DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
E. LESTER L. JONES, Director

C. & G. SURVEY
L. & A.
APR 8 1929
Acc. No.

State: CALIFORNIA

DESCRIPTIVE REPORT
Topographic
Sheet No. E 4404

LOCALITY
Near Oregon Boundary
SMITH RIVER
Mouth of Smith River
Northern California

1928

CHIEF OF PARTY
E. G. ENGLE, H. G. G. ENGINEER
DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET NO. SCALE 1:10,000
Coast of NORTHERN CALIFORNIA
NEAR OREGON BOUNDARY

LIMITS: This sheet includes the shore line of Northern California near the mouth of the Smith River and South of the Oregon line, between the latitudes, 41° 52.5' and 41° 59.5 North and extending from a half to a mile inland.

GENERAL DESCRIPTION: This stretch of coast-line has a sandy beach except at Pyramid Point. South of the mouth of the Smith River, for a quarter of a mile inland there is a solid stretch of wind blown sand dunes running to the southern limit of the sheet. These dunes are bounded on the East by pines and brush.

At the river mouth there is a series of connected lagoons that are affected by the tides. Some of these are former channels of the Smith River. The river valley is flat and extends inland several miles.

North of the Smith River the land rises from a 20 to 60 foot clay bluff near the shore line. The rise is gradual for the first half mile then more abrupt to an elevation of about 1000 feet. The steep mountain rise is covered with a dense growth of redwoods and pine.

Low Rocks lie about a mile west from the mouth of the Smith River and are bare at all stages of the tide. There are two sunken rocks and one bare rock north and northwest of Cone Rock.

There is a cone shaped hill on Pyramid Point rising to an elevation of 273 feet. Triangulation station Sinestia is located on this hill.

CHANGE OF COAST LINE: There has been little or no change in the shore line on this sheet. The sand beach has moved slightly one way or the other and the clay bluffs north of Pyramid Point have receded slightly. These changes are most likely due to erosion.

The Smith River has changed its channel, now coming into the lagoon farther south and its mouth has moved north about 500 meters. The lagoon has also changed its shape in many ways.

SURVEY METHODS: The triangulation stations, Dune, Sinestia, and Cone Rock were used as control for this sheet.

Twenty four new signals were built and located for hydrography. They were Post, Dot, Hi, Spi, Mess, Ex, Dia, Green, Nail, Suf, Vir, Bun, Spit, Niv, Smith, Moss, Tit, Gel, No, Kik, Nob, Niz, Tres, and Ead.
Signals were first built for hydrography the entire length of the sheet. A number of flags were planted in the interior.

A traverse was run from triangulation station Dune to triangulation station Sinestia. This traverse checked within 5 meters. A traverse was next run from Sinestia to the Northern limits of the sheet and checked by resecting on triangulation station Sonc Rock. This traverse was also connected to the work on the next sheet. When reaching the northern limits of the sheet the traverse was continued back south over the Roosevelt Highway back to Sinestia and checked within the allowable error.

While running the traverse between Dune and Sinestia the flags that were previously planted were cut in and thus located. A traverse was run along the highway from triangulation station Sinestia to the flag north of the highway near the edge of the sheet. The interior along the lagoon and Smith River was detailed by rod readings and short traverses between flags.

The area south of Smith River was contoured by running a second traverse along the tops of the dunes. Elevation were determined using the hypsograph, elevation located by rod readings. Many elevations were also determined north of the Smith River to check the contours traced from the bromide of the 1870 survey. These contours were found to be accurate. Offshore rocks were cut in by three or more cuts.

Magnetic meridian was determined at triangulation station Sinestia on September 17, 1928.

Part of party consisted of one officer, three men—using a White truck.

Work executed by party from Str. Discoverer, Aug. 30 to Sept. 27, 1928, according to instructions dated March 13, 1928.

Magnetic declination scaled 19° 45'
Correction 5.9'

\[
\text{Respectfully submitted,} \\
\text{A. G. Thorson, Jr. H. M. G.B.} \\
\text{Topographer.}
\]

Approved and forwarded,

F. G. Angl
H. & G. Engineer,
Chief of Party.

[Signature]

[Signature] {July 1929}
STATISTICS

Statute miles of shore-line----------------------- 8.63
Statute miles shoreline rivers------------------- 11.50
Statute miles of shoreline ponds----------------- 2.00
Statute miles of creeks------------------------- 0.90
Statute miles of roads-------------------------- 5.46
Statute miles of railroad(abandoned)------------- 3.70
LANDMARKS FOR CHARTS

SUPERINTENDENT, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted:

T. 4404

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>Position</th>
<th>Method of determination</th>
<th>Charts affected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Latitude</td>
<td>Longitude</td>
<td>Datum</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D. M. meters</td>
</tr>
<tr>
<td>Hill on Pyramid Point</td>
<td>41 57</td>
<td>171</td>
<td>124 12</td>
</tr>
</tbody>
</table>

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of each report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are of primary importance.

