

The Lake Breeze

NATIONAL WEATHER SERVICE BUFFALO, NY
FORECAST OFFICE

Photo Credit: David Church

Volume 2, Issue 1

Spring 2019

Welcome to the latest issuance of The Lake Breeze.

The persistent rain has made for a green and lush spring across the region. Summer is fast approaching but before we get there, let's take a look at what's been going on at NWS Buffalo. Enjoy!

- Heather Kenyon, Editor



A Note from the Meteorologist in Charge By Judith Levan

Looking Forward to Summer!

It seems we're all looking forward to the sunshine and warmer temperatures that summer will bring. While the "official" Severe Weather Awareness Week in New York State was April 28-May 4, it's never too late to be prepared. Check out our website www.weather.gov safety for tips on lightning, thunderstorm and tornado safety. In addition, for those enjoying the local waterways, there's safety information about Beach Hazards, Rip Currents and Safe Boating.

Speaking of being prepared – kudos to Ontario County and the State University of New York at Buffalo! Both have recently been recognized as StormReady by the NWS. The StormReady program is voluntary and provides communities with clear-cut advice from a partnership between local National Weather Service forecast offices and state and local emergency managers.

We at the NWS Buffalo office have also made our "summer preparations". We held our annual Spring Weather Workshop where forecasters dusted off **(continued on page 2)**

Table of Contents

A Note from the MIC	1-2
Meet the Observer	1-2
Q&A with NWS Buffalo	3
2019 Summer Outlook	4
Growing Season	4-5
2019 Spring Workshop	5-6
2018-2019 Winter Summary	6-7
Safe Boating	7-8
10th Anniversary of Gowanda Flood	8-9
SKYWARN News	10

Meet the Observer—Bill Gregway, Coop Observer, Oswego, NY By Dan Kelly

On November 1st 2018, Bill Gregway, a very dedicated Cooperative Observer in Oswego, hit 50 years of reporting weather observations for the National Weather Service! A life-long resident of Oswego, Mr. Gregway has always had a passion for weather which was nurtured by his uncle (who served as a Weather Observer in WWII) and his high school science teacher (a pilot in WWII). In 1968, the position of Cooperative Weather Observer came open in Oswego, NY and Bill was ecstatic for the position and has been taking observations ever since!

Weather observations in Oswego, NY date back to the mid 1840s, when the weather observations were taken at Fort Ontario, about three quarters of a mile from Mr. Gregway's location. In 1870, weather observations transferred to the US Signal Service and moved about two thirds of a mile to downtown Oswego. In 1891, the offi-



Bill Gregway (left) receives the Edward H Stoll award for 50 years of service as a Cooperative Observer. (Photo Credit: Brandon Wood, Palladium Times)

(continued next page)

Meet the Observer (continued)

cial weather observations for Oswego transferred to the US Weather Bureau and remained in downtown Oswego. In the 1950s, the station moved to the Oswego State Teachers College (now SUNY Oswego.) The weather station moved a few more times before reaching Mr. Gregway's house. Throughout history, the weather station has remained within a few miles of its current location, allowing it to earn the rank in the Historical Climate Network, a group of sites with very little to no missing or erroneous data and a history of more than 80 years. Oswego is a unique site in that the liquid in glass maximum and minimum thermometers are still used, not electronic temperature equipment.

Aside from 3 years in the Army, Bill has lived most of his life in Oswego. He met his ex-wife, who was from Newfoundland, at an Army Camp. They raised four daughters and one son, and traveled to Newfoundland a fair amount. Despite his travels, weather observations continued because his friends and family filled in for him. From 1955 to 1958, Mr. Gregway was a Draftsman and Clerk for the US Army Construction Engineers Battalion. Following his Military Service, he was fortunate to continue as a Draftsman in Oswego, working as a Surveyor and Construction Draftsman for the US Army Corps of Engineers. His draftsman work was all done by hand, before the widespread use of computers.

