

4289

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

....., Director

U. S. SURVEY
L. & A.

DEC 15 1927

State: Florida

A. C. No.

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. ² 4289

LOCALITY

San Carlos Bay

W. Shore of Estero Island

1927

CHIEF OF PARTY

R. P. Eyman

GOVERNMENT PRINTING OFFICE

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4289

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4289

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. 2

REGISTER NO. 4289

State Florida

General locality ~~West Coast~~ San Carlos Bay

Locality Western Shore of Estero Island

Scale 1:10,000 Date of survey July 11 - 12 - 13, 1927

Vessel Str. HYDROGRAPHER

Chief of Party Raymond P. Egan

Surveyed by Ector B. Latham

Inked by Ector B. Latham

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated October 21, 1926

Remarks:

SUPPLEMENTAL DESCRIPTIVE REPORT

To Accompany
Topographic Sheet No. 4289.

A survey was made on sheet 4289, on Feb. 11, 1928, of the shore line from ^{W.D.} Bouchitch Point along the N. E. shore of Estero Island to the bridge, and the road across the island located.

The Topographer admits some culpability in failing to accurately locate the road across the island on the original survey. ✓

The sheet as originally sent in did not show any shore line from the beginning of the mangroves on the N.E. shore S.-Eastward. This was apparent from the appearance of the sheet. The original survey gave an overlap of shore line of 1400 meters common to this sheet and sheet #4288.

As Estero Pass is used only by small fishing and pleasure craft, this portion of the shore is not, in the opinion of the Topographer, so important as to warrant survey on two sheets.

A comparison was made between the newly located shore line and the tracing sent and the two found to check satisfactorily.

The shore line as originally surveyed checks the tracing as closely as can be expected, when it is considered that the beach has a very gradual slope and the high water line is not clearly defined.

Comparison with photographs is unsatisfactory because of difficulty in identifying the high water line on the photographs.

Respectfully Submitted,

Ector B. Latham
Ector B. Latham, Jr. H. & G. E.

Respectfully Forwarded:

Raymond P. Eymann
Raymond P. Eymann, H. & G. E.
Chief of Party.

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEET NO. 2

WEST SHORE OF ESTERO ISLAND, FLA.

DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET NO. 2
WEST SHORE OF ESTERO ISLAND, FLA.
STEAMER HYDROGRAPHER
RAYMOND P. EYMAN
COMMANDING
1927

DESCRIPTIVE REPORT TO

ACCOMPANY

TOPOGRAPHIC SHEET NO. 2

WEST SHORE OF ESTERO ISLAND, FLA.

AUTHORITY

Work done in accordance with Instructions dated October 21, 1926 to the Commanding Officer, Steamer HYDROGRAPHER.

LIMITS

Sheet comprises the Western shore of Estero Island together with the offlying islands and sand bars to the southward of Big Carlos Pass.

Geographic limits;

Lat. 26 - 27 N. Lo. 81 - 59.3 W to Lat. 26 - 30 N. Lo. 81 - 56.2 W to Lat. 26 - 25 N. Lo. 81 - 50.6 W. to Lat. 26 - 22 N. Lo. 81 - 53.8 W.

SCALE

1:10,000

DATE

Field work was done July 11 - 12 and 13, 1927.

GENERAL DESCRIPTION

The general trend of the shoreline is from S.E. to N.W. Southeastward of Estero Island the shore consists of mangrove swamp with outlying sand bars, low, and sparsely vegetated. They have an elevation of from 1 to 3 feet above high water they have the appearance of constantly shifting and changing.

The westernmost of these islands, on which is located signal PUG has an elevation of three feet, and is fairly well covered with high tropical grass with a small patch of mangrove in the center. This island seems to be permanent, altho the shore appears subject to change.

The main portion of the sheet consists of the western shore of Estero Island, known as Crescent Beach. The shore is gently curving, and the general trend is from S.E. to N.W. The island is covered with high tropical grass to within 50 to 60 meters of the high water line. The beach slopes fairly sharply from the water, attaining an elevation of 5 to 6 feet at the vegetation line.

Inside the vegetation line the land is flat.

Numerous palms and palmettoes grow a short distance inside the high water line, and a few pine trees, with dead trunks standing are located along the shore. From the center of the beach, northward, there are numerous houses scattered along the beach. There is a red water tank two thirds of the distance from the southern end of the island.

LANDMARKS

The only landmark of value to a navigator is a red water tank located two thirds of the distance from the southern end of the island. This is prominent, and can be seen, under favorable conditions about five miles offshore.

This is the only landmark of any value to the navigator, the channel into San Carlos Bay passes about $2\frac{1}{2}$ miles (Stat.) offshore, being marked by range lights located near Punta Rasa.

CHANGES

The shoreline shows considerable change since the old surveys, 1858 - 1893.

The greatest change has occurred at the northern and southern ends of the island. Bowditch Point, comprising the northern end of the island, has been built up for a distance of 405 meters to the northwestward, and the point has been sharpened. Along the southern shore the beach has eroded away, the present shoreline being approximately 140 meters inside of the old shoreline. Along the southern end of the western shore the beach has eroded until the present shoreline is approximately 140 meters inside of the old. These conditions obtain from the point for a distance of 900 meters northward. From this point, the two shorelines (old and new) converge, coming together in a distance of 350 meters. From this point the old and new shorelines approximately coincide, running along together about half way up the island or to a point on the shore just off the crazy house. From that point on, the present shoreline is approximately 40 meters outside of the old.

