

The Forum

NEW YORK STATE WETLANDS FORUM NEWSLETTER

THE CLEAN WATER RULE—A BRIEF HISTORY

By: Kevin Bliss, Sr. Permitting Specialist, TRC

The Clean Water Rule (CWR) became effective on August 28, 2015. For details of this Rule defining Waters of the United States, see the Federal Register, Vol. 80, No. 124, published Monday, June 29, 2015. Several lawsuits ensued immediately thereafter in various U.S. District and Circuit Courts, resulting in the suspension of the Rule in various states across the nation. In New York, the Rule lasted until October 9, 2015, when the Sixth Circuit Court of Appeals issued a nationwide stay. As you might imagine, the CWR (AKA Waters of the U.S. Rule) saw very little action anywhere.

From its onset, the Trump Administration intended to review and rescind or revise the Rule. On February 28, 2017, the President signed the, “Executive Order on Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the ‘Waters of the United States’ Rule.” This Order directed the Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACE) to consider interpreting the term “navigable waters” in a manner consistent with U.S. Supreme Court Justice Scalia’s opinion in *Rapanos*: “The phrase, ‘the waters of the United States,’ includes only those relatively permanent,

standing or continuously flowing bodies of water forming geographic features that are described in ordinary parlance as ‘streams,’ ‘oceans, rivers, [and] lakes,’ Webster’s New International Dictionary 2882 (2d ed.), and does not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall,” (*Rapanos v. United States*, 547 U.S. 715 (2006)).

Litigation continued, and on January 22, 2018, the United States Supreme Court weighed in, ruling unanimously that legal challenges to the CWR must be initially heard in federal district courts – not federal courts of appeals. The Sixth Circuit Court then vacated its prior nationwide stay. The Trump Administration was ready for that, and on February 6, 2018, released the Applicability Date Rule (AKA the Suspension Rule), effective immediately. This Rule proposal had been published in the Federal Register on November 22, 2017, with public comment allowed through December 13, 2017.

The Applicability Date Rule directed that until February 6, 2020, or a new Rule defining Waters of the United States was finalized, the USACE and EPA would continue to implement the regulatory definition of Waters of the U.S. in effect prior to the

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Mission

The New York State Wetlands Forum is a non-advocacy corporation comprised of individuals and groups with diverse backgrounds, interests and viewpoints regarding wetlands and their science, use and management. Incorporated in 1994, the Forum is a 501(c)(3) not-for-profit organization. Its purpose is to improve communication among people interested in wetlands; call attention to and objectively discuss local, statewide, regional, national and global wetland issues as they relate to New York State; improve its members' knowledge and understanding of wetlands; and, make available information about wetlands to its members and the general public.

MESSAGE FROM THE CHAIR

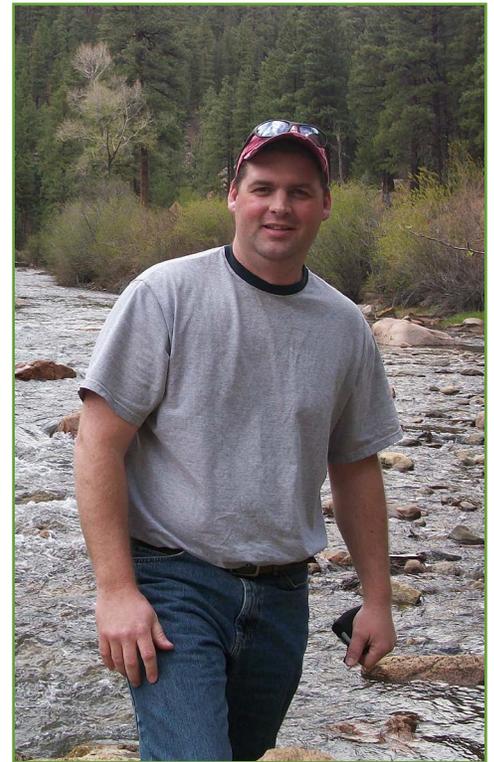
Hello, New York State Wetlands Forum members. We are almost there...winter is almost gone. Spring is right around the corner, and so is our Annual Conference and Business Meeting in Saratoga Springs, New York. We are returning to Saratoga Springs on April 2 and 3, 2019, for what is set to be another great conference. The theme of this year's conference is "Celebrating the Diversity and Stewardship of New York State Wetlands." With all the chaos that seems to surround us all at one time or another, let's not forget to take some time and get out to enjoy some of these great, diverse areas.