Mr. Gregway has always been very active in his community over the years. For several years, he served as the president of the United Way of Oswego County. Bill was also very active in the Jaycees and, in 1964, he was instrumental in establishing the 4th of July Parade and festivities in Oswego, which continues to this day. Additionally, Bill was a founding member of the Heritage Foundation, and helped to establish the Marine Museum in Oswego, to educate future generations of the long rich history of Oswego, and its contributions to shipping on the Great Lakes and the building of the United States.

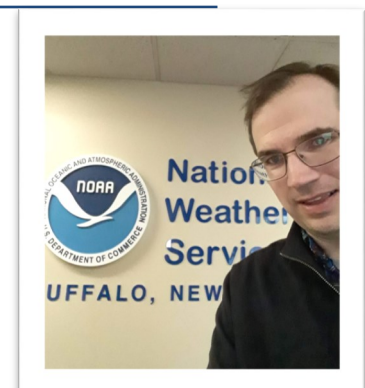
Due to the proximity to Lake Ontario, Oswego certainly has a variety of weather, from frequent snow squalls and lake effect snow, averaging 141 inches in the winter, to spectacular sunsets. We are very fortunate to have such a diligent reliable observer as Bill Gregway. Thank you for over 50 years of dedicated service as a Cooperative Observer!

Here is an example of one of Mr. Gregway's daily weather observations from Feb 6, 2007. Note the 24 hour snowfall on this particular day was 26.0 inches, with a liquid content of 0.80" (snow water ratio of 1:32.5)! Also, note Bill's exquisite penmanship.

A Note from the MIC (continued)

their summer convective weather forecasting skills. Remember: a "Watch" means you should watch the sky and if threatening weather approaches take shelter immediately; when a "Warning" is issued.

Lastly, we've added a new forecaster to our ranks. Jason Alumbaugh (shown on the right) has been promoted to Lead Forecaster at NWS Buffalo. He's no stranger to Great Lakes weather as he comes to us from the Forecast Office in Marquette, Michigan. Welcome Jason!



Q & A with NWS Buffalo - Bob Hamilton, Meteorologist

By Heather Kenyon

How and when did you become interested in meteorology?

My interest in weather started at an early age, around 7 or 8 years old. Our school district in southeast Pennsylvania was notorious for canceling or delaying classes with very minimal snowfall, so anytime there was a mere mention of snow in forecast I turned into a weather geek. I would scan the radio for the various forecasts, which would widely vary because of our usual proximity to the rain/snow line within our Nor'easter's. While my hometown had an annual snowfall of roughly 40 inches, we would experience the occasional Nor'easter that would bury us with a couple feet of heavy, wet snow. This would close down our school for up to a week! As a pre-teen, I can remember running around with friends on a particular New Years Eve in the pouring rain...only to wake up the following morning with two feet of snow on the ground. That peaked my interest and pointed me to a place where I could usually get my fill of snow...western New York.

What is the best part of being a meteorologist?

I like the challenge of being able to predict Mother Natures next move. It's no fun when the forecast goes astray, but it's a great feeling when the weather works out and you know that you have probably helped out someone that was depending on a solid forecast. I place myself 'in the shoes' of the public and envision the forecast from that perspective. For example, an anxious father planning his daughters outdoor wedding, or someone looking forward to an outdoor concert the next evening. That expectation of being accurate drives me to understand the processes even more and express it as best possible. The day to day variety of weather is nice too, as there is typically something different to contend with each shift.



What is the most challenging part of the job?

Without a doubt, the most challenging part of the job is getting 'it' right! That not only means an accurate forecast, but being able to express it to the public so that it can be digested in the most useful way. Not everyone looks at a forecast the same way, as we all have different needs and backgrounds. In western New York, there is also the added difficulty of forecasting near the Great Lakes. Unlike anywhere else in the country, this adds a tremendous amount of local influence to the weather that is experienced. This forces the local meteorologist to rely even more on experience and understanding of the processes. While this can make the job a little tougher, it can also make it more satisfying.

