action to implement. Collection of this information is necessary because it (1) determines current condition of their lands so that an appropriate treatment may be recommended, (2) determines the response of their land to previous applications of treatment so that models on which decision support is based can be improved, and (3) determines progress towards satisfying the overall objective of reducing *Phragmites* to a desired level. Without this collection of information, participants would not receive treatment guidance appropriate for the conditions they observe, and the entire cooperative network would not benefit from the ability to systematically learn about best means of controlling this invasive pest.

PAMF is jointly led by the Great Lakes Commission (GLC), a non-government organization, and the U.S. Geological Survey (USGS). The GLC is the long-term administrator of PAMF and will ultimately host the supporting databases, web tools, and predictive models that comprise the program. The USGS is providing start-up scientific leadership to the initiative through the development of models, monitoring design, data systems, and a workflow to process the collected data into management guidance.

Executive Orders 13112 and 13751 call on federal agencies to coordinate with states, local governments, non-government organizations, and international partners in efforts to control or eradicate established populations of invasive species. Agencies are specifically authorized to “monitor invasive species populations accurately and reliably” and to use innovative technologies such as citizen science and predictive analytics to meet the challenge.

- 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 purpose of the information is to (1) identify the most appropriate treatment for a land parcel invaded by *Phragmites*, based on characteristics of the invasion, (2) update models used to generate the annual treatment guidance, and (3) assess progress towards *Phragmites* reduction on the parcel. The information will be used as input to computer-based decision tables that generate treatment guidance and to statistical algorithms that update the predictive models that underlie the decision tables, thereby improving the quality of management recommendations over time. The information will be used by the PAMF Coordinator (an employee of the GLC) and the analytical team that supports this manager.

- 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.**

Monitoring data collected by PAMF participants are entered electronically into a web-based reporting system, and by no other means. This approach is required because it efficiently centralizes the collection of information from many participants across a broad region. The utility of PAMF relies on rapid turnaround of data within a narrow time window, so that participants have as much lead time as possible to plan their management activities in response to the treatment guidance recommended by the decision model. Web-based information collection also permits real-time data quality control and is less burdensome on the user than any paper-based or distributed software approach.

- 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.**

There is no other past or current effort to gather, synthesize, and redistribute information on *Phragmites* invasions across a network of participants. There is no comparable collection of data that serves the purposes described in item 2.

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

Small businesses and other small entities may participate in PAMF, and they do so voluntarily, like all other participants. Collection of information is a requirement of participation, and the burden of collection is no greater or no less for small entities as for any other class of participant.

- 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.

Phragmites reduction is a component of Focus Area 2 (Preventing and Controlling Invasive Species) of the Great Lakes Restoration Initiative (GLRI), an effort guided by a partnership of multiple Federal agencies. One objective of the GLRI Action Plan II calls for the development of invasive species control technologies and refinement of management techniques. Control of *Phragmites* is challenging because of uncertainties about how the plant responds to treatments in different contexts. PAMF is designed to address and reduce these uncertainties over time, while using current knowledge to prescribe best courses of action. If the collection is not conducted, participants would not receive site-specific treatment guidance, and there would be no ability to systematically learn about control of the plant. If the collection is conducted less frequently, some control of the plant may be achieved, and some learning may accrue, but at a slower rate that cannot match the rate of spread of this species. Given the priority that the GLRI has placed on control of the species, not collecting the information or collecting it less frequently will adversely impact restoration objectives held by several Federal agencies in the region.

- 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 special circumstances that would cause the information collection to be conducted in any of the above manners.

- 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 11/28/2017 at 82 FR 56262.

A working group to design PAMF was constituted by volunteer members of the non-USGS organizations listed below. These individuals are a cross-sectional representation of the anticipated PAMF user base. The design of the survey instrument and the data to be requested were informed by their input. Modifications to the format and design of the application were suggested during the testing period and these have been incorporated.

Table 1: Collaboration on Design

Organization Name	Position Title	City, State
U. S. Army Corps of Engineers	Assistant Technical Director for Environmental Engineering and Sciences	Vicksburg, Mississippi
Michigan Department of Environmental Quality	Great Lakes Coastal Wetland Ecologist (Water Resources Division)	Lansing, Michigan
Michigan Department of Natural Resources	Invasive Species Coordinator	Lansing, Michigan
New York State Department of Environmental Conservation	Biologist	Buffalo, New York
Ohio Division of Natural Areas and Preserves	Researcher	Columbus, Ohio
Wisconsin Department of Natural Resources	Water Resource Management Specialist	Madison, Wisconsin
Ducks Unlimited, Inc.	Manager of Conservation Programs	Ann Arbor, Michigan

Nature Conservancy of Canada	Co-Chair	Ontario, Canada
University of Wisconsin – Green Bay	Natural Areas Ecologist, Cofrin Center	Green Bay, Wisconsin
University of Waterloo	Assistant Professor Department of Biology	Waterloo, Ontario
Clay Township <i>Phragmites</i> Advisory Board	Board member	Berkley, Michigan
Great Lakes Stewardship Network	Executive Director, Board Member	Ann Arbor, Michigan
U. S. Fish and Wildlife Service	Wildlife Biologist (Refuges)	Detroit, Michigan

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

Respondents (PAMF participants) will not receive payments or gifts of any kind beyond trivial tokens (<\$5 value) recognizing their participation.

