Weekly Condition Monitoring

To understand the impacts of drought on plants, animals, and people, it is very helpful to monitor conditions regularly, whether the weather is wet or dry. This allows us to see how a drought year differs from a normal year, and we learn how different plants and animals respond to the onset, intensification, and recovery of drought.

Regular condition monitoring can also help identify expected seasonal changes versus changes caused by unseasonally wet or dry conditions.

This type of monitoring can also help to identify long-term or cumulative effects of drought.
Weekly Condition Monitoring

Observer responsibilities

• Note how precipitation affects conditions in your area

• Summarize and submit observations on a weekly basis using the online CoCoRaHS Condition Monitoring report form
Weekly Condition Monitoring

Photo credits: CoCoRaHS, Pat Momich, Melinda Ball
Weekly Condition Monitoring

Connecting weather and climate with the environment

- Your knowledge about the local environment and how weather influences it can reveal much more than can be learned from recording daily rainfall alone.

- Please report *no change* in conditions as well. This is a valid data point just like reporting zeros on days with no precipitation.
Sample Condition Monitoring Reports

**Pickens County, SC, April 20-June 10, 2014** – Incipient drought is now occurring in western Pickens County, SC. Except for a 3.14" single day rainfall on May 15, only 2.12" of rain has fallen during a 51 day span from April 20 to June 10. Irrigation has become an increasingly normal activity for both agriculture and (in my case) horticulture. Year to date rainfall at SC-PC-1 is only 20.71" or about 7 inches below normal.

**Rio Grande County, CO, December 17, 2015** – In the last four weeks I have recorded only 0.02" of moisture. Without snow cover, crops started this fall suffer desiccation and vulnerability to winter kill. This coupled with laws preventing supplemental irrigation in winter has me concerned about my perennial and fall seeded crops.

**Nash County, NC, February 3, 2016** – Rain total for last week is 2.64. The creek (Flat Rock Branch) is back to normal. The Pond at Rocky Mount Memorial Park is full. Minor flooding last Friday in nearby fields. Minor flash flooding on roads last week. The daffodils are at their peak of flowering, brightening the yard with yellow flowers.

**Richland County, SC, October 31, 2015** – Our station had 19.38" in October, almost 16" of which fell in the first six days. We've had 1.55" during the last five days of the month. Our neighborhood has plenty of springs, but they only appear when it’s really wet. The neighborhood has “bled” all month, although only the most persistent springs are still active. We have one French drain that runs when it’s really wet and it’s still going strong, but it’s drawing water from a foot or more under the surface.
**CoCoRaHS Condition Monitoring Report Form**

1. Enter “Report Date”
2. Select from Condition Monitoring Scale Bar
3. Write Condition Monitoring Report
4. Review Impact Categories

**Condition Monitoring Report Form**

<table>
<thead>
<tr>
<th>Station Number: SC-RG-51</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station Name: Columbia 6 &amp; SE</td>
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</tbody>
</table>

Condition monitoring reports are submitted on a regular (weekly, biweekly, monthly) basis to share information about the effects of local precipitation on the environment and society. By submitting reports on a regular basis, you create a baseline to see change through time, such as seasonal differences or changes caused by more or less precipitation. Please refer to the Condition Monitoring training slide show for more information. *Indicates required field

**Report Date**

<table>
<thead>
<tr>
<th>Severe Dry</th>
<th>Moderately Dry</th>
<th>Mildly Dry</th>
<th>Near Normal</th>
<th>Mildly Wet</th>
<th>Moderately Wet</th>
<th>Severely Wet</th>
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</tbody>
</table>

**Description**

Please provide a description of how dry, normal or wet conditions are affecting you, your livelihood, your activities, etc. *  

**Report Categories**

- General Awareness
- Agriculture
- Business And Industry
- Energy
- Fire
- Plants And Wildlife
- Relief Response
- Society And Public Health
- Tourism And Recreation
- Water Supply And Quality

**Submit Data**

Reset
1. Condition Monitoring Observation Date

- Enter the date when you are submitting your report in the “Observation Date” field
2. The Condition Monitoring Scale Bar

- The condition scale bar will be used to provide a standardized form of condition reporting. You can select from one of the 7 categories representing a range of dry, wet, or normal conditions.
- There is a link to additional guidance to help you select from the different categories.
3. Description of Conditions

• Type a brief description of the conditions you have observed in the comment box.

Description
Please provide a description of how dry, normal or wet conditions are affecting you, your livelihood, your activities, etc.

*
4. Impact Categories

• Select the impact categories that correspond to the information you provided in your description of conditions.

• Check out the link for “more information on condition monitoring categories” for ideas on different things you might observe.

[Checkboxes for report categories: General Awareness, Agriculture, Business And Industry, Energy, Fire, Plants And Wildlife, Relief Response, Society And Public Health, Tourism And Recreation, Water Supply And Quality]
Request to submit reports on Saturdays or Sundays

• To improve reporting consistency we ask that you report conditions for a one week reporting period. We also ask that you submit reports on either Saturday or Sunday.
Request to submit reports on Saturdays or Sundays

- This will ensure that up-to-date information is available to US Drought Monitor authors, who review the information at the beginning of the week in order to publish the Drought Monitor map on Thursdays. Having all observers submit condition monitoring reports on a weekly basis will also make condition reports more reliable and timely, thus more useful in scientific research.
Observation Guidance

When writing condition monitoring reports you can use the report categories as a guide:

- Were there Agricultural impacts this week?
- Was Business And Industry affected?
- Did you notice any Public Health impacts?
- Was there Fire?
Observation Guidance

If possible, consistently report from specific locations:

• Report on specific bodies of water
• Report on specific plant life
• Report on specific businesses

Note the differences between your last report and the current conditions.
**Madison County, NC – March 8, 2015** This has been a week of extremes – from a high of 73° to a low of 18° with a covering of snow and ice. The good news is that **definite signs of spring** are finally appearing. Song sparrows are starting to sing. Crocuses are blooming. And, best of all, **wood frogs have returned to our pond and laid eggs**. This is late. According to my records over 10 years, the average date for wood frogs coming to the pond is February 18.

**Buncombe County, NC – November 30, 2015** We continue in the all or nothing weather pattern. 6" rain, a week of unseasonably warm and dry, 2" 15 days warm and dry and a quick 2 day cool down, and now 2+ precip again. **In between the rain it has been alarming how quickly the streams and creeks go back to below normal levels.** Birds are emptying the feeders quickly, and I am still seeing snakes, groundhogs and one bear sighting. We ate our thanksgiving dinner on the porch. sunsets and sunrises have been spectacular. **Tourists** are enjoying the warm dry spells for hiking and shopping. **Farmers** are shaking their heads! **Most everyone has a sniffle** - seasonal whiplash
Condition Monitoring Web Map

- Available for NC and SC reports as part of a pilot testing program
- Users can view an observer’s report content by clicking on a station location
- Temporal analysis – The time slider allows you to see change over time
- Available at www.cisa.sc.edu/webmap.
Regional CoCoRaHS Blog:

• Stay up to date with current events and news

• Find the monthly newsletter

• See what other observers are reporting

http://carolinascocorahs.blogspot.com/
Interested in learning more?

• For more information about the launch of condition monitoring as a pilot project in the Carolinas visit: www.cisa.sc.edu/CoCoRaHS.html

• You can also reach members of the research team leading the pilot project at cisa@sc.edu.