During your career as a meteorologist, what weather event stands out and why?

My most memorable weather event was the January 1998 ice storm across the St Lawrence Valley and portions of the Adirondacks and North Country. This was an event, that in my opinion, was biblical in nature. Large areas ended up experiencing three to as much as five inches of rain! Ice storms typically include amounts of an inch, maybe two...but when was the last time you heard of an area receiving FIVE inches of ice? Needless to say the storm was devastating to that area. There were areas that had no power for more than month, and this came at a time when temperatures averaged below zero! I not only worked the event as a meteorologist, but traveled to the affected area and worked several days as a ham radio operator...relaying information in and out of the region. Being able to experience the after-effects and working directly with the people made this storm much more personal.

What do you like to do outside of work?

I strive to spend as much time as I can with my family, but that has become increasingly challenging due to twin boys attending college in different parts of the country. I would be considered a hockey junkie by many...spending countless evenings watching or attending many college, minor league and NHL games. During the 'off-season', I do a lot of bicycling and spend a lot of time outdoors hiking or enjoying the family cabin where I can target shoot and relax.

2019 Summer Seasonal Outlook

By David Thomas

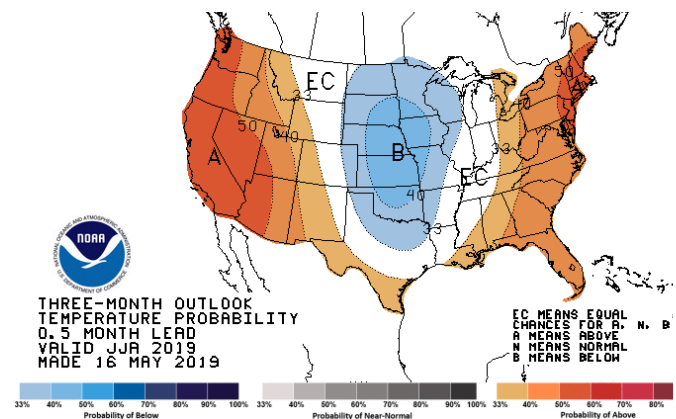
The summer of 2018 (June, July and August) was one of the warmest on record with many locations, including our three primary climate sites (Buffalo, Rochester and Watertown), finishing in the top 10 warmest summers. Precipitation for the summer of 2018 was just below normal for many sites. This was in contrast to the summer of 2017, when north-central New York recorded one of their wettest summers on record.

What does the summer of 2019 have in store for us? The Climate Prediction Center located in College Park, Maryland has weighed the odds towards a summer with above normal temperatures and near normal precipitation. The El Niño-Southern Oscillation (ENSO) conditions are expected to be within the weak El Niño phase through the summer. Since 1981, there have been 8 summers that were considered El Niño, with 3 of the 8 finishing above normal. Considering the small sample size, we must look at more than an ENSO phase to determine whether this summer is forecasted to finish with above or below normal warmth. Some other factors looked at this year include, the strength of the Southeast United States ridge, impacts of soil moisture, ocean sea surface temperatures and trends in the atmosphere.

There are no clear indicators for a wetter or drier than normal summer in regards to precipitation. It is favored to be above normal across much of the Plains and towards the Ohio Valley and Southeast.

The NOAA Atlantic Hurricane Outlook for this summer predicts a near normal season, with 9 to 15 named storms of which 2 to 4 of these reach major hurricane status. While the El Niño phase of ENSO may act to suppress Atlantic hurricanes, warmer than average sea surface temperatures in the tropical Atlantic Ocean and an enhanced west African monsoon usually favors a more active Atlantic hurricane season.

In summary the signals and trends in the atmosphere favor a warmer and near normal precipitation summer for Western and North Central New York.



Don't Let a Frost or Freeze Ruin Your Growing Season

By Aaron Reynolds

It's an exciting time of year for agriculture and gardening enthusiasts as the growing season is well upon us in the State of New York.

