

Southeast and Caribbean Climate Community of Practice Member Survey Report

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Project Overview

The Southeast and Caribbean Climate Community of Practice (SEC-CCoP), hereafter referenced as CoP, was created to explore the state of climate science; learn how coastal communities can adapt to climate change impacts; and share lessons-learned related to climate communication and adaptation. Comprised of individuals from state agencies, federal agencies, academia, non-profits, and local communities, the CoP formed around an initial meeting in May 2010. The geographic scope of the group includes North Carolina, South Carolina, Georgia, Florida, Puerto Rico, and the U.S. Virgin Islands. To date, group activities have consisted of two workshops (May 2010, June 2012) and the establishment of an online, interactive webpage for community members through StormSmart Connect. The group is open to new participants and seeks to engage individuals and organizations throughout the region.

In spring 2013, the CoP steering committee asked the Carolinas Integrated Sciences & Assessments (CISA) team at the University of South Carolina to assist with efforts to reach out and re-engage with members of the community. In the summer of 2013, CISA developed an online survey to procure information from CoP members in order to identify priority climate concerns and information needs and to obtain information about what resources CoP members use and recommend. One of the goals of this survey was to utilize the practical experience and expertise of community members to develop a “resource directory” that will provide information about individuals, organizations, websites, and documents which can serve as climate resources for CoP members. Second, CoP steering committee members will be able to utilize the information collected to guide future efforts of the group.

This brief report provides a summary of the survey results and identifies key themes from survey data.

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Southeast and Caribbean Climate Community of Practice Survey

Survey Participant Demographics & Information

In total, 101 individuals were invited to complete an online survey (surveymonkey.com) developed by CISA and the CoP Steering Committee in July 2013. All members of the CoP were targeted. The survey consisted of 57 total questions. A reminder was sent to all invitees two weeks after the initial email invitation, and a second reminder was sent to individuals who had not opened or started the survey after four weeks. Individuals who started but did not complete the survey were targeted with an individual request for completion. The survey was open for approximately six weeks. Although 44 individuals started the survey, only 36¹ completed the entire form, for a final response rate of 36%. Twenty five percent of respondents work within local government, followed by approximately fifteen percent each in academia, regional consortiums or councils, and Sea Grant programs. Respondents from Florida and North Carolina comprised a third each of survey participants. Individuals from Georgia and South Carolina each comprised approximately fifteen percent of respondents.

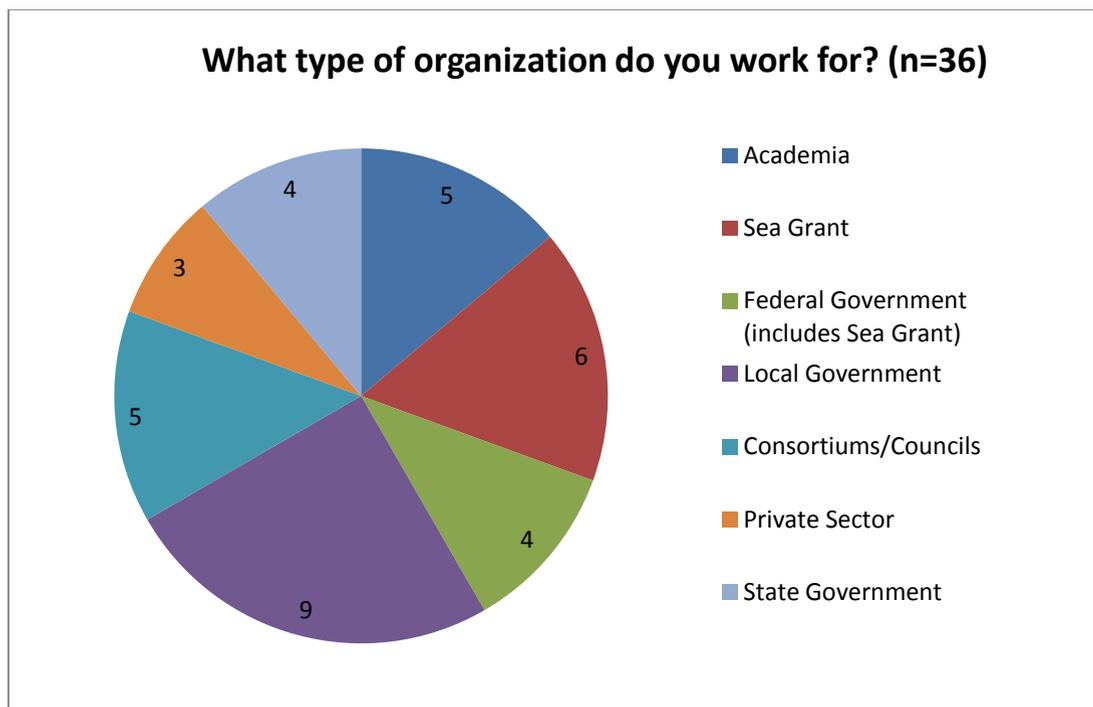


Figure 1. What type of organization do you work for?

¹ Because not every respondent completed all 57 questions in the survey, the "n" indicated in the tables and graphs varies from 36 to 25.

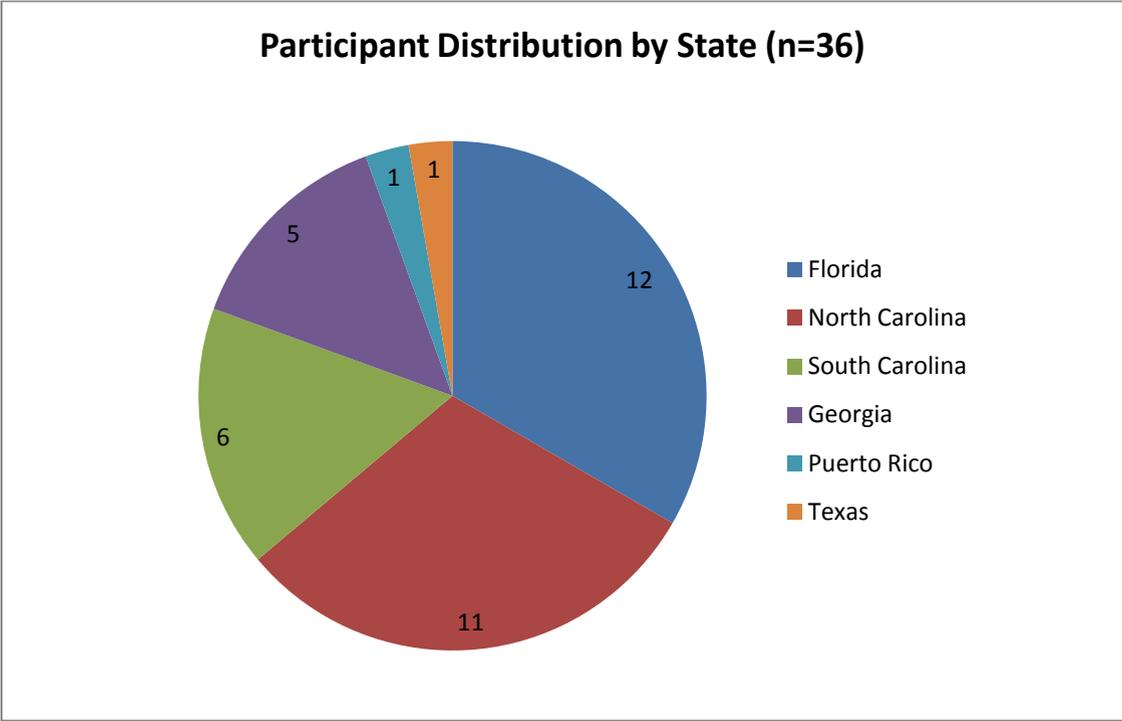


Figure 2. Participant distribution by state

Stakeholders and Audience

Participants were asked to indicate the degree to which climate change is a topic they discuss with stakeholder groups or audiences (Figure 3). 72% of survey participants discuss climate change regularly (43%) or sometimes (29%), while 11% either rarely discuss the topic (9%) or do not address climate change (3%). Another 17% avoids using the term “climate change” but will discuss the issue in other relevant ways.

Furthermore, participants were asked to indicate which stakeholder groups or audiences with whom they interact regarding climate issues and to provide an indication of the level of interaction by ranking these groups in order of one to five. Table 1 demonstrates that a high percentage of respondents interact with academic organizations and researchers as well as city and county government staff members. Other types of individuals with whom respondents engage around the issue of climate change include city and county elected officials, state and federal agency staff members, regional planning councils and private citizens.

