

## C. VERTICAL AND HORIZONTAL CONTROL

### C.1. Vertical control

All sounding data were related to Mean Lower Low Water (MLLW) using observed water levels recorded by the NOAA CO-OPS tide station 8423898 located at Fort Point, NH (Table 13), using the zone corrector NA169 as computed by NOAA CO-OPS (Table 14). These data were converted to .tid format for use with CARIS HIPS using MATLAB R2008a.

Table 13 - Tide gauge information

<i>GaugeID</i>	<i>Model</i>	<i>Gauge Type</i>	<i>Location</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Operation</i>
8423898	NOAA Primary	Acoustic	Fort Point, NH	43°04.3' N	70°42.7' W	Permanent

Table 14 - Tide zone from Fort Point, NH

<i>Zone</i>	<i>Site</i>	<i>Station number</i>	<i>Time</i>	<i>Range Ratio</i>
NA169	Fort Point	8423898	-6 min	1.00

### C.2. Horizontal control

The North American Datum of 1983 (NAD83) was used for horizontal control. All raw positions were collected in WGS84 and transformed to NAD83 during post-processing in CARIS HIPS.