May 23, 2016

The S.C. Department of Health and Environmental Control (DHEC) partnered with the U.S. Army Corps of Engineers to do an on-site assessment of all Class One and Class Two dams statewide as a precaution after the 1,000-year flooding event in October 2015. Based on the initial assessments as well as ongoing assessments, the department issued emergency orders covering 76 dams.

FLOOD IMPACT ON DAMS

As of this date, **52 dams** are known to have failed in the historic flooding event:

- 47 regulated, 4 unregulated, and 1 federal
- DHEC and the U.S. Army Corps of Engineers assessed **652** dams statewide post-flood, including all classified as **High or Significant Hazard**.
- Of the **2,370** regulated dams statewide:
 - o **2%** failed as a result of the floods
 - o 3% have been issued Emergency Orders
 - o 7% have been issued non-emergent Repair Orders

EMERGENCY RESPONSE & REGULATORY OVERSIGHT

DHEC staff worked around the clock to assess the impact on dams throughout the state. The agency mobilized more than 125 staff dedicated to dam response for this disaster. Additionally, DHEC partnered with the U.S. Army Corps of Engineers, Homeland Security, SCE&G, and HDR Engineering as part of our response to the 1,000-year flood and statewide assessment of all High- and Significant-hazard dams. As part of the overarching assessment process, the agency evaluated overtopping, debris, structural damage, signs of erosion, flow, seepage, potential weak and or failure points, and overgrowth. After the floods, DHEC:

- Assessed all High- and Significant-hazard (and selected low hazard) dams statewide
- Issued emergency orders covering 76 dams
- Identified 184 additional dams as being in need of inspection and possible maintenance or repairs
- Partnered with HDR Engineering to conduct a complete review of the agency's dam safety program
- Contracted with HDR to conduct an engineering review and assessment of the Gills Creek Watershed. The report is currently available on the http://www.scdhec.gov/HomeAndEnvironment/DisasterPreparedness/FloodUpdates/.
- Hosted a forum for dam owners on March 12, 2016, to help connect dam owners to information and people who can help them move toward recovery
- Continues to work with dam owners to provide technical assistance so that they can make final decisions on the future of their dams and implement the repairs.

REPAIRS

State regulation allows owners to make the decision whether to repair or remove damaged dams, regardless of the percentage of the structure that might be damaged. If an owner decides to repair or remove a dam, they must follow state requirements including filing a permit application for DHEC to review and approve. We are currently working with dam owners to

provide technical assistance so that they can make final decisions on the future of their dams and implement the repairs.

13 permits have been issued to repair dams since October. This includes permits issued pursuant to Emergency Orders or other DHEC directives, such as the Maintenance and Inspection letters issued in November.

- Wildewood Pond # 1 /Silver Lake Dam (D 0568)
- Wildwood Pond #2/Beaver Dam (D 0567)
- Robert Shirer Dam (D 3725)
- Lakewood Dam (D 3490)
- Lake Katherine (D 0027)
- Sunview Lake Dam (D 0579)
- Prestwood Lake Dam (D 0011)
- Lower York Reservoir Dike (D 1222)
- Wildwood Pond #5 Dam (D 0564)
- Lower Heather Lakes Dam (D 3623)
- Town & Country Dam 1 (D 1271)
- Town & Country Dam 2 (D 1272)
- Duffies Pond (D 0600) *

ROADS

Following the historic flooding event, we are continuing to work collaboratively with the Department of Transportation to share information and provide technical assistance related to roads impacted by both regulated and unregulated dams. We are working with dam owners to provide technical assistance so that they can make final decisions on the future of their dams and implement the repairs.

^{*}Staff has completed an inspection of the completed repair work on this dam and issued a Certificate of Completion.