

COCORAHS -- HAPPY NEW YEAR

FORT COLLINS, CO — Sunday, October 2, 2011

Greetings to all,

And special greetings to all of you who are new to CoCoRaHS. Since I last wrote, we've had a number of teachers and school classes join our CoCoRaHS rain gauge team as well as new volunteers from nearly 25 states. We've seen a surge of new volunteers from the Pacific Northwest where a new weather radar system is being deployed by the National Weather Service right now. Also, we've seen a lot of new Texas volunteers who are still optimistic that eventually there will be rain there to measure and report. Welcome, all of you. Your rain gauge observations will all be greatly appreciated in the weeks and months ahead.

Water Year 2012 arrives!

Even without checking the calendar, I knew it was October 1 today as my e-mail box lit up with messages of "Happy New Year". Quite a few of you already compiled and attached your water year summary reports tabulating WY2011 precipitation totals, snowfall totals and number of days with rain and snow. Those of you new to CoCoRaHS are saying "What is he talking about???" but for CoCoRaHS veterans as well as many climate and water professionals you know. Today, October 1, is the day we close the books on the 2011 Water Year and set forth into the great unknown of "Water Year 2012"

What do I mean by "Water Year"? It is the 12-month period starting October 1st (today) and ending next Sept 30th (happens to match the federal fiscal year). This is an arbitrary definition, of course, and one that works better in some parts of the country than others. Here in Colorado and many other western states, the water year makes sense to almost everyone. It marks the end of the 2011 growing season and the

beginning of a new water storage cycle. Starting any day now, snows in the high mountains will begin to fall and accumulate. Based on the latest weather forecasts it looks like mountain snows may arrive right about on schedule — later this coming week. These early autumn snows become the first layer of what will build to be the 2012 snow pack. By next spring and early summer when the mountain snow begins to melt, it will become our 2012 water supply. That water will be used to water our neighborhoods and grow our crops throughout the many areas of the West who rely on surface irrigation water.

For the rest of the country, the water year also makes hydrological sense. The days are shortening quickly and temperatures will be dropping. Vegetation over much of the U.S. will become dormant within the next few weeks. Evapotranspiration rates (ET) now drop off quickly. For the next several months (now through about March or April) precipitation has its best chance of exceeding evaporation. This means we can make some progress to recharge soil moisture and ground water that were depleted this past summer.

The water cycle is an amazing thing, and the arbitrary "water year" definition helps us keep that in mind.

Water Year precipitation summaries

This is also the time of year when CoCoRaHS tradition calls us to check over all of our precipitation data for the past year and compile (if we are so inclined) our 2011 Water Year Precipitation summary reports. As of yesterday, there have been a record breaking 3,000,000 daily precipitation reports submitted this past year -- awesome indeed. So compiling these data into summaries help us all make more sense out of all those observations.

This year will be similar to last. Julian (from our staff) wants to make your job easy. He is ready to begin compiling summary statistics for every single station. We will post these in a few days. Then we'll encourage everyone to review your Water Year 2011 summary reports, check to see that all of your data for the year were typed in accurately, and fill in the days you may have forgotten to enter. (Yes, you can always go back and fill in previous days). In a few weeks, we will then run final 2011 Water Year Summaries and post them here:

http://www.cocorahs.org/Content.aspx?page=dataanalysis

This is a wonderful culmination of all of your efforts throughout the year

and it is worth enjoying, using and celebrating.

Did we reach our goal of 10,000 daily reports?

You probably knew the answer from my obvious silence. We made a good showing September 19–23 during the "Reach 10,000" challenge. But drat — we fell short again. Our best showing was September 19 with 9,292 daily reports plus another 405 multiday accumulation reports for a total of 9,697. More are still trickling in, but I don't think we'll make it to 10,000. On the bright side, since mid–May there have been 12 individual days where daily reports have exceeded 9,600 with a maximum of 9,827 precipitation reports on June 22. We will reach 10,000 reports soon, but it looks like it will be 2012.

