Volume 1, Number 4 of the Regulating District Newsletter



Hudson River -Black River Regulating District

Andrew M. Cuomo, Governor

Mark M. Finkle, Chairman

Robert J. Smullen, Executive Director

Executive Director's Corner

Greetings from the Regulating District!

It was a great summer season in the Adirondacks, and a beautiful transition to fall. This edition of the newsletter continues our series of the who, what, when, where, why, and how the District operates its dams on the rivers across six million acres of land in eleven counties which comprise the Hudson and Black River watersheds.

The Regulating District strives to be firm, fair, and consistent in its administration of the permit system around Great Sacandaga Lake. We ask that all permitees contact the Sacandaga Field Office if any proposed activity may impact state land



administered by the Regulating District. Thank you in advance for calling ahead to see if a work permit is required.

Yours in service, Robert J. Smullen Colonel, USMC (Ret.)

P.S. Please see the notice below on the GSLAC Film Premiere!

Visit Our Website

View Levels and Releases

GSLAC Film Premiere

The Great Sacandaga Lake Advisory Council is pleased to announce the premiere of its recently completed documentary Harnessing Nature: Building the Great Sacandaga.

There will be two viewings of Harnessing Nature: Building the Great Sacandaga on Saturday, November 25th at the Northville Central School Auditorium. The first show will begin at 3:00 pm and the second show will begin at 6:00 pm. Due to space constraints, pre-registration will be required to attend. When registering, please select either the 3:00 pm or 6:00 pm show.

Click on the link below to register and feel free to share this with anyone who may be interested:

https://www.eventbrite.com/e/harnessing-nature-building-the-great-sacandaga-filmdebut-tickets-38784781325

If you have any questions, feel free to email GSLAC Treasurer Jason Kemper at <u>jkemper@saratogacountyny.gov</u> or Saratoga County Historian Lauren Roberts at <u>lroberts@saratogacountyny.gov</u>

Scheduled Board Meetings

The next meeting of the Regulating District Board is at 10:00 am on December 12, 2017 at the Saratoga County Offices in Ballston Spa, NY.



Conklingville Dam - May 1, 2011 - Elevation 774.42 feet

When are Rivers Regulated?

A common question received each year is "when are you going to open the dam?" It's easy to see the intent of the question, and stakeholders have a decent grasp on the two basic concepts of regulation: store water and release water, but, understandably, not everyone has a handle on the terminology.

When we're questioned about "opening the dam" it's usually because the reservoir stakeholder wants to know about the timing or occurrence of part of the annual cycle of river regulation. In last month's Newsletter, "How" regulation

occurs touched on the timing of certain phases of river regulation. Generally speaking during the spring-time water is stored, and in the summer, fall, and winter, water is released from a reservoir. On the surface (no pun intended) it might seem that regulation occurs only twice a year. The fact of the matter is that regulation occurs any time water is stored or released. Since storage and releases are made on a daily basis, regulation occurs on a daily basis.

A river regulating reservoir, like Great Sacandaga Lake or Stillwater Reservoir, thus regulates the flow of a river every day. Each day a forecast of the anticipated flow in rivers downstream of the reservoirs is developed. This forecast is used to make a determination regarding the flow needs of the rivers and the amount of water, expressed in terms of cubic feet per second, which should be prevented from entering the river (stored in the reservoir) or should be added to the river (released from the reservoir). Typically, thanks to the somewhat steady and predictable nature of a river, regulation which occurs on a daily basis is either entirely due to storage, or entirely due to release, of water.

Extreme events like severe thunderstorms, sudden snow melt, and tropical storms cause rivers to become less steady and less predictable. A river can fluctuate substantially in one day in response to a significant precipitation event. Under the correct conditions, like flash floods, flow rates can increase rapidly and drop off rapidly, and can cause a river flow to fluctuate greatly in just hours. It is not uncommon to release water from a reservoir during the first half of a day leading up to a heavy rain storm, then suspend the release (store water) for the second half of the day as the flash flood passes through a river system.

Conservation Corner

featuring Britt Westergard of the National Weather Service

The National Weather Service (NWS) relies on our partnership with the Hudson River-Black River Regulating District to help fulfill our mission to "provide weather, water, and climate data, forecasts and warnings for the protection of life and property and enhancement of the national economy." It's a dense mission statement but it boils down to this: not only do we forecast the weather, we also forecast water...including river levels.

There are many components to our hydrologic (water) forecasts, but without observations to tell us what's happening right now, our forecast is probably not going to be very good. Regulating District employees are part of a national network of observers who provide rainfall, snowfall, snow depth and in some cases, temperature data to the NWS. In the digital age, it's easy to think computers have all the answers, but when it comes to measuring something like snow, manual observations still make up the bulk of our information. For example, take a look at this map of snowfall amounts from the mid-March blizzard this past spring - all the numbers are snow depth observations taken by people:



These snow, rainfall and temperature observations are combined with other information we receive from automated observing stations as well as weather radar and satellites to give us a picture of current conditions. We add the amount of rain that's fallen to our forecast of how much more rain will fall and this is the basis of our forecast of river levels. In the winter, we also rely on information the Regulating District gathers on how much liquid is in the Adirondack snowpack.

Observations of snow depth are helpful, but to understand how much water is available to fill District reservoirs and cause river rises downstream, observations of the amount of "snow water equivalent" - basically how much water is being held in the snowpack - are critical to our operations.

If you'd like to become a citizen scientist and help the National Weather Service by measuring rain and snow, visit <u>www.cocorahs.org</u> to learn more.

And for the latest weather forecasts and warnings, bookmark <u>weather.gov/albany</u> !

Historical Spotlight

DEC Conservation Summer Camps Check out this article in Conservationist Magazine on their 70th Anniversary! <u>http://www.dec.ny.gov/docs/administration_pdf/1017consmag4web.pdf</u>

The geography of the Regulating District encompasses nearly six million acres in the Hudson and Black River watersheds.



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