

4306

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., Director

U. S. COAST AND GEODETIC SURVEY  
L. & A.

Acc. No.

State: Washington

DESCRIPTIVE REPORT

*Topographic* } Sheet No. <sup>B</sup> 4306  
*Hydrographic* }

LOCALITY

Grays Harbor

Copalis Head to Cape Elizabeth

1927

CHIEF OF PARTY

T.J. Maher

GOVERNMENT PRINTING OFFICE

T  
DESCRIPTIVE REPORT  
to accompany

TOPOGRAPHIC SHEET "B" 4306

Coast of Washington  
Copalis Head to Cape Elizabeth

U.S.C. & G.S.S. GUIDE  
1927

Thos. J. Maher  
Chief of Party.

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET "B"

4306

AUTHORITY - Orders to Thos. J. Maher, H & G Engineer, dated March 5, 1927.

LIMITS - This sheet covers the coast of Washington from Copalis Head, latitude  $47^{\circ} 09'$  to Cape Elizabeth, latitude  $47^{\circ} 22'$ .

CONTROL - Control for the survey is furnished by stations located by third order traverse at about two and one-half mile intervals.

METHODS - The ordinary plane table method was used for executing the survey.

The trail indicated north of Taholah was sketched on the sheet after the survey, from notes observed when travelling the trail.

The half mile stretch of road close by the beach, between stations North and Hix, was sketched by similar notes.

Points on the low water line were obtained at practically all places at extreme low water, and this line is well located.

The traverse for the road, north of latitude  $47^{\circ} 18'$ , was run by orienting, by declinoire and reading single distances, between stations South and Dub.

Traverses were all short and closed within the allowable limits. The traverse from station North to station Quinault was run before station Quinault had been computed; this traverse was in error, about 20 meters in azimuth. It was adjusted by swinging in on station Quinault.

The abruptness of the beach does not lend the country favorably to obtaining elevations nor form lines. As many elevations as could be determined without too great delay in the progress of the work were obtained.

GENERAL DESCRIPTION - In general the shore is steep to, with well defined high water line. From Copalis Head to Point Grenville the beach is sand and about 200 meters wide. The stretch from Copalis Head to the Moclips River is generally soft and very treacherous for automobile travel. From a point one mile north of the Moclips River the beach can be travelled at all times except at extreme high water, with safety, as far as Grenville Bay. North of Point Grenville beach travel by automobile is out of the question; the beach is of soft sand and only about 40 meters wide as far as the Quinault River. North of the Quinault River, the shore is extremely rocky and steep to. It is impossible to travel the beach on foot beyond a point one-half mile north of the Quinault River at any time, except at extreme low water. The three points where stations Wing, Pan and Pot are located are similarly impassable. Cape Elizabeth can be passed only with great difficulty, and only when there

is little sea, and at extremely low water. The Indians recognize this, and have constructed a trail leading from Moclips to Queets, to make this stretch passable. North of Cape Elizabeth, the point 400 meters from the Cape, is passable only at extreme low tide. At impassable stages of the tide best use of the time available can be made by travelling the Indian trail from the Quinault River as far as station Taholah, where the beach can first be approached by a precipitous descent. It takes two and one-half hours to travel this trail. From station Wing to station Taholah, the shore is as nearly vertical as a natural formation can be, at an even height of about 200 feet.

The road from Pacific Beach to Moclips is well graded and improved. Beyond Moclips, as far as station Fin, it is passable at all times. North of here the road has just been completed and opened up and is not in good condition. Use can be made of the beach as far as station Ded, and beyond here of the old road, which is passable at all times as far as Taholah. The trip from Pacific Beach to Taholah can be made in 40 minutes.

From Point Grenville north to station Not, the shore is a vertical bluff at an even height of about 110 feet.

In general the country is well wooded. Appropriate legends appear on the sheet.

Cape Elizabeth is readily recognizable from the south. When fairly close to shore, Point Grenville is not so easily recognized. Grenville Arch Rock is not as easily recognized from the south as the two in Grenville Bay, because of their lighter color.

Coast Pilot Notes, furnished by the Commanding Officer of the Ship GUIDE, 1927, give information on the general aspect of the coast from offshore.