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

Respondents’ personal information (name, organization, and contact information) will not be released as part of this collection. However, respondents will be provided an “opt-in” opportunity to have their name, organization, email, and postal code publicly disclosed, as many will wish to be recognized as part of a collaborative effort. Whether users opt to have their personal information publicly disclosed or not, no assurances of special protection against disclosure will be provided.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

No respondent will be asked questions of a sensitive or private 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.

The PAMF program may enroll as many as 200 respondents. Information will be collected from each respondent up to four times annually for each management unit that the respondent enrolls, for as long as the respondent is enrolled in PAMF. Annual hour burden will vary among respondents, with the total area of *Phragmites* to be treated by a respondent being the main determinant of burden. Larger or more numerous patches of *Phragmites* take longer to traverse and measure than do smaller, less numerous patches. The range of estimated annual hour burden is 30 minutes for a combined area of 1 acre of *Phragmites* to 2 hours for a combined area of 100 acres of *Phragmites*. Estimates were derived on experiences of federally-employed field staff.

Table 2 was created using information from Bureau of Labor Statistics USDL-17-1222, Employer Cost for Employee Compensation, published September 8, 2017 (<https://www.bls.gov/bls/news-release/ecec.htm#2017>). BLS reported employee compensation for private industry averaged \$33.26 per hour and for state and local government employees averaged \$48.06 per hour. These values include benefits and overtime. Hour burden for collecting field measurements was computed based on a *Phragmites* extent of 4 acres, the expected median total extent per respondent.

Table 2: Responder Burden

Participant / Activity		Number of Responses	Minutes per response	Burden Hours	Burden Value
Public					
	Reads instructions	140	30	70	\$2,328
	Collects field measurements	140	45	105	\$3,492
	Enters data in webform	140	15	35	\$1,164
SubTotal			90	210	\$6,984
State and Local Government					
	Reads instructions	60	30	30	\$1,442
	Collects field measurements	60	45	45	\$2,163
	Enters data in webform	60	15	15	\$721
SubTotal			90	90	\$4,326
Total		200		300	\$11,310

13. Provide an estimate of the total annual non-hour cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected in item 12.)

- * **The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information (including filing fees paid for form processing). Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**
- * **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**
- * **Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

There is no non-hour cost burden associated with this collection. To collect field measurements, respondents will use materials either readily available in a home or office (pencils, clipboard). Respondents enter data through a web browser on a personally-owned

computer.

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 \$80,375. This includes salary and benefits for one federal employee to administer the program, and for three contractors to process the responses, respond to web design issues, and manage overall implementation of the program. We used the Office of Personnel Management Salary Table 2017-DET (https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/17Tables/html/DET_h.aspx) to determine the hourly rate (Table 3). We multiplied the hourly rate by an estimated rate of 1.64 to account for benefits (Congressional Budget Office; https://www.cbo.gov/sites/default/files/cbofiles/attachments/2012-04FedBenefitsWP_0.pdf).

Table 3: Federal Labor Table

Position	Grade /Step	Hourly Rate	Annu Hrs by Fed	Fully Loaded Hr Rate (x 1.64)	Total Labor Value
Project Lead	13/6	\$52.40	80	\$85.94	\$6,875
		TOTALS	80		\$6,875

Table 4: Other Federal Government Expenses

Item	Quantity	Value
Contractor, analysis	80 hours	\$3,000
Contractor, web design	80 hours	\$2,500
Contractor, implementation	1800 hours	\$65,500
Web hosting	1 year	\$2,500
Total		\$73,500

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

This is a new collection. No program changes or adjustments in hour or cost burden have occurred.

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.

Research products generated from this collection of information will be published. Data will be presented in aggregate or summarized form. Planned results from statistical models

include estimates of regional trend in *Phragmites* cover and refined estimates of average plant response to alternative forms of treatment. Because PAMF is a management program, the time schedule for the entire project is indeterminate; however, a 2-year phase of research and development will occur in 2018-2019. Publications and reports from the research and development phase will follow immediately afterward. Summary products from the ongoing management program will likely be produced at annual intervals.

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 number and expiration date as required.

18. Explain each exception to the topics of the certification statement identified in "Certification for Paperwork Reduction Act Submissions."

No exceptions to the topics of the certification statement are being sought.