Is climate change a topic you discuss with your stakeholders and audiences? (n=35)

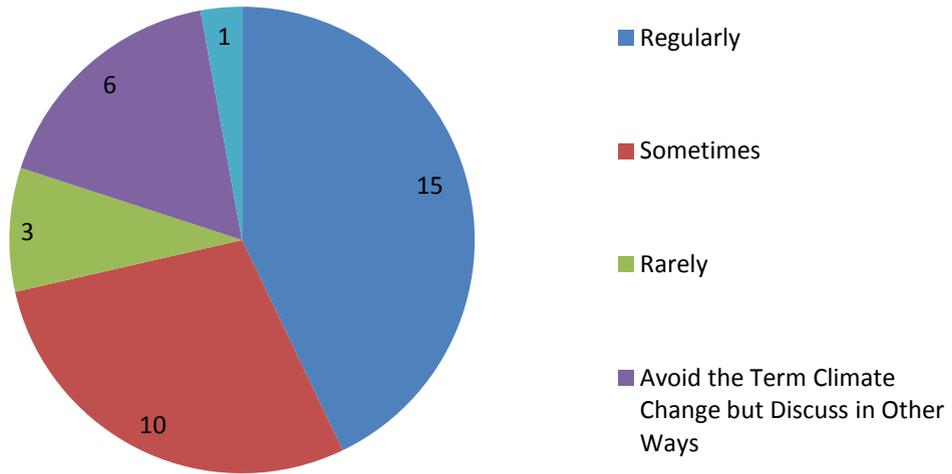


Figure 3. Is climate change a topic you discuss with your stakeholders and audiences?

Table 1. Stakeholder groups and audiences with whom participants engage

Stakeholder Groups and Audiences with whom Participants Engage (n=35)						
Audience	Percentage of participants indicating engagement	Of those that indicated engagement, rank order of level of engagement:				
		1 st	2 nd	3 rd	4 th	5 th
Academic Organizations/Researchers	69%	29%	21%	25%	13%	13%
City & County Government Staff	80%	43%	25%	11%	19%	4%
City & County Elected Officials	54%	16%	37%	26%	11%	11%
State Agency Staff	51%	11%	22%	11%	22%	33%
State Government Elected Officials	6%	0%	0%	50%	50%	0%
Federal Agency Staff	40%	14%	36%	21%	21%	7%
Extension, education, or communications staff members	17%	17%	17%	17%	0%	50%
K-12 Education	6%	0%	0%	0%	0%	100%
Media	14%	0%	20%	20%	0%	60%
Non-profit Organizations	29%	30%	0%	20%	40%	10%
Private Citizens	49%	12%	24%	29%	12%	24%
Regional Planning Councils	46%	6%	6%	31%	38%	19%

Climate-related Responsibilities & Climate Change Concerns

When respondents were asked to identify their top three job-related responsibilities related to climate, several major topics emerged. In particular, Table 2 highlights that forty to fifty-five percent of respondents noted responsibilities with regards to community planning, climate adaptation, and the natural environment. Of note is the high percentage of individuals (80%) who engage with climate adaptation work who indicated that area of work as their most important climate concern. Additionally, nearly a third of respondents indicate responsibilities in areas of hazards and emergency management, water resources, and infrastructure.

Table 2. Climate-related responsibilities of participants & level of importance

Climate-Related Responsibilities of Participants & Level of Importance (n=35)					
Topic	Percentage of participants indicating responsibility	Of those that indicated responsibility:			
		Noted As Most Important	Noted As Second Most Important	Noted As Third Most Important	Average Rating *
Beach Management/Erosion	17%	33%	33%	33%	2
Built Environment-Infrastructure Planning & Protection	29%	0%	70%	30%	2.3
Climate Adaptation	40%	79%	14%	7%	1.3
Community Planning	54%	42%	21%	37%	2
Economic Development	6%	50%	0%	50%	2
Fisheries	6%	100%	0%	0%	1
Hazards & Emergency Management	37%	54%	31%	15%	1.6
Marine Resources	9%	0%	67%	33%	2.3
Natural Environment	40%	7%	36%	57%	2.5
Public Health & Safety	14%	0%	0%	100%	3
Water Resources	34%	25%	58%	17%	1.9

* Participants were asked to rate the level of importance of each area of responsibility using a scale of 1 to 3 (1=most important, 3=third most important).

Using a list of climate concerns shared at the 2010 and 2012 CoP meetings, respondents were asked to rate their level of concern about each area of interest. Figure 4 highlights a high level of concern about sea level rise and storm surge, with moderate levels of concern around issues of changes in flooding events and precipitation patterns and stormwater management. Of least concern among those items presented were phenological changes, temperature extremes, wetland loss, and wildlife impacts.

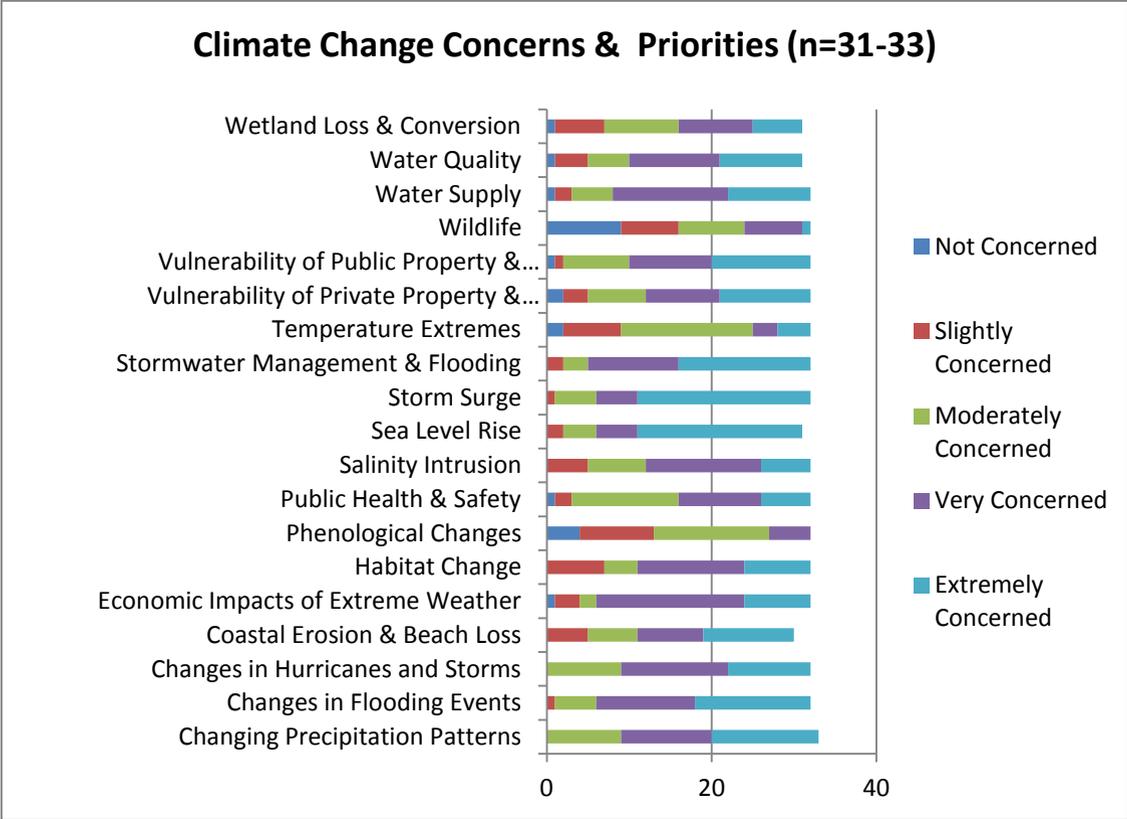


Figure 4. Climate change concerns and priorities

Almost ninety percent of respondents have conducted some sort of vulnerability assessment either as an organization or with community groups (Figure 5).



Figure 5. Have you/your organization, or stakeholders with whom you work, conducted any vulnerability assessments?

CoP Engagement

Respondents were asked to communicate preferences with regards to the frequency of CoP updates and information sharing. Although responses were rather distributed (see Figure 6), nearly fifty percent of respondents noted a preference for monthly updates. Moreover, Figure 7 demonstrates that numerous respondents are willing to take on active leadership roles within the organization.

