

San Francisco Bay Study - Boat Stations

| <u>Station</u> | <u>Latitude</u> (Degrees, minutes, decimal minutes) | <u>Longitude</u> | <u>Description</u> | <u>Comments</u> |
|----------------|--------------------------------------------------------|------------------|----------------------------------------------------------------|----------------------------------------------------------------------------|
| 101 | 37° 32.130 | -122° 09.976 | S San Francisco Bay, Chnl 1.4km E Redwood Cr. | |
| 102 | 37° 34.998 | -122° 12.498 | S San Francisco Bay, Shl 1.8km S of SM Hayward Br. | |
| 103 | 37° 36.198 | -122° 18.168 | S San Francisco Bay, Shl 1.9km NE of Coyote Point | |
| 104 | 37° 40.782 | -122° 14.202 | S San Francisco Bay, Shl NW San Leandro Chnl | |
| 105 | 37° 43.170 | -122° 16.248 | S San Francisco Bay, Shl SW of Oakland Airport | |
| 106 | 37° 42.120 | -122° 22.002 | S San Francisco Bay, Shl SE of Candlestick Point | |
| 107 | 37° 36.300 | -122° 17.148 | S San Francisco Bay, Chnl 3.4km NE Coyote Pt. | |
| 108 | 37° 40.548 | -122° 19.782 | S San Francisco Bay, Chnl 5km NE Pt San Bruno | |
| 109 | 37° 44.352 | -122° 21.198 | S San Francisco Bay, Chnl near Hunters Point | |
| 110 | 37° 47.291 | -122° 21.371 | San Francisco Bay, Chnl 1.5km S of Yerba Buena Is. | |
| 140 | 37° 30.111 | -122° 06.971 | S San Francisco Bay, Chnl 0.3km SE Railroad Br. | |
| 141 | 37° 39.000 | -122° 16.000 | S San Francisco Bay, East San Bruno Shoal | Established Dec 1987, discontinued after Feb 1988. Not used for analyses. |
| 142 | 37° 45.710 | -122° 18.320 | S San Francisco Bay, Shl 2km SW Alameda Naval St. | |
| 211W | 37° 50.684 | -122° 23.282 | San Francisco Bay, Shl 1km N of Treasure Is. West Start | |
| 211E | 37° 50.340 | -122° 22.460 | San Francisco Bay, Shl 1km N of Treasure Is. East Start | |
| 212 | 37° 51.270 | -122° 21.162 | San Francisco Bay, Shl 3.5km W of Berkeley Harbor | |
| 213 | 37° 49.950 | -122° 25.630 | San Francisco Bay, Chnl, Alcatraz Shoal | |
| 214 | 37° 51.940 | -122° 24.100 | San Francisco Bay, Chnl 1.5km E of Angel Is. | Moved slightly north in 2017 to avoid channel marker. |
| 215 | 37° 53.280 | -122° 25.452 | San Francisco Bay, Chnl 1.5km NE of Angel Is. | |
| 216 | 37° 55.248 | -122° 26.178 | San Francisco Bay, Chnl SW Red Rock | |
| 243 | 37° 53.052 | -122° 24.072 | San Francisco Bay, Shl E of Southampton Shl | |
| 244 | 37° 55.422 | -122° 28.080 | San Francisco Bay, Shl E Corte Madera Cr. Chnl. | |
| 317 | 37° 59.341 | -122° 24.542 | San Pablo Bay, Shl 2km NE of Point San Pablo | |
| 318 | 38° 01.278 | -122° 20.700 | San Pablo Bay, Shl 2km NE of Pinole Point | |
| 319 | 38° 02.418 | -122° 17.130 | San Pablo Bay, Shl 1.5km West of Lone Tree Point | |
| 320 | 38° 03.760 | -122° 19.030 | San Pablo Bay, Shl N of Pinole Shl Across Chnl | Original location now 3' deep (as of early 2017). Moved closer to channel. |
| 321 | 38° 03.972 | -122° 22.050 | San Pablo Bay, Shl N of Pinole Shl Across Chnl | Kent towed closer to channel. Moved back to original location in 2017. |
| 322 | 38° 03.180 | -122° 24.828 | San Pablo Bay, Shl S Petaluma R Chnl Entrance | Kent towed closer to channel. Moved back to original location in 2017. |
| 323 | 38° 01.122 | -122° 25.800 | San Pablo Bay, Shl 1km NE Point San Pedro | Moved back to original location in 2017. |

