

# 2366 a

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Diag. Chart No. 77-1

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

Superintendent.

State: *Maryland*

DESCRIPTIVE REPORT.

*Hyd<sup>c</sup>* Sheet No. *2366a*

LOCALITY:

*Elk River*

190

CHIEF OF PARTY:

*J. B. Bantell*

2366 a

U.S. COAST AND GEOD. SURV.  
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Chart

# Hydrographic Sheet No. 2366

New survey of Elk River Md. with a view of developing the "Inside Water Way" along the Atlantic coast - via the Chesapeake + Delaware Canal.

The shores of the river are nearly all occupied as farming lands. Traffic on the river is composed of the steamers, tugs, barges etc. passing through the Canal and small craft engaged in the coasting trade.

J. D. Bontelle  
Act. Insp. Coast.

The data on this survey <sup>map</sup> has been rejected in the area surveyed. See H 2366 a also descriptive report for 2367 a.

L. O. Polub.

Nov. 10 1933

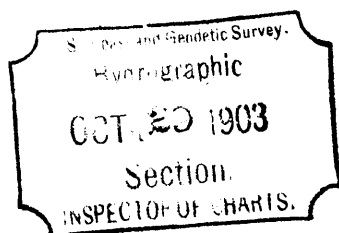
Chief Sect. Field Records.

REPORT  
on  
HYDROGRAPHIC SHEET NO. 2366a.

Elk River,  
Entrance to Fords Landing,  
Md.  
Assistant Flower.  
1903.

Field work is good, lines cross well, but show less water at Entrance to river than is shown by adjoining sheets Nos. 2393 and 2512. Soundings were transferred to this sheet from Sheets 2393 and 2512 and curves drawn by combining the three surveys, giving preference to soundings on this sheet No. 2366a.

F. C. Donn. (Signed).



To Accompany Hydrographic Sheet No.

EXAMINATION OF ELK RIVER, MD.

from the Mouth to Ford's Landing.

2366

U. S. G. S.	U. S. G. S.
MARYLAND	DELVES
OCT 30 1902	
Acc. No.	

Baltimore, Md., October 27, 1902.

Mr. O. H. Tittmann,  
Superintendent U. S. C. & G. Survey,  
Washington, D. C.

Sir:-

As the work on this sheet is an examination to determine the cause of the discrepancy in the hydrographic work developed in this locality as shown on hydrographic sheets Nos. 2393, 2366 and 2512, the sounding lines were not run close enough together to furnish the development necessary for a close determination of the curves.

In executing this work, your instructions of Sept. 8, 1902, were followed as closely as possible. The plane of reference reading on Keybold's Wharf Tide Gauge, used in the reductions of the soundings, was furnished by the Office. Great care was taken in referring the gauge to the bench marks and I personally attended to the leadline measurements. The leadline was measured at the beginning and close of each days work.

The weather for this work was selected and the work discontinued when the sea became choppy or rough. The lines of soundings were made to coincide as closely as possible with lines run on sheet # 2366 so as to give the greatest possible number of coincident soundings.

As the Schooner Matchless is now undergoing repairs by the

Spedden Shipbuilding Company I find that I have no room to erect a drawing table on board so as not to interfere with the workmen making the repairs and so cannot make a report on a careful comparison of the different surveys.

I find however that my work gives less water than that shown by any of the previous surveys. It agrees more closely with the examination by Assist. Young at the mouth, shown on Hydg. Sheet No. 2512, than with the others. A comparison with this sheet shows that out of 103 soundings taken in the same place or in nearly the same place 42 give the same depth, 21 give  $1/4$  of a foot less, 14 give  $1/2$  ft. less, 12 give  $3/4$  ft. less, 2 give 1 ft. less, 7 give  $1/4$  ft. more, 4 give  $1/2$  ft. more and 1 gives  $3/4$  ft. more water, or the average of depths shows about .17 ft. less water than on sheet #2512.

In comparing with sheet # <sup>3</sup>2466 the differences seem to vary with the different depths and a more careful comparison than I can make while the Schooner is under repairs, should be made to determine the average differences for the different depths of water shown on the two sheets. As the depths more nearly coincide in the shoal water than in the deeper water, the differences cannot be attributed to an error in referring the tide gauge to its bench marks nor to erroneous tide readings. It is my opinion that the differences are due to an incorrect leadline.

Respectfully submitted,

*Geo. L. Flower*

Asst. U.S.C. & G. Survey,

Commanding.

Communications should be forwarded  
under cover to the Superintendent U. S.  
Coast and Geodetic Survey, Washington, D. C.

Treasury Department

*Mr. Braid*  
*New York*

Office of the Coast and Geodetic Survey

Washington, D. C.

January 6, 1900.

Mr. Andrew Braid,

Assistant in charge of the Office.

Sir:

I transmit herewith original hydrographic sheet No. 2366, "Elk River, Chesapeake Bay to Fords Landing, Maryland", which is now ready for the approval of the Office.

Respectfully yours,

*Wm. Woodriff*

Assistant and Chief Drawing and Engraving Division.

*Elk River*

*This is ready for approval*

*to the [unclear] [unclear]*

*W. Woodriff*

*120*

## Elk River Md.

In joining Hyd. of Elk River Sheets No 2366 by Boutelle 1898. No 2393 by Mannin 1898 and 2412 by Young in 1901. It was found that Young's soundings give less than the other two, therefore the curves were drawn to agree with his soundings where they cross with the other two. The next preference is given to Mannin's soundings, as they show a less depth than Boutelle's.

On sheet 2366 Young's soundings are shown in green figures and Mannin's in red figures so that a comparison can be made. In reducing for charts the Green soundings should be given <sup>the</sup> preference.

In 149 cases where the location of the Boutelle & Young soundings coincide, or nearly so, it will be found that Young's soundings show a less depth by an average of 1.9 ft. The least difference being  $\frac{1}{4}$  ft in  $(13\frac{1}{2})$  ft and the greatest difference being  $3\frac{1}{4}$  ft in  $(16\frac{3}{4})$  ft. Therefore it would seem that for some cause not known, Boutelle's soundings throughout his entire

work gives a depth of 19 ft too much water.  
If this should prove true, then 2 ft should be  
taken from all soundings on Boutelle's two  
sheets of Elk River & Back Creek.

But as the area covered by Young was  
very small and as he differs from both  
Marinden and Boutelle, it seems necessary  
that a more extensive examination should  
be made probably by a series of lines  
covering the ground of both of Boutelle's  
sheets, running from shore to shore  
of the river so as to take in all depths.