# Request for Approval under the "Generic Clearance for the Collection of Routine Customer Feedback" (OMB Control Number: 3145-0215)

**TITLE OF INFORMATION COLLECTION:** Questionnaire and Small Group Discussion for National Science Foundation (NSF) Water, Sustainability, and Climate (WSC) Program Grantees

**PURPOSE:** The National Science Foundation intends to leverage the January 29, 2018, Water, Sustainability, and Climate Program Principal Investigator (PI) Convening to collect information through written questionnaires and facilitated small group discussions with project staff from WSC's approximately 20 active projects participating in the meeting.

One of the most urgent challenges facing the world today is to ensure an adequate supply and quality of water in light of both burgeoning human needs and increasing climate variability. Despite the importance of water to life on Earth, there are major gaps in our basic understanding of water availability, quality and dynamics, and the impact of both human activity and a variable climate on the water system. The goal of the Water Sustainability and Climate (WSC) program was to enhance the understanding and predict the interactions between the water system and land use changes (including agriculture, managed forest and rangeland systems), the built environment, ecosystem function and services and climate variability through place-based research and integrative environmental models.

The purpose of the written questionnaire and facilitated small group discussions is to gain information from project staff at various stages of their careers (e.g., research faculty, postdoctoral fellows, graduate students) about the following: implementation of their WSC-funded projects; unanticipated challenges and opportunities they have encountered and adjustments in the anticipated activities or outcomes; perspectives of individual and collective progress toward advancing the field of environmental modeling; and continued or emerging needs in environmental modeling that would benefit from coordinated implementation efforts by the research communities participating in WSC.

The collection will inform adjustments and improvements in program design, respective vehicles that convey funding opportunities, (e.g., program solicitations, Dear Colleague Letters, etc.), and strategy for outreach to and community-building activities to relevant research communities. By gathering information through facilitated small group discussion, the information collection may serve to simultaneously catalyze opportunities for networking, collaboration, and early coordination of future research activities among the research community members that participate.

**DESCRIPTION OF RESPONDENTS**: Respondents are ~35 PIs and junior project staff (e.g., postdoctoral fellows and graduate students) representing ~20 WSC projects that are participating in the January 29, 2018, WCS PI Convening in Washington, D.C. All 35 PIs and junior project staff in attendance will be invited to participate in a short questionnaire and facilitated small group discussion. The information collection will occur during a facilitated 65 minutes of sessions.

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[ ] Customer Comment Card/Complaint Form	[] Customer Satisfaction Survey
[] Usability Testing (e.g., Website or Software	[ X] Small Discussion Group
[] Focus Group	[ X] Other: Questionnaire

**TYPE OF COLLECTION:** (Check one)

### **CERTIFICATION:**

I certify the following to be true:

- 1. The collection is voluntary.
- 2. The collection is low-burden for respondents and low-cost for the Federal Government.
- 3. The collection is non-controversial and does <u>not</u> raise issues of concern to other federal agencies.
- 4. The results are not intended to be disseminated to the public.
- 5. Information gathered will not be used for the purpose of <u>substantially</u> informing <u>influential</u> policy decisions.
- 6. The collection is targeted to the solicitation of opinions from respondents who have experience with the program or may have experience with the program in the future.

Name: Suzanne H. Plimpton, NSF Reports Clearance Officer

To assist review, please provide answers to the following question:

## **Personally Identifiable Information:**

- 1. Is personally identifiable information (PII) collected? [] Yes [X] No
- 2. If Yes, will any information that is collected be included in records that are subject to the Privacy Act of 1974? [] Yes [X] No
- 3. If Yes, has an up-to-date System of Records Notice (SORN) been published? [ ]Yes [X ] No

### Gifts or Payments:

Is an incentive (e.g., money or reimbursement of expenses, token of appreciation) provided to participants? [ ] Yes [X] No

#### **BURDEN HOURS**

Category of Respondent	No. of	Participation	Burden
	Respondents	Time	
Individuals (questionnaire)	35	5 minutes each	3 hours
Individuals (small group discussion and share out)	35	30 minutes	35 hours
		each for 2	
		sessions	
Totals	35	65 minutes	38 hours
		each	

**FEDERAL COST:** This will be incorporated into the plans of running the program.

# If you are conducting a focus group, survey, or plan to employ statistical methods, please provide answers to the following questions:

# The selection of your targeted respondents

1. Do you have a customer list or something similar that defines the universe of potential respondents and do you have a sampling plan for selecting from this universe?

