

## **Mill Creek - Environmental Assessment Project Status as of March 22, 2006**

We have initiated the Mill Creek environmental assessment to evaluate the effects of the December 2005 sewage spill. The assessment has several components and a description and the status of each are described below:

Bathymetric Survey – We have reviewed the previous (circa 2000) bathymetric survey and are developing procedures that we will use to conduct the field work and to compare the results of the two surveys to determine changes in water depths. Our boat will be used to perform the survey where there is sufficient water depth. The upper tidal area of Mill Creek is exposed at low tide and therefore the survey will have to be done during a high tide or we will have to use an innovative means to traverse the bottom while exposed.

Our goal was to perform the survey in March but wind and tides have not been cooperative. We should complete the lower tidal area using our boat this week. The technique to be used for the upper shallow tidal area is still being worked out. We may have to ask that one or more residents call us to let us know when there is a high tide.

Sediment Sampling - Sediment samples will be collected and analyzed to obtain a chemical characterization of the bottom sediments in Mill and Dividing Creeks. The sampling will be performed after completing the bathymetric survey to better identify the areas of recent sediment deposition in Mill Creek. The sediment samples will also be analyzed for bacteria.

It is anticipated that most of the sampling locations will be in the upper tidal area. The samples will be collected primarily from the upper layer of the bottom sediments to capture those recently deposited from the sewage spill. Sediment core samples will also be taken down several feet for chemical and visual examination to distinguish legacy sediments from the more recent deposits. The sediment sampling should take place in April.

Water Quality Monitoring – Both Bayland and the Magothy River Association (MRA) will be conducting water quality monitoring and sampling. The MRA will perform bi-weekly sampling from April to October at six locations in tidal Mill and Dividing Creeks. BayLand will augment the MRA tidal sampling to collect samples in late March and in November and December 2006 at the same tidal locations. In addition, BayLand will conduct weekly sampling at 9 locations in the non-tidal stream portions of Mill and Dividing Creeks. The monitoring will include chemical and bacterial analysis.