

## NOAA - NOS - CO-OPS

## **Delaware River & Bay Tidal Current Survey**

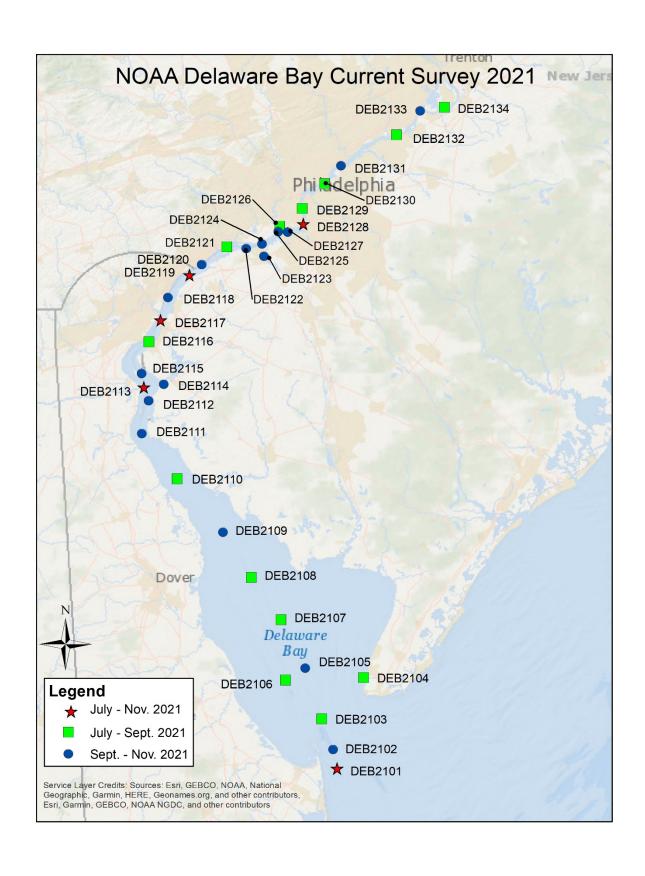
The Center for Operational Oceanographic Products and Services (CO-OPS), an office of the National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service (NOS), is planning an update to NOAA's tidal current predictions for the Delaware River & Bay to help ensure safe navigation.

**Geographic Scope**: We intend to deploy current meters at 34 stations spanning from the mouth of the Delaware Bay upriver to Fieldsboro, NJ. Station locations are shown in the map and listed in the table below.

**Project Description:** Acoustic Doppler current profilers (ADCPs) will be deployed in order to sample current speed and direction every six minutes over a 45 - 90 day duration. The ADCPs will be primarily housed in bottom mounts ( $\sim 1$  m tall or distance to seafloor) with no surface presence or on USCG ATONs (with prior permission) collecting a vertical profile of currents throughout the water column. One station in Mantua Creek will be horizontally mounted on a bridge measuring the currents across the channel at a single depth.

## **Project Timeline (pending COVID regulations & approval):**

- July 12 24, 2021: The current survey field operations began. ADCPs were deployed at approximately half the stations (18) for a minimum of 45 days.
- September 7 27, 2021: ADCPs will be recovered from the first set of stations (13) and deployed at the second set (16 stations) for a minimum of 45 days.
- November 2 22, 2021: Completion of current survey. It is intended that all equipment will be recovered.
- 2022: Completion of data analysis. Tidal current predictions and raw data will be available online at tidesandcurrents.noaa.gov



## **NOAA Delaware River & Bay Current Survey Stations:**

Station ID	Station Name	Latitude	Longitude	Depth (m)	Deployment Dates
DEB2101	Delaware Bay Entrance	38.7813	-75.043	18.4	July- Nov
DEB2103	Cape Henlopen, 5 mi north of	38.8834	-75.0833	23	July-Sept
DEB2104	Cape May Canal, west end	38.9684	-74.9724	6	July-Sept
DEB2106	Big Stone Beach Anchorage "G" buoy	38.9632	-75.1794	19.5	July-Sept
DEB2107	Brandywine Range at Miah Maull Range	39.0875	-75.1913	15	July-Sept
DEB2108	Cross Ledge Light	39.1747	-75.27	13.5	July-Sept
DEB2110	Arnold Point, 1.8 nm WSW of	39.3768	-75.4662	13	July-Sept
DEB2113	Chesapeake and Delaware Canal Entrance	39.5644	-75.5549	8.8	July- Nov
DEB2116	Kelly Point, 0.7nm N of	39.6568	-75.541	10.5	July-Sept
DEB2117	Deepwater Point, 0.5 nm NW of	39.7013	-75.5106	17	July- Nov
DEB2119	Marcus Hook Bar (north)	39.7933	-75.4338	10	July- Nov
DEB2121	Eddystone	39.8504	-75.3348	10	July-Sept
DEB2126	Girard Point	39.8924	-75.195	8	July-Sept
DEB2128	Gloucester Point	39.8973	-75.1322	12	July- Nov
DEB2129	Kaighn Point	39.9282	-75.1353	12	July-Sept
DEB2130	Fisher Point	39.9785	-75.076	11.9	July-Sept
DEB2132	Edgewater Range at Devlin Range	40.0778	-74.8852	13	July-Sept
DEB2134	Newbold Island north of, Main Channel	40.1337	-74.7589	12	July-Sept
DEB2102	Cape Henlopen, 2 mi NE of	38.82	-75.0533	28	Sept-Nov
DEB2105	Brandywine Shoal Light, 0.5 nm west of	38.9877	-75.127	14	Sept-Nov
DEB2109	Ben Davis Point, 3.2 nm southwest of	39.2671	-75.3447	14.9	Sept-Nov
DEB2111	Baker Range Channel	39.4695	-75.56	10.6	Sept-Nov
DEB2112	Reedy Island Wreck	39.5367	-75.5417	7.5	Sept-Nov
DEB2114	Salem River Entrance, east of marker 11	39.57	-75.5017	4.2	Sept-Nov
DEB2115	Pea Patch Island	39.5922	-75.5607	11	Sept-Nov
DEB2118	Edgemoor	39.7473	-75.4909	10	Sept-Nov
DEB2120	Marcus Hook	39.8142	-75.4013	8	Sept-Nov
DEB2122	Crab Point, 0.5 mi East of	39.8467	-75.2833	11.9	Sept-Nov
DEB2123	Mantua Creek US 44 Bridge Paulsboro	39.8314	-75.2361	5.4	Sept-Nov
DEB2124	Mantua Creek Anchorage	39.8563	-75.2417	11.5	Sept-Nov
DEB2125	Schuylkill River Entrance	39.8813	-75.1986	6	Sept-Nov
DEB2127	Eagle Point, 0.2 nm northwest of	39.8803	-75.1733	15	Sept-Nov
DEB2131	Frankford Range at Tacony Range	40.0152	-75.0323	12	Sept-Nov
DEB2133	Florence Bend	40.1262	-74.8228	12	Sept-Nov

Please contact the project lead, Katie Kirk (email: katie.kirk@noaa.gov) if you have any questions and/or concerns.