

**SUPPORTING STATEMENT
DEFINING TARGET LEVELS FOR ECOSYSTEM COMPONENTS:
A SOCIO-ECOLOGICAL APPROACH
OMB CONTROL NO. 0648-XXXX**

This request is for clearance related to a one-time administration of social science questions concerning the human dimensions of the Puget Sound ecosystem and its restoration goals.

A. JUSTIFICATION

1. Explain the circumstances that make the collection of information necessary.

The creation of the [Puget Sound Partnership](#) (PSP) allowed for a group of private and public entities, local citizens, tribes and businesses to begin to collectively work toward restoring the ecological health of the Puget Sound. Restoration of the Puget Sound's ecological health has been identified as a state-level priority within Washington State. With the PSP's inception, the Puget Sound ecosystem has become a national example of ecosystem-based management (EBM) implementation. The Partnership's 2008 "[Action Agenda](#)" identified 80 near-term actions that are required for ecosystem recovery. These actions, however, will require specific performance measures. In concert with the PSP's evolution, NMFS research partners at the Northwest Fisheries Science Center, partnering with the State of Washington, have begun an effort to develop these performance measures. The goal of the proposed study is to develop and implement an approach for identifying scientifically rigorous ecosystem targets that explicitly considers social perspectives.

For this reason, the Northwest Fisheries Science Center seeks to conduct social norm analyses which involve a survey of Puget Sound community stakeholders (residents of one of the twelve counties associated with the Puget Sound). Stakeholders will be asked, via a random digit dial (RDD) telephone survey, a series of general questions regarding their views on the Puget Sound environment and the desirability of a range of potential ecosystem conditions for the Puget Sound.

Information collected under this clearance will include demographic variables, economic data, resource governance and use patterns, data on cultural linkages between resource users and the resource as well as data related to other coastal activities that influence the social sustainability of living marine resource use.

The aforementioned Puget Sound Partnership "Action Agenda" sets out concrete interventions and activities for Puget Sound, including many that are required by state and federal laws like the Endangered Species Act. Although there is language in these statutes that requires consideration of social as well as ecological considerations to guide restoration decision making, state and federal authorities have limited social science data from which to make these decisions. The proposed survey will provide a source of quantitative data regarding Puget Sound residents' views about different restoration options, collected to be statistically viable and predictive. Because the design of the project explicitly links social and ecological information, we can assess the acceptability and support for different types of ecological restoration activities that

ecologists suggest are needed based on their data. Previously, the social perspectives that have been included with ecological data have been anecdotal in nature. This survey will provide quantitative data from a sample of residents of the Puget Sound region, utilizing a survey and methodology constructed to develop a sample that is as representative as possible. Rigorous social data is as necessary for policy making and environmental management as ecological data is. This is where our survey will be particularly valuable. , the results will help to ensure that social perspectives are included and considered in Puget Sound policy processes,

The overall purpose of collecting these data is to develop stakeholder-based societal inputs relative to the restoration of the Puget Sound, but these survey data will also increase the capacity of NOAA to respond effectively to relevant mandates and executive orders that guide social science activities (NEPA, MFCMA, and Executive Order (EO) 12898).

2. 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.

Information will be collected for this one-time survey, using a random digit dial (RDD) telephone survey and will be disseminated, in an aggregate form (with no personally identifiable information attached), to the public upon request. The information will be used to develop normative sociological analyses by Northwest Fisheries Science Center (NWFS) scientists and their survey research partners, and these analyses will also be disseminated to the public in the form of *interpreted products*, including technical memoranda and peer-reviewed publications. Such products will be developed in conjunction with the associated research project. Research partners at the University of New Hampshire's survey research center, The Carsey Institute (<http://www.carseyinstitute.unh.edu/>), will administer the data collection tool over a period of weeks, until 1000 respondents have been contacted. This is the only period over which the survey will be conducted. The written form of the survey ensures that the survey is reproducible, and the Carsey Institute's experience in implementing surveys of this nature will help to insure that the quality of the information collected, at the level of raw data, meet NOAA's Information Quality Guidelines. For example, the Carsey Institute has produced publications based on similar research for Southeast Alaska (*Enduring Ties to Community and Nature: Charting an Alternative Future for Southeast Alaska* Ulrich, 2011, Issue Brief No. 22), Northern Michigan (*How Yoopers See the Future of their Communities: Why Residents Leave or Stay in Michigan's Upper Peninsula* Ulrich, 2010, Policy Brief No. 17) and rural areas more generally (*Environmental, Economic, and Social Changes in Rural America Visible in Survey Data and Satellite Images* Hartter and Colocousis, 2011, Issue Brief No. 23).

