

Stormwater Treatment System at Wychmere Harbor

by Lindsay Cook

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Last week, I sat down with Tom Leach, the Harwich harbormaster, to get his thoughts about the stormwater treatment system that was recently installed at Wychmere Harbor as a part of the Cape Cod Water Resources Restoration Project. As harbormaster, Mr. Leach is responsible for managing and overseeing all the operations that take place in the Harwich harbors and was one of the driving forces behind the construction of the new stormwater system.



Figure 1. Wychmere Harbor looking west from bulkhead at Town Pier

The Wychmere stormwater project has been a priority for Mr. Leach ever since a 1998 report revealed that the old stormwater system was failing to keep stormwater contaminants, such as pesticides, oil, and fecal coliform bacteria, from entering the bay. The system, which had been installed in 1995, might have been effective had it been located on higher ground, but a last-minute decision caused it to be sited in the intertidal zone. This location left the system vulnerable to flooding during high tides, allowing stormwater to escape before it could be treated.

The fact that the Wychmere stormwater system failed to work effectively was particularly troubling because Wychmere Harbor is not a natural harbor, but instead was formerly a kettle pond. The harbor was created in 1887 when a channel was dug connecting the kettle pond to the ocean. As Mr. Leach informed me, because there are no rivers flowing into the harbor, it takes a long time for water in the harbor to “flush” to the ocean. Therefore, when environmental contaminants enter the bay, they are likely to stay there for a long time. In fact, a study done in the 1980's showed that when rhodamine dye was put in the harbor, traces of the dye were still present a week later!

Now that the new system has been installed, stormwater is treated before it enters the bay. This means that Harwich shellfishers won't have to worry about stormwater contaminants fouling up the shellfish beds. Not to mention, shellfish and other marine creatures will benefit from cleaner water in the bay. Finally, many fishermen are heaving a sigh of relief that the old stormwater system was removed because it took up valuable space and interrupted the flow of traffic in the parking lot. As for Mr. Leach, he already has his sights set on new projects to protect Harwich's coastal waters and habitats.



Figure 2. Aerial picture of the site after the project was completed; the new system is entirely underground. (courtesy Tom Leach)