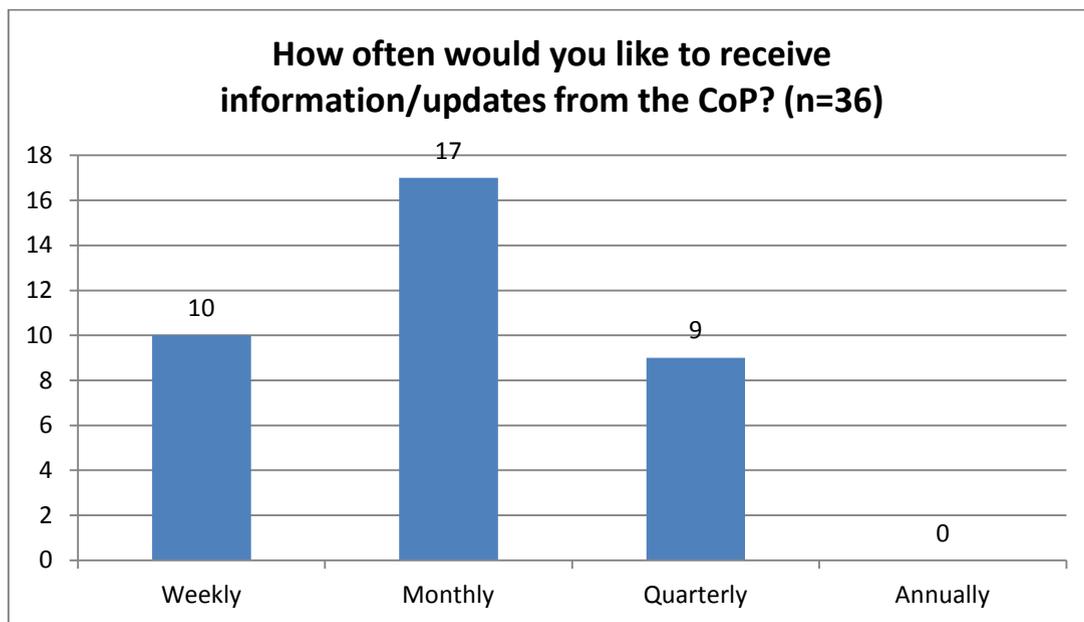


Figure 6. How often would you like to receive information/updates from the CoP?

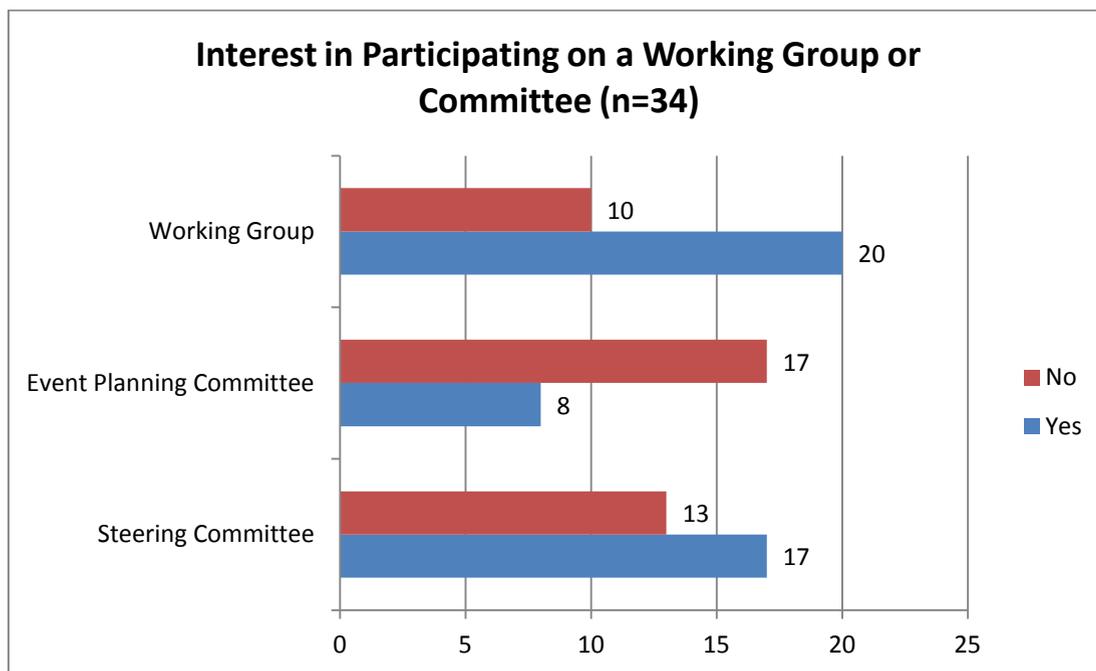


Figure 7. Interest in participating on a working group or committee

Resource Directory

Based on recommendations from the 2010 and 2012 workshops, one of the primary objectives of this survey was to gather information from current CoP members to assemble a comprehensive database of available resources that might support the climate-related work of group members. Accordingly, survey respondents were asked to provide information regarding the use and utility of resources that are available to help individuals and organizations meet their climate-related responsibilities. The survey included previously-identified resources that were grouped into seven general categories (“climate topics”). A list of specific items was provided within each category for respondents to indicate both whether or not they use the resource for their job or organization and if they would recommend the resource to other members of the CoP. Members of the CISA team and the CoP Steering Committee developed the lists of resources included in the survey based on their knowledge of existing tools and an online search for additional resources.

Additionally, respondents were asked to provide information on any resources they utilize or would recommend to colleagues that were not already included in the survey. Respondents added 77 resources to those provided in the survey, for a total of 145 resources identified. Table 3 lists the top five resources used and recommended by respondents in each of the seven climate topic categories included in the survey. Consistently, respondents indicated high use of, and provided recommendations for, NOAA-affiliated entities and Sea Grant partnerships, in addition to numerous federal- (EPA, DOI, DOD, DOT, National Climate Assessment) and state-level (Natural Resources Departments, Health Departments) agencies and projects. A comprehensive list of these resources is available in the project database, searchable by category, resource type, resource name, geographic scope implicated, and member use and recommendation ratings.

Table 3. Top 5 resources used and recommended by CoP members

Climate Topic	Top 5 Resources Used (in order of preference)	Top 5 Resources Recommended (in order of preference)
Climate Adaptation	State Sea Grant Programs	NOAA CSC, Coastal Climate Adaptation
	NOAA CSC, Coastal Climate Adaptation	State Sea Grant Programs
	Southeast Climate Consortium	Southeast Climate Consortium
	Climate Adaptation Knowledge Exchange (CAKE)	Carolinas Integrated Sciences and Assessments
	Carolinas Integrated Sciences and Assessments	NOAA Office of Ocean and Coastal Resource Management
Climate Impacts on the Built Environment	US Green Building Council	US Green Building Council
	ICLEI – USA – Green Building Decision Tool	US DOT Transportation & Climate Change Clearinghouse
	US DOT Transportation & Climate Change Clearinghouse	US DOD Climate Change Adaptation Roadmap
	US DOD Climate Change Adaptation Roadmap	US EPA Transportation Impacts & Adaptation Report
	US EPA Transportation Impacts & Adaptation Report	ICLEI – USA – Green Building Decision Tool
Climate Impacts on Natural Resources	NOAA Coastal Programs	NOAA Coastal Programs
	State Natural Resource Offices	State Natural Resource Offices
	NOAA National Marine Fisheries Service	NOAA National Marine Fisheries Service
	US DOI Climate Change Website	USDA NRCS Climate Change Website
	Landscape Conservation Cooperatives	US DOI Climate Change Website
Climate Communications	Global Warming’s 6 Americas	Global Warming’s 6 Americas
	ClimateCommunication.org	Climate Access Website/Network
	Climate Access Website/Network	ClimateCommunication.org
	TalkingClimate.org	Cooperative Institute for Research in Environmental Sciences
	Cooperative Institute for Research in Environmental Sciences	Climate Communications and Behavior Change Report (Climate Leadership Initiative @ the University of Oregon)