**RIVERS, CREEKS AND TOWNS** - Jo Creek is of no industrial importance. During the beach tourist season rowboats frequent its waters in the lower part, which is affected by tide for three-quarters of a mile inland; up to the Aberdeen road. Pacific Beach is connected with Aberdeen by a good graded road, and also by the Southern Pacific Railroad. It is of no commercial importance, but is a favorite beach resort. A large hotel and many cottages furnish accommodations for visitors.

Moclips is a resort similar to Pacific Beach. There are several saw-mills located here.

The Moclips River, like Jo Creek, practically disappears in the sand before it reaches the sea. The river is dammed at Moclips and is used for floating logs.

The Coast Pilot Notes adequately describe Taholah. (see the preceding).

The Quinault River bar can be crossed by boats and launches drawing but a few feet of water. The Indians disport themselves crossing the bar in their canoes, most of which are equipped with

small motors. They also travel by poling their canoes as far as Lake Quinault. Lately, however, the motor truck is used to transport these canoes over the highways, and the descent of the river only is made. Licensed Indian pilots make these trips, carrying tourists from Lake Quinault to Taholah.

The Quinault River is noted for it's salmon fishing, which is the main occupation of the Indians.

NEW PLACE NAMES - Pacific Beach and Sunset Beach. Both are well established local names.

Quinault is also spelled Quinaielt on government signs posted within the reservation.

CHANGE OF COAST LINE - The most noticeable change is at Pacific Beach, where Jo Creek has eroded the bluff on the north to an extent alarming to the inhabitants.

No particular change over the old survey, which does not show much detail, is noticeable at Point Grenville, nor to the north. But the steepness of the bluffs, with indications of continual erosion, shows that the shore is receding. This is particularly true north of the Quinault River, where debris is continually falling.

GENERAL - A list of plane table positions and of landmarks for charts is appended.

Respectfully submitted,

*E. H. Bernstein*  
E. H. Bernstein,  
H & G Engineer,  
USC & G Survey.

APPROVED:

*Thos. J. Maher*

Thos. J. Maher,  
Chief of Party.

*Inspected and found adequate*

*E. H. Bernstein, Nov 8, 1928*

## LIST OF PLANE TABLE POSITIONS SCALED FROM TOPOGRAPHIC SHEET "B".

Page 1.

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OBJECT	DESCRIPTION	LATITUDE	D.M. meters	LONGITUDE	D. P. meters	HEIGHT, feet	REMARKS
PAT	cross boards	47 09	885	124 11	495	15	
MIKE	large tripod	47 09	1705	11	682	12	on dead tree stump below high water line.
LAR	yellow bluff	47 10	699	11	762	50	peak of triangular shaped yellow bluff.
CUT	tripod	47 10	1199	11	872	30	same as station Roosevelt.
SHL	cross boards	47 11	46	11	1016	15	on white dead tree.
HIL	house	11	377	11	990	30	front gable of gray house.
DOG	cross boards	11	950	11	1191	15	on tree.
LO	stump	11	1180	11	1254	20	whitewashed 4' stump, 20' high.
POP	cross boards	11	1616	124 12	86	12	on tree stump below h.w. line.
MOM	cross boards	47 12	75	12	119	12	on tree stump below h.w. line.
SHA	shack	12	371	12	92	10	lone new shack.
HOP	tank	12	865	12	102	30	southernmost water tank at Pacific Beach.
CAN	cross boards	12	1500	12	389	18	an old telegraph pole.
ABE	tree	47 13	495	12	630	30	white washed tree trunk, leans seaward.
BOY	cross boards	13	659	12	677	12	on tree.
PIL		13	858	12	706		pile of white rocks.
GRAT	chimney	13	1570	12	841	50	single chimney on big gray roof.
NEW	house, west gable	47 14	202	12	982	80	Newest and most southern house at Moclips.
RUST	chimney	14	377	12	999		chimney west of McCammon Hotel, Moclips.
CUP	cupola	14	975	12	1196	50	Cupola on Moclips R. R. station.
FIN(a)	big signal	47 15	681	124 13	302		on prominent eroded cliff.
FIN(b)	big signal	15	703	13	303	60	
LOT	house	15	1058	13	473		front gable of southern of two Indian houses.
BO	cross banners	15	1436	13	617	12	on tangent tree.
HAX	shack	47 16	14	13	676	15	small gray lone shack.
BAD	cross boards	16	1049	13	1022	12	on leaning tree trunk.
ZED	cross boards	16	1652	13	1214	15	on tree trunk.
YU	sign board signal	47 17	449	124 14	155	18	large surface signal.
SEE	white wash	17	1310	14	579	12	roof of wrecked house.
MON	rock	17	1657	14	878	30	white washed monument like rock.
DED	tree	47 18	667	124 15	1216	60	tall dead tree in Grenville Bay.
MAD	rock	18	515	15	576		rock, whitewashed, on promontory.
IN	island	18	46	124 16	32	96	top of east island, Grenville Bay.
OUT	island	47 17	1839	16	87	89	top of west island, Grenville Bay.
LON	tree	47 18	327	16	564		end and tall lone tree on Point Grenville.
BIG	rock	18	472	16	972	100	tip of big rock, 150 meters off Pt. Grenville.
YEL	yellow bluff	47 17	92	124 13	1167	110	peak of very prominent yellow bluff at Wreck Creek.
HIX	sign board sig	47 19	114	124 16	1093	100	big surface signal on bluff.
FACE	white wash	19	1110	124 17	146	15	whitewashed blotch on face of bluff.