The growing season length is determined from averaged daily minimum temperature values. Threshold surface temperatures of 32, 28, and 24 degrees Fahrenheit are generally used to determine the effects of air temperature on plants using the following commonly accepted classifications:

- 32 to 29 degrees F is a **light freeze**: Tender plants killed, with little destructive effect on other vegetation.
- 28 to 25 degrees F is a **moderate freeze**: Widely destructive effect on most vegetation with heavy damage to fruit blossoms, tender and semi-hardy plants.
- 24 degrees F and less is a **severe freeze**: Heavy damage to most plants. At these temperatures, the ground freezes solid, with the depth of the frozen ground dependent on the duration and severity of the freeze, soil moisture, and soil type.

(continued next page)

Don't Let your Frost or Freeze Ruin Your Growing Season (continued)

It should be noted that temperatures near the ground may be significantly lower than official observed temperatures that are measured near 6 feet. If you have a green thumb and like gardening you know this too well. However, if you are just getting started, it's important to keep track of the weather and get to know your local climate, since a frost or freezing temperatures can quickly kill or damage tender plants. In the spring, the National Weather Service here in Buffalo, New York begins the frost and freeze program in early May. This program is designed to help you protect those sensitive plants against the potential danger of a frost or freeze.

This program begins May 1st for Niagara, Orleans, Monroe, Wayne, Cayuga, Oswego, Genesee, Wyoming, Livingston, Ontario, Erie, and Chautauqua counties. It begins May 11th for Cattaraugus, Allegany, Lewis, and Jefferson counties. However, across Western and North Central New York, we have what's called micro climates which can widely influence temperatures. Close proximity to lakes, in particular Lake Erie and Lake Ontario, can create a stark temperature difference between the immediate lakeshores and inland areas.



Don't let your hard work be a victim of cold temperatures

The Buffalo National Weather Service issues three products designed to assist your gardening interests when temperatures plummet overnight.

- **Freeze Watch:** This product is designed to heighten your awareness about a possible freeze, with surface low temperatures below 32F.
- **Freeze Warning:** This product means that a Freeze is imminent.
- **Frost Advisory:** This product is issued when surface temperatures are forecast to be in the mid to upper 30s on nights with good radiational cooling conditions (e.g. light winds and clear skies).

NWS Buffalo Hosts Spring Workshop and Environment and Climate Change Canada

By Mike Fries

As each winter moves into spring, most National Weather Service offices in the country host refresher training for the forecast staff in order to refine our skills that revolve around forecasting and detecting severe thunderstorms and tornadoes. This year, NWS Buffalo hosted this training on April 2 and invited our fellow forecasters from Environment and Climate Change Canada's (ECCC) Ontario Storm Prediction Centre (OSPC) to attend. Because of this, the workshop afforded both the opportunity to hone our severe weather skills and to do it directly with our colleagues we collaborate with day-to-day across Lake Ontario at OSPC.



NWS Buffalo and Environment and Climate Change Canada Meteorologists

Presentations were made by NWS staff on topics ranging from tornadogenesis (the development of tornadoes), radar storm interrogation, utilizing lightning data, new satellite data, hydrology, aviation, social media in severe weather operations, and last year's severe weather season's verification. Staff from OSPC also presented on severe weather operations at their office and updated the NWS staff on the evolution of the Canadian radar system to updated technology that is currently occurring across the country.