Our conference will focus on some of those great wetland communities, as well as a wide variety of other topics with great presentations scheduled both Tuesday and Wednesday. It will also be a good opportunity to meet up with many familiar faces, and meet some new ones, from both the private and public sectors. I hope you can join us again this year, and if you do attend please take the opportunity to fill out the conference survey form at the end of the conference. It is important to get your feedback so we can continue to give you the conference you deserve.

In addition to our upcoming conference, our Training Committee has some exciting opportunities coming up this summer and fall. These training sessions are currently being organized and more specific information will be announced and detailed at the conference.

I look forward to seeing you all in Saratoga Springs. I realize that as we enter into spring we also begin a very busy part of our year, but I hope you can find the time to join us again for the annual conference. Please enjoy the articles in this latest newsletter that our Board of Governors, members, and guests have contributed.

Brad Sherwood, Chair



THE CLEAN WATER RULE—A BRIEF HISTORY (CONT.)

2015 CWR. However, on August 16, 2018 the Federal District Court in South Carolina enjoined and vacated the Applicability Date Rule, noting that the agencies violated the Administrative Procedures Act (APA) by refusing to solicit public comment on the merits and substantive implications of suspending the CWR and replacing it with previous regulations and guidance. This court ruling reinstated the 2015 Clean Water Rule within those states where the Rule is not under a separate Federal District Court injunction. In states where the 2015 Clean Water Rule is enjoined, regulations promulgated by the Corps and EPA in 1986 and 1988, respectively, are in effect. The old 2015 Clean Water Rule is new again in New York and 21 other states plus the District of Columbia and U.S. territories--for the time being.

On December 11, 2018, the EPA and USACE followed up on the Executive Order on Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the 'Waters of the United States' Rule, by signing a proposed rule intended to replace the 2015 CWR. Their claim is that the revisions provide a clear, understandable, and implementable definition of Waters of the United States. The agencies submitted the proposed rule to the Office of

the Federal Register for publication, which was delayed until February 14, 2019, owing to a government shutdown. Better appreciating the importance of public input, on February 26, 2019, the agencies posted a general agenda on the EPA website for a hearing that was held February 27-28, 2019, in Kansas City, Kansas. Follow up discussions are scheduled with state and tribal officials in Kansas, Georgia, and New Mexico.

The Federal Register notice for the proposed rule is available at: <https://www.epa.gov/wotus-rule/revised-definition-waters-united-states-proposed-rule>

The public may submit written comments, identified by Docket ID No. EPA-HQ-OW-2018-0149, to the Federal eRulemaking Portal: <https://www.regulations.gov>

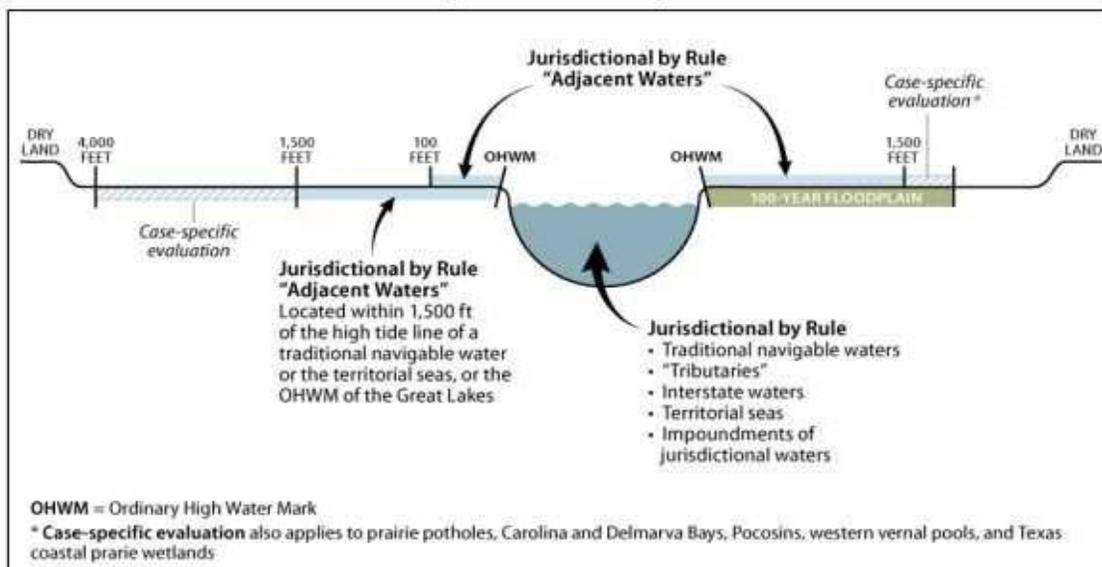
General guidance on making effective comments is available: <https://www.epa.gov/dockets/commenting-epa-dockets>