LIST OF PLANE TABLE POSITIONS SCALED FROM TOPOGRAPHIC SHEET "B".

Page 2.

OBJECT	DESCRIPTION	LATITUDE	D.M. meters	LONGITUDE	D.P. meters	HEIGHT, feet	REMARKS
NOT	signboard sig	47 20	225	124 17	459	100	big surface signal near north edge of bluff.
DUB	cross boards	20	606	17	642		line.
STU	tree stump	20	956	17	800	12	white washed 5' stump, 12' high, below HW
SPIRE	church spire	20	1423	17	894	20	church at Taholah.
PI	pile	20	1711	124 18	171	3	<i>In water 200 mt. off Quinal R. mouth.</i>
STUMP	tree stump	47 21	115	18	235	15	prominent tree stump, on projecting cliff.
WING	whitewash	21	317	18	578	10	on projecting cliff.
PAN	whitewash	21	435	18	873	20	on projecting cliff.
POT	whitewash	21	478	18	1079	30	on projecting cliff.

### LANDMARKS FOR CHARTS

Steamer GUIDE, 508 Custom House, \_\_\_\_\_

San Francisco, Calif., November 21 \_\_\_\_\_, 19 27

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:

Thos. J. Maher  
Chief of Party.

DESCRIPTION.	POSITION.					Method of determination.	Charts affected.	
	Latitude.		Longitude.		Datum.			
	D. M. meters.			D. P. meters.				
<i>Yellow on Info 4 30 6 Charted as (Capt Yellow's Collect)</i> Red bluff	47	10	1591	124 11	930	N A	topog.	6002
Hotel gable	47	12	1117.0	124 12	278.5	N A	triang.	6002
Yellow bluff	47	17	92	124 13	1167	N A	topog	6002
R R station cupola	47	14	975	124 12	1196	N A	topog	6002

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 such 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, flagstaves and like objects are not sufficiently permanent to chart.



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY  
L. & A.  
DEC 80 1927  
Acc. No.

REG. NO.  
4306

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 No. B

REGISTER NO. 4306

State WASHINGTON

General locality Coast of Washington Grays Harbor

Locality Copalis Head to Cape Elizabeth

Scale 1:20,000 Date of survey June-July, 1927.

Vessel Steamer GUIDE

Chief of Party Thos. J. Maher

Surveyed by E. H. Bernstein

Inked by E. H. B.

Heights in feet above H. W. to ground • ~~to tops of trees~~

~~contour, approx. to contour~~, Form line interval 50 feet

Instructions dated March 5, 1927

Remarks: \_\_\_\_\_

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U. S. COAST AND GEODETIC SURVEY

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Register No. B 4306

State WASHINGTON . . . . .

General locality Coast of Washington . . . . .

Locality Copalis Head to Cape Elizabeth . . . . .

Chief of party Thos. J. Maher . . . . .

Surveyed by E. H. Bernstein . . . . .

Date of survey July, 1927 . . . . .

Scale 1:20,000 . . . . .

Heights in feet above high water . . . . .

Contour interval 50 . . feet.

Inked by E. H. B. . . . Lettered by E. H. B. . . . . .

Records accompanying sheet (check those forwarded): Photographs,

Descriptive report, Horizontal angle books, Field computations,

Data from other sources affecting sheet . . . . .

Remarks: