CISA & CoCoRaHS Citizen Science Condition Monitoring Project

Observer Conference Call Thursday, October 29, 2015, 10:00 – 11:00 a.m.

Below are a few key points from a conference call held Thursday, October 29, 2015 with 7 CoCoRaHS condition monitoring volunteers. The purpose of the call was to discuss experiences with recent heavy rainfall and flood events and get feedback from volunteers about possible changes to the CoCoRaHS reporting form for Phase 2 of the CoCoRaHS Condition Monitoring Project. If you have additional questions, comments, or concerns you can reach Amanda Brennan at <u>abrennan@sc.edu</u> or (803) 777-6875.

CISA Team Members: Amanda Brennan, David Eckhardt, Sumi Selvaraj

Discussion on reporting impacts caused by heavy rainfall, flooding, or other local events

- In October, drought conditions in the Carolinas were alleviated by rainfall throughout the region. CISA researchers put together <u>a 4-page handout about the SC Floods</u> that happened earlier in the month. Additionally, King Tides have caused coastal flooding in many communities along the coast.
- Observers indicated that they do include impacts from these "wet" events in their reports when they occur.
 - Amanda also suggested that observers can submit reports to <u>MyCoast: South Carolina</u>, which is a project run by South Carolina Department of Environmental Health and Control (SCDHEC) Office of Coastal Resources Management (OCRM) to monitor impacts caused by King Tides and severe storms.
- Some observers also asked about other local events that impact conditions, such as large logging operations that cut many acres of trees periodically and alter the local environment. A few observers agreed that similar things have happened in their area as well.
 - *Reporting tip:* While human-caused land-use change does impact local conditions, currently CoCoRaHS does not have a section to note these local changes. However, we agree with observers that these changes are important to note if they cause changes in the way local rainfall impacts the area (i.e., reduced wind breaks which might lead to wind damage during storms). This type of impact information would be useful to include in your reports if it influences the way weather conditions affect your area.

Feedback on incorporating a scale bar into the CoCoRaHS reporting form

- In response to feedback from drought decision makers about the condition monitoring reports currently for the Condition Monitoring Project, the CISA team is working with the folks at CoCoRaHS headquarters on ways to update the reporting form in order to improve the detection of changing conditions. Initial plans look to incorporate a scale bar into the CoCoRaHS online reporting from for observers to use in addition to your written condition monitoring report. Additionally, information from the scale bar would feed into a web map to display local conditions based on the condition monitoring reports.
- CISA team member David Eckhardt developed a prototype of the scale bar and guidance information (see page 3 below), and asked for feedback from the observers on the materials.
 - Observers felt that the categories on the scale bar would be sufficient to describe conditions in their areas and help quantify information about what is happening locally.
 - They appreciated the guidance provided with the scale bar, which included descriptions of each category.

- Observers also agreed that the current reporting form could be improved by including text boxes by each category so they could enter information about specific impact categories (e.g., plants and wildlife, tourism and recreation, etc.). This would be in addition to the general condition monitoring box that currently exists.
- One concern raised about the scale bar was how to indicate changing conditions throughout the week. A lot of the observers report every week and write about conditions that happened on different days.
 - The CISA team agrees that the best option is to choose the option that best represents conditions on the day you are entering your report. If conditions have changed drastically over the course of the week, this should be noted in the written portion of your report.
- Observers agreed that being able to see their previous response when entering their new weekly condition report would not necessarily be useful. One observer even suggested it could bias what they choose to enter in the form.
- Observers also mentioned how they would appreciate being able to see an archive of the data that they previously submitted, such as a graph, and use it to inform some of their own choices such as when to plant different plants.
- Please take a moment to complete this brief online survey to share your feedback on the condition monitoring scale bar and guidance prototype. <u>https://docs.google.com/forms/d/13xXV_uAbxjzYbZdGRf84S5M12Q3s30ncNh8Y-</u> <u>zICtFM/viewform</u>

Feedback on the CISA & CoCoRaHS Condition Monitoring Newsletter

- CISA team members compile a monthly newsletter to share project updates, news, and items of interest. You can access the latest edition on the project webpage: www.cisa.sc.edu/CoCoRaHS.html.
- During the call we asked for feedback on articles observers would like to see in the newsletter.
 - One observer suggested including more about the observers, such as expanding the star of the month article to include a bio sketch.
 - Several of the observers agreed that they would like to hear more about how CoCoRaHS and condition monitoring reports are being used by local decision makers.



Condition Monitoring Scale Bars

Proposed Condition Scale:

Based on your local knowledge and experience, please select a condition that best describes your Condition Monitoring area from the options below:

Severely dry	Moderately dry	Mildly dry	Near normal	Mildly wet	Moderately wet	Severely wet
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Dry guidance - general descriptive information on dry conditions will be included with each category in order to provide help in making a selection.

Severely dry- "Soil moisture is absent. Crop or pasture losses likely. Possibility of major crop and pastures losses. Mandatory water restrictions requested. Water shortages or water emergencies are possible"

Severely dry	Moderately dry	Mildly dry	

Moderately dry - "Soil is dry. Browning or color changing in plants is present due to dry conditions. Stress leading to some damage in plants, crops, or pastures. Streams, reservoirs, or wells low, some water shortages developing or imminent. Voluntary water-use restrictions requested." Mildly dry - "Soil is somewhat dry. Short-term dryness slowing growth of local plants, crops or pastures. Coming out of drought: some lingering water deficits. Local plants, pastures or crops not fully recovered."

Wet guidance - general descriptive information on wet conditions will be included with each category in order to provide help in making a selection.

Mildly wet - "Soil moisture is above normal. Local plants, crops, or pastures healthy or recovering from dry conditions."

Mildly wet	Moderately wet	Severely wet	

Moderately wet - "Soil is very damp - the ground is partially saturated with water. Standing water is present in low areas and ditches. Local plants, crops, or pastures are healthy and lush. Water bodies are full" Severely wet - "Soil is wet ground is completely saturated with water. Standing water is severe and abundant. Water bodies are very elevated. Flooding may be present, leading to some damage in plants, crops, or pastures."