

Photo by Mike Cempa

## *Inside This Issue:*

Lake Forecasts	Page 2
NWS on Twitter	Page 3
Watch/Warning Review	Page 4
Weather Review	Page 5

**Editor-in-Chief:**  
*Chris Kimble*

**Editors:**  
*Stacie Hanes*  
*Margaret Curtis*  
*Michael Kistner*

**Meteorologist in Charge (MIC):**  
*Hendricus Lulofs*

**Science and Operations Officer (SOO):**  
*Dan St. Jean*

**Warning Coordination Meteorologist (WCM):**  
*John Jensenius*

To subscribe, email:  
[GYX-Newsletter@noaa.gov](mailto:GYX-Newsletter@noaa.gov)

# *The Coastal Front*

## *Summer 2013*

Volume IV-2

### ***Late Spring Snowfall***

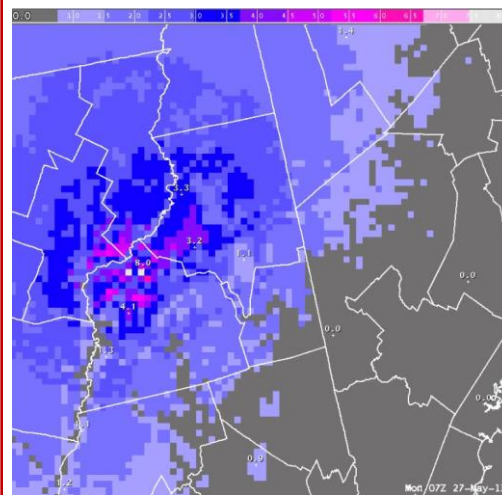
By Margaret Curtis, Meteorologist Intern

Memorial Day weekend is traditionally a time to get out boats and grills, plant a garden, and enjoy the start of summer, but for some in Northern New England this year hats, mittens and sleds were more appropriate.

On Thursday, May 23 an unusually cold air mass began making its way into the northeast. By Friday, an upper level low was over the region. At the same time a low pressure system developed along the coast. The low moved into the Gulf of Maine and helped to pump tropical moisture into the

region causing rain to begin late Thursday night and continue through Friday and Saturday. On Saturday night the cold air was over upstate New York, Vermont, and extending into western New Hampshire and the CT river valley. As the sun set, many locations began to report snow. At 8:30 pm on the 25th, Whitefield, NH began to report snow and it kept snowing until 7:10 am. While most of the snow was reported in the upper Connecticut River valley, the cold air did try to move further south and east with Lebanon, NH briefly reporting snow at 11 pm and Plymouth, NH reporting snow from 11 pm-midnight. While the mountains of southern Grafton County saw up to 2 inches of snow, those same mountains kept the cold air to the west with Berlin and Conway reporting only rain.

The heaviest snow stayed above 1,000 feet where as much as 6 inches was reported. With leaves already on the trees, the weight of the snow caused scattered power outages.



**Figure 1: Map of estimated snowfall totals for Memorial Day Weekend.**

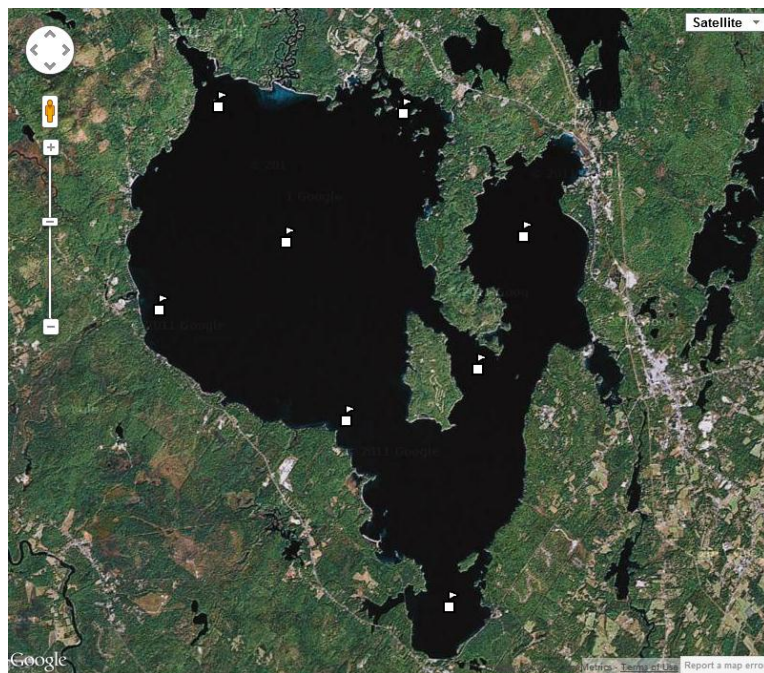
## *Lake Forecasts Offer Greater Detail*

