

June 1, 2015

To: Darien Board of Selectmen
From: Tom Bell, State of CT Harbor Master, Darien
Re: 2015 Harbor Survey Results and additional Harbor Update

With financial support from both the Darien Boat Club and the Noroton Yacht Club, a survey was conducted in mid-March of this year.

This survey was conducted 3 years after the last survey occurred and will hopefully be done going forward every three years, at the recommendation of the survey company. This will provide the Town with historical data for use in determining if and when the channel may need to be dredged. It should be noted that Hurricane/Super Storm Sandy occurred in October of 2012.

The 2015 survey started at the Town's boat ramp and ended at the USCG "red" buoy located on the eastern side of the Harbor, outside of the mooring field. It should be noted that the survey company used did not have comparison data for the area just south of the DBC to and around the boat club's floating docks and ending at the boat ramp. A different survey company was used. However, we were able to get printed data for 2010 from the company and this data is included with "manual" comparisons provided.

In summary:

- The main channel – just south of the DBC to the "red" buoy had virtually no silting in the areas surveyed.
 - While there was some minor silting, it was insignificant and occurred on the outer edges of the channel, which is to be expected.
- The area around the boat ramp had similar results.
 - But there is still a major issue here for residents trying to use the ramp except during mid-to-high tides.
 - The boat ramp is not under control of the Harbor Master.
- Some significant silting occurred in the east/west channel just north of the DBC's docks.
 - Most likely coming from the shallow areas where no boats are moored.
 - You can see this effect at low tide.
 - Several of the boats moored here rest on the bottom during low to extreme low tides.
- The main channel used by most DBC boaters to exit/enter this area runs north/south between "A" dock and the neighbors on the western side of the channel.
 - Again there was some minor silting in a few areas but not a real hazard to boaters.
 - But it does prevent more than one boat from turning in/out of the east/west channel.

The conclusion from the surveyor was that the Town does not need to institute a dredging program at this time.

I have provided sample snapshots of the various areas discussed on the attached pages for your reference. Please understand that many of these images are "copied" from documents that are formatted in 11 x 8.5". And the data may be difficult to read and in some instances the orientation is different due to different sources. I have filed full formatted versions of the survey results with the Town and they are available for review for those interested.

I would also like to take this opportunity to update the Board on several other topics, if I may:

- Moorings:
 - We currently have 284 registered mooring holders in all 5 harbors in Town.
 - Our wait list has grown significantly over the years and now sits at 85 residents awaiting a mooring in Darien Harbor and 15 folks waiting for a mooring in Zeigler's Cove:
 - The growth for wait list for Darien Harbor is predominantly due to the successful implementation of the DBC's launch service;
 - Darien Harbor is full except for larger boats where their owners understand that the only available space is in the outer harbor;
 - Some question the open space on the eastern side of the harbor but this area is loaded with sub-surface hazards that make moorings impractical and unsafe;
 - And one needs to remember that since moorings are bow only type - there is a necessary swing ratio for all boats moored;
 - Zeigler's Cove moorings are all transient moorings and there is virtually no turnover. I've only done 1 in the last five years.
- New Speed/No Wake Buoys
 - With the 2015 budget approved, we will replace and relocate the warning buoys in Darien Harbor with new, larger and brighter USCG approved buoys:
 - We are in the process of applying for a location change to the 2 existing buoys with DEEP;
 - The current location of the buoys are not in plain sight for boater to easily see:
 - The eastern buoy is placed too far off the edge of the channel;
 - Currently, both buoys are placed on the same latitudinal line but not on a parallel line.
 - So boaters are unsure as to when they need to decelerate when entering the harbor and accelerate when leaving it.
 - The new buoys will be placed so they are visually parallel to each other regardless of the long/lat headings.
 - It is our hope that the new buoys and new locations will help boaters better obey the posted 5 MPH no wake zone.

Please let me know if you have any questions on the above.