**SUPPORTING STATEMENT**

**Survey of Coastal Managers to Assess Needs for Ecological Forecasts**

**OMB CONTROL NO. 0648-xxxx**

1. **JUSTIFICATION**
2. **Explain the circumstances that make the collection of information necessary.**

This request is for a new survey of coastal and Great Lakes managers, in order to determine their needs and potential uses for ecological forecasts or scenarios. This activity is in line with the [Coastal Zone Management Act, 16 U.S.C. § 1456b. Coastal Zone Enhancement Grants (Section 309)](http://coastalmanagement.noaa.gov/about/czma.html#section309)**.**  NOAA has a long history of conducting operational modeling and forecasting, mostly in the National Weather Service for weather and climate and the National Ocean Service for tides and currents. Expanding this capacity to include forecasting of ecological trends and conditions can be critical to many coastal management applications. This survey will help to assess managers’ needs for ecological forecasts and scenarios, and how such forecasts may be used in management contexts.

The proposed survey will be conducted through a cooperative agreement that was awarded competitively in 2011. The project is led by Mr. James Fitzpatrick at HDR|HydroQual in Mahwah, N.J. Other experts are drawn from the University of Maine, the University of Michigan, the University of Delaware, the University of Maryland, and Limno-Tech, Inc. In addition to these scientists and modelers, the project was designed to involve coastal managers by assessing their information needs. This survey is a major part of the project, and will help to guide a subsequent workshop on the topic and a set of recommendations that will be summarized in a white paper at the end of the project.

NOAA and the National Ocean Service (NOS) have polled coastal managers for information needs and tool development, but not specifically for forecasting needs. No other office within NOAA has collected this information in a consolidated and formalized way.

1. **Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.**

Purpose, Delivery, and Frequency

The survey will assess what types of projections or scenarios would be most useful to managers, and how best to portray model output in a forecast mode. This will be a one-time survey, administered through a Web-based survey engine.

Projected Use of Results

The information collected will be used by the project team to develop a white paper that will recommend approaches and methods for developing forecasts and making them available to a wide audience.

The questionnaire is designed to assess the need for models used in developing scenarios and/or current use of such models, and model requirements. It is divided into two separate pathways: one for agency directors/managers to assess the need for models used in developing scenarios

and/or current use of such models, and one for agency staff who may be applying existing models themselves or overseeing outside consultants or vendors who are applying models for the agency.

1. A set of 12 questions asks about the respondent’s job responsibilities (state and agency where they work, spatial domain covered, types of management decisions they make, major issues they deal with). Depending on whether respondents identify themselves as directors or modeling staff, they are directed to one of the two pathways:
   1. A set of 19 questions asks directors about the use of models in decision-making (are models used in the management process currently, what types of decisions are influenced, are models proprietary, how best to provide model output, what members of the community are influenced by the decisions based on model output)
   2. A set of 19 questions asks staff modelers more technical details about the models themselves (what are the needs for data input, what were the costs of model development, what are the costs of running the model, what are the uncertainty estimates)
2. Two follow-up questions ask for any additional comments, and whether the respondent would like to participate in a further workshop activity.

The survey responses will be collated and used to develop a subsequent workshop that will include a subset of the managers surveyed (based on their responses to the final question) as well as modelers and representatives from NOAA and the Environmental Protection Agency (EPA) as workshop leaders/facilitators. The workshop will discuss the topic of scenario forecasts more deeply, and develop a white paper with suggestions on what scenarios are of most interest to the management community and how forecasts might be provided to them.

The project team will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Although the information collected is not expected to be disseminated directly to the public, results may be used in scientific, management, technical or general information publications. Should NOAA’s National Ocean Service decide to disseminate the information, it will be subject to the quality control measures and pre-dissemination review pursuant to [Section 515 of Public Law 106-554](http://www.fws.gov/informationquality/section515.html).

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.**

The survey will be administered via a Web-based survey instrument. Invitations with a link to the survey will be sent to coastal managers via e-mail. The survey will be fillable and fileable online. If preferred and requested, respondents will be mailed a paper version of the survey to complete and return in a postage paid envelope. Also if requested, accommodations will be made to facilitate completion of the survey via telephone.