New station in Alaska

We don't have large numbers of volunteers in Hawaii or Alaska, but the ones we have are doing an amazing job. I recently noticed a new station in Alaska that just got started this summer. They are already well practiced. This station near Dora Bay (vicinity of Ketchikan) has only been taking CoCoRaHS precipitation observations since July 30th, but they've already totaled 44.39". That is a lot of rain for two months' time. Edna Bay (AK-PW-1) is close behind with 41.69". That's more than we get in 3 years. For the same period of days, the best (wettest) we can find in Hawaii is our Pepeekeo station on the big island of Hawaii with a total of 17.35" since July 30.

A new path for CoCoRaHS -- and a fun way to introduce CoCoRaHS to others

To celebrate the beginning of Water Year 2012, CoCoRaHS is proud to announce our new YouTube channel.

http://www.youtube.com/cocorahs

We recently had the extremely good fortune of bumping into a local weather enthusiast who also has artistic talents. He attended one of our CoCoRaHS volunteer training sessions this summer and then did some research on how CoCoRaHS got started. The result is a short "Animation" that pokes a little fun at us, but also describes surprisingly well who we are, how CoCoRaHS got started, and why we are so passionate about measuring precipitation — all in just 4 minutes of animation. Take a

peak. There is also a top-notch introduction to CoCoRaHS prepared by a TV station in North Dakota posted on our YouTube channel. So when someone seems interested in rainfall measurements and CoCoRaHS, direct them to our channel to learn more about the project. You will also notice the tiny YouTube icon in the upper right-hand corner of our homepage. Click there and away you go.

Stung twice

It's been a fine summer and early autumn. Today we successfully got our winter hay supply stowed in the loft of our barn so we're almost ready. But despite important accomplishments and some dandy weather, there have been some nasty challenges. Wasp activity has been crazy around our little farm. I've been stung twice, my wife once, and two of our neighbors who came over for a visit. After the second my hand swelled up like a boxing glove. It's OK now, but I'm getting the idea that I've become allergic to these little buggers.

Weather will be changing

It's that time of year. Keep a close eye on the weather now. Things have been fairly stagnant lately and the tropics have been fairly quiet. The week-long low pressure swirl over the southern Great Lakes was a part of the blocked weather patterns, but was amazing to watch. But the jet stream starts speeding up now as the northern latitudes begin cooling down. This will activate some weather changes soon. Find your favorite website or TV station and keep an eye on what comes next. Also, make sure your rain gauge is ready for action. It won't be long now until our first dances with snow and subfreezing temperatures. That all comes sooner than we think. So be prepared to remove your funnel and inner cylinder when the time is right.

Call for Drought Impact Reports

Just a quick reminder to encourage you, at any time of the year anywhere in the country, to submit "Drought Impact Reports" to CoCoRaHS. Submit reports whenever you and your communities are experiencing the resultof inadequate precipitation. To submit a report, just click "My Data" at the top of the CoCoRaHS website (you need to be logged in to your account). Then click "Drought Impact Report" under the "Enter My New Report" menu. The report form will help guide you.

To view "Drought Impact Reports" for any state of the whole country click

http://www.cocorahs.org/ViewData/ListDroughtImpactReports.aspx

Tracking the drought in Texas this year has been interesting, to say the least. While we had dozens of drought impact reports submitted, the worse it got the fewer drought impact reports were submitted. I don't know what this means, but it may be a sign of being really depressed about the whole situation.

Pictures of Drought

This is something we're really interested in. Take photos that show the impact of drought — especially photos taken in the same place and same time of year comparing drought conditions to how things looked in a better year. Drought creeps up on us so we don't always even notice that it looks different and we don't think to take photos. So if you have any pictures, please let me know.

Again, Happy New Year

I sincerely appreciate your interest in weather, climate and water -- and your volunteer efforts to help make and share your observations. Let's all have a great 2012 water year!

Sincerely,

Nolan Doesken

Colorado State University