The public comment period will close on April 15, 2019.

The Wetlands Forum April 2-3, 2019, conference and business meeting in Saratoga, NY, will undoubtedly further your understanding of the current and proposed Rule, or allow you to further educate others. Guest speakers will include Ms. Susan Baker, one of the USACE's primary CWR trainers.

Figure 1. Jurisdictional Waters Under the 2015 Clean Water Rule

(Not drawn to scale)



Source: Prepared by CRS, from Army Corps of Engineers and EPA, "Clean Water Rule: Definition of 'Waters of the United States'; Final Rule," 80 *Federal Register* 37054, June 29, 2015.

Notes: "Jurisdictional by Rule" waters are jurisdictional *per se* without case-specific evaluation. "Tributaries" and "adjacent waters" are jurisdictional by rule if they meet the definitions established in the 2015 Clean Water Rule. Waters requiring case-specific evaluation may be jurisdictional if there is a significant nexus to traditional navigable waters, interstate waters, or the territorial seas.

An OHWM is defined in Corps and EPA regulations as the line on the shore established by the fluctuations of water and indicated by specific physical characteristics listed in those regulations (e.g., the natural line impressed on the bank, the presence of litter and debris).

- Case-specific evaluation for this subset of waters (waters within the 100-year floodplain, but beyond 1,500 feet from the OHWM) is limited to those waters within the 100-year floodplain of a traditional navigable water, interstate water, or the territorial seas.

A MILLION TINY PIECES

By: Sheila Hess, Principal Ecologist and CEO of CC Environment & Planning

INTRODUCTION

By way of introduction consider the following: 1) Infrastructure in our communities is aging and, in many cases, replacement is long overdue; 2) water-related issues (stormwater, drought, flood, water quality and quantity) are increasingly common and costly; 3) our ecological networks continue to fragment due to sprawl and shifting land use patterns; 4) the pieces of the ecological network that remain (e.g., wetlands, streams, forests) support the resilience of our landscapes and communities; and 5) the back window of my car broke. Let's start with the last point first and progress from there in a completely disorganized fashion.

HOOK

Once upon a time (February 25, 2019 at 10:42am) I was driving through a cold, snowy, windy landscape, down a quiet road completely minding my own business (mostly minding my own business) when KABOOM! -someone shot at my car (no one shot at me) with a sawed-off shotgun, possibly a bazooka (no gun). I stopped the car and calmly pulled to the side (I screeched to a halt in the middle of the road recounting my sworn enemies and questioning that morning's report from their tracking devices). As the dust settled (no dust), I looked around and quickly (after several moments of wild-eyed consternation) saw that my back window had shattered into a million tiny pieces; all still frozen in place. I got out of my car (ducking low and running in a zig zag pattern) to inspect the damage. There was no bullet hole, no rock, no stick, no asteroid, no message from God that I could interpret. As my heart slowed and my mind cleared (relatively speaking), shock and horror were replaced by wonder and curiosity at the transformation of the window from smooth, tinted glass to the intricate and almost beautiful wreckage before me. I slowly, almost as if in a trance, reached out and... touched it. You know what happened next.

TRANSITION

All those pieces of glass! Each dependent upon the other but no longer seamlessly joined, now changed and changing fast. How quickly it all fell apart. Connectivity lost. Resilience = Zero.