Specifically, each question in the proposed survey is designed to elicit certain data of direct benefit to the ecological restoration goals of the Puget Sound Partnership and to the ecological modeling efforts underway at the Northwest Fisheries Science Center.

In the first few pages of the survey instrument as well as later in the survey (p. 3-6 as well as 7-10 and 13-14), there are a series of questions that relate to respondents' views about 1) the current status of social and ecological conditions in the Puget Sound region and 2) the most

important uses of coastal resources. These questions provide an important framework for understanding how beliefs about current conditions as compared to other factors such as normative orientations influence residents' views about ecological restoration approaches and alternatives, including those approaches that may be designed and implemented by the Puget Sound Partnership.

Another set of questions (p. 6-7) are some of the first normative questions that begin to elicit factors that might predict or influence residents' views about the environment and restoration. These are questions about, for example, the respondent's trust in government as opposed to business and the respondents' access to scientific information.

On pages 10-13 of the survey instrument, there are a series of trade off and restoration activity related questions. These are based on the specific actions identified in the Puget Sound Partnership's "Action Agenda." Through the responses to these questions, our project will determine relative support for these activities as well as predictors of why some segments of the population might be more or less likely to support these different activities.

On page 14, there are questions about support and trust in science and the science of climate change. These are important to include in order to understand how broader discussions of environmental issues such as climate change influence normative orientations and support for restoration activities. Climate change mitigation is one of the top priorities in the "Action Agenda" and it is also important to consider how broader environmental concerns might shape residents' views about "local" environmental concerns such as coastal restoration. In general, questions on pages 14-18 are about trust in specific governmental policies and approaches to restoration. As the implementing agency, the Puget Sound Partnership has not only a series of different restoration alternatives that it can use, but also policy tools and approaches that will frame implementation. The series of questions on pages 14-18 are questions that enable us to determine whether it is not only the particular restoration activity, reduction of lawn-based fertilizer use for example, but also whether support or opposition is based on the way this activity is implemented. For example, implementation could be required by law or supported through financial incentives, both of which constitute definitively distinct and available approaches.

The final questions in the proposed survey, on pages 18-25, all relate to elements we will use in our models as predictor variables. These will enable us to examine how different segments of the population appear to think about coastal environmental concerns, different restoration alternatives, and appropriate governmental approaches for achieving environmental objectives.

As explained in the preceding paragraphs, the information gathered has utility. NOAA 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. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to [Section 515 of Public Law 106-554](#).

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 information described in the survey will be entirely collected through the use of random digit dial telephone contacts. Carsey Institute staff will conduct the survey over the telephone, following the written survey instrument and adhering to all protocols that have been developed during the Carsey Institute's nine years of social survey implementation (<http://www.carseyinstitute.unh.edu/CERA/cera-home.html>).

4. Describe efforts to identify duplication.

The social scientists at the NWFSC work closely with regional academics, community based organizations, industry groups and other parties interested in this type of information. Reviews of existing information are common practice when initiating social science studies. A thorough literature review has been completed and we are fairly confident there is no duplication. An overall strategic research plan will also guide this process and ensure that all data collected is relevant, new and essential for achieving NMFS social science goals. The NMFS point of contact for this research, Karma Norman, also serves on the Partnership for Puget Sound (PSP)'s Social Science and Social Strategies Advisory Committee, so he keeps informed of the Partnership's activities and has verified with the organization that they have not commenced or planned duplicative social research efforts.

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

The study is designed to survey individual respondents – at the household level - regarding a range of demographic information, and the respondents are not anticipated to be small businesses. Small business contacts which occur as part of the Random Digit Dial (RDD) process will be excluded from participation. The random samples used in the RDD process will be purchased from Scientific Telephone Surveys (STS), of Fort Hill Ranch, California. STS screens each selected telephone number to eliminate non-working numbers, disconnected numbers, and business numbers to improve the efficiency of the sample, reducing the amount of time interviewers spend calling non-usable numbers. Only the minimum data necessary for the research are requested and the estimated time for the completion of the survey is 15 minutes per individual.