(continued next page)

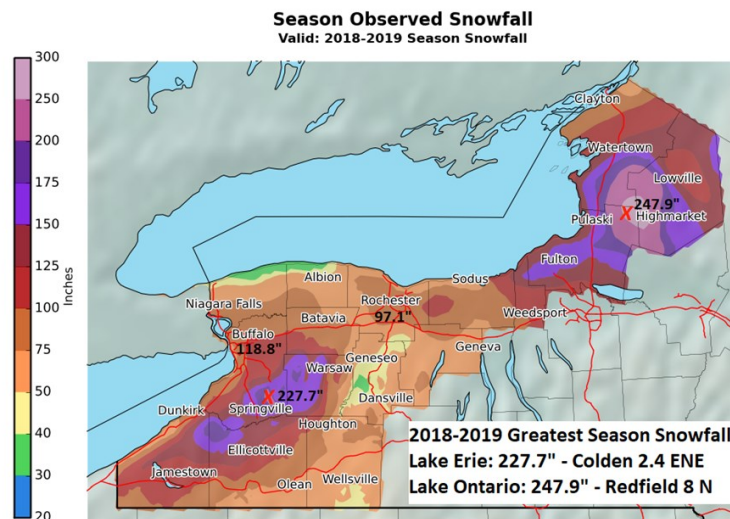
NWS Buffalo and Environment and Climate Change Canada (continued)

The weather is starting to get active this spring. This has afforded opportunity to put updated knowledge on severe weather forecasting and radar techniques to use. By hosting these workshops annually upon the change of season, your NWS will continue to be prepared to issue timely warnings to help save lives and protect property going into the summer season. Further, a second face-to-face meeting with forecasters from ECCC in the past 12 months affords better opportunity for cross border forecast alignment and warning continuity when severe weather is impending.

2018-2019 Winter Summary

By NWS Buffalo Winter Team (Bob Hamilton, Jon Hitchcock, David Thomas and Steve Welch)

The winter of 2018-19 was manageable, with near to above normal snowfall and fluctuating temperatures that finished the winter season at or just below normal across Western and North Central New York. Overall the winter season did not fair much different from the previous season. The winter season began with below normal temperatures in November, and within this cold regime the season started much snowier than normal. A mild December and below normal snowfall eroded the early winter snowpack. The heart of the winter season occurred in January with several large snow events that brought a deeper snowpack to portions of Western and North Central New York. A quiet February and March finished the winter season.



National Weather Service
Buffalo New York

Follow Us:   
weather.gov/BUF

Temperatures alternated between below and above normal through the winter season, with November, January and March below normal for most areas. November's temperature strayed the most from normal, and through the winter there only a handful of temperature records at the primary climate sites.

The 13 lake effect snow events this season was 3 more than normal. There were 4 lake effect snow events each in the January and February months. There were two blizzard events this winter. The first blizzard event occurred across Erie, Wyoming and Genesee counties, as well as across Jefferson and Lewis counties on January 30th. The second event occurred February 24th and 25th across counties east of Lake Ontario.

Despite the fluctuating temperatures there was little ice jam flooding across the region this winter. There were several Lake Erie seiche events deep into the winter season that sent ice over the ice boom and creating flooding along the immediate Niagara River. Lake Erie froze January 23rd, just a few days past normal and then thawed with ice out of the Lake near Buffalo on April 29th which is about two weeks past normal.

Snowfall

Snowfall for the winter of 2018-2019 was well above normal for some areas such as Buffalo and Watertown, but near to slightly below normal for other areas such as Rochester. Generally areas just east or northeast of

(continued next page)

2018-2019 Winter Summary (continued)

either Lake Erie or Lake Ontario experienced above normal snowfall for the winter, with some areas like Buffalo and the Watertown area having two feet or more above normal snowfall for the season. Areas south of the lakes or farther inland from the lakes received near normal snowfall with a few locations having well below normal snowfall. With 118.7 inches of snow, Buffalo had its 12th snowiest winter on record and was 24 inches above the normal of 94.7 inches. With 96.8 inches of snow, Rochester was slightly below the 99.5 inch normal for the season. The 118.7 inches of snow for the winter of 2018-2019 at the Buffalo Airport ranks as the second snowiest winter in the last decade and fourth snowiest winter since the winter of 2000-2001.