THE POINT

As a young college student just a few short years ago (more than 20 years ago how is that possible), I was fascinated to learn about the concept of ecological connectivity and its importance to community, society, and economy. Mostly, I think I was pleased to find out that my desire to play outdoors, a desire I have not outgrown, might enable me to serve some useful adult purpose, or at least claim to.

ADULT: "What do you do?"

ME: "I am an ecologist, I am saving the planet by playing outdoors."

As a practitioner engaged daily in site specific and landscape level land use decisions, the relationship between connectivity and resilience (all kinds of resilience, resilience of all kinds) could not be more obvious. And in my most isolated moments I have been proud and pleased with myself (and all of you) for making this fantastic discovery. But time lends perspective and suddenly I am thinking I've heard this all before. Weren't we talking about Ecosystem and Landscape Level Management in the 1980s and 90s, decades before Green Infrastructure, Sustainability Plans, and Resilience? Ecosystem-based Conservation was practiced in the 1970s and surely the flower children of the 1960s were grooving connectivity (I'm reaching here). But who can argue with the Sand County Almanac (thank you Aldo), which has been an anchor for natural resource conservation since the 1950s (1949 to be exact)? How much have land use management concepts changed? A little? Not at all? Just before the year 2000, when we all took a very brief pause to party like it was 1999 (because it was) and needlessly panic about Y2K, there dawned the era of Watershed Management. This was fortunate from my perspective. Watershed being a much easier concept for everyone to understand and a brilliant organizational tactic (WATER: universal solvent AND unifying issue). But I wonder, how many new concepts were introduced? Or was it just the language that had changed?

Now we are approaching the year 2020 and, consistent with our primary modes of communication (texts and twitters), we have boiled the elements and importance of environmental conservation and land use management down to the cool and casual use of single words like holistic, balanced, optimized, functional, sustainable, resilient, and my most favorite of all, and surely yours too, "green" (#GoGREEN). My point (I sort of have one though I admit it keeps slipping just out of reach), is that the concept of connectivity as it relates to resilience is more of an echo than a new sound. The changing phrases and organizational constructs are merely our attempts at keeping the echo alive; shaping it, refining it, making it louder, adding it to the back beat of political mantras, incorporating it into social justice, and touting it as a necessary preservative of economic vitality. We do this optimistically, energetically, and hopefully. Surely the message will stick, and policies and practices will increasingly reflect its simple and possibly unavoidable truths.

Speaking of unavoidable truths – let's reflect upon our crumbling infrastructure (gray) and fragmented infrastructure (green), intense storm events, and changing land use. Changes to land use that are in part driven by

renewable energy (good) subsidies (bad?) and the resulting wind farms (bad?) and solar fields (good? 5,000+ acres funded in western NY alone) and increasingly large (that is the right word) agricultural practices on incredibly large (still the right word) tracts of land. Sort of hard to avoid these realities if you are an ecologist, or a municipal leader, or a regulator, or a developer, or a landowner, child, dog, bird - not necessarily in that order.

One response (and this is great news) is that communities I work with across the State demonstrate consistent dedication to the development, maintenance, and protection of infrastructure as it relates to resiliency – gray and green. There is an echo of Aldo's point about considering all the important parts – all the tiny pieces – in this approach. While challenging, a growing number of weather-related or weather-exacerbated issues including flooding, property damage, water shortages and water quality concerns, and power outages, provide incentive and encouragement to forge ahead. Routinely, I hear the argument that these weather-related issues are not new, and nothing has changed. I like this argument. I take comfort in it - even as I determinedly draw up another land use optimization plan highlighting the relatively low-cost flood control provided by existing wetlands, the water quality enhancement of intact stream buffers, and the health benefits of natural areas to our increasingly overweight and ADD community (you might want to argue my ADD comment but since this article is longer than one paragraph, I doubt you are still reading it).

Recently, Genesee County completed a land use management plan based on the designation of an ecological network (green infrastructure approach) and translated this into municipal comp plan and zoning recommendations. This is called the Green Genesee/ Smart Genesee project and it is the foundation for the upcoming development of a countywide resiliency plan. After the development of Green Genesee/Smart Genesee and during the formation of the resiliency project, Genesee County was hit by two significant weather events in close succession. On March 8, 2017, high winds with gusts close to 70 mph caused significant damage to trees and properties. Widespread power outages were experienced by more than 16,000 households in Genesee County alone. This resulted in the closure of County roads, schools, and businesses. Much of the wind damage, including power outages, had not been completely addressed before a severe winter storm swept through the area six days later dumping over a foot of snow on March 14 and 15, 2017. This storm was accompanied by freezing temperatures and high winds. Once again, schools and businesses were forced to close. Not new issues? Time will tell.

