

Oxford prepares for future stormwater infrastructure updates

By JOSH BOLLINGER jbollinger@stardem.com | Posted: Wednesday, September 25, 2013 1:21 pm

OXFORD — The town of Oxford is faced with a decision that will affect the future of its stormwater system and flooding issues.

After months of discussing and studying Oxford's stormwater and flooding issues, Sean Williamson, a research assistant with the University of Maryland Environmental Finance Center, came to Oxford on Tuesday, Sept. 24, and again on Wednesday, Sept. 25, to present the center's findings and potential solutions.

“For the last year, we've heard from a number of citizens and businesses from the town of Oxford about concerns with the frequency and severity of high water events, concerns about the amount of water on the roads, concerns about being able to leave town when there's high water events, being able to get to work, or if there's an emergency if an ambulance can come through,” Williamson said.

There's also concern among the town about water quality associated with high water events, Williamson said.

Three areas were identified as having the most problems — South Morris Street and the Causeway area, the historic district and Jack's point — all of which Williamson said experience high water differently.

South Morris Street at the Causeway tends to flood and form “Lake Oxford” because “the size and coverage of that local drainage basin feeds into a bottleneck at Town Creek.”

Since Oxford's stormwater system can only hold so much, water accumulates at the lowest point around “Lake Oxford.”

In the historic district, specifically Tilghman, Mill, Norton, Stewart and Bank streets, the streets flood during certain high tide and storm events.

Williamson said it's a result of Mill Street being a low basin and the tide gate near Mill Street being a



Oxford Stormwater

The above picture was taken the day after Hurricane Sandy struck the Eastern Shore in Oct. 2012 at the entrance to Oxford. Stormwater infrastructure improvements are estimated to reduce high water around the town after significant storm events like Sandy.

little outdated. Also, the presence and height of shoreline buffers causes high tides to spill over and onto the street.

At Jack's Point, there is periodic standing water and tidal flooding, which Williamson said largely has to do with surface level drainage and tidal inflow on both sides of the peninsula due to Jack's Point's geographic location.

"It's important to emphasize stormwater infrastructure. Regardless of the cause of flooding, properly designed, operating stormwater infrastructure is critical to mitigating and dewatering high water events," Williamson said. "This includes tide gates, outfalls and stormwater storage capacity."

Since there are limits to stormwater infrastructure, he said shoreline infrastructure to prevent flooding is also important.

Also with the additional 2 to 4 feet of sea level rise expected by the end of the century, Williamson said Oxford should construct all infrastructure bearing that in mind.

"The most important thing Oxford can do to address the situation is have a comprehensive stormwater program," Williamson said.

{span style="font-size: 12px;"} Williamson laid out three tiers in which Oxford could potentially place their stormwater program, moving from low cost and low impact to high cost and high impact. {/span}

Currently, he said Oxford's stormwater program is keeping the town's "head above water" and makes necessary repairs related to stormwater and high water issues, but doesn't necessarily make repairs that drastically improve the situation for the long term.

The Environmental Finance Center estimated the 5-year cost of the low cost-low impact plan to be \$506,000.

The options vary after the first plan in 5-year estimates from \$630,000 to \$2.3 million.

But as the price tag increases, so does the direct and indirect impacts of each plan, with direct impacts being things like changes in infrastructure to reduce high water events and indirect impacts being things like development of an infrastructure map to plan for Oxford's future.

{span style="font-size: 12px;"} Williamson laid out a few different options for Oxford that would improve their stormwater program. {/span}

{span style="font-size: 12px;"} The options included what other towns, like Dewey Beach, Del., have done, such as installing pumping stations, constructing a wetland, road elevation and shoreline protection — all estimated to reduce frequency and severity of high water events beyond the currently planned and funded projects. {/span}

{span style="font-size: 12px;"} Historically, Oxford's stormwater program is funded through the town's general fund, but Williamson laid out other options to town residents and commissioners on Tuesday. {/span}

{span style="font-size: 12px;"}One option would be to establish a stormwater utility, which would be assessed to local residents and businesses based on the size of the property, and also contributed to from town funds with a specific amount. {/span}

{span style="font-size: 12px;"}One advantage of a stormwater utility would be a dedicated and consistent funding source for stormwater management, Williamson said, with the possibility to set up credits for those who make environmentally responsible improvements to their own property. {/span}

Williamson said a stormwater utility could also help to leverage grants for stormwater infrastructure projects.

{span style="font-size: 12px;"}With flood insurance rates rising, Town Manager Cheryl Lewis said the Federal Emergency Management Agency is more likely to give discounts to communities who are working together and trying to address the flooding issue now. {/span}

In the end, Lewis said this is about Oxford doing the best thing necessary for the town, and that something of this nature has to be approached from the ground up.

Oxford is currently in the education stage of this issue.

Commission President Carole Abruzzese encouraged Oxford residents to learn about the different options available to the town and give the commissioners feedback.

“This is something that we’re going to look for the public to really give us feedback on, because if we do these stormwater projects, such as work on the Causeway or tidal areas ... this is going to cost a lot of money, and I’ve got to know that the residents feel that this is important enough,” Abruzzese said. We’re going to want to hear from the residents here and not sit up here and make a decision that we don’t feel we have adequate input on.”