The shoreline, consisting of sand beach, is subject to change, but no predictions can be made as to the probable amount or direction of such change, as the greatest change occurs during storms, and the nature and severity of such storms may vary within large limits.

DANGERS

There are extensive sand bars and shoals in the vicinity of Big Carlos Pass, and much shoal water in that vicinity. The bars have the appearance of constantly changing, and, as the channel into the pass is tortuous, and the tidal currents attain considerable velocity (current velocity estimated at 2 to 3 knots, ebb tide) it is recommended that this

channel be not attempted except with local knowledge.

SURVEY METHODS

Traverse from Signal Bowditch Point to Signal BOOB was run by chain along the beach with a sounding wire chain, the azimuth being carried on the plane table and chained distances layed off on the sheet.

This method gave good results, an especial advantage being that the distances (being multiples of 50 meters) could be re-layed on the sheet after coming in from the field, and errors due to temporary distortion in the field largely minimized.

An error was found in running from Bowditch Point to Signal Red and this portion of the traverse rerun. The error was found to be due to a mistake in holding the chain.

Traverse from ^ABowditch Point northwestward and from Signal BOOB southeastward was carried by rod reading due to the fact that short shots, and intervening water made chaining impracticable. All detail was rodded in.

Considerable difficulty was encountered due to the poor condition of plane table head No. 162, the bent spindle causing the head to work loose and the difficulty of turning the table caused a stripping of the threads on the clamp screw.

A new plane table head has been requisitioned from the office to replace this head.

The presence of swarms of mosquitos, especially along the southern shore of the island, harassed the topographer considerably, and the daily wind and rain squalls caused considerable delay in the work.

The organization of the party was as follows;

Topographer.

Umbrella man.

Rodman and rear chairman.

Forward chairman.

Coxswain.

The coxswain followed along the beach in the launch and acted as skiffman when needed.

GENERAL REMARK

The mangrove swamp along the eastern shore of Bowditch Point was sketched to show it's appearance from the plane table set up's. The eastern shoreline was surveyed on sheet No. 3 and is as shown thereon.

Respectfully submitted.

Ector B. Latham

Ector B. Latham,

Jr. H. & G. E.

C. & G. Survey.

Inspected and found adequate.

E. P. Lee

Mar. 12, 1928

NAME	LAT.	LONG.	REMARKS
End	26 - 23 - 611 m. (1236) (673)	81 - 52 - 1258 (405) (650)	Tripod Signal
Ho	26 - 23 - 1174 (297)	81 - 52 - 1013 (653)	House on stilts - West Gable
Got	26 - 23 - 1549 (18)	81 - 52 - 1007 (605)	Flag on Mangrove tree
Zig	26 - 23 - 1828 (1722)	81 - 52 - 1058 (576)	Flag on Mangrove tree
Pip	26 - 24 - 124 (1529)	81 - 52 - 1087 (1441)	Flag on Mangrove tree
Eat	26 - 24 - 317 (1530)	81 - 53 - 222 (1176)	Flag on whitewashed stump
Met	26 - 24 - 316 (1502)	81 - 53 - 487 (636)	Whitewashed trunk, Palmetto Palm
Sou	26 - 24 - 344 (1150)	81 - 53 - 1027 (252)	Flag on stick
Tree	26 - 24 - 696 (225)	81 - 53 - 1411 (1460)	Palmetto Palm, Flag on trunk
Palm	26 - 24 - 1621 (1282)	81 - 54 - 203 (1023)	Large bushy palm, flag on trunk
How	26 - 25 - 564 (908)	81 - 54 - 640 (710)	Tripod Signal
Flag	26 - 25 - 938 (449)	81 - 54 - 953 (369)	Flag on stick
Jo	26 - 25 - 1397 (300)	81 - 54 - 1294 (161)	House near large pine tree
Shak	26 - 25 - 1546 (1569)	81 - 54 - 1502 (1150)	Small shack covered with canvas
Ad	26 - 26 - 277 (1038)	81 - 55 - 512 (413)	Advertising billboard.
Sig	26 - 26 - 806 (822)	81 - 55 - 1250 (103)	Site for tripod signal
White	26 - 26 - 1024 (648)	81 - 55 - 1560 (1610)	Chimney of Prominent white Ho.
Win	26 - 26 - 1198 (263)	81 - 56 - 52 (672)	Windmill
High	26 - 26 - 1583 (194)	81 - 56 - 990 (501)	House on stilts.
Sign	26 - 26 - 1652 (41)	81 - 56 - 1161 (169)	Sign board
Yel	26 - 26 - 1805 (1746)	81 - 56 - 1493 (1369)	Yellow house
Bath	26 - 27 - 100 (712)	81 - 57 - 293 (189)	S.W. Gable of Bath House
Spit	26 - 27 - 1134	81 - 57 - 1473	Shack