Gills Creek Watershed Association's 2015 Flood Response

Guest Opinion in The State - November 8, 2015

As individuals, members of the Gills Creek Watershed Association ache for those whose lives and property have been upended by the unprecedented flood event. We especially mourn for the lost lives. And we extend our thanks and gratitude for the local, state and federal responders, as well as the jon-boat navy and other volunteers who worked tirelessly to help those in distress and to begin to return order to our community.



As an association — formed in the 1990s to work with Richland County, Columbia, Forest Acres, Arcadia Lakes, Fort Jackson and Cayce to restore and protect the watershed — we call for equal dedication and coordination in developing plans, policy and funding that will result in a safer and healthier watershed. While flooding has previously been a problem in limited areas, this storm event has been a game-changer in many ways.

Today residents better understand the interconnected nature of the Gills Creek system of lakes, ponds and streams. Perhaps less clear is the fact that the watershed includes more than 75 square miles of land and 125,000 residents. This entire area collects and concentrates all its rainfall into the creek system, from Two Notch Road over to Fort Jackson and the VA Hospital, and from Wildewood to the Congaree. So while the current focus has been on the dams and lakes, let's recognize that the challenge is much larger.

In a healthy watershed, stormwater has adequate opportunities to soak in before concentrated run-off becomes a problem. When 20 percent of a watershed area is impervious, stream health is considered poor, and run-off becomes more critical. In Columbia, conventional suburban development over the past 75 years has encroached on the natural floodplain. More than 30 percent of the Gills Creek watershed is developed, and much of the floodplain and even the floodway has been built upon. We have squeezed the Gills Creek system to the breaking point. Throw in the climate science that predicts more violent weather patterns in the future, and we indeed have a new normal to plan for.

For this reason, we have considered various approaches to integrated system management. One example with merit is an overlay district — a public watershed commission, akin to the Richland County Conservation Commission or the East Richland Public Service District. Such an entity could take on the long-term management of the creek system, handling dam maintenance and upgrades, lake dredging and stream restoration projects. Improved stormwater management, state-of-the-art-hydraulic flood-gates and an early warning system could be implemented. A state or county water infrastructure authority might serve to accomplish these goals as well.

Lakes provide significant public value, and there is a precedent for spending public funds to enhance and improve the buffering or reservoir capacity that they can provide. Lakes trap pollution that originates upstream, and public roads built over private dams improve access across the watershed.

The Gills Creek watershed has had swamps drained, dams built and streams channelized since the 1800s. The creeks and lakes have been a source of power, recreation and drinking water. The Garners Ferry area where the most devastating flooding occurred was a swamp that was drained and the creek channelized around 1917. Surely this history of alteration and impairment can offer us some lessons moving forward.

Nature is indifferent to human activity. The rain will fall, creeks will swell, and floodplains will flood. We should not try to control nature but instead give it the space it deserves. Let's manage the lakes and streams cooperatively and share the risks and rewards. Let's use FEMA mitigation funds to buy out flooded properties built too close to the creeks or river. Let's peel back the pavement. Let's keep future development out of flood-prone areas and restore stream buffers wherever possible. Let's re-create natural green corridors for habitat and recreation in the floodplain.

Like Nashville after its flood and Greensburgh, Kansas, after its tornado, we can learn and respond. This disaster gives us an opportunity to rebuild in a responsible and resilient way by implementing solutions throughout the watershed, making Gills Creek, its lakes and tributaries an asset to the entire community.

Valerie Marcil, President of the Gills Creek Watershed Association

See the opinion piece in The State...