Climate Topic	Top 5 Resources Used (in order of preference)	Top 5 Resources Recommended (in order of preference)
Climate Data	NOAA CSC Digital Coast	NOAA CSC Digital Coast
	Climate.gov	Southeast Regional Climate Center
	Intergovernmental Panel on Climate Change	Climate.gov
	Regional Climate Trends & Scenarios for the U.S. Southeast, National Climate Assessment	National Climatic Data Center
	National Climate Assessment	Intergovernmental Panel on Climate Change
Sea Level Rise	Intergovernmental Panel on Climate Change	NOAA CSC Digital Coast
	NOAA CSC Digital Coast	Intergovernmental Panel on Climate Change
	NOAA Tides & Current, Sea Level Trends	Coastal Impacts, Adaptation & Vulnerabilities, National Climate Assessment
	Coastal Impacts, Adaptation & Vulnerabilities, National Climate Assessment	NOAA Tides & Current, Sea Level Trends
	Global Sea Level Rise Scenarios, National Climate Assessment	Global Sea Level Rise Scenarios, National Climate Assessment
Social Vulnerability/Equity	NOAA CSC Digital Coast	NOAA CSC Digital Coast
	State Health Departments	CDC Climate & Health Program
	US EPA Climate Change Society Impacts & Adaptation	US EPA Climate Change Society Impacts & Adaptation
	CDC Climate & Health Program	State Health Departments
	Environmental Justice & Climate Change Initiative	Environmental Justice & Climate Change Initiative

Directory Use

Respondents were asked how frequently they expect to use the climate resource directory. Nearly fifty percent anticipate using it at least monthly, with almost twenty percent indicating plans for more frequent use, and a third expecting less frequent utilization (Figure 8).

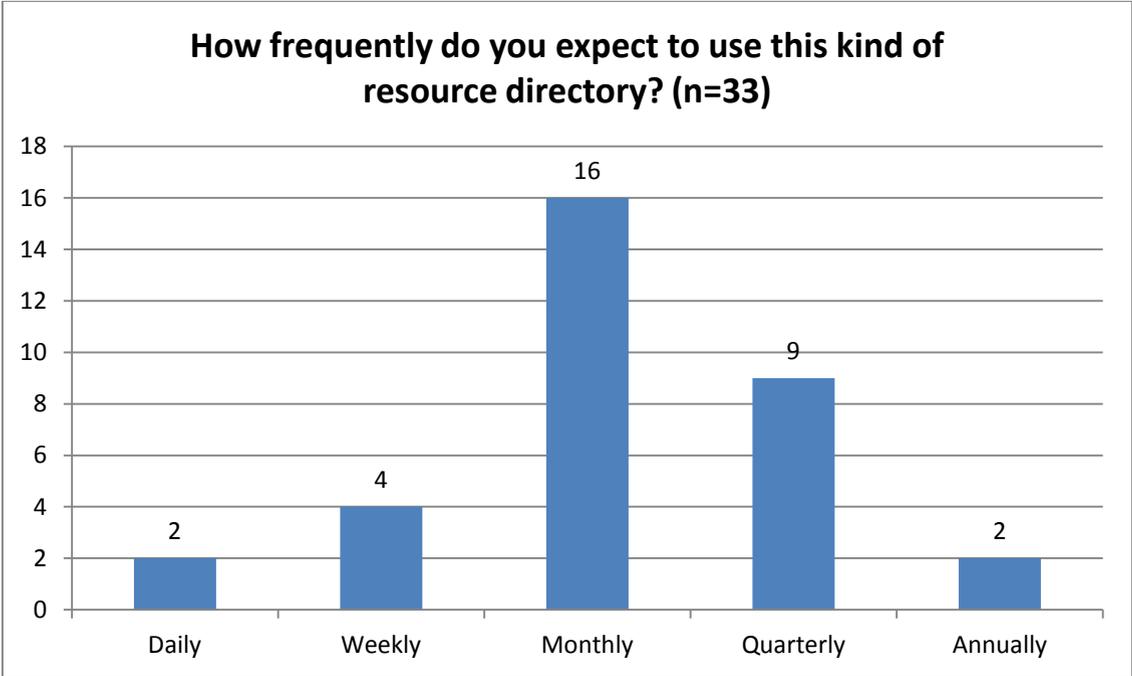


Figure 8. How frequently do you expect to use this kind of resource directory?

Member Expertise

The CoP is comprised of members with decades of scholarship and practice in dealing with climate-related phenomena and impacts. Survey respondents were asked whether or not they would be willing to serve as content experts within various areas of interest to CoP members. Twenty-two members provided information regarding their areas of experience and expertise. This information will be provided as a component of the climate resource directory that highlights members with particular expertise who are willing to serve as a resource for colleagues.

Member Needs

Survey respondents were provided an opportunity to articulate any general information or resource needs with regards to their climate-related responsibilities and priorities. This information was collected to assist CoP Steering Committee members in planning for the development of future resources and events. A summary of the major information or resource needs suggested by respondents is included in the bullets below, followed by specific information on needs as they relate to climate communications and climate science.

- Economic impacts of climate change and examples of positive economic benefits of forward planning and preparation
 - Including information about the health costs of asthma, heat-related illness, extreme weather injuries, and water-borne illness
- Climate change impacts on cultural resources
- Templates/examples of local ordinances, building codes, or land development codes that address climate change
- Database of climate tools – A resource that characterizes the tools available for both adaptation and sea-level rise planning to assist local governments in evaluating the tools and determining the best fit.
- Estuarine and shoreline planning data, for example:
 - Brackish water salinity measurements
 - Integrating eustatic sea level rise with new directional storm surge models
- Resources to bridge the practice-science information gap – There seems to be a disconnect between what people say they want for decision making and what is scientifically reasonable to provide.
 - Perhaps primers/facts sheets would be useful to help reconcile this?
- More definitive information on anticipated climate change impacts in our region. Research seems to be split 50/50 on the impacts in the Carolinas.
- NC Sea Level Rise Study (Div of Emergency Management) updates

When respondents were asked the best avenues to receive, access, and share information within the SEC-CCoP so that information or resource needs may be met, survey respondents indicated a strong preferences for emails, followed by the use fo webinars, websites, and workshops (Figure 9). These general approaches garner more support than the targeted StormSmart Connect.

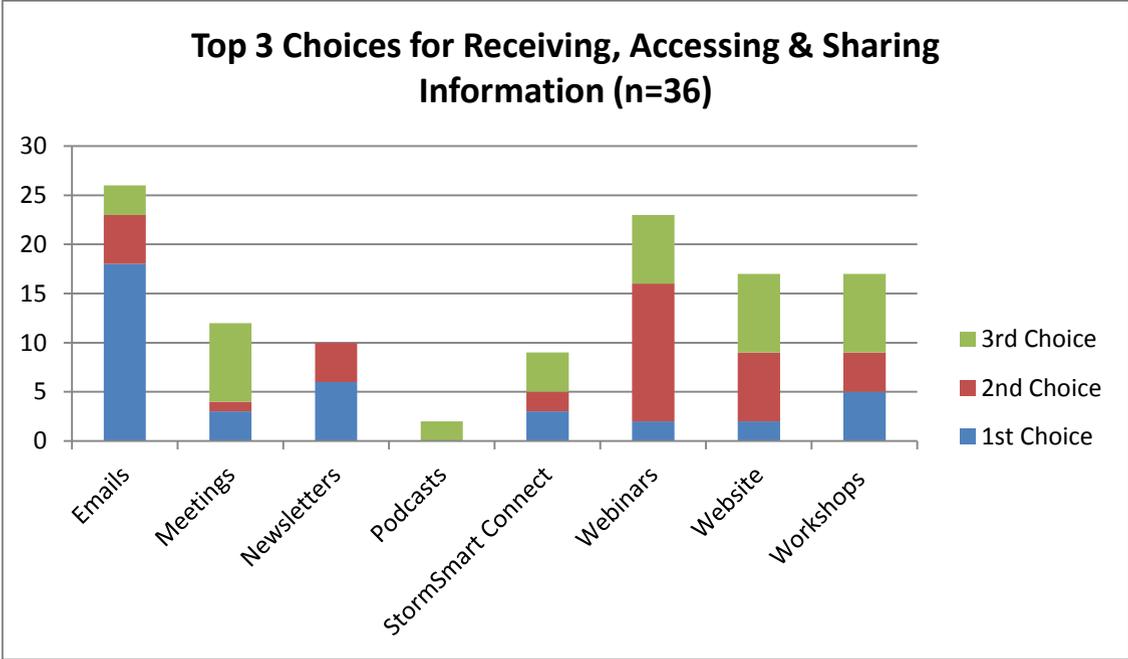


Figure 9. Top 3 choices for receiving, accessing, & sharing information

Climate Communication Needs

Survey respondents noted several areas in which they could utilize support for communicating information about climate and climate change (Figure 10). Prominent needs identified included general education/outreach resources, tools to communicate with elected officials, information about avenues to communicate the economic impacts of climate change and strategies to address skeptics. As Figure 11 highlights, respondents are interested in obtaining this information in a variety of formats, specifically advocating for workshops, webinars, and fact sheets.