Water is a central theme for resiliency in many communities. Changing water needs and land use patterns

challenge existing infrastructure. Ongoing water quality assessments of impaired streams identify issues relating to excess nutrients, silts, and sediments, and high algal/ plant populations. Flooding and increased intensity of precipitation events worsen water quality issues. Drought, as we recently experienced, also comes with significant challenges. In the summer of 2016, Genesee County experienced 'extreme' drought conditions resulting in private wells running dry, restricted or variable water availability to agricultural operations and agribusinesses, and major crop/pasture loss. Even without extreme weather events, communities are regularly called upon to solve water-related problems such as water availability, water-related infrastructure, water quality, flooding, stormwater, sanitary sewer and wastewater treatment. Weather events exacerbate these baseline issues.

This should all sound familiar regardless of your geographic location. The important thing is that communities are responding. With an emphasis on diverse public and private partnerships, stakeholder involvement, and public engagement, we can focus on identifying vulnerable assets (both natural and built) and populations – all the parts and pieces. This will allow municipalities to apply for increasingly available funding to complete priority projects. Ultimately, and most certainly having a direct and positive impact on economic and community resilience. This can and is happening! There, I think I just hit ALL the buzzwords and ended on an encouraging note. Now I can go play outdoors...

BUT WHAT ABOUT YOUR BACK WINDOW AND ARE YOU OKAY AND WHO IS YOUR THERAPIST?

At my touch the pieces of my broken window began to crumble and fall, one here, three there, finally the whole central portion collapsed into the cargo area. I could not save any of the pieces or parts; my tinkering had been far from intelligent (I'm sorry Aldo, I was taught better). I drove to a glass shop. I told the receptionist my story with great drama, but apparently this sort of thing actually happens sometimes so I had to tone it down and suffer PTSD symptoms privately in exchange for remaining dignity. My new back window has some sort of imperfection that makes things look a little wavy in spots. It might not surprise you that I've decided not to have it fixed because it is consistent with the way I see the world. I do not have a therapist.

PROPER COVER CLASSIFICATION IS NEEDED TO PROTECT PALUSTRINE WETLAND FOREST STRUCTURE AND FUNCTIONS

By: Dr. James Schmid

We are pleased to provide below the abstract from Dr. James Schmid's recent article on the definition and measurement of cover in wetlands. Dr. Schmid is a regular attendee and occasional speaker at the NYS Wetlands Forum annual conference, and presented some of this information to us in Watkins Glen last year. This article accompanies a companion article on the consequences of misdiagnosing cover, which appears in the January 2019 issue of *Wetland Science and Practice*. Congratulations, Jim! With permission, we will be posting the full article on our website:

ABSTRACT

“Cover” is a technical concept used by scientists and regulators to describe plant communities in several ways that can be confused. The venerable Cowardin descriptive classification of wetland habitats requires that vegetation be assigned to categories based on the (external) cover Class of their tallest plants. Cowardin Classes are widely employed on National Wetlands Inventory maps across the United States and are used to communicate scientific, regulatory, and resource management information.

The term “cover” also is used for other regulatory purposes, notably the (internal) cover formed by individual species growing within layers of a plant community that determines dominants for the three-parameter methodology identifying federally regulated wetlands. Internal and external measures of cover, and the recorded data from which they are derived, may differ for an individual wetland sample plot. Both are meaningful, but if these distinct measures of cover are muddled, the result can be misclassification, misregulation, and inappropriate mitigation of impacts—especially in small wetlands.

Thus I review classifications of cover. Regulators and consultants must insure the accurate identification and reporting of internal and external cover when inventorying vegetation, delineating wetlands, and assessing impacts. Otherwise, environmental impacts will not be minimized, and post-disturbance wetland ecosystem recovery will be unlikely even where human mitigation is attempted.