* The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.
<table>
<thead>
<tr>
<th>Object</th>
<th>Latitude</th>
<th>D.M. Meters</th>
<th>Longitude</th>
<th>D.P. Meters</th>
<th>Height Feet</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post</td>
<td>41 52</td>
<td>1420</td>
<td>124</td>
<td>12</td>
<td>762</td>
<td>10 Post erect and white washed.</td>
</tr>
<tr>
<td>Bot</td>
<td>41 53</td>
<td>324</td>
<td>124</td>
<td>12</td>
<td>642</td>
<td>8 Pile of driftwood white washed</td>
</tr>
<tr>
<td>Hi</td>
<td>41 53</td>
<td>810</td>
<td>124</td>
<td>12</td>
<td>523</td>
<td>32 Pole square banner on sand dune Marked with 3&quot; galv pipe</td>
</tr>
<tr>
<td>Spi</td>
<td>41 53</td>
<td>1128</td>
<td>124</td>
<td>12</td>
<td>520</td>
<td>14 Tripod covered with white cloth</td>
</tr>
<tr>
<td>Moss</td>
<td>41 53</td>
<td>1489</td>
<td>124</td>
<td>12</td>
<td>462</td>
<td>12 Pole and banner</td>
</tr>
<tr>
<td>Ex</td>
<td>41 54</td>
<td>16</td>
<td>124</td>
<td>12</td>
<td>423</td>
<td>18 Pole with cross banner</td>
</tr>
<tr>
<td>Dia</td>
<td>41 54</td>
<td>400</td>
<td>124</td>
<td>12</td>
<td>381</td>
<td>24 Pole with diamond shaped banner</td>
</tr>
<tr>
<td>Green</td>
<td>41 54</td>
<td>798</td>
<td>124</td>
<td>12</td>
<td>321</td>
<td>33 Pole cross banner below high dune</td>
</tr>
<tr>
<td>Nai</td>
<td>41 54</td>
<td>1227</td>
<td>124</td>
<td>12</td>
<td>364</td>
<td>12v Pole with square banner nailed to log</td>
</tr>
<tr>
<td>Suf</td>
<td>41 54</td>
<td>1597</td>
<td>124</td>
<td>12</td>
<td>313</td>
<td>10 Pole with cross banner on beach</td>
</tr>
<tr>
<td>Vir</td>
<td>41 56</td>
<td>217</td>
<td>124</td>
<td>12</td>
<td>204</td>
<td>24 Tripod on dune white covered</td>
</tr>
<tr>
<td>Bum</td>
<td>41 55</td>
<td>733</td>
<td>124</td>
<td>12</td>
<td>238</td>
<td>30 Pole and banner</td>
</tr>
<tr>
<td>Spit</td>
<td>41 55</td>
<td>1300</td>
<td>124</td>
<td>12</td>
<td>231</td>
<td>18 Covered tripod on dune</td>
</tr>
<tr>
<td>Riv</td>
<td>41 55</td>
<td>1844</td>
<td>124</td>
<td>12</td>
<td>207</td>
<td>13 Pole with cross banner</td>
</tr>
<tr>
<td>Smith</td>
<td>41 56</td>
<td>310</td>
<td>124</td>
<td>12</td>
<td>173</td>
<td>10 Pole with square banner</td>
</tr>
<tr>
<td>Moss</td>
<td>41 56</td>
<td>1549</td>
<td>124</td>
<td>12</td>
<td>573</td>
<td>30 White wash on rock</td>
</tr>
</tbody>
</table>
**PLANE TABLE POSITIONS ( Cont. )**

<table>
<thead>
<tr>
<th>Object</th>
<th>Latitude</th>
<th>D.M.</th>
<th>Longitude</th>
<th>D.P.</th>
<th>Height</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tit</td>
<td>41 57</td>
<td>510</td>
<td>124 12</td>
<td>755</td>
<td>40</td>
<td>White wash on face of bluff</td>
</tr>
<tr>
<td>Cel</td>
<td>41 57</td>
<td>1089</td>
<td>124 12</td>
<td>381</td>
<td>70</td>
<td>White wash on face of cliff in from beach.</td>
</tr>
<tr>
<td>No</td>
<td>41 57</td>
<td>1652</td>
<td>124 12</td>
<td>370</td>
<td>43</td>
<td>Pole with sq. ban fastened to bldg.</td>
</tr>
<tr>
<td>Kik</td>
<td>41 58</td>
<td>290</td>
<td>124 12</td>
<td>354</td>
<td>34</td>
<td>Pole and banner</td>
</tr>
<tr>
<td>Nob</td>
<td>41 58</td>
<td>682</td>
<td>124 12</td>
<td>230</td>
<td>40</td>
<td>White wash on rock outcrop.</td>
</tr>
<tr>
<td>Niz</td>
<td>41 58</td>
<td>1265</td>
<td>124 12</td>
<td>298</td>
<td>50</td>
<td>Pole and banner edge of bluff</td>
</tr>
<tr>
<td>Tres</td>
<td>41 59</td>
<td>111</td>
<td>124 12</td>
<td>307</td>
<td>68</td>
<td>Pole and square bannet,</td>
</tr>
<tr>
<td>Med</td>
<td>41 59</td>
<td>792</td>
<td>124 12</td>
<td>612</td>
<td>37</td>
<td>White washed rock</td>
</tr>
</tbody>
</table>

Above MHW
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter: E

REGISTER NO. 4404

State: CALIFORNIA
General locality: NORTHERN CALIFORNIA Near Oregon Boundary
Locality: MOUTH OF SMITH RIVER AND NEAR AUBURN LINE
Scale: 1:10,000 Date of survey: AUG. 30 TO SEPT. 27 1928
Vessel: STR. DISCOVERER
Chief of Party: F. G. ENGLE
Surveyed by: A. C. THORBON
Inked by: A. C. T.
Heights in feet above MNT. to ground: 8700 ELEVATION
Contour interval: 20 feet
Instructions dated: MARCH 13, 1923
Remarks: 

U.S. GOVERNMENT PRINTING OFFICE: 1929.