

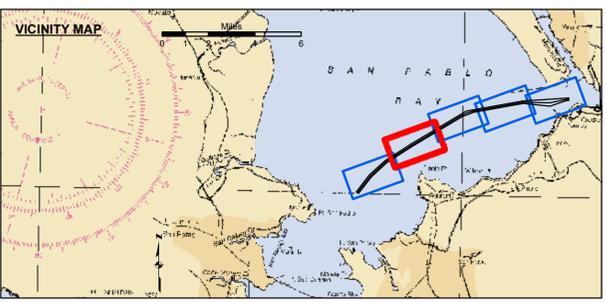
US Army Corps of Engineers
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Prepared Under the Direction of JOHN D. CUNNINGHAM LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Nov 12, 2020
Submitted: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Plotted by: PDT
Approved: Chief, Construction Branch	Checked by: PDT
	Drawn by: PDT

CALIFORNIA
PINOLE SHOALS
 POST-DREDGE SURVEY
 10 NOVEMBER 2020

Sheet
Reference
Number
2 of 5



- | | | |
|----------------------------|--------------------|-----------|
| Federal Navigation Channel | Beacon, General | Countours |
| Shoaling Area | Obstruction Point | -35 |
| Placement Area | Navigation Buoy | -34 |
| Anchorage Area | Navigation Buoy | -33 |
| Wreck Area | Shoalest Sounding* | -32 |
| Submerged Wreck | | -31 |
| Angle Point | | |

NOTES:
 DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY. THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME. DISTANCE UNITS IN U.S. SURVEY FEET. DEPTHS ARE SHOWN AS POSITIVE VALUES.
 COORDINATES ARE BASED ON THE CALIFORNIA STATE PLANE COORDINATE SYSTEM (SPCS) ZONE III, LAMBERT CONFORMAL PROJECTION REFERENCED TO NAD83, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY NATIONAL OCEAN SURVEY.
 BASE MAPS ARE USDA NAIP 2010.
 *SHOALEST SOUNDING PER QUARTER PER REACH
 SURVEYED BY THE CORPS OF ENGINEERS.
 SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER (MLLW) AT THE LOCALITY AND ARE SHOWN TO THE TENTHS OF A FOOT.
 THE PROJECT DEPTH IS -35 FEET MLLW.
 VERTICAL DATUM:
 MLLW (MEAN LOWER LOW WATER)
 TIDAL EPOCH 1983-2001
 TIDAL DATUM CONTROL STATION(S):
 - 9415056 PINOLE POINT - JUNE 2014
 - 9415218 MARE ISLAND - AUG 2013

HORIZONTAL CONTROL DATUM:
 NAD83(2011) EPOCH 2010.00
 CONTROL:
 POINT PINOLE 4 RESET | PID: JT2895 | BM 5056 A | PID: BBCN55
 OPUS 3/19/2020 | 9415056
 5218 L 1976 | 5218 R 2006
 PID: BBC281 | PID: BBCN57
 OPUS 8/11/2010 | 9415218 | OPUS 10/31/2020 | 9415218
 TIDE GAUGE:
 NAIL & BRASS DISK SET IN DOLPHIN AT 10.0 FT MLLW
 APPROX POSITION: 38° 04' 9.9" N, 122° 15' 4.4" W
 POSITIONS AND SOUNDINGS HAVE BEEN CORRECTED USING PPK TECHNIQUES USING A CORS NETWORK BASE STATION AT OHLN.
 TIDE VALUES HAVE BEEN EXTRAPOLATED USING GEOD18 AND VDATUM V4.0.1.
 SURVEY VESSEL / EQUIPMENT:
 S/V RANDY CUMMINGS
 - RESON 150-R SINGLE-HEAD MULTIBEAM ECHOSOUNDER
 - POS MV 220 VERS HW2-E-12
 - IMU TYPE 42
 - TRIMBLE AT1675-540TS GPS ANTENNA