## Gills Creek Watershed Management After The 2015 Flood

## Guest Opinion in The State - June 26, 2016

The October floods were an eye-opening event that cost lives and billions of dollars in damage. This may have been a 1,000-year storm event, but that does not mean we will never see anything like it again. It is imperative that we find a comprehensive solution to myriad problems surrounding Gills Creek Watershed, with flooding certainly at the forefront.

This is a challenge that individuals and even neighborhoods cannot address on their own; it requires a mutual, shared responsibility across the watershed.

A special purpose tax district, approved for one lake community and under consideration for several others in Forest Acres, is an opportunity to provide some stability and funding for selected lake and dam projects.



For some private lakes, a reversion to natural stream corridors may be a solution. But the lakes and dams are not the only problems in the watershed. In fact, the dam failures were a symptom of a much larger problem: the overall land-development pattern and corresponding stormwater runoff in Gills Creek Watershed.

Gills Creek and its tributaries no longer function like a natural stream would during high flows and floods. There is not much undeveloped floodplain left for floodwater to safely disperse. Instead, Gills Creek is bottle-necked, and during heavy storms, the bottle breaks.

One third of the land area in the watershed — about 25 square miles — is covered by roofs and pavement. Such high rates of impervious surfaces lead to stormwater runoff, and that excess and often polluted water leads to trouble downstream. Historically, the lakes have buffered many effects of runoff, benefiting the entire watershed. During the floods, the lakes and dams were not enough to hold back this deluge.

The stormwater problem is not a new problem, nor is it unique to our area. This is a legacy of decades of development during a time when natural drainage systems were poorly understood, and eventually compromised. The typical practice was to get the water off-site as quickly as possible. The consequences, multiplied over time, are often disastrous for people and places downstream.

One strategy for a more broad-based approach to watershed issues would be to implement a stormwater utility fee in Richland County. Many municipalities around the country have implemented such programs, including Columbia, although at a relatively low rate. Stormwater utility fees are typically assessed on the amount of impervious surface on site, so that the

generators of stormwater pollution pay for the runoff they create rather than shifting the costs to the rest of us. This fee can be paired with credits that provide incentives for reducing the negative impacts of stormwater.

The combination of the fee and fee credits encourages developers and property owners to reduce their impervious surfaces and runoff.

Stormwater utility fee revenues should be used to repair and upgrade aging stormwater infrastructure, stabilize stream banks and restore flood plains. This would improve water quality, provide wildlife habitat and natural green space and reduce flood risk to people and property. It could be the start we need to get rid of that Gills Creek bottleneck.

Another broad-based approach would involve the cooperative management of individual lakes that recognizes their costs, risks and benefits. More stringent review of redevelopment in floodplain areas also would improve the watershed.

While we work to put the pieces back together, let's think big and holistically by addressing the real cause of our flooding problems. Let's manage Gills Creek Watershed as a whole, not piece by piece. Let's build back smarter or not at all in certain flood-prone areas. Let's restore floodplains and vegetated buffers around our urban streams so the next time we will not be in harm's way.

We are dealing with the consequences of poor land-use decisions that we have collectively allowed over time and that cannot be reversed overnight.

If we do not deal with this issue now, we are destined to face similar disasters in the future.

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See the opinion piece in The State...