

3727 & 3728

Diag. Cht. No. 5802

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC
Field No. _____ Office No. H-3727 & 3728

LOCALITY

State OREGON
General locality YAQUINA BAY AND RIVER
Locality _____

191 14

CHIEF OF PARTY

J. W. Maupin

LIBRARY & ARCHIVES

DATE APRIL 28, 1915

B-1870-1 (1)

3727 & 3728

POST-OFFICE ADDRESS: 310 Custom House, San Francisco, California.

TELEGRAPH ADDRESS: do

EXPRESS OFFICE: do

U. S. G. SURVEY,
LIBRARY AND ARCHIVES
APR 28 1915
Acc. No. _____

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

San Francisco, California,

April 10th, 1915.

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEETS 1 AND 2
YAQUINA BAY AND YAQUINA RIVER, OREGON
AUGUST-NOVEMBER 1914

JOHN W. MAUPIN

Chief of Party.

H. 3727.

The soundings seem to be well spaced and in sufficient number with exception of unfinished areas mentioned in the notes.

Sheet examined in Div.
of Hyd'y & Top'y.

1. Limits: ~~On sheet No. 1, the area sounded over, extends two miles off~~ shore, and up the Bay, on the inside, to Coquille Point. On the outside, this area extends two miles south and three miles north of the entrance to the Bay. The soundings on sheet No. 2 were carried from Coquille Point to the town of Toledo. The soundings were carried very close in to shore along the River.
2. General Remarks: Sheet No. 2 is considered to be complete as far as the soundings go. Sheet No. 1 is not considered complete, as the Party was ordered to close the season's work before same was finished on account of lack of funds. It was intended to do some more work on what is locally called the South Spit, where it is only possible to work under very favorable conditions. As there was no time when further work could be safely donethere, about a half dozen soundings are estimated (on the boat sheet) and are believed to be within a foot of being correct.

There is a reported depth of 4 ft at the place indicated on the Boat Sheet, which is, no doubt, a rock, as the same depth is shown at about the same place on published Chart No. 6057. It was also intended to do some more work on the outside reefs. The depths on these reefs are believed to be the same as shown on the old Chart according to the soundings which were taken and to the local authorities.

3. The Bar; At the time the work was being done, a maximum of 12 ft. could be carried over the Bar at M.L.L.W. The Bar breaks heavily in a moderate S. W. swell. The best time to cross the Bar is, of course, on the flood shortly before high water, as the swells are decreased considerably when running with the current. It is reported, by local authorities, that a four foot and sometimes as much as a five foot change has been known to take place in the depth on the Bar during a blow.

4. Sailing Directions; Owing to the shifting nature of the shoals and bar, and the short distances, no compass courses are given here. It is believed that a local knowledge, or at least some previous local, up to date, information is advisable before attempting to cross the Bar. The Captain of the Life Saving Station (located in old unused L. H. tower at Newport) will usually send out the power boat to pilot strangers across the Bar. When crossing the Bar, the buoys may be followed, and when heading in, it is thought best to head straight between the jetties after leaving black can buoy No. 3, and pass about 150 meters north of the Fairway buoy. By doing this, the swell will be directly from astern and help to lift the vessel over the Bar, and also prevent yawing and breaching to. The old range lights, for entering the Bay, are no longer used, as they would take a vessel over very shoal water. The courses up the Bay and River to Toledo are various, and the buoys and ranges may be followed with the aid of the chart.

5. River Channel and Shoals; A ten foot channel up as far as Toledo is usually

claimed by the local residents of Yaquina Bay, after the recent dredging by the U.S. Engineers. There are several places, however, where the lead showed only nine feet at M.L.L.W. and the channel is evidently filling in, to some slight extent. This is true of the channel on Range No. 1, also about a half mile west of this channel. The most conspicuous shoal in the River, extends from the point near triangulation signal "Spit", out into the middle of the River, and about a half mile downstream. There are many other shoals along the River, and it is quite shallow in most places. In the Bay and along the River the mud flats extend out close to the channel. In the upper part of the River, a number of shoals were formed when the recent dredging was done.

6. Currents: Through lack of time, current observations were only taken during the ebb tide on one day. The range of tide was a little more than half of the maximum on this day, and a current of nearly three knots was found. The current is mostly tidal, but there is some fresh water flow, which causes the current at ebb to be stronger than at flood. The current sets fair with the channel, and responds very closely with the turn of the tides.

7. Miscellaneous: Red spar buoy No. 8 should be on the end of the sand spit about 330 meters south (true) of triangulation signal "Dike"; as it was about 215 meters out of position when located. The following is quoted from a letter dated June 19th, 1914, sent to the Chief of Party by the Lighthouse Inspector at Portland, Oregon...."For your information it is stated that the positions of the Outside Bar Whistling Buoy "Y" and Reef South End Buoy, 1, as shown on the chart of Yaquina Bay are correct, that is to say these are the official positions of these buoys although at the present time neither one may be exactly where it belongs". There was a red spar buoy near Mc Lanes Point, but it was not in position when the buoys were located.

Respectfully submitted,

John W. Mauhin
Chief of Party.

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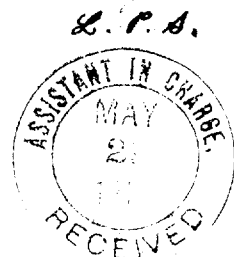
Respectfully submitted,

John W. Maupin,
Chief of Party.

MLS
May 27, 1915.

HYDROGRAPHIC SHEET 3727

Yaquina Bay and River, Oregon, by Assistant J.W.
Maupin in 1914.



ENGRY CONSTRUCTION

TIDES

| | Newport, Oregon |
|---|-----------------|
| Mean lower low water, or plane of reference on staff | 3.1 |
| Lowest tide observed " " | 0.5 |
| Highest " " " " | 13.7 |
| Mean range of tide | 6.1 |

MLS
May 27, 1915.

L. P. S.

HYDROGRAPHIC SHEET 3728

Yaquina Bay and River, Oregon, by Assistant
J. W. Maupin in 1914.



CHART CONSTRUCTION

TIDES

| | Newport | Toledo, Oreg. m. |
|---|---------|------------------|
| Mean lower low water, or plane of reference on staff | 3.1 | 4.9 |
| Lowest tide observed " " | 0.5 | 4.4 |
| Highest " " " " | 13.7 | 15.9 |
| Mean range of tide | 6.1 | 6.1 |

Hydrographic Sheet No. 3727.

Yaquina Bay and River. Oregon.

Positions plotted by field party and taken as correct although verified many verifications were made when necessary to locate position or when it appeared that errors were possible. No errors noted.

Soundings pencil plotted ^{by field party} in office by Asst. French and found correct except on cross lines when in many cases the shallowest soundings were not plotted. The few errors found were corrected.

In places the lines are so closely run that all soundings could not be plotted but it has been endeavored to plot those which would show as far as possible conditions existing. In this connection attention is called to marginal note suggesting that the ground between the jetties be plotted on a larger scale, while such would better show conditions it does not appear advisable.

Attention is also invited to the suggestion of field party that additional work be done on the "South Spit". This appears advisable. The estimated soundings on this spit referred to "from boat sheet" are plotted in pencil.

A general comparison of this sheet and sheet 998 of 1868 + 1888 indicates such changes in this locality that an attempt to combine the soundings of the three sheets appears useless - therefore it has not been attempted.

Soundings plotted in fact

J. D. Loring

Dec 8, 1915

Hydrographic Sheet No. 3728.
Yaquina River. Oregon.

Positions plotted by the field party and have been taken as correct except where necessary to verify to locate position and line. When verified no errors were found.

Soundings plotted in office by Asst. French and found correct except on crossings where in many cases the shallowest sounding was not plotted.

The field work can be considered good and appears to develop the channel and shoals closely.

No trouble was found in the records which can be considered good.

Soundings plotted in feet.

J. D. Torrey
Dec 9. 15