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

Without current information on the human dimensions of fisheries and coastal use practices, NMFS and the Regional Councils will be unable to adequately understand and predict the potential impacts of policy decisions on people, particularly those people who do not regularly attend public meetings, but are nonetheless affected by the decisions.

The federal mandates and executive orders described in Section A of this document require the

analysis of the impacts that government actions have on the individuals and communities involved in fishing and coastal related activities. Social impacts assessment, analysis of the affected human environment, cumulative impacts as well as the distribution of impacts with a special emphasis on vulnerable or at risk communities are all examples of these requirements. The ability of the NWFSC Social Scientists to adequately respond to this charge rests on access to timely and relevant information about the stakeholders involved. Currently, social scientists are largely dependent on data limited to fishing vessels, captains, owners and dealers. Although in recent years, partly as the result of increased funding and staffing capacity, more studies have been developed, apart from isolated studies, existing information does not include research on a broader set of stakeholders.

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

The collection will be consistent with OMB Guidelines.

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 9, 2011 (76 FR 12942) solicited public comments on this survey.

One comment was received in response to this notice. A faculty member in an environmentally-oriented academic department requested copies of the survey instrument, grant proposal and contact information for the relevant government agencies, including the Puget Sound Partnership and the Northwest Fisheries Science Center. Center scientists have been in contact with him in order to provide him with hard copy versions of all requested documents.

Through our work with Puget Sound Partnership and the Principal Investigator's service on the Puget Sound Partnership's Social Science and Social Strategies Committee, the survey and concomitant approach have been discussed and reviewed by interested peers. Moreover, because funds for this research project originate with the U.S. Environmental Protection Agency (EPA), the project is subject to the EPA's Quality Assurance Project Plan (QAPP) standards, which specify that each phase of the project and all included data collection efforts are subject to EPA review.

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

No payments or gifts are planned for respondents.

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

As stated in the survey script, the data collected will be kept confidential as required by section 402(b) of the Magnuson-Stevens and [NOAA Administrative Order 216-100](#), Confidentiality of Fisheries Statistics, and will not be released for public use except in aggregate statistical form without identification of sources.

Further, the nature of a Random Digit Dial (RDD) telephone survey ensures that survey staff is collecting data from survey respondents without reference to the respondents' names, specific locations or other indentifying characteristics. The RDD telephone survey approach renders respondent participation in the survey both anonymous and entirely voluntary.

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.

There are two different areas where issues of a potentially sensitive nature will be explored. These are listed and discussed below:

1. Ethnicity and Race: Questions of ethnicity and race are often useful in determining potential environmental justice issues where certain groups are more negatively impacted by governmental regulations than others. Questions submitted for approval comply with federal standards and follow the US Census approach.
2. Employment and economic status: Similarly, questions regarding employment and income are often useful in determining potential environmental justice issues, as well as allowing for standard demographic analyses. Questions submitted for approval comply with OMB regulations and follow the US Census approach.

The Random Digit Dial (RDD) nature of the survey methodology ensures confidentiality with regard to both of these sensitive areas.

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

The total burden hours are projected at 250, all of which will be incurred during a single time period. No follow-up surveys are anticipated or planned. At 15 minutes per respondent, with a total of 1000 respondents, the total cost to the public in terms of burden hours is 250 hours. Response time includes not only the time necessary for respondents to answer the questions, but also the time needed to make the initial contact. Participants are not expected to spend time gathering information because the information sought is based on participants' personal experiences, perceptions and knowledge.

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).

The total cost burden to respondents is zero dollars. There are no start-up, capital, or maintenance costs associated with this collection. No new or specialized equipment is needed to respond to this collection.

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

The annualized cost to the Federal government for this research is estimated to be \$139,000. This cost is solely due to the cost for contract survey work to be conducted by the University of New Hampshire's Carsey Institute under the direction of Dr. Thomas Safford.

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

This is a new program.

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

The survey results are not intended for publication for statistical use by others. Data will be analyzed using standard social science quantitative and qualitative data analysis methods. Where possible and relevant, final reports and other relevant portions of the research process will be posted on the appropriate web site. Where relevant, the study in its entirety may be published as an internal report or in part may be submitted for publication in journals to encourage peer review of data collected through this process as well as to disseminate findings.

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

The expiration date for OMB approval will be displayed on the forms; although since this is a telephone survey, information about the OMB number and expiration date will be provided verbally to survey respondents.

18. Explain each exception to the certification statement.

Not Applicable.