Water Quality Restoration Five Year Action Plan

December 2011

Background:

Final prevention measures have been taken with adoption of on-lot controls for lots of record but not built. It is expected that these volume controls will prevent any new impairments of water uses. The 2006 Stormwater Management Plan recommended a level of effort to address water quality impairments from existing development that has not been achieved to date. There is now a need to focus our efforts on water quality retrofits to restore currently impaired waters. This focus will generally be taken on a watershed basis. The Town of Bluffton has taken the lead on the May River and this plan will first focus on two of the County's other impaired watersheds.

References:

1. 1994 – 2010 SC DHEC Shellfish Monitoring Station Data 1994-2010
2. 2006 Stormwater Management Plan
3. 2010 Okatie TMDL
4. 2010 SC DHEC 303 d list
5. 2011 Regional Stormwater Quality BMP Retrofit Project

Discussion:

The 2010 303d list has a total of 47 listed impairments in Beaufort County of which 28 are impairments to Shellfish Harvesting due to elevated Fecal Coliform levels. The other impairments are difficult to link to stormwater runoff with the possible exception of 5 copper violations.

The Stormwater Management Plan links impairments to runoff from areas that had been developed before adoption of water quality controls in 1998. The recent acknowledgement of the importance of stormwater runoff volume lead to a re-evaluation of the management plan's retrofit projects. This 2011 update identified 5 priority projects – 3 in Battery Creek and 2 in the Okatie River. These priority regional retrofits reflect the fact that SCDHEC has established a TMDL for the Okatie River and that the Battery Creek impairments appear to stem from localized sources that could be controlled by retrofit projects.

Restoring impaired watersheds is considered a public cost as opposed to private (regulatory) cost for new and redevelopment, which is expected to install protection as part of the development. Therefore impairments should be addressed on a comprehensive watershed basis with the following components considered:

1. Regional Retrofits in Watersheds
2. Incentives for voluntary upgrades (SW Fee reductions for voluntary volume reductions)

3. Multi-jurisdictional cost sharing
4. Public-private partnerships
5. Fee in lieu of options for new and redevelopment to help develop more cost effective public solutions

Plan: (Costs are total cost)

Year One – CY2012 – $200,000

1. Set up County/Municipal Watershed Committees for Battery Creek and Okatie River to develop plans and project based IGAs
2. Jointly define and select technical support services
3. Develop proposed homeowner/commercial incentive program
4. Initiate pilot regional retrofits – Okatie East and Admin Center Parking Lot
5. Pilot a large ditch detention retrofit to see if feasible and beneficial

Year Two – CY2013 - $1,200,000

1. Develop Watershed Plans
2. Finalize project specific IGAs on cost Sharing
3. Secure regional retrofit sites
4. Finalize potential Public/Private initiatives (e.g. Shopping center retrofit)
5. Finalize proposed incentive program and identifying revenue impact

Year Three – CY2014 - $1,900,000

1. Possibly request for Stormwater Fee increase to fund restoration (could be linked to EOS expansion) and incentives
2. Implement two regional retrofits in watersheds
3. Implement targeted incentives

Year Four – CY 2015 - $1,700,000

1. Implement final two regional priority retrofits

Year Five – CY 2016 - $600,000

1. Monitor impacts of restoration program
2. Evaluate impacts of incentive program
3. If improvements documented, identify two other watersheds for targeted efforts