

**SUPPORTING STATEMENT**  
**User Engagement Survey for Water Resources Forecasts and**  
**Climate Information**  
**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.**

Potential respondents are stakeholders that make decisions based on water resources or seasonal climate forecasts. These will normally be state and local government units, other federal agencies, and private sector or non-profit water interests (for instance, the Colorado River Water Users Association (CRWUA) has a membership that includes about 1,500 individuals and organizations involved in water management (source: crwua.org). Nationwide, the total respondent universe is on the order of 10,000. Survey data will be collected by NOAA River Forecast Centers for individual river basins and/or by national program managers at workshops that they sponsor and that these water stakeholders regularly attend. All collection efforts will utilize the Web as much as possible.

A 2005 study in South Carolina and the Susquehanna River Basin analyzed survey responses from regular meetings in the year 2000 in which water management entities participated, and found the respondents to be a representative sample of user categories as shown in the table below (source: O’Connor, et al, 2005: “Feeling at Risk Matters: Water Managers and the Decision to Use Forecasts” in Risk Analysis, Vol 25, No 5).

We expect to survey approximately 100 workshop participants per year, with an expected response rate of 90%. This response rate is based on the active engagement of the workshop participants in water management issues at the time they are surveyed, as well as the brevity of the survey.

Previous survey work indicated that the population of stakeholders is approximately 35% federal, 20% state government, 35% other government (including municipalities, irrigation districts, counties, etc), and 10% non governmental.

Respondent category	Respondent Universe (estimate)	Annual number of possible respondents expected	Expected Response Rate
Federal	3,500	35	90%
State Government	2,000	20	90%
Other Government	3,500	35	90%
Non Government	1,000	10	90%
	10,000	100	90% or 90 completed surveys

**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.**

The survey will be largely administered in conjunction with meetings and workshops for NOAA NWS stakeholders. Survey responses will be stratified according to characteristics of the stakeholder entity (e.g. federal government, state government, etc) to assess differences between categories. We recognize that due to limited numbers per type of entity, this strategy may not allow a high level of accuracy in its results, in terms of differences between the groups.

**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.**

We anticipate relatively high response rates given our strategy of surveying stakeholders in conjunction with existing meetings and workshops that they already attend. NOAA NWS staff regularly attends these meetings and workshops and has developed good working relationships with many of the stakeholders. The survey questions were developed by academic partners and tested with stakeholders and NOAA NWS staff alike. The questions are simple and brief.

**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.**

As described previously, our academic partners have tested the survey instrument at two stakeholder meetings in 2010 as well as with NOAA staff on several occasions. We anticipate future refinement of the survey instrument through ongoing academic partnerships.

**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.**

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