

**SUPPORTING STATEMENT**  
**Survey of Coastal Managers to Assess Needs for Ecological Forecasts**  
**OMB CONTROL NO. 0648-xxxx**

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

**1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.**

E-mail requests for responses to the survey will be sent to approximately 100 coastal managers and agency personnel involved in modeling from around the US. The survey will be sent to both managers and modelers: if a modeler is known at an agency, it will be sent directly; if it is not known if a modeler is on staff at an agency, it will be sent to the manager. If the manager feels that they are not the right person to answer the survey, they are requested to send the survey on to someone on their staff who may be more appropriate. The estimate below of 3 respondents per agency took allowance for managers to forward to a staff member. A survey target of 100 is deemed to be large enough to allow representation from most geographic areas (see below), but not overwhelming in terms of analysis. The potential respondent universe can be calculated as:

# of coastal and Great Lakes states X number of management agencies per state with responsibilities for coastal planning, water quality or fisheries management X number of personnel at each agency with appropriate expertise in modeling or management.  
 This works out to be  $33 \times 4 \times 3 = 792$ .

	# of states	Avg. # agencies/state	Avg. # respondents/agency
Estimated Universe	33	4	3
Survey Requests	29	3.5	1

Respondents were chosen through consultation with project personnel and the project’s advisory group. Survey targets were chosen with the following criteria:

1. Geographic balance – approximately equal numbers from all coastal regions of the US. This required some states to be unrepresented. (For instance, there are only 4 states on the Pacific continental US coast, but 8 Great Lakes states. All 4 Pacific states were represented, but only 6 Great Lakes states were targeted.
2. Some level of sophistication with modeling – the survey asks relatively technical questions about modeling, so respondents have to be involved in running models or utilizing model results.

3. Area of responsibility – respondents need to be involved in using models to aid in decision making for coastal management.
4. Respondents are primarily state agency personnel. This survey has not been conducted before, so no reliable estimates of response rate exist.

**2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

Information will be collected by a Web-based instrument. In addition to collecting the responses to the survey, this instrument also provides simple analysis of responses to individual questions. This analysis includes:

- Summaries for each question presented as a percent of the sample population who answered the question,
- Where appropriate, summary statistics (percent) for each sub-choice available for a particular question that provides multiple choice options. The percentages are presented based on the number of respondents that choose to answer that particular question.

For those questions which do not involve multiple choice, the project team will review the written text, categorize the results, where appropriate, into similar response classes and summarize the results using simple percentages.

Since this is a relatively simple survey meant to collect information concerning the needs and potential uses for ecological forecasts or scenarios, there is no need to for sample stratification. The sample size is expected to be of a manageable size and all respondents responses will be considered in developing the summary statistics for the survey responses. Similarly, given the generic nature of the survey, there are no concerns at this time with the expected accuracy of the survey. The survey is meant to provide an indication of the potential needs for and interest in the use of ecological forecast models. The information from this survey will be used to inform a national workshop, comprised on coastal managers and modeling experts, about the needs for and the types of ecological forecast and scenario models (ex. eutrophication, fisheries, contaminant fate and transport, etc.) of interest to coastal managers.

This survey will be a one-time survey and, therefore, there is no need for any use of periodic data collection.

**3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.**

- The initial contact with perspective survey participants will consist of an email inviting participants and describing the purpose of the survey along with a link to the survey instrument and instructions. Members of the steering committee with professional relationships with the survey targets will send these e-mails, to maximize the responses from targeted individuals. We expect a relatively high response rate because of this personal outreach with an explanation of the survey goals, as well as the relative brevity of the survey and ease of response via the web.
- A series of follow-up reminders may be sent to respondents, following the delivery of the original survey invitation.
- If a paper copy of the survey is requested, postage-paid return envelopes will be enclosed.
- Respondents will be given contact information for any questions regarding the survey
- For expediency, electronic mail will be used instead of postal mail to communicate with customers, unless a mailed hard copy is requested.
- If fewer than 80% of the targeted managers respond after the series of reminders, we will compare the responders vs. non-responders in terms of their geographic region and the type of agency (Federal, state, NGO) to assess potential biases in survey results.

**4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.**

Pilot testing of the survey instrument was completed in January, 2013. Seven advisory group members participated in the pilot test and subsequent discussions. Pilot testers were state coastal resource managers, managers in the National Estuary Programs, and field personnel of NOAA/NMFS and the Environmental Protection Agency. Responses of the pilot group included timing for responses, identification and discussion of unclear instructions and question content, the length of the instrument, and discussing suggestions for improvements. Comments from the pilot test participants resulted in some content and wording changes to clarify responses.

**5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

Principal Investigator under the Cooperative Agreement:

James Fitzpatrick

HDR|HydroQual

1200 MacArthur Blvd.

Mahwah, NJ 07430

Phone: 201-529-5151 x7110

Fax: 201-529-5728

[Jim.Fitzpatrick@hdrinc.com](mailto:Jim.Fitzpatrick@hdrinc.com)

Agency contact information:

Elizabeth Turner

NOS/NCCOS/CSCOR

Gregg Hall Room 146

35 Colovos Road

Durham, NH 03824

603-862-4680

[Elizabeth.Turner@noaa.gov](mailto:Elizabeth.Turner@noaa.gov)