By Mike Kistner, Meteorologist Intern

The National Weather Service in Gray, Maine began producing daily recreational forecasts for Lake Winnepesaukee in New Hampshire and Sebago Lake in Maine at the beginning of May. Last summer was the first time that this product was provided for the public and overall the new forecasts were a success. However, this year several improvements have been made to the lakes forecasts, with the biggest being the addition of wave heights to the product.

Our official Lake Forecast can be found at <http://www.erh.noaa.gov/gyx/lakeforecasts/>. Users will have several options to choose from on this page. For most, the 48 hour text forecast will be more than enough. However some may want a more detailed forecast depending on where they are planning to go on the lake.

We now offer point specific forecasts for several different locations where weather conditions tend to differ on the lakes. Users can click on a point that will be closest to their location and receive several forecast parameters such as wave height, wind speed, and water temperature every 3 hours for the next 24 hours. This helps highlight the times that conditions may change for better or for worse and can also be used to choose what part of the lake one may want to venture to in order to find the best conditions for their needs.



**Figure 2: Forecasts are now available for several different locations over the lakes. Each of these points on Sebago Lake now has a specific forecast.**

Another new feature that users will find this year on the Lakes Forecast page is an experimental wind and wave model. The NWS Gray Office now runs a high resolution local forecast model out to 60 hours for both Sebago and Winnepesaukee. Although this model does not represent an actual forecast it can still be used for informational and planning purposes. However, users must realize that because the computer model's output is only experimental that it may differ from the official forecast.

## ***Lake Forecasts Offer Greater Detail (Continued)***

Overall, the lakes recreational forecast product should be very beneficial to fishermen, boaters, and everyone who lives or vacations on the lake. In order to ensure the most accurate forecast possible, the NWS Gray Office receives observation reports at least twice a day from the Portland Water District on Sebago Lake and the State Marine Patrol on Lake Winnepesaukee. This data is used to verify forecast accuracy and help calibrate our evolving forecast techniques. It also allows forecasters to produce updates if necessary and can be used for further understanding of the land versus water wind relationships and also the lake wind and wave relationships. Additionally, this information assists us in assessing the output of our computer model. We are also asking for help from the general public and if anyone wants to report conditions on the lake, they can call the NWS in Gray at 207-688-3216.

### ***NWS Now on Twitter***

By Stacie Hanes, Lead Forecaster



Twitter is an online social network which allows users to send and receive messages called “tweets”. Messages are only allowed 140 characters in length in order to comply with text message protocols. NWS Gray has recently embraced Twitter and is sending out messages daily.

Whoever “follows” NWS Gray will receive any messages we send. Our followers may also reply with a question or “retweet” (forward) the message we send to additional people and entities.

There are over 500 million registered users on Twitter which makes it an ideal tool when information needs to be disseminated quickly. For NWS Gray this may include information on upcoming weather events, scheduled Skywarn spotter classes, climatological averages, interesting weather anomalies, tips, or weather of the day.

Links to other sites or information as well as photographs may also be included in a tweet. If you are a member of Twitter or plan to be, please follow @nwsgray for the latest information from our office!

You can also follow us on Facebook by “liking” our page. Just search National Weather Service Gray and you will find us at <https://www.facebook.com/US.NationalWeatherService.Gray.gov>



**Figure 3: National Weather Service is on Facebook and Twitter!**

## ***15 Years of Observing With CoCoRaHS***

By Nikki Becker, Observing Program Leader

CoCoRaHS was started on June 17, 1998, by three high school students from Fort Collins, Colorado, with the help of Colorado State University because of crippling flooding in Fort Collins in 1997. A few dozen precipitation reports over the last 15 years have grown to be around 8,000 to 10,000 reports daily across the United States and Canada. The states of Maine and New Hampshire joined CoCoRaHS in the summer of 2009 and have around 150 active observers. The program became international when the province of Manitoba, Canada joined in December 2011. Canada hopes to have all providences involved in the coming years. We commend and thank all the volunteer observers sending in reports daily. With the summer convective season underway, your precipitation reports via CoCoRaHS are very valuable. Keep up the great work. Happy Anniversary CoCoRaHS.