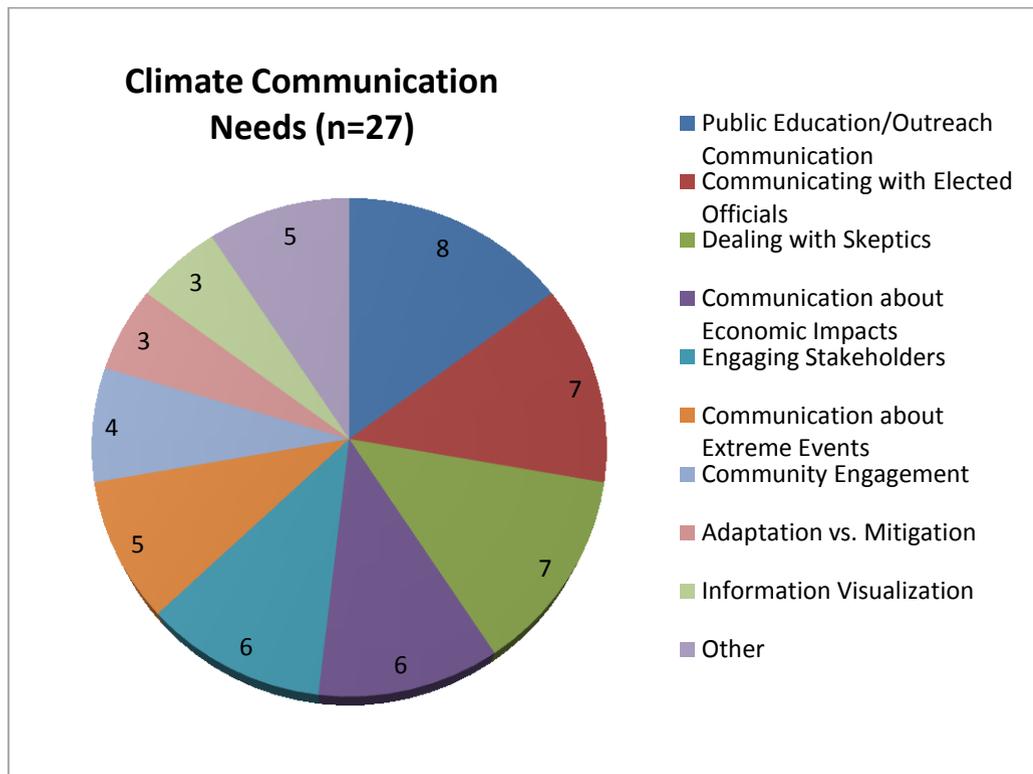


Figure 10. Climate communications needs

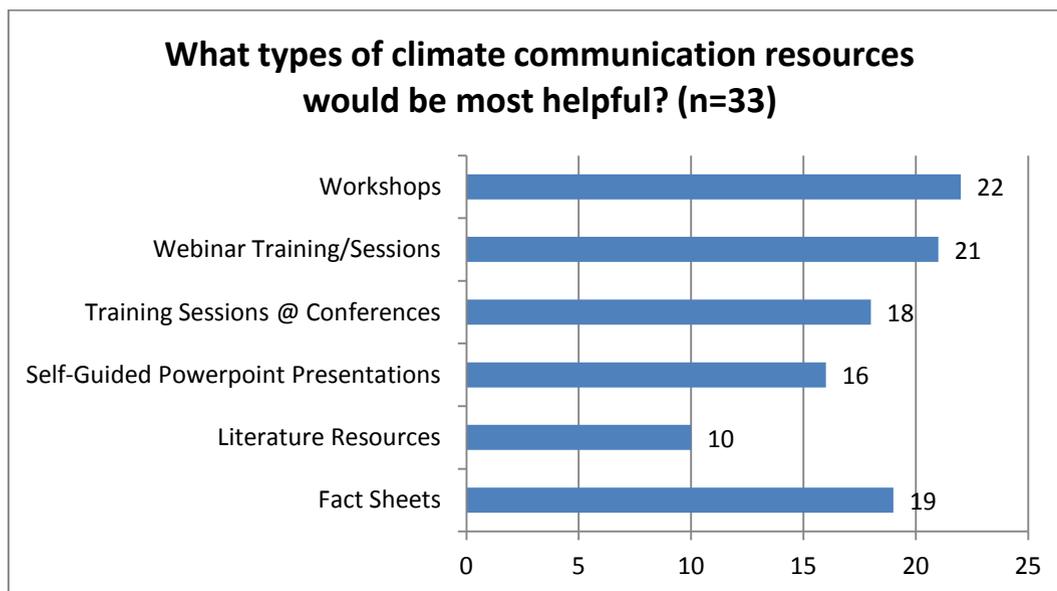


Figure 11. What types of climate communication resources would be most helpful?

Climate Science Needs

Survey respondents noted several areas where they could utilize assistance with regards to climate science and data (Figure 12). Among the most prevalent needs identified were those focused on climate modeling and downscaling, sea level rise and impacts, and extreme events and hazards. Again, webinars, workshops, and fact sheets appear to be the most useful format for these resources among survey respondents (Figure 13).

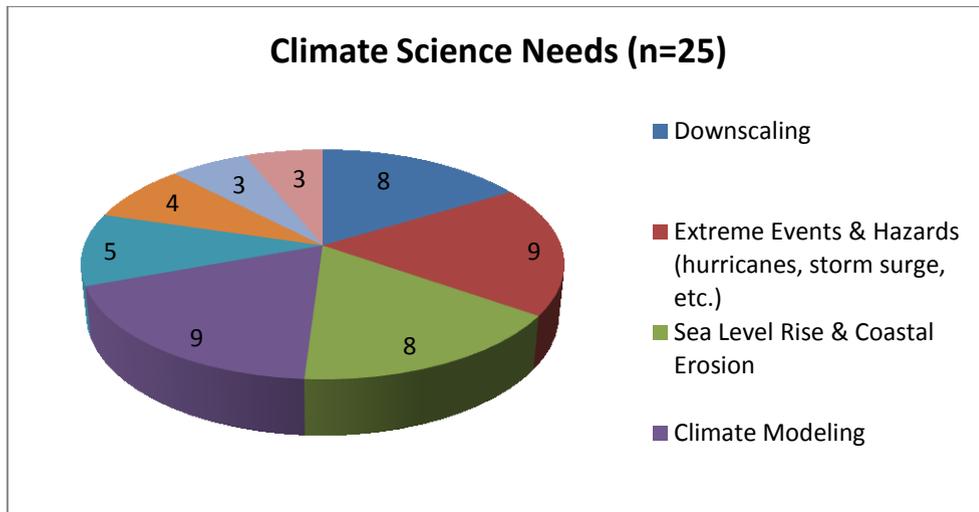


Figure 12. Climate science needs

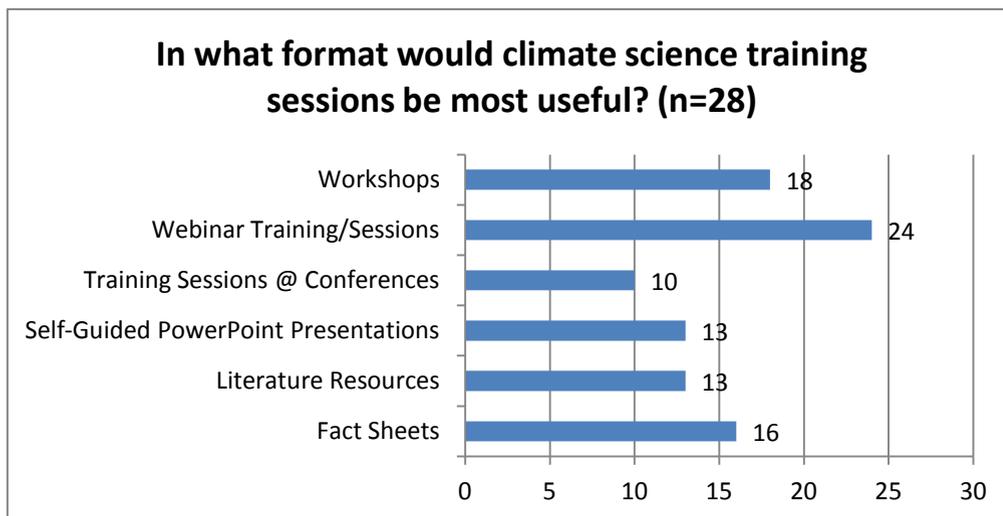


Figure 13. In what format would climate science training sessions be most useful?