[X] Yes [] No

If the answer is yes, please provide a description of both below (or attach the sampling plan)? If the answer is no, please provide a description of how you plan to identify your potential group of respondents and how you will select them?

Respondents will be a convenience sample that emerges from self-selected participation of individuals from among the ~35 PIs and junior project staff (e.g., postdoctoral fellows and graduate students) representing ~20 WSC projects that are participating in the January 29, 2018 WCS PI Convening in Washington, D.C.

<b>Administration of the Instrument</b>	A	dmin	istrat	tion	of	the	Instr	ument
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1.	How will you collect the information? (Check all that apply)
	[ ] Web-based or other forms of Social Media
	[ ] Telephone
	[X] In-person
	[ ] Mail
	[ ] Other, Explain
2.	Will interviewers or facilitators be used? [X] Yes [ ] No

Please make sure that all instruments, instructions, and scripts are submitted with the request.

To be read by each small group discussion facilitator:

My name is [DISCUSSION FACILITATOR] and I am a [POSITION TITLE] in the [OFFICE NAME]. I am collaborating with the Water, Sustainability, and Climate (WSC) program to learn about WSC project members' perspectives of and experiences with implementing their project, how they view the collective progress made by the WSC community, and what issues they think are important for the WSC community to consider moving forward. We invite you to participate in a short questionnaire and a facilitated small group discussion with project team members' other WSC projects. Your participation is completely voluntary. You may choose not to participate, or may stop participating at any time.

The purpose of the written questionnaire is to gather individuals' perspectives of and experiences with implementing a WSC project. The questionnaire will take five minutes of your time and can be completed before or after the small group discussion.

In the small group discussion we hope to learn how you view the collective progress made by the WSC community and to facilitate cross-project conversation about continued or emerging needs for the WSC community to address. The small group discussion is part of a 90 minutes of organized sessions during the WSC PI meeting. Each of the three small groups in the room will have an opportunity to share key ideas from their discussion with the other small groups toward the end of the session.

My colleague [NAME OF NOTETAKER] will be taking notes on the small group discussion. After the session, we will provide WSC with the completed questionnaires, charts, and typed notes. No individuals will be identified.

The information will inform programmatic improvements and adjustments to documents that convey funding opportunities (e.g., program solicitations, Dear Colleague Letters, etc.) as well as improvements in the program's outreach to and community-building activities with the environmental modeling community. We hope the small group discussions may also catalyze opportunities for networking, collaboration, and coordination of future research activities among the research community members that participate.

Our collection of information through the questionnaire and small group discussion have been reviewed and approved under OMB Control Number3145-0215.

Do you have any questions before we begin?

### Part A: Written Questionnaire (5 minutes)

- 1. Considering WSC as a research focus:
  - a. What do you find interesting?
  - b. What do you find challenging?
- 2. In what ways (if any) were your enacted WSC project activities and/or outcomes different than those originally proposed? What were the reason(s) for these differences?
- 3. VERSION A: If you are a Faculty Researcher on the WSC project: In what way(s) has your WSC experience influenced your laboratory or research focus, if at all? VERSION B: If you are a Graduate Researcher or Postdoctoral Researcher the WSC project: In what way(s) has your WSC experience influenced your views of or goals in science, if at all?
- 4. What do you consider the greatest insight (take-home message) of the WSC project?

### Part B: Small Group Discussion (30 minutes)

- 1. Give an example of how you think WSC has influenced "environmental science" in each of the following areas:
  - a. Changing the nature or focus of questions posed
  - b. Adding new, or novel ways of incorporating existing, frameworks and methods
  - c. Changing the nature or focus of graduate student and postdoctoral training
  - d. Adding new undergraduate course content
  - e. Changing the nature or focus of community outreach
  - f. Adding new, or novel ways of incorporating existing, **cyberinfrastructure for** data gathering, long-term data access, or computation
- 2. In what ways (if any) has WSC prepared you for future projects including possibilities under "Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS)"?
- 3. Given the legacy of WSC and the continued activity of INFEWS, does the field need to continue in this direction and why?
- 4. What improvements in the process or use of environmental modelling are needed? Why?
- 5. What are the next great challenges in environmental modelling? Why are they important?

### Part C: Small Group Share Out (30 minutes)

• Each of the three small groups has ~10 minutes to share out key ideas from their discussion with the members of the other two small groups and initiate whole group discussion of those ideas (if desired).