The pace for the above normal snowfall that did occur in some locations was started in November 2018 when most locations across the Buffalo forecast area received well above normal snowfall for November. December 2018 was the only month of the winter where snowfall was below normal for all climate and Cooperative Observer locations. Many areas received less than half the normal snowfall expected in the month of December, resulting in some of these areas having below normal snowfall amounts for the winter. January and February 2019 for most areas was near normal snowfall levels. The exception being well above normal snow amounts in January northeast of Lake Erie and Lake Ontario, primarily due to a large lake effect event with blizzard conditions at the end of the month. Snow totals for the season were generally above normal in the lake effect areas and below normal elsewhere. This was primarily due to a repetitive feed of the very cold air into the nations mid section and Upper Great Lakes that later moved into our forecast area. Direct shots of arctic air into the Lower Great Lakes are more favorable to multiple band events that cover a large area versus larger snowfalls in the lake snow-belts.

Temperatures

Temperatures for the winter of 2018-2019 were near normal for all three climate locations and most of the Buffalo forecast area. Buffalo and Watertown were slightly colder than normal at 1.1F and 0.7F below normal respectively. Rochester was 0.1F above normal for the winter. Temperatures at all three climate locations for November 2018 ran between four to five degrees Fahrenheit below normal. Temperatures in December 2018 were between three and four degrees Fahrenheit above normal for Rochester and Buffalo, while Watertown was one degree above normal. Temperatures for the three climate locations for the rest of the winter were within a few degrees Fahrenheit of normal.

Winter Statistics for Buffalo, Rochester and Watertown

Buffalo

Average Temperature, November – March: 30.1F (1.1F below normal)

Snowfall: 118.7" (12th snowiest)

Days with 1.0" or more of snowfall accumulation: 31

Days with 1" or more on ground: 67

Rochester

Average Temperature, November – March: 31.3F (0.1F above normal)

Snowfall: 96.8" (42nd snowiest)

Days with 1.0" or more of snowfall accumulation: 29

Days with 1" or more on ground: 80



Visible satellite imagery from Terra MODIS showing ice cover on Lake Erie and Lake Ontario and an organized lake effect band over Lake Ontario (February 1, 2019.)

Safe Boating

By Tony Ansuini

With warmer weather right around the corner, many Western New Yorkers will enjoy boating with friends and

(continued next page)

Safe Boating (continued)

family during the summertime. The National Weather Service and the National Safe Boating Council will once again partner to support boating safety by creating safety-specific messages for National Safe Boating Week, held from **May 18-24, 2019**. The goal of the campaign is to increase boating safety awareness. Each day of the week a new topic will be discussed on our social media platforms.



Sunday: Life Jackets: Wearing a life jacket is one of the most effective and simple life-saving strategies for safe recreational boating. The most important thing is this: remember to grab a life jacket and "Wear It!"

Monday: Fire Extinguishers: U. S. Coast Guard approved, marine-type fire extinguishers are required on boats where a fire hazard could be expected from the engines or fuel system. The boater shouldn't have to travel more than half the length of their boat to get to the fire extinguisher

Tuesday: Boating under the Influence: There are many dangers to boating under the influence. Protect your life and others – never BUI!

Wednesday: Cold Water Safety: Warm air doesn't necessarily mean the water is warm. Survival time is greatly diminished for someone immersed in water below 70 degrees. Being prepared for an outing on cold water means being prepared for the possibility of suddenly being immersed into cold water. Your ability to survive cold water immersion depends on your ability to stay afloat and to stay warm until help arrives. Below are several things to consider prior to venturing out on cold water. Always wear a life jacket. Wear cold water protection gear for the water temperature, not the air.

Thursday: Thunderstorms: Thunderstorms can be a mariner's worst nightmare. They can develop quickly and can produce strong wind, pounding rain, deadly lightning, and hail with very few places for shelter. Even marginal thunderstorm winds can capsize certain boats and other floating vessels. If you are out on the open water and see clouds quickly growing in the distance, it may be thunderstorms that are developing. Don't wait until you can hear thunder or see lightning. It is best to head to port or safe shelter at the first sign of a developing storm.