**4. Describe efforts to identify duplication.**

Program staff made personal contact with EPA Council for Regulatory Environmental Modeling (CREM). We also conducted an Internet search for needs assessment and coastal modeling, both as a wide Internet search and through the NOAA Coastal Services Center Web site and the Integrated Ocean Observation System (IOOS).

No other existing similar information collections were found. Some assessments existed for either specific issues (storm surge, marsh restoration, coastal erosion) or specific geographic regions (South Florida, Great Lakes, West Coast). None of these explicitly addressed scenario-based forecast needs, but instead were more for general information and mapping needs.

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

None of the survey targets are small businesses. In any case, the collection does not require record keeping or expenditure funds, only information about existing responsibilities and uses of models and scenarios. The individual response time is estimated to be 20 minutes.

**6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.**

Conducting this survey will provide the project with crucial information from the targeted community on the potential use of ecological forecasts. Survey results will enable the project to tailor a workshop that will discuss questions in more detail, and develop the major outcome of the project, a white paper detailing recommendations on how to develop and deliver such forecasts. This will help NOAA plan future programs in research and operational delivery of future forecasts. Without this survey, the planned workshop will be less informed by coastal managers’ needs, and the resulting report will be less useful to NOAA.

**7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.**

NA.

**8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments.** **Describe the 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.**

A Federal Register Notice published on March 7, 2013 (78 FR 14775) solicited public comments). No substantive comments pertinent to the collection were received.

The project has a group of outside advisors which encompasses state coastal resource managers, managers in the National Estuary Programs, and field personnel of NOAA/NMFS and the Environmental Protection Agency. Seven members of the advisory group provided pilot testing of the survey in January, 2013. This included timing for responses, identification and discussion of unclear instructions and question content, asking respondents about the length of the instrument, and discussing suggestions for improvements. After the pilot test, some questions were re-worded and clarified.

**9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.**

No payment or gifts to survey respondents will be provided.

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

As stated on the survey instrument, responses will not be reported individually, only in aggregate. Individual names will not be kept on completed surveys or subsequent reports, but will be retained on a list of those who ask to be kept informed about the project. A summary of results will be used by the project team in the development of their recommendations. A summary of the aggregate results will also be made available to participants at a workshop in FY14.

**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.**

NA.

**12. Provide an estimate in hours of the burden of the collection of information.**

The estimated annualized burden estimate for the survey is 33.3 (33) hours. This reflects 100 respondents with an average completion time of 20 minutes, including the time for reviewing instructions and gathering the requested information.

Respondents are likely to be coastal managers and state employees with an average pay grade equivalent to a Government Service Pay Grade 12 Step 1. Using this grade to estimate the hourly rate of the respondent ($28.62), the maximum estimated annualized cost to the respondent for the hour burden of each collection (i.e. 20 minutes) is $9.45 per respondent; the maximum cost for the information collection for a 100 percent response rate (i.e., 100 respondents) is $945.

**13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).**

Responding to the survey requires no reporting or record keeping costs.

**14. Provide estimates of annualized cost to the Federal government.**

This information collection and analysis effort is supported through a cooperative agreement. The estimated annualized cost for this information collection is $8709 (i.e., in-house staff time, supplies). Estimates presented below represent the costs per annum for the term of the approval.

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| --- | --- | --- |
| Annualized Cost to Federal Government | Labor | $Cost |
| Supplies and printing |  | $100 |
| Project personnel (through a cooperative agreement) | 15.5 days | $8209 |
| NOAA staff (through coop. agreement substantial involvement) | 20 hrs @ 20.00/hr | $400 |
|  |  |  |
| TOTAL |  | $8709 |

**15. Explain the reasons for any program changes or adjustments.**

This is a new information collection.

**16. For collections whose results will be published, outline the plans for tabulation and publication**.

The results will be summarized and presented in aggregated form in a workshop venue and in a white paper final project report. Aggregated results may be shown in bar chart, pie chart or tabular format.

**17. If seeking approval to not display the expiration date for OMB approval of the information collections, explain the reasons why display would be inappropriate.**

NA.

**18. Explain each exception to the certification statement.**

NA.