Southeast and Caribbean Climate Community of Practice

Introduction

Thank you for taking the time to complete this survey to learn more about the practitioners and professionals who are part of the Southeast and Caribbean Climate Community of Practice (CoP). One objective of this survey is to obtain information that will be used to develop a CoP resource directory. The need for a climate resource directory was first identified at the May 2010 meeting of the CoP. The resource directory will be developed with the intent of aiding CoP members in forming partnerships, coordinating existing efforts, and learning from one another's experiences.

This online survey includes questions about your climate and climate change information needs; resources you or your organization use(s) related to various climate-related topics; how you, yourself, might serve as a resource to other CoP members; how you anticipate utilizing the resource directory; and preferences for future engagement opportunities with the Southeast and Caribbean Climate CoP. Questions were developed based on priority needs identified at the 2010 and 2012 meetings of the CoP, although there may be some repetition given that we hope the survey will reach a broader audience than only those who attended the meetings. We are specifically hoping to find out more about local, state and regional resources. Resources can include, but are not limited to, individuals, organizations, websites, visualization tools, databases, communication strategies and guidance documents.

Survey responses will be used as a guide for development of the resource directory and to inform efforts by the CoP steering committee for future engagement with CoP members. The directory will initially be developed as an Excel spreadsheet and housed on both StormSmart Connect and the CISA website.

Please feel free to distribute the survey to colleagues who might be interested in participating in the CoP, may offer additional resources to include, or who might be suitable resources for the directory themselves.

If you have any questions regarding the survey, please contact Amanda Brennan (abrennan@sc.edu, (803) 777-6875).

Thank you for your participation.

Contact Information

1. Please tell us about yourself/ your organization

First name	<input type="text"/>
Last name	<input type="text"/>
Organization	<input type="text"/>
Title/position	<input type="text"/>
Street Address	<input type="text"/>
City	<input type="text"/>
State	<input type="text"/>
Email address	<input type="text"/>
Phone	<input type="text"/>
Other Info	<input type="text"/>

2. What type of organization do you work for?

- Academia
- Elected Official
- Federal Government
- Local Government
- Nonprofit
- Private Citizen
- Private Sector
- State Government

Other (please specify)

Southeast and Caribbean Climate Community of Practice

Recommended and Needed Resources

Questions in this section are divided according to the CoP's identified priority topics in climate variability and change. For each of these topics, we would like to know what resources you use or would recommend for the Southeast and Caribbean Climate Community of Practice Resource Directory, specifically local, state and regional resources. Resources can include, but are not limited to, individuals, organizations, websites, visualization tools, databases, communication strategies and guidance documents.

We have included a list of possible resources for each subtopic. These lists are not exhaustive. Rather, they are intended to get you thinking about the subtopic for each set of questions. There are open-ended questions for each subtopic so that you may list additional resources you or your organization use and would recommend for the directory.

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Climate Data and Information

For this topic, we'd like you to share resources you use to access climate data and information.

Examples of climate data and information include:

- Precipitation and temperature data (e.g. historical information about trends and extremes)
- Early warning systems and forecasts for flooding events, storm surge and drought
- Extreme temperatures (e.g. heat waves, freezing events)
- Hurricanes and tropical storms
- Fire-risk conditions and forecasts
- El Nino-Southern Oscillation conditions and forecasts
- Regional climate projections

3. Please tell us if you use the following resources and if you would recommend them for others to use.

	Yes, I use this resource	Yes, I would recommend this for the directory
ClimateWizard	<input type="checkbox"/>	<input type="checkbox"/>
Integrated Ocean Observing System (including CariCOOS, SECOORA)	<input type="checkbox"/>	<input type="checkbox"/>
Intergovernmental Panel on Climate Change (IPCC)	<input type="checkbox"/>	<input type="checkbox"/>
NASA Space Grant	<input type="checkbox"/>	<input type="checkbox"/>
National Climate Assessment	<input type="checkbox"/>	<input type="checkbox"/>
National Climate Assessment - Regional Climate Trends and Scenarios for the U.S., Climate of the Southeast U.S (Kunkel et al., 2013)	<input type="checkbox"/>	<input type="checkbox"/>
National Climate Assessment - Southeast Region Technical Report (Ingram et al., 2012)	<input type="checkbox"/>	<input type="checkbox"/>
National Weather Service Offices	<input type="checkbox"/>	<input type="checkbox"/>
National Weather Service, Climate Prediction Center	<input type="checkbox"/>	<input type="checkbox"/>
NOAA, climate.gov	<input type="checkbox"/>	<input type="checkbox"/>
NOAA Coastal Service Center, Digital Coast	<input type="checkbox"/>	<input type="checkbox"/>
NOAA, National Climatic Data Center	<input type="checkbox"/>	<input type="checkbox"/>
Southeast Regional Climate Center	<input type="checkbox"/>	<input type="checkbox"/>
State Climate Offices	<input type="checkbox"/>	<input type="checkbox"/>
US EPA Climate Change Indicators in the United States	<input type="checkbox"/>	<input type="checkbox"/>
US Global Change Research Program (USGCRP)	<input type="checkbox"/>	<input type="checkbox"/>

Southeast and Caribbean Climate Community of Practice

4. Other Resources:

In addition to the options above, please tell us about other climate data and information resources you would recommend for the resource directory. Please be sure to include any regional, state or local resources you would recommend.

5. Needed Resources:

Are there other climate data and information resources which you need but are unable to find?

Sea Level Rise

6. If you do not work on issues related to sea level rise, please check the box below and proceed to the next page (question 10).

N/A

7. Please tell us if you use the following sea level rise resources and if you would recommend them for others to use.

	Yes, I use this resource	Yes, I would recommend this for the directory
Climate Central: Surging Seas	<input type="checkbox"/>	<input type="checkbox"/>
Intergovernmental Panel on Climate Change (IPCC)	<input type="checkbox"/>	<input type="checkbox"/>
National Climate Assessment - Coastal Impacts, Adaptation, and Vulnerabilities (Burkett et al., 2012)	<input type="checkbox"/>	<input type="checkbox"/>
National Climate Assessment - Global Sea Level Rise Scenarios (Parris et al., 2012)	<input type="checkbox"/>	<input type="checkbox"/>
NOAA Coastal Services Center, Digital Coast	<input type="checkbox"/>	<input type="checkbox"/>
NOAA Tides & Currents, Sea Level Trends	<input type="checkbox"/>	<input type="checkbox"/>
SLAMM: Sea Level Affecting Marshes Model	<input type="checkbox"/>	<input type="checkbox"/>
The Nature Conservancy, Coastal Resilience Tools	<input type="checkbox"/>	<input type="checkbox"/>

8. Other Resources:

In addition to the options above, please tell us about other sea level rise resources you would recommend for the resource directory. Please be sure to include any regional, state or local resources you would recommend.

9. Needed Resources:

Are there other sea level rise resources which you need but are unable to find?

Southeast and Caribbean Climate Community of Practice

Climate Change Adaptation

10. If you do not work on issues related to climate change adaptation, please check the box below and proceed to the next page (question 14).