EVALUATION OF METHODS AND RESULTS IN THE BRADDOCK BAY WETLAND RESTORATION PROJECT OF LAKE ONTARIO

By: Alexander O. Silva, The College at Brockport, SUNY

Braddock Bay is an open embayment wetland on the southern shore of Lake Ontario and is part of the Rochester Embayment Area of Concern (AoC). Over time, the protective barrier beach has slowly been eroded, leaving the coastal wetland severely impacted by wave action from Lake Ontario, leading to loss of wetland acreage. Erosion of the barrier has been facilitated by water-level regulations implemented in the late 1950s, resulting in little water fluctuation and a loss of plant diversity, bringing about a cattail (*Typha* sp.) monoculture and the loss of sedge/grass meadow habitat. The Braddock Bay restoration began in 2016 and was completed in 2017 by the United States Army Corps of Engineers. Doug Wilcox's wetland ecology lab at the College at Brockport was contracted to assist USACE with conducting vegetation and water quality sampling, with my role focused on determining short-term success of the project using the vegetation data that I collected. The completed plan included the restoration of a portion of existing cattail-dominated wetland by cutting and herbicide treatment of cattail stands; channeling and potholing to improve wildlife access to the wetland; and creation of spoil mounds along the channels and potholes to increase the elevation in these areas to discourage the growth of cattail.

I completed two years of monitoring at Braddock Bay from 2016 to 2017, which included preliminary invasive species surveys along with using vegetation data collection to calculate the Floristic Quality Assessment Index (FQAI). This FQAI score helps us determine the nativeness and the overall quality of the plant community based on the plant species present, taking into account each individual plant's tolerance to disturbance. The preliminary invasive species surveys showed an increase in an invasive species of concern, purple loosestrife (*Lythrum salicaria*), from 2016 to 2017 across the restoration site. Galerucella beetles have previously been used as a biological control for purple loosestrife and were used in 2017 at Braddock Bay, with continued monitoring showing continued herbivory by these beetles and a decrease in purple loosestrife abundance in 2018. A decrease in non-native cattail in the sedge/grass meadow and the spoil mound habitats was observed, which was expected with cattail management techniques being implemented in these areas. Pre-restoration data from 2013 were compared to post-restoration data from 2017, which resulted in a significant increase in floristic quality, with a similar significant trend

across the 2016-2017 sampling years. Recommendations for future restorations include comments on construction, excavation, and planting/seeding standards, mostly related to timing during the season. Braddock Bay has a calculated FQAI score of 6.8, which means that the habitat is still poor, even with the statistically significant increase across the sampling years and from pre-restoration. More long-term data are necessary to give a better representation of restoration success.

Funding has been secured for continued monitoring at Braddock Bay WMA through 2021, with continuation of the work by new graduate student Courtney Scoles and Associate Professor and graduate advisor, Dr. Rachel Schultz. The approval of a new lake-level regulation plan that includes greater water level variability can increase the diversity of vegetation and wildlife at Braddock Bay and increase the potential for long-term restoration success.



Graduate Students, Alex Silva (left) and Courtney Scoles (right), touring a habitat pothole mostly filled with non-native frogbit (Photo credit: Dr. Rachel Schultz).

ARE YOU REGISTERED? NEW YORK STATE WETLANDS FORUM ANNUAL CONFERENCE & MEETING

APRIL 2-3, 2019

Holiday Inn | Saratoga Springs, New York

Announcing the Slate of Candidates for the Board of Directors.

The Nominating Committee is nominating the following slate of candidates to fill the six (6) vacancies on the board:

Chris Einstein
CHA Companies, Inc.

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Melissa Toni
Federal Highway Administration

Charlotte Brett
Empire Environmental Partners

Aimee Viens Rutledge
McFarland-Johnson, Inc.

David MacDougall
The Chazen Companies

The slate of candidates will be voted upon by the membership at the NYSWF Business Meeting on Tuesday, April 2, 2019. All positions are 3-year terms. Please be advised that members may make additional nominations by petition. Any such petition shall be in writing, signed by at least ten members, and filed with the secretary (Jeremy Waddell at jjwaddell@u-s-c.org) no later than 3 days before the annual meeting on Tuesday, April 2, 2019.

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If you have questions, or need additional information, please contact Jill Cyr in the NYSWF office at 518-783-1322 or jill@nysta.org.

Surface Processes and Landforms

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