AIPG GEORGIA SECTION

March 2019

The USGS Flood Event Viewer

Speaker: Anthony J. Gotvald, P.E., Surface-Water Specialist, U.S. Geological Survey South Atlantic Water Science Center
When: Friday, March 22, 2019, 12 Noon to 1 pm
Where: USGS South Atlantic WSC, Norcross, GA
U.S. Geological Survey, 1770 Corporate Drive, Suite 500, Norcross, GA 30093
AIPG members and guests call or email by Thursday March 21, 2019, if you plan to attend
[Call or Email Greg Cherry at gccherry@usgs.gov or (678) 924-6632]

PRESIDENT'S MESSAGE

The government shut down delayed us for a month in having a speaker at the USGS office but I think we are back on track. I hope many of you can come out to the talk. We contacted Premier Drilling and we plan to do a drilling demonstration at University of North Georgia. When the date has been finalized, we will notify our members. We also plan to visit DeKalb County landfill for a tour this spring.

In our last newsletter I announced the AIPG National Scholarship program for both graduate and undergraduate. I also contacted each of our chapter presidents to encourage them to apply and to contact their fellow students. The scholarship applications are currently being evaluated and the overall number of applications are down from last year and there was only one applicant from Georgia. I would like to hear from our students as to why they are not applying.

Later this month we will purchase from University of West Georgia 25 rock and mineral sets that we will give away to different schools in Cobb County. Each set has 24 minerals and 24 rock samples. I contacted Cobb County and I'm to attend a meeting with the elementary science teachers.

GSA Southeastern conference is in Charleston on March 28-29, 2019, and AIPG will have a booth. We do need volunteers to help me out in talking to students and signing them up to AIPG. Also GSA has two mentoring luncheons, which is a great way to hear from other professionals.

This is the time of year that I will visit most of our chapters to preset our Georgia Section scholarship. Once again, the award will be $500.00 for each student. Last week I attended AIPG student chapter at Berry College.

Scholarship winners for 2019
Georgia Southern – Skylar Massey
Columbus State – Brittany Plyler
University of Georgia – Sophia Sanders
Georgia State – Jordan Walterman
Georgia Southwestern State – Jacob Sanders
West Georgia – Kathryn Hanson
University of North Georgia – Luke Schrader
Berry College – Emily Summers Silver

THE USGS FLOOD EVENT VIEWER

The U.S. Geological Survey (USGS) plays an important role in the collection and dissemination of flood data resulting from coastal and inland flooding events. In addition to the continuous monitoring of streamflow through its network of long-term stream gauges, the USGS has established a network of short-term coastal sites for the measurement of storm surge elevation and wave height during hurricane events. The data collected by numerous self- recording water-level sensors that are deployed for the duration of an event, along with surveyed inland and coastal high-water mark elevations collected immediately after an event, are stored in the USGS Short-Term Network (STN) database for long-term archival. The collected flood data can be viewed by the public in the USGS Flood Event Viewer (FEV; https://stn.wim.usgs.gov/fev/). The FEV is a map-based data portal that allows users to explore and download sensor-based data and high-water mark records for any event in the STN database; including historic flood events dating back to 1888. The implementation of the STN has been instrumental in expanding the USGS response to flooding events such as Hurricane Matthew in October 2016, with the FEV providing an efficient method flood data dissemination.

Biography

Tony Gotvald received a Bachelor of Science Degree in Civil Engineering from Mississippi State University in May of 1999 and a Master of Science Degree in Civil Engineering from the Georgia Institute of Technology in December of 2004. He is also a licensed Professional Engineer in Georgia. He began his career with the USGS as a student in the Mississippi Water Science Center in January of 1997. After graduating from Mississippi State University in May of 1999, he transferred to the Georgia Water Science Center as a full-time employee. He has authored or co-authored over 25 USGS publications. In 2011, he became the Surface-Water Specialist for the Georgia Water Science Center. In 2016, he became the Surface-Water Specialist for the South Atlantic Water Science Center after the merger of the North Carolina, South Carolina, and Georgia offices. He serves as technical support for surface-water activities that are conducted by the South Atlantic Water Science Center.

BERRY COLLEGE

On February 27, 2019, I visited Berry College to present the student scholarship and a $300.00 check to help eight students attend GSA Southeastern conference in Charleston. They also announced new officers for 2019.

Tom Kessler, President of the student chapter receives a $300.00 check

Emily Silver receiving the Georgia Section scholarship

FEDERAL DOCUMENTS

House lawmakers introduce natural resource sustainability bills

Throughout the month of January, several bills were introduced in the House relating to natural resource sustainability, especially at the energy-water nexus.

On January 3, Representatives Eddie Bernice Johnson (D-TX-30) and Frank Lucas (R-OK-3) cosponsored the Energy and Water Research Integration Act of 2019 (H.R. 34), which directs the Department of Energy (DOE) to consider the critical link between energy and water use in its programs in order to "guarantee efficient, reliable, and sustainable delivery of energy and clean water resources."