N/A

11. Please tell us if you use the following resources and if you would recommend them for others to use.

	Yes, I use this resource	Yes, I would recommend this for the directory
Carolinas Integrated Sciences & Assessments (CISA)	<input type="checkbox"/>	<input type="checkbox"/>
Climate Adaptation Knowledge Exchange (CAKE)	<input type="checkbox"/>	<input type="checkbox"/>
Climate Impacts Group at the University of Washington, Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments	<input type="checkbox"/>	<input type="checkbox"/>
Georgetown Climate Center, Adaptation Clearinghouse	<input type="checkbox"/>	<input type="checkbox"/>
ICLEI, Adaptation Database and Planning Tool (ADAPT)	<input type="checkbox"/>	<input type="checkbox"/>
Mississippi-Alabama Sea Grant Program, Coastal Resilience Index	<input type="checkbox"/>	<input type="checkbox"/>
National Fish, Wildlife and Plants Climate Adaptation Strategy	<input type="checkbox"/>	<input type="checkbox"/>
NatureServe, Ecosystem-Based Climate Planning	<input type="checkbox"/>	<input type="checkbox"/>
NOAA Coastal Services Center, Coastal Climate Adaptation	<input type="checkbox"/>	<input type="checkbox"/>
NOAA Office of Ocean and Coastal Resource Management	<input type="checkbox"/>	<input type="checkbox"/>
Southeast Climate Consortium (SECC)	<input type="checkbox"/>	<input type="checkbox"/>
State Sea Grant Programs	<input type="checkbox"/>	<input type="checkbox"/>
US EPA Coastal Areas Impacts and Adaptation	<input type="checkbox"/>	<input type="checkbox"/>
Vulnerability and Consequences Adaptation Planning Scenarios (VCAPS) Tool	<input type="checkbox"/>	<input type="checkbox"/>

12. Other Resources:

In addition to the options above, please tell us about other climate adaptation resources you would recommend for the resource directory. Please be sure to include any regional, state or local resources you would recommend.

Southeast and Caribbean Climate Community of Practice

13. Needed Resources:

Are there other climate adaptation resources which you need but are unable to find?

Climate Change Impacts to the Natural Environment

14. If you do not work on issues related to climate change and the natural environment, please check the box below and proceed to the next page (question 18).

N/A

15. Please tell us if you use the following resources and if you would recommend them for others to use.

	Yes, I use this resource	Yes, I would recommend this for the directory
Landscape Conservation Cooperatives	<input type="checkbox"/>	<input type="checkbox"/>
NOAA National Marine Fisheries Service	<input type="checkbox"/>	<input type="checkbox"/>
NOAA Coastal Programs	<input type="checkbox"/>	<input type="checkbox"/>
TACCIMO- Template for Assessing Climate Change Impacts and Management Options, USDA Forest Service	<input type="checkbox"/>	<input type="checkbox"/>
USDA Forest Service, Climate Change Resource Center	<input type="checkbox"/>	<input type="checkbox"/>
USDA Forest Service, Office of the Climate Change Adviser	<input type="checkbox"/>	<input type="checkbox"/>
USDA NRCS Climate Change website	<input type="checkbox"/>	<input type="checkbox"/>
State Natural Resource Offices	<input type="checkbox"/>	<input type="checkbox"/>
US DOI Climate Change website	<input type="checkbox"/>	<input type="checkbox"/>
US DOI National Parks Service - Climate Change Response Program	<input type="checkbox"/>	<input type="checkbox"/>

16. Other Resources:

In addition to the options above, please tell us about other resources which address climate change and the natural environment you would recommend for the resource directory. Please be sure to include any regional, state or local resources you would recommend.

17. Needed Resources:

Are there other topics related to climate change and the natural environment for which you need additional resources?

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Climate Change Impacts to the Built Environment

18. If you do not work on issues related to climate change and the built environment, please check the box below and proceed to the next page (question 22).

N/A

19. Please tell us if you use the following resources and if you would recommend them for others to use.

	Yes, I use this resource	Yes, I would recommend this for the directory
American Rivers- Greening Water Infrastructure	<input type="checkbox"/>	<input type="checkbox"/>
Department of Defense Climate Change Adaptation Roadmap	<input type="checkbox"/>	<input type="checkbox"/>
ICLEI Local Governments for Sustainability USA-Green Building Decision Tool	<input type="checkbox"/>	<input type="checkbox"/>
NOAA Atlas 14 Point Precipitation Frequency Estimates	<input type="checkbox"/>	<input type="checkbox"/>
Plans from other municipalities (e.g. PlaNYC, Southeast Florida Regional Compact)	<input type="checkbox"/>	<input type="checkbox"/>
US DOT Transportation and Climate Change Clearinghouse	<input type="checkbox"/>	<input type="checkbox"/>
US EPA Transportation Impacts and Adaptation	<input type="checkbox"/>	<input type="checkbox"/>
US Green Building Council	<input type="checkbox"/>	<input type="checkbox"/>

20. Other Resources:

In addition to the options above, please tell us about other resources related to climate change and the built environment you would recommend for the resource directory. Please be sure to include any regional, state or local resources you would recommend.

21. Needed Resources:

Are there other topics related to climate change and the built environment for which you need additional resources?

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Economic Impacts of Climate Change

Resources related to the economic impacts of climate change on various sectors are not as readily available as resources for other climate impacts such as sea level rise and the natural environment. For this question, we would like you to share resources you use/are aware of (websites, documents, people, organizations) which provide information on the economic impacts of climate variability and change for each of the sectors below.

22. If you do not address issues related to the economic impacts of climate change, please check the box below and proceed to the next page (question 34).

N/A

Please tell us about any resources related to the economic impacts of climate change to each of the following sectors you would recommend for the resource directory, particularly any regional, state or local resources.

23. Agriculture

24. Aquaculture

25. Infrastructure Investment

26. Insurance/ Reinsurance

27. Manufacturing

28. Marine/Freshwater Fisheries

29. Real estate

30. Shipping

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31. Taxes

32. Tourism

33. Please tell us about any other topics or resources related to the economic impacts of climate change that you consider priorities for the resource directory.

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Social Vulnerability/ Equity

34. If you do not address issues related to social vulnerability/equity, please check the box below and proceed to the next page (question 38).

N/A

35. Please tell us if you use the following resources and if you would recommend them for others to use.

	Yes, I use this resource	Yes, I would recommend this for the directory
CDC Climate and Health Program	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Justice and Climate Change Initiative	<input type="checkbox"/>	<input type="checkbox"/>
NAACP Climate Justice Initiative	<input type="checkbox"/>	<input type="checkbox"/>
Oxfam America: Vulnerability and Climate Change in the US Southeast	<input type="checkbox"/>	<input type="checkbox"/>
State Health Departments	<input type="checkbox"/>	<input type="checkbox"/>
US EPA Climate Change Society Impacts and Adaptation	<input type="checkbox"/>	<input type="checkbox"/>

36. Other Resources:

In addition to the options above, please tell us about other social vulnerability/equity resources you would recommend for the resource directory. Please be sure to include any regional, state or local resources you would recommend.

37. Needed Resources:

What additional resources related to climate change and social vulnerability/equity do you need?

Climate Change Communications

38. Please tell us if you use the following climate communications resources and if you would recommend them for others to use.

	Yes, I use this resource	Yes, I would recommend this for the directory
Climate Access	<input type="checkbox"/>	<input type="checkbox"/>
ClimateCommunication.org	<input type="checkbox"/>	<input type="checkbox"/>
Climate Communications and Behavior Change: A Guide for Practitioners by The Social Capital Project at the Climate Leadership Initiative	<input type="checkbox"/>	<input type="checkbox"/>
Cooperative Institute for Research in Environmental Sciences	<input type="checkbox"/>	<input type="checkbox"/>
Talking Climate	<input type="checkbox"/>	<input type="checkbox"/>
Global Warming's 6 Americas by Yale Project on Climate Change Communication and George Mason University	<input type="checkbox"/>	<input type="checkbox"/>

39. Other Resources:

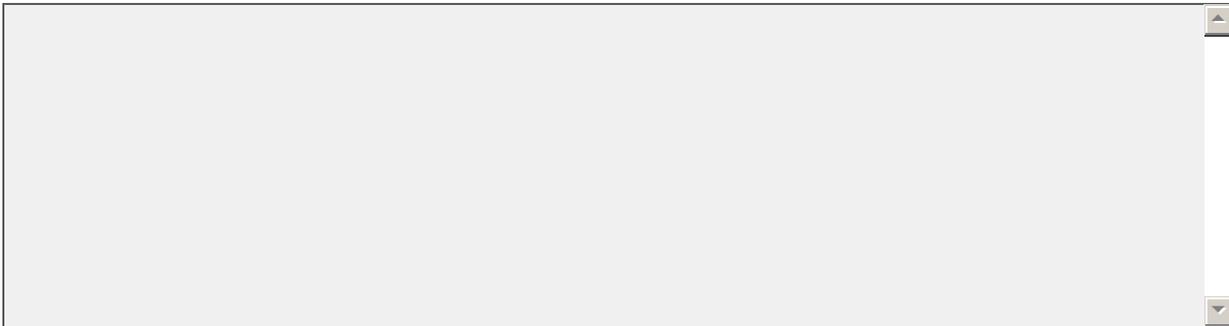
In addition to the options above, please tell us about other climate change communications resources you would recommend for the resource directory. Please be sure to include any regional, state or local resources you would recommend.

