A. Supplemental Questions for DOC/NOAA Customer Survey Clearance (OMB Control Number 0648-0342)

1. Explain who will be conducting this survey. What program office will be conducting the survey? What services does this program provide? Who are the customers? How are these services provided to the customer?

NOAA's Office of Coastal Management (OCM) National Estuarine Research Reserves (NERRS) will be conducting the survey. NERRS is a network of 29 coastal sites designated to protect and study estuarine systems. Established through the Coastal Zone Management Act, the reserves represent a partnership program between NOAA and the coastal states. NERRS supports coastal zone management programs and decision-making across the country through the System-Wide Monitoring Program (SWMP). The purpose of this survey is to understand how long-term estuarine monitoring programs can better address regional and national coastal management needs.

NERRS SWMP services focus on providing standardized, quantitative data on long-term variability of nutrients, biological communities, habitat, land use, water quality, and meteorological conditions in estuarine ecosystems. Data from 28 coastal NERRS sites are transmitted to the NERRS' Centralized Data Management Office (CDMO), which handles over 48 million data points annually. SWMP data include water quality data on nutrients, temperature, salinity, pH, dissolved oxygen, and turbidity. A minimum of four water quality stations with automated data loggers are deployed across a gradient of environmental conditions. Reserve weather stations collect information on air temperature, wind speed and direction, relative humidity, barometric pressure, rainfall, and photosynthetically active radiation. Biological monitoring measures biodiversity, habitat, and population characteristics. Watershed and land use classifications provide land-use and land-use change information

NERRS SWMP customers include two primary groups: (1) Managers of estuarine resources that are part of a national and/or regional networked program, primarily NERRS but also the National Estuary Program, National Wildlife Refuge System, and National Park Service; and, (2) Federal, state, and local agencies and other organizations participating in regional partnerships to manage estuarine resources at the watershed (or larger) scale.

NOAA provides SWMP data to its customers through the CDMO website (<u>http://cdmo.baruch.sc.edu/</u>).

NOAA is currently conducting a SWMP needs assessment that will focus on providing recommendation on how best to use and present SWMP data so that it can more effectively reach key audiences to: (1) inform coastal management decisions; (2) provide information about the status of the reserve estuarine systems at national and regional scales; and (3) demonstrate the value of the reserves to broader audiences. This survey effort will contribute to the needs assessment by collecting information on: a) coastal management priority issues, b) use of coastal monitoring data and information, c) the extent to which the information meets customer needs, d) how effective SWMP data can be to help make management decisions, e) SWMP information gaps, and f) best practices for synthesizing and delivering monitoring data to address coastal

management issues. The information will be used to improve the program, develop new information and data products to meet customer needs, and help prioritize future NERRS investments to improve the health of our nation's estuaries and coastal resources.

2. Explain how this survey was developed. With whom did you consult during the development of this survey on content? statistics? What suggestions did you get about improving the survey?

NOAA consulted with Eastern Research Group, Inc. (ERG) on the development of the survey instrument. ERG has significant experience working with federal agencies and implementing detailed interviews, focus groups, stakeholder engagement, and surveys about data products. The survey development process was informed by discussions between NOAA, ERG, the NERRS science collaborative and employees working at reserves.

NOAA worked with water quality experts at NOAA and ERG to change some open-ended questions to multiple choice to reduce burden and enhance data analysis. NOAA removed questions related to the effectiveness of data visualizations as we were able to answer those questions through a literature review. Finally, NOAA removed a few questions that were deemed too broad to inform the purpose of the survey.

3. Explain how the survey will be conducted. How will the customers be sampled (if fewer than all customers will be surveyed)? What percentage of customers asked to take the survey will respond? What actions are planned to increase the response rate? (Web-based surveys are not an acceptable method of sampling a broad population. Web-based surveys must be limited to services provided by Web.)

NOAA will perform the survey using a web-based instrument. NOAA has chosen a web-based instrument for two reasons. First, the SWMP information we are asking about is primarily provided to the customers via the internet. Second, the program has significant interaction with customers over the internet (e.g., via email, on web forums, etc.) and so a web-based survey represents a logical mode for implementing the survey. Additionally, customers are widely dispersed geographically, making other survey modes (e.g., phone, mail) less efficient.