This bill also calls for DOE to consider non-traditional water sources and climate impacts on water availability, and to develop a new interagency advisory committee to facilitate energy- and water-related data collection and innovation. The advisory committee is required to help develop yearly technical workshops with non-federal experts and to update Congress every two years on its proceedings.

Representative Scott Tipton (R-CO-3) introduced two energy- and minerals-related bills on January 28. The first bill, the Planning for American Energy Act (H.R. 785), directs the Energy Information Administration to predict the nation's energy needs over the next thirty years. It also requires the Departments of the Interior and Agriculture to create a comprehensive four-year plan for U.S. energy production that incorporates wind, solar, geothermal, natural gas, and other energy sources.

The second bill, the Education and Energy Act (H.R. 786), proposes reallocating royalties from federal mineral and geothermal leases to fund state and county level public education systems. According to Representative Tipton, the bill would send about 50 percent of excess federal revenues to counties and states to support K-12 and public higher education, and 50 percent would go to the federal government's Treasury Department.

The drafting of these bills is reflective of the United States' growing concerns regarding water and energy sustainability. These have been ongoing priorities at the DOE for a number of years, as illustrated by the 2013 creation of the Office of Energy Policy and Systems Analysis and a 2014 report entitled "The Water-Energy Nexus: Challenges and Opportunities."

President Trump approves National Integrated Drought Information System Reauthorization Act

On January 7, President Donald Trump signed the National Integrated Drought Information System (NIDIS) Reauthorization Act (S. 2200) into law. The bill, first introduced by Senator John Thune (R-SD) and former Senator Bill Nelson (D-FL) in December 2017, reauthorizes funding for the National Oceanic and Atmospheric Administration's NIDIS program through fiscal year (FY) 2023.

NIDIS provides drought information to farmers, ranchers, and other industries affected by extreme weather.

Under the NIDIS Reauthorization Act, the interagency program would be authorized to partner with citizen scientists, in addition to the private sector and academic institutions. This provision facilitates the development of novel partnerships and offers a framework for increasing public awareness and education. According to Representative Lamar Smith (R-TX), the act has "made tremendous advances in the accuracy and timeliness of weather forecasting and the rapid integration of the private sector."

The bill also recommends increased funding for NIDIS from $13.5 million in FY 2019 to $14.5 million in FY 2023, an increase that can help fund a proposed Earth Prediction Innovation Center focused on reclaiming and maintaining international leadership in the area of numerical weather prediction.

Other key points of the bill include prioritizing a national coordinated soil moisture monitoring network and reauthorizing an algal blooms and hypoxia program to assess harmful algal blooms and accelerate the implementation of effective intervention and mitigation methods to reduce their impacts.

Senators Murkowski and Cantwell reintroduce lands bill package

On January 8, Senators Lisa Murkowski (R-AK) and Maria Cantwell (D-WA) reintroduced a bipartisan package of more than one hundred public lands, natural resources, and water bills, which they negotiated last year with their leadership counterparts on the House Natural Resources Committee.

The lands package—S. 47, the Natural Resources Management Act—was placed directly on the Senate calendar for expedited consideration.

The lands package contains provisions sponsored by a total of fifty senators in the 115th Congress. It includes measures to improve the existing U.S. volcano monitoring network, reauthorize the U.S. Geological Survey's geologic mapping program, and permanently reauthorize the Land and Water Conservation Fund (LWCF). t also includes bills to provide flexibility to reroute the natural gas pipeline authorized in the Denali National Park and Preserve, and to increase the maximum acreage available for inclusion in the Florissant Fossil Beds National Monument.

The 680-page package had previously failed to pass the Senate in late December 2018, after months of negotiations, because of objections from Senators Mike Lee (R-UT) and Rand Paul (R-KY) to past use of the LWCF to acquire more federal land. At the time, Senator Lee offered to waive his objections if Senator Murkowski would accept the addition of language to the Antiquities Act that would require congressional approval for new national monument designations in Utah. Such exemptions currently exist for Alaska and Wyoming. Still, the new lands package does not include the two-word amendment proposed by Senator Lee to exempt Utah from the Antiquities Act.

Senate Majority Leader Mitch McConnell (R-KY) filed a motion on January 31 to move forward on the public lands package, meaning the Senate will likely consider the bill in the next week.

Also on January 31, a bipartisan group of senators reintroduced a stand-alone bill to permanently reauthorize the LWCF (S. 302), which gives this particular measure another path to passage if the broader lands package encounters problems. On the House side, Natural Resources Committee Chairman Raúl Grijalva (D-AZ) recently told reporters that he also plans to file a separate bill related to reauthorizing LWCF.

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