Friday: Hurricane Preparedness: Be prepared for hurricane season. Don't wait until a hurricane warning to secure your boat. By the time a hurricane warning is issued, it's too late to be working on a dock safely. Listen to weather forecasts and plan ahead. Haul out your boat or add additional lines during a hurricane or tropical storm watch, which is issued before a warning, 48-hour before the anticipated onset of storm winds.

Saturday: Marine Forecast: Understanding a marine forecast is critical to safe boating. Weather and wave conditions can change suddenly, catching boaters off guard and creating life threatening conditions. Know before you Go! Visit our website weather.gov/buf each day you plan on heading out the water.

Have a safe and enjoyable boating season!

The 10th Anniversary of the Gowanda Flood

By David Thomas

This summer will mark the 10-year anniversary of the historic flooding that took place in and around Gowanda in 2009. The catastrophic event was the result of a deluge of rainfall over saturated ground which resulted in flash flooding across the village of Gowanda and nearby Silver Creek. Heavy rain and a rapid rise of water on Cattaraugus Creek also impacted nearby communities, but to a lesser extent.

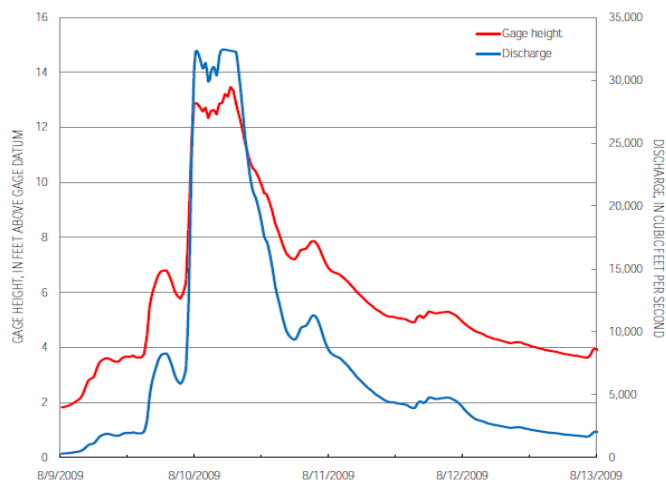
(continued next page)

The 10th Anniversary of the Gowanda Flood (continued)

A very warm and humid air mass was across Western New York on Sunday August 9th 2009. Dewpoint temperatures rose into the lower to middle 70s which is an indication of a very moist airmass even by late summer's standards. Early in the day of Sunday August 9th, a line of thunderstorms formed near Toronto, Canada and dove southeastward across Western New York. These severe thunderstorms produced widespread straight line wind damage, and also spawned a tornado near Cuba, NY in Allegany County. In addition, one to two inches of rain fell with this system, effectively priming the region for the potential for flash flooding.

Another complex of thunderstorms formed over southern Canada and dove southeastward across Western NY Sunday night and into the early morning hours of Monday, August 10th, 2009. The airmass remained moist during this second round of thunderstorms which came only 8 to 10 hours after the first complex of thunderstorms the day prior. Ahead of this second line of thunderstorms, a stationary boundary developed within the warm, humid airmass and heavy thunderstorms blossomed over a narrow line from Lake Erie through the Cattaraugus Creek basin. This stationary boundary allowed for heavy rain to fall continuously over the same area for several hours, before the second inundation of showers and thunderstorms hit. From 1030 PM EDT to midnight Sunday August 9th a spotter in nearby Perrysburg N.Y. measured an astonishing 5.98 inches of rain!

“One such tributary, Walnut Creek reportedly rose 3 to 4 feet in 30 minutes.”



Water levels and discharge from the Cattaraugus Creek at Gowanda, NY.

evacuated. Two men lost their lives in the village of Gowanda as a result of the disaster. It is estimated that nearly 30 percent of the homes and businesses in Gowanda were damaged by extensive water and mud. Roughly 80 percent of the roads in the village of Gowanda had damage and were rebuilt. Three counties in New York received a Presidential Disaster Declaration, with approximately \$100 million needed to clean up the areas affected by this flash flood event.

