

[Bluffton Today, 11-30-2010](#)

TOWN'S DITCH PROJECT SLOWS RUNOFF TO VERDIER COVE

Next step involves further improving flow at Bluffton Parkway and Red Cedar.



Water trickles last Tuesday into Verdier Cove from the outfall draining part of Bluffton Park north of May River Road. The town is arranging for Beaufort County Public Works to replenish the riprap at the outfall mouth soon to reduce water flow velocity.

He's not ready to declare "mission accomplished," but town Engineering Director Bob Fletcher can report substantial progress in a year-long project to reduce stormwater flow to the May River's Verdier Cove.

Drainage ditch improvements and related work by the town of Bluffton have cut by roughly half the surface area draining from north of May River Road south to Verdier

Cove, according to Fletcher.

The change results from ditch maintenance and related work that began about a year ago. Now, stormwater runoff from the Hidden Lakes subdivision is flowing north, back on a natural path to the Colleton River, instead of taking an unintended detour into the May River drainage basin. Mayor Lisa Sulka applauded the improvements.

“I am happy, that after all of the studies the town has asked for in relation to Verdier Cove and other areas of the May River, that we are making progress. We are producing results in this area on Verdier Cove, and hopefully it will continue in other areas of the May,” she said Sunday.

The improvements follow engineering and environmental detective work that began around July 2007 – when a watershed study of coves was initiated after the town received complaints that runoff from new development was eroding Verdier Cove.

After several contracted engineering studies of the area’s drainage situation, about a year ago the town began ditch and other improvements in phases managed by Fletcher. Lack of routine maintenance on the ditch system had caused vegetative growth and sediment build-up to reduce flow, Fletcher said last week. He said he could find no individual person or company at fault.

But the big picture was missed as the individual development components were permitted by the state and the county, which had acted as the town’s agent in Hidden Lakes, Bluffton Park and other permitting before the town grew and took the responsibility. Before, he said, “Nobody ever looked at the whole thing.” He put it this way in a March memo to the Town Council: “The present conditions are a result of a series of individual developments which are interrelated but not totally integrated.

“The Bluffton Park residential system is servicing a larger area (Hidden Lakes and portions of Bluffton Parkway Commercial) than originally designed due to lack of ditch maintenance and vegetative growth in the area.”

Also, his memo noted, “There is no comprehensive drainage basin model of predevelopment conditions. Therefore, pre-development conditions can be approximated but cannot be exactly quantified.”

Engineer gives drainage basins work timeline

Bob Fletcher, Bluffton engineering director, provide this time line of town work to reduce drainage to the May River’s Verdier Cove. He also gave spending and project summaries:

- July 2007 – Initiated watershed study of key coves
- March 2008 – Initiated survey and analysis of Bluffton Park tracts and watershed. Report included multiple recommendations
- January 2009 – Initiated detailed design based on study recommendations
- June 2009 – Additional third party (Carolina Engineering) assessment of historical and current watershed conditions. Carolina Engineering proposed lower cost phased maintenance actions and monitoring
- October 2009 – Initiated ditch maintenance, Phase 1 (From U.S. 278 south to the power line easement)

- March 2010 – Report to Council on initial maintenance findings and path forward
MARCH – SEPTEMBER 2010
- Completed ditch maintenance
- Phase 2, from the power line easement south to Bluffton Parkway
- Phase 3, from Bluffton Parkway south to Red Cedar St.
- Phase 4, in Tract B-11 (between Hidden Lakes and Red Cedar Street)
- Removed haul log-hauling road at B-11
- Blocked culvert from Hidden Lakes outflow into Bluffton Park “teardrop” lagoon

SEPTEMBER-PRESENT

Working with Beaufort County on:

- Drainage equalization pipes beneath Red Cedar Street and Bluffton Parkway
- Adding rip rap at the Verdier Cove inlet culvert

SPENDING

- Surveys, modeling, engineering analysis and design \$210,000
- Construction & Maintenance: \$85,000
- Equalization piping and replenishing Verdier Cover rip rap: Cost to be determined

SUMMARY

Hidden Lakes outfall flow has been restored to its natural direction northward. The southerly flow into the teardrop lagoon (in Bluffton Park) has been stopped. Visual monitoring at key flow points including Bluffton Park lagoons will continue throughout the winter rainy

season to determine if further actions are required.