No statistical methods are being used in the survey; all relevant "quality stakeholders" connected to 28 Reserves will receive the survey (i.e., coastal managers who are engaged and more likely to respond with thoughtful responses) as well as applicable coastal managers who are partners with NOAA at the federal level will receive a survey. NOAA and ERG expect a high response rate to this survey since the potential respondents are individuals who work closely with the reserves. Nevertheless, NOAA and ERG will continue to follow good survey practices to ensure high participation, including the following:

- Each of the 28 coastal training program coordinators will send a pre-notification email to inform their relevant partners of the upcoming survey and to stress the importance of providing a response.
- ERG will send the email with the survey link 3-4 days after the pre-notification email.

- ERG will send 1 reminder to non-responders one week following the email with the survey link.
- 4. Describe how the results of this survey will be analyzed and used. If the customer population is sampled, what statistical techniques will be used to generalize the results to the entire customer population? Is this survey intended to measure a GPRA performance measure? (If so, please include an excerpt from the appropriate document.)

NOAA is not using any statistical methods to select from the population and will select all population members in the survey. The data collected under this effort will be used as an input into NERRS larger SWMP needs assessment effort, to identify data and information improvements, and to plan for future data and information products to meet customer needs. NOAA will have ERG summarize the results based on information category, jurisdiction, occupation, and customer role or discipline to identify information needs.

B. COLLECTIONS OF INFORMATION EMPLOYING TICAL 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.

The potential respondent universe includes approximately 600 individuals who are relevant partners of each of the 28 Reserves listed in Table 1. The survey will not sample from the list of customers; the entire list will receive a survey.

Description	Potential Universe	Response Rate	Actual Respondents
ACE Basin	14	40%	6
Apalachicola	42	40%	17
Chesapeake Bay	10	40%	4
Maryland			4
Chesapeake Bay	122	40%	49
Virginia			49
Delaware	15	40%	6
Elkhorn Slough	10	40%	4
Grand Bay	14	40%	6
Great Bay	10	40%	4
Guana Tolomato	18	40%	7
Matanzas			/
Hudson River	12	40%	5
Jacques Cousteau	10	40%	4
Jobos Bay	16	40%	6
Kachemak Bay	68	40%	27
Lake Superior	10	40%	4
Mission-Aransas	15	40%	6
Narragansett Bay	78	40%	31
North Carolina	13	40%	5
North Inlet-Winyah	11	40%	4
Bay			4
Old Woman Creek	10	40%	4
			4
Padilla Bay	28	40%	11
Rookery Bay	10	40%	4
San Francisco Bay	16	40%	6
Sapelo Island	10	40%	4
South Slough	11	40%	4

 Table 1. Summary of potential respondent universe, response rate, and expected number of respondents

Tijuana River	10	40%	4
Waquoit Bay	10	40%	4
Weeks Bay	10	40%	4
Wells	9	40%	4
Other National	25	40%	10
Partners			10
Total	0	40%	255

NOAA expects that 40 percent of the recipients will respond to the survey since these tend to be individuals that have a strong interest in the information about coastal management and rely on NERRS for this information.

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.

Following a prenotification email, an email invitation to participate in the survey with a web link to the survey instrument will be sent to all individuals in the list of customers. No sampling will be performed so NOAA has not developed a statistical methodology for stratification and sample selection. Additionally, no estimate procedure or degree of accuracy is needed, as no sampling procedures are being employed.

This will be a one-time data collection, there is no need for periodic collections.

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.

NOAA expects that a high response rate is achievable; however, NOAA and ERG will continue to follow good survey practices to ensure high participation, including the following:

- Each of the 28 coastal training program coordinators will send a pre-notification email to inform their relevant partners of the upcoming survey and to stress the importance of providing a response.
- ERG will send the email with the survey link 3-4 days after the pre-notification email.
- ERG will send 1 reminder to non-responders one week following the email with the survey link.

As discussed above, ERG, on NOAA's behalf, will administer the survey to the full population of customers; no statistical methods will be used.

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.

NOAA OCM contracted with ERG to develop the survey instrument. ERG has developed a number of surveys related to assessing customer satisfaction with data and information products. ERG developed questions for this survey based on prior NOAA data collections that were successful.

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.

NOAA has contracted with Eastern Research Group, Inc. (ERG) of Lexington, MA to design the survey instrument and implement the survey. NOAA's lead for this project is Mary Culver ((843) 740-1250; <u>mary.culver@noaa.gov</u>). ERG's project manager for this work is Arleen O'Donnell (781-674-7220; <u>arleen.odonnell@erg.com</u>).