# C. Vertical and Horizontal Control

Additional information discussing the vertical and horizontal control for this survey can be found in the accompanying 2018 DAPR

## **C.1 Vertical Control**

The vertical datum for this project is Mean Lower Low Water.

Traditional Methods Used:

**TCARI** 

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID
Los Angeles, CA	9410660
Santa Monica, CA	9410840
Santa Barbara, CA	9411340
Oil Platform Harvest, CA	9411406
Port San Luis, CA	9412110
Monterey, CA	9413450

Table 13: NWLON Tide Stations

File Name	Status
H13087_TCARI_Features.tid	Final Approved

## Table 14: Water Level Files (.tid)

File Name	Status
L397RA2018.tc	Final

A request for final approved tides was sent to N/OPS1 on 10/28/2018. The final tide note was received on 01/29/2019.

H13087 shoreline features were reduced to chart datum (MLLW) using a .tid file created in Pydro utilizing the "TCARI TID file via S-57" function, then loaded in Caris Notebook. H13087 MBES data were reduced to MLLW using ERS via VDATUM processing methods. See Supplemental Correspondence regarding approval of traditional tides for use in determining feature heights.

#### ERS Methods Used:

ERS via VDATUM

## Ellipsoid to Chart Datum Separation File:

OPR\_L397\_RA\_18\_lgECpoly\_xyNAD83-MLLW\_geoid12b.csar

### **C.2 Horizontal Control**

The horizontal datum for this project is North American Datum 1983 (NAD83).

The projection used for this project is Universal Transverse Mercator (UTM) 10N.

Post Processed-Real-Time Extended (PP-RTX) processing methods were used in Applanix POSPac MMS 8.2.1 software to produce SBETs for post-processing horizontal correction.