## ***Severe Weather Watches and Warnings***

By Stacie Hanes, Lead Forecaster

Many people become confused as to the difference between a weather warning and a watch. Warnings are issued by your local National Weather Service office on a case by case basis when a storm has or is expected to produce hail larger than 1", damaging winds greater than 58 mph, and/or tornadoes. Generally these warnings are based on clues on radar or storm spotter reports. A tornado warning is issued if strong rotation is indicated on radar or a tornado has been sighted. Warnings do not account for lightning since lightning is a danger in any thunderstorm. Warnings are issued only for the areas expected to be directly impacted by the storm, covering a portion of one or a few counties, and last generally less than one hour.

A Severe Thunderstorm Watch or Tornado Watch is issued in coordination with the Storm Prediction Center, located in Norman, Oklahoma. A watch is issued when conditions become favorable for organized severe thunderstorms and tornadoes to develop. A tornado may occur under a Severe Thunderstorm Watch, but a tornado watch is issued when conditions favor the development of multiple and/or strong tornadoes. Watches generally cover many counties or portions of several states, with an average duration of 6 to 7 hours.

Watches give a heads up to the public as well as to emergency managers, school districts, broadcast media, and storm spotters. The public is encouraged to pay more attention to the weather if a watch is issued and listen for any subsequent warnings. Emergency managers, broadcast media, and storm spotters use the extra time to ramp up their operations and call in more assistance if needed. However, it is important to remember that a watch is not a warning, and severe weather is not guaranteed under a watch.

## Spring Weather Review

By Steve Capriola, Lead Forecaster

Spring has been milder than normal and much drier than normal in Portland, Maine. In fact March and April combined for just 3.80 inches of precipitation (combined rainfall and melted snowfall) which was less than half the normal precipitation of 8.56 inches. The month of May helped to make up for this dry weather with over four and a half inches of rain. All three spring months were warmer than normal, though April and May were only by a fraction of a degree.

The last significant snowfall of the season fell on March 19-20 when 9.6 inches fell in Portland. Traces of the winter snow pack remained on the ground through the beginning of April. The nicest stretch of weather was a two week period from late April through early May. Temperatures during this period were close to normal with daytime highs reaching the 60s on several occasions with mostly dry weather.

	HIGH	LOW	AVE	PRECIP	Snow
March	42.2 (+0.1)	27.4 (+2.5)	34.8 (+1.3)	1.69 (-2.55)	13.2 (+0.5)
April	53.3 (+0.0)	35.0 (+0.3)	44.2 (+0.2)	2.11 (-2.21)	0.2 (-2.6)
May	64.0 (+0.5)	44.2 (+0.0)	54.1 (+0.2)	4.57 (+0.56)	0.0 (+0.0)
Spring 2013	53.2 (+0.2)	35.5 (+0.9)	44.4 (+0.6)	8.37 (-4.20)	13.4 (-2.1)

Table 1: Spring 2013 climate statistics for Portland.

Springtime in northern New England is noted for its extended periods of cloudy

wet weather and this was the case again this year. The nice weather came to an abrupt end in the second week of May when the weather pattern became much wetter. There were 15 days in May with measurable precipitation, which was only 2 days more than normal.

A more summer-like weather pattern arrived for the end of May. The last two days of the month reached 85 and 92 degrees, which was just short of the record high temperatures for both days. The 85 degree reading was the first 80 degree temperature in Portland since September 7th of last year and the 92 degree reading was the first 90 degree temperature in Portland since August 3, 2012, a span of nine months and 28 days.

Spring 2013 marks the 5<sup>th</sup> straight year in which spring temperatures were above normal in Portland. It is also the first in the last 4 years to record below normal precipitation in the spring.

***Like us on Facebook!***  
***[www.facebook.com/US.NationalWeatherService.Gray.gov](http://www.facebook.com/US.NationalWeatherService.Gray.gov)***  
***For questions, comments, or suggestions contact us at***  
***[GYX-Newsletter@noaa.gov](mailto:GYX-Newsletter@noaa.gov)***



***Photo by Stacie Hanes***