40. Needed Resources:

Are there other climate change communication resources which you need but are unable to find?

Additional Resources for the Directory

41. Please identify any additional source(s) of climate information (individuals or organizations) that you would recommend for the resource directory. These sources could include federal, state, or local agencies, non-profit organizations, academic researchers, or the private sector. Please specifically consider sharing local, state and regional resources you use.



42. Have you/ your organization or the stakeholders with whom you work conducted any vulnerability assessments?

- Yes
- No

If yes, please provide more information such as web links and recommended resources.



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43. Are you willing to be included as a resource in the directory? If so, please indicate the climate-related issues for which you could be listed as a resource.

Yes, I can serve as a resource

Adaptation	<input type="radio"/>
Built Environment	<input type="radio"/>
Climate Communications	<input type="radio"/>
Climate Data and Information	<input type="radio"/>
Economics	<input type="radio"/>
Natural Environment	<input type="radio"/>
Sea Level Rise	<input type="radio"/>
Social Vulnerability/Equity	<input type="radio"/>

Other (please specify)

44. For the topics selected above, please provide additional information on how you can serve as a resource (e.g., related projects and collaborations, data collection, research, etc.). Please provide any links that would be relevant for the resource directory.

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Engagement with the Community of Practice

This set of questions will provide us with more information on how you would like to utilize the resource directory, how you might like to engage with the CoP in the future, and which climate-related responsibilities you are most involved.

45. How frequently do you expect to use this type of resource directory?

- Daily
- Weekly
- Monthly
- Quarterly
- Annually

Other (please specify)

46. Please rank in order of preference your top 3 choices for receiving, accessing, and sharing information from and with the Community of Practice.

	1st	2nd	3rd
Emails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Newsletters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Podcasts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
StormSmart Connect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Webinars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workshops focused on a particular topic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

47. How often would you like to receive information or updates from the Community of Practice?

- Weekly
- Monthly
- Quarterly
- Annually

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48. Would you be interested in participating on a:

	Yes	No
Steering Committee (longer term planning and direction of the Southeast and Caribbean Climate Community of Practice)	<input type="radio"/>	<input type="radio"/>
Event Planning Committee	<input type="radio"/>	<input type="radio"/>
Working Group(s) (e.g., developing FAQ sheets, developing communication messages)	<input type="radio"/>	<input type="radio"/>

Southeast and Caribbean Climate Community of Practice

Engagement with the Community of Practice

Participants at the 2010 and 2012 CoP meetings identified several actions the CoP should take to help communities make progress incorporating climate change information into planning. The following questions are based on that information and will help the CoP steering committee determine how it might meet that need.

49. If the Community of Practice were able to provide assistance with climate change communications, what are the climate change topics with which you need communications assistance (e.g. having fruitful discussions with all types of people that result in moving my adaptation strategies forward, stakeholder engagement/public meetings, dealing with skeptics)? List your top three.

First

Second

Third

50. What types of communication resources would be most helpful in sharing information on these topics?

- Fact Sheets
- Literature Resources
- Self-Guided PowerPoint Presentations
- Training Sessions at Conferences
- Webinar Training/Discussion Sessions
- Workshops (1/2 or full day)

Other (please specify)

51. If the Community of Practice were able to provide training on climate science, what are the climate change science topics (e.g. extreme events, climate model downscaling, etc.) with which you need assistance? List your top three.

First

Second

Third

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52. In what format would these training sessions be most useful?

- Fact Sheets
- Literature Resources
- Self-Guided PowerPoint Presentations
- Training Sessions at Conferences
- Webinar Training/Discussion Sessions
- Workshops (1/2 or full day)

Other (please specify)

Southeast and Caribbean Climate Community of Practice

Engagement with the Community of Practice

53. Please identify your top three responsibilities related to climate.

	Most Important	Second Most Important	Third Most Important
Beach management, erosion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Built environment-infrastructure planning and protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate adaptation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fisheries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hazards and emergency management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marine resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Natural environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public health and safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Southeast and Caribbean Climate Community of Practice

Stakeholder Engagement & Climate Issues of Concern

In this final section, we would like to learn more about the stakeholder groups with whom you engage on issues related to climate variability and change, as well as more detail about the climate issues and impacts which are of greatest concern to you and your organization.

54. Who are the primary stakeholder groups or audiences with whom you engage about climate issues? Please rank your top 5.

	1st	2nd	3rd	4th	5th
Academic organizations or researchers	<input type="radio"/>				
City and county government staff members	<input type="radio"/>				
City and county government elected officials	<input type="radio"/>				
Federal agency staff members	<input type="radio"/>				
Extension, education, or communications staff members	<input type="radio"/>				
K-12 education	<input type="radio"/>				
Media	<input type="radio"/>				
Non-profit organizations	<input type="radio"/>				
Private citizens	<input type="radio"/>				
Regional planning councils	<input type="radio"/>				
State agency staff members	<input type="radio"/>				
State government elected officials	<input type="radio"/>				

Other (please specify)

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55. A priority list of climate concerns was shared at the 2010 and 2012 CoP meetings. The list included broad topics such as sea level rise, built environment and infrastructure, flooding, natural environment impacts, economics, planning, and social vulnerability and equity.

We would like a more detailed understanding of these topics of concern. Please indicate your level of concern about the following climate change concerns and impacts with respect to your job and role in working with stakeholders. Please use the 'other' box to include additional topics.

	1- not concerned	2- slightly concerned	3- moderately concerned	4- very concerned	5- extremely concerned
Changing precipitation patterns (increase in the number and intensity of extreme events, floods or droughts)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes in the frequency and severity of flooding events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes in the frequency and strength of hurricanes and storms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coastal erosion, beach loss	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic impacts of extreme weather events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Habitat changes (e.g., mangroves, dunes, marshes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phenology changes (e.g. changes in growing seasons)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public health and safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Salinity intrusion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sea level rise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storm surge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stormwater management and flooding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Temperature extremes (heat waves/ freezing events)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vulnerability of private property and infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vulnerability of public property and infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wildfire	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water supply	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Water quality

Wetland loss or conversion

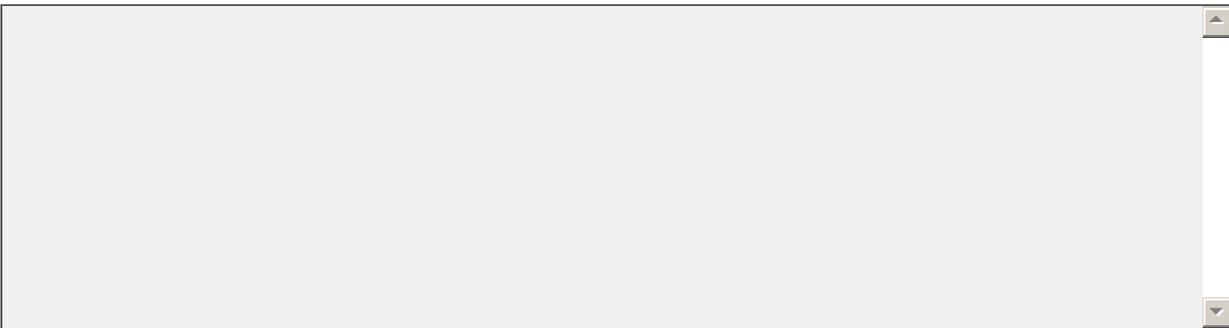
Other (please specify)

Stakeholder Engagement & Climate Issues of Concern

56. Is climate change a topic that you discuss with your stakeholders and audiences?

- Regularly
- Sometimes
- Rarely
- I avoid the term "climate change" but discuss the issue in other terms (e.g., sustainability, efficiency)
- I do not address climate change

57. Any other comments?



Thank you for taking the survey! Please forward the survey link on to others who may benefit from or be interested in participating in the Southeast and Caribbean Climate Community of Practice resource directory.