

AUTHORITIES.

This Map was reduced from Surveys made as follows:

Under the direction of the
MISSOURI RIVER COMMISSION,

Secondary Triangulation: From St. Louis to Sioux City and from Bismarck to Fort Benton, by Asst. Engr. O.B. Wheeler; and from Sioux City to Bismarck and from Fort Benton to Three Forks, by Asst. Engr. G.A. Marr.
Precise Levels: From St. Louis to St. Joseph, by Asst. Engr. O.W. Ferguson; and from St. Joseph to Sioux City, by Asst. Engr. J.A. Paige.
Topography and Hydrography: From the mouth to Sioux City, shore line and topography near shore in 1890 by Divn. Engrs. S.H. Yonge, S.W. Fox, and C.F. Potter; from Wolf Point to Fort Benton in 1889-'90 by 1st Lieutenant H.M. Chittenden, Corps of Engrs.; from Fort Benton to Sun River and from Stubbs Ferry to Three Forks, and a revision of the survey of 1880 from Sun River to Stubbs Ferry, in 1890 by Asst. Engr. G.A. Marr.

Under the direction of

Major C.R. SUTER, Corps of Engrs.,

Topography: From the mouth to Sioux City, the topography back from the shore and along the bluffs from the survey of 1878-'79 (adjusted to the survey of 1890) by Asst. Engr. D.W. Wellman.

Under the direction of

Captains C.F. POWELL and H.F. HODGES, Corps of Engrs.,

Topography and Hydrography: From Sioux City to Wolf Point, in 1891-'93 by Asst. Engr. F.M. Towar.

Under the direction of

1st Lieut. E. MAGUIRE, Corps of Engrs.,

Topography and Hydrography: From Sun River to Stubbs Ferry, in 1880 (adjusted to survey of 1890) by Asst. Engr. H.E. Stevens.

Under the direction of the

MISSISSIPPI RIVER COMMISSION,

Topography and Hydrography: That part of the Mississippi River shown on sheet No. 1, in 1889-'90 by Asst. Engrs. C.M. Winchell and F.B. Maltby.

NOTE.

The parallels and meridians depend upon the latitude and longitude of Morrison Observatory at Glasgow, Mo., as published in 1885.

Tables of the geodetic positions and descriptions of triangulation points (shown thus -▲-) and of the elevations and descriptions of bench marks (shown thus -●-) are published in the annual reports of the Chief of Engineers, U.S.A., as follows:

Secondary Triangulation, St. Louis to Ft. Leavenworth, 1887, page 3043.
" " *Fort Leavenworth to Three Forks, 1891, page 3763.*
Precise Levels, St. Louis to Sioux City, 1893, pages 3964 and 4138.
Ordinary " Sioux City to Fort Benton, 1894, page 1757.
" " *Fort Benton to Three Forks, 1891, page 3751.*

MAP OF THE MISSOURI RIVER

From its mouth to Three Forks, Montana,

IN EIGHTY-FOUR SHEETS

Scale, one inch to one mile [63,360]

AND

NINE INDEX SHEETS

Scale, one inch to eight miles [506,880]

Published in 1892-1895

By the

MISSOURI RIVER COMMISSION

Created by Act of Congress July 5, 1884.

COMMISSIONERS:

A. MACKENZIE, LT. COL. OF ENGRS., U.S.A., TO JULY 11, 1895.	C. R. SUTER, COL. OF ENGRS., U.S.A., PRESIDENT.	O. H. ERNST, MAJ. OF ENGRS., U.S.A., TO JAN. 8, 1894.
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C. J. ALLEN, MAJ. OF ENGRS., U.S.A., FROM JAN. 30, 1894.	W. R. KING, LT. COL. OF ENGRS., U.S.A., FROM JULY 11, 1895.	

SECRETARIES IN CHARGE OF SURVEYS:

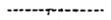
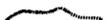
W. L. FISK, 1 st LIEUT. OF ENGRS., U.S.A., TO AUG. 29, 1885.	T. A. BINGHAM, CAPT. OF ENGRS., U.S.A., FROM AUG. 29, 1885, TO JAN. 9, 1890.
J. C. SANFORD, CAPT. OF ENGRS., U.S.A., MARCH 31, 1890, TO JUNE 9, 1894, & FR. SEPT. 27, 1894.	J. F. M'INDOE, A. D. 2 nd LIEUT. OF ENGRS., U.S.A., FROM JUNE 20 TO SEPT. 27, 1894.

The Topographical and Hydrographical surveys were made as follows:

LOCALITY	DATE OF SURVEY	NO. OF SHEETS
THREE FORKS TO FORT BENTON:		
Three Forks to Stubbs Ferry	July to Sept., 1890.	83-81
Stubbs Ferry to Sun River	April & May, 1880.	81-77
Sun River to Fort Benton	Nov. & Dec., 1890.	77-76
FORT BENTON TO SIOUX CITY:		
Fort Benton to Coal Banks	May to Sept., 1889.	75-74
Coal Banks to Wolf Point	June to Oct., 1890.	74-63
Wolf Point to Grinnella Ldg.	June to Oct., 1891.	63-67
Grinnella Ldg. to Cannon Ball River	June to Nov., 1891.	67-48
Cannon Ball River to 20 miles above Chamberlain	Sept. to Nov., 1892.	48-38
20 miles above Chamberlain to Chamberlain	July, 1893	37
Chamberlain to Big Sioux River	Sept. to Nov., 1892.	37-28
BIG SIOUX RIVER TO MOUTH: <i>(Shore line and Topography near shore)</i>		
Big Sioux River to Florence	Oct. & Nov., 1890.	27-23
Florence to Omaha	Dec., 1888, & Jan., 1890.	23
Omaha to Jones Point	Nov., 1890.	23-22
Jones Point to St. Joseph	Oct. to Dec., 1891.	22-18
St. Joseph to Beverly Junction	Nov., 1890.	17-15
Beverly Junction to Kaw Bend	Dec., 1890, & Jan., 1891.	15-14
Kaw Bend to Randolph	Oct. & Nov., 1889.	14
Randolph to Wellington	June, 1890.	14-13
Wellington to 3 miles above Boonville	Oct. to Dec., 1890.	13-9
3 miles above Boonville to Franklin Island	June, 1890.	9-8
Franklin Island to Osage River	Oct. to Dec., 1890.	8-6
Osage River to Klusmeyers Ldg.	Nov., 1890.	6-4
Klusmeyers Ldg. to Patton's Point	June, 1890.	4
Patton's Point to mouth	Nov. & Dec., 1890.	4-1
<i>(Topography back from shore)</i>		
Big Sioux River to Weston	1878.	27-16
Weston to Boonville	Sept. to Dec., 1878.	16-9
Boonville to mouth	Apr. & May, 1878.	9-1
Under the MISSISSIPPI RIVER COMMISSION:		
Mississippi River above Alton	Aug., 1890.	1
" " below "	Nov. & Dec., 1889.	1

The stage of water is shown on each sheet in tenths of the interval between standard low and standard high water.

CONVENTIONAL SIGNS.

Triangulation Station (secondary) ▲	Bench Mark	
Saw Mill ★	Church	
Cemetery 	Section Corner	
Road 	Railway	
Fence 	County & Resn. Line	
Levee 	State Line	
Bench 	Dike	
Orchard 	Cultivated	
Forest (deciduous) 	Sand Bar	
Forest (evergreen) 	Grass	
Bushes 	Lake & Marsh	
Willows 	Bluffs	