This historic event will long be remembered for the large volume of water that fell over a short period of time, and the damage that was done to several communities of Western New York. Although the Cattaraugus Creek at Gowanda spiked to historic levels, it was the small tributaries that caused the flooding in Gowanda. The Gowanda and Silver Creek events are a reminder of how sudden and devastating flash flooding can be. Always remember to heed Flash Flood Warnings and “Turn around, don’t drown.”

The second wave of thunderstorms advanced across Western New York during the overnight hours of Sunday night into Monday morning August 10th. Small tributaries flooded and peaked in the middle of the night on August 10. One such tributary, Walnut Creek reportedly rose 3 to 4 feet in 30 minutes. As a fury of water flowed down the steep hill sides, small creeks and streams became roaring rivers which inundated the villages of Gowanda and Silver Creek with catastrophic flooding.

In Silver Creek, residents were evacuated from a mobile home community before it was destroyed by the flooding waters. In Gowanda, patients of the local hospital were



Debris near Gowanda, NY days after the catastrophic flooding.

**NATIONAL
WEATHER SERVICE
BUFFALO NY**

587 Aero Drive
Cheektowaga, NY 14225
(716) 565-0204
www.weather.gov/buf
Email: buf.webmaster@noaa.gov



***“The National
Weather Service
provides weather,
water, and climate
data, forecasts and
warnings for the
protection of life
and property and
enhancement of the
national economy.”***



Follow us!



US National
Weather Service
Buffalo NY



@NWSBuffalo

SKYWARN® News

By Jon Hitchcock, Meteorologist

The spring 2019 SKYWARN severe weather spotter training season is wrapping up as we prepare for the heart of our severe weather season. This season we held 11 training sessions in 8 different counties across western and north central New York. A total of 258 spotters were trained, including over 70 in our first ever online spring SKYWARN training session. The online meeting platform worked well, and gave an opportunity to participate in SKYWARN for those who could not attend one of our in person training presentations.

The SKYWARN training program was started in the 1970's by the National Weather Service and partner organizations. The National Weather Service in Buffalo has nearly 1000 trained SKYWARN spotters in all corners of our forecast area. They relay reports of critical severe weather information to forecasters at the National Weather Service, allowing for more accurate warnings and forecasts of severe weather impacts to the public. SKYWARN spotters also relay reports of snow and ice during the winter, helping to better quantify snowfall amounts and impacts from snowstorms.

During the severe weather season, we ask our volunteer SKYWARN spotters to relay reports of funnel clouds, wall clouds, tornadoes, waterspouts, flooding, hail, and damaging winds. It is vitally important that our spotters ensure their own safety first during a severe thunderstorm. Once they are safe, then we ask that they report the severe weather.

Our first severe weather event of the year on April 14, 2019 proved the value of near real-time reports from SKYWARN spotters. A Tornado Watch and several Severe Thunderstorm Warnings had already been issued for Western New York based on the favorable environmental setup and radar data. Trained SKYWARN spotters and the public reported large hail across Chautauqua County, including some photos shared on social media. These reports, coupled with radar data, allowed forecasters to increase the hail size estimates in the Severe Thunderstorm Warnings, providing more accurate warning information to the public still in the path of the storms. Thank you to all our SKYWARN spotters for their help!



Hail and rain shaft (Photo credit: Christy McVaugh Arkwright)

The Lake Breeze—Spring 2019 Contributors:

Judith Levan, Meteorologist in Charge
Dan Kelly, Observation Program Leader
Bob Hamilton, Meteorologist
David Thomas, Meteorologist
Aaron Reynolds, Meteorologist
Mike Fries, Warning Coordination Meteorologist
Jon Hitchcock, Meteorologist
Steve Welch, Meteorologist
Tony Ansuini, Meteorologist

Editor:

Heather Kenyon, Meteorologist