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| 324 | 37° 58.950 | -122° 24.720 | Same as Station 317, discontinued after January 1981 | Use Station 324 data instead of Station 317 for 1980 and January 1981 for analyses. |
| 325 | 38° 01.800 | -122° 22.302 | San Pablo Bay, Chnl 2km NW of Pinole Point | |
| 326 | 38° 02.420 | -122° 17.130 | Same as Station 319, discontinued after January 1981 | Use Station 326 data instead of Station 319 for 1980 and January 1981 for analyses. |
| 345 | 37° 59.850 | -122° 25.452 | San Pablo Bay, Chnl N of Pt. San Pablo | |
| 346 | 38°03.330 | -122° 18.000 | San Pablo Bay, Chnl mouth of Carquinez Strait | |
| 427 | 38° 02.130 | -122° 09.132 | Carquinez Strait, Chnl 0.6km SW Hwy 680 Br. | |
| 428 | 38° 03.720 | -122° 06.318 | W Suisun Bay, Chnl Nr Reserve Fleet Anchorage | |
| 429 | 38° 05.150 | -122° 04.610 | N Suisun Bay Chnl Nr Reserve Fleet Anchorage | |
| 430 | 38° 06.492 | -122° 03.300 | Grizzly Bay Shl NW of Ryer Is. near Suisun Sl. Chnl. | Moved south due to mud in early 2006, but deeper water. Moved slightly south of original location in March 2017, back to shallower water. |
| 431 | 38° 06.312 | -122° 01.680 | Grizzly Bay Shl N of Ryer Is. E of Simmons Is. | |
| 432 | 38° 02.550 | -122° 06.480 | Suisun Bay, Sacramento R. Chnl E of Hwy 680 Br. | |
| 433 | 38° 03.607 | -121° 58.969 | Sacramento River, Chnl near Port Chicago | |
| 447 | 38° 03.355 | -122° 10.700 | (E) Carquinez Strait, Chnl S of Benicia Boat Ramp | |
| 534 | 38° 04.287 | -121° 57.372 | Honker Bay, Shl (Center) | |
| 535 | 38° 02.839 | -121° 55.060 | Sacramento R., Channel S of Chipps Island | |
| 736 | 38° 03.62 | -121° 48.260 | Sacramento R., Chnl N of Sherman Lake | Original coordinates on land. Changed in May 2017 based on 2014-2015 averages. |
| 750 | 38° 05.08 | -121° 45.000 | Sacramento River, Chnl 1 Km SW Decker Island | Original coordinates on east/south bank, slightly downstream. Since 2010 (probably longer, haven't pinpointed), towed on west/north bank further upstream. Coordinated changed May 2017 based on 2014-2015 averages. |
| 751 | 38° 06.330 | -122° 43.020 | Sacramento R., Chnl N end of Decker Island | Changed latitude from 38.06.68 to 38.06.25, longitude from 121.42.72 to 121.42.75 on 12/29/2010 |
| 752 | 38° 06.252 | -121° 42.750 | Sacramento R., Shl N End of Decker Island | |
| 760 | 38° 09.140 | -121° 41.090 | Sacramento R., Shl upstream Rio Vista Bridge | Late 1997 moved to western bank. Dec 1997 moved downstream of bridge along western bank. Mid to late 2000s slowly moved to eastern bank. Coordinates changed in May 2017 based on 2014-2015 averages. |
| 761 | 38°10.070 | -121° 40.630 | Sacramento R., Chnl at confluence of Steamboat Slough | Original station further upstream. 1994-99 very close or on western bank, 2000-2008 on land. Changed in May 2017 based on 2009-2015 averages |

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| 762 | 38°10.500 | -121° 39.420 | Sacramento R., Shl at confluence of Steamboat Slough | Original station on edge of northern bank. 2011-2016 in river. 15 tows on land (Loran error?). Coordinates changed in May 2017 based on 2011-2015 averages. |
| 837 | 38° 01.470 | -121° 45.600 | San Joaquin R., Shl between West Is. and Antioch Br. | |
| 853 | 38° 01.710 | -121° 44.220 | San Joaquin R., Chnl E of Antioch Br. | |
| 863 | 38° 05.487 | -121° 39.066 | San Joaquin R., Santa Clara Shoal | |
| 864 | 38° 06.070 | -121° 35.880 | San Joaquin R., Channel next to San Andreas Shl. | |
| 865 | 38° 05.200 | -121° 34.580 | San Joaquin R., shoal at Old River Flats | Original station further upstream (south) then recent tows, as of 2016. Moved downstream as shoal filled in with mud. Ken says we had to move further downstream, getting too shallow at southern end (12/17). |

For boat stations, channel (Chnl) and shoal (Shl) designations refer to whether the station is relatively deep or shallow. Directions are indicated by single letters without periods following. Distances and directions are approximate. Two latitude/longitudes indicate that tow was either made between the locations or started at a given location at a given tide; distinctions are made in the description.