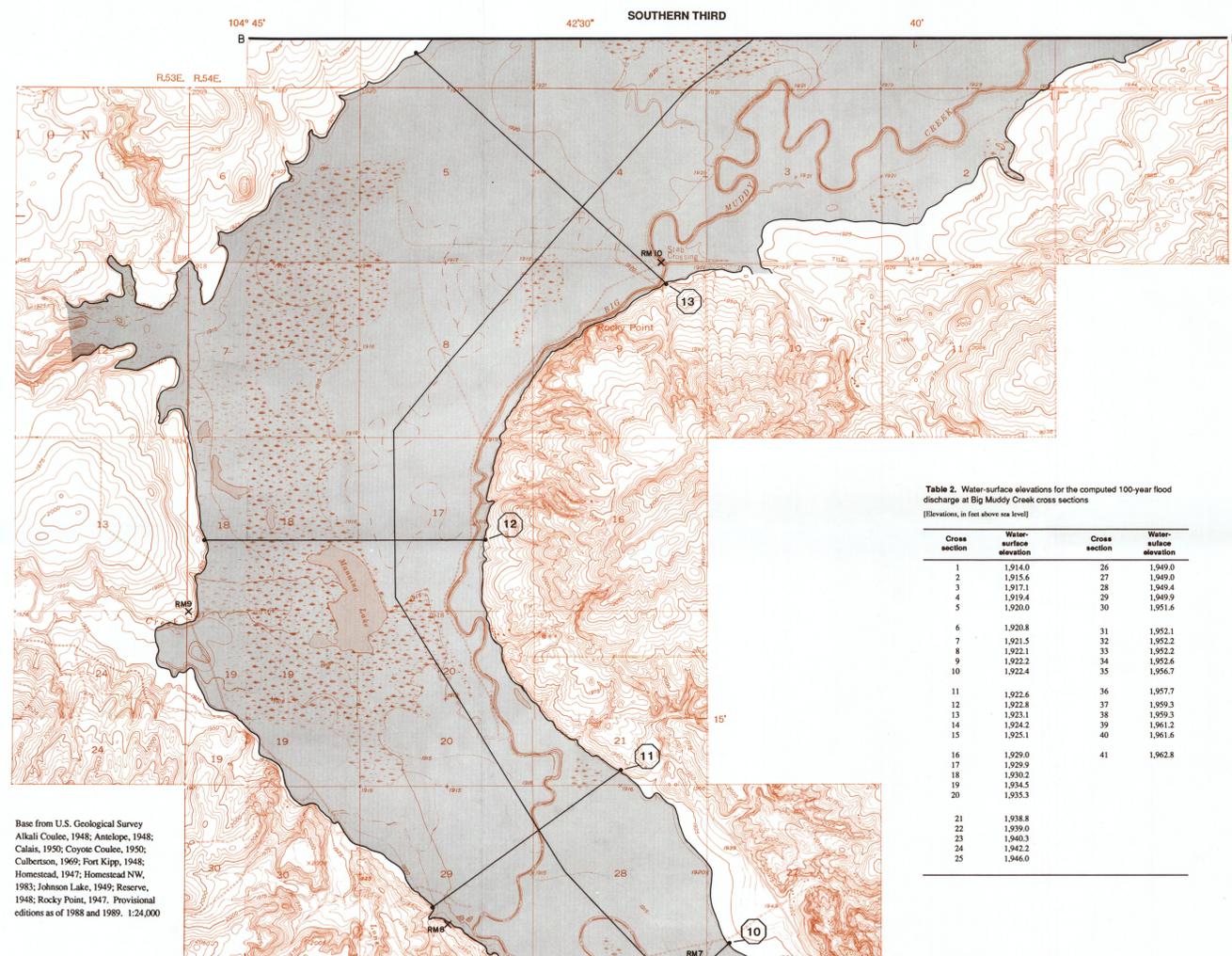


Copyright, U.S. Geological Survey, 1996. Water surface profile and flood boundaries for the computed 100-year flood, Big Muddy Creek, Fort Peck Indian Reservation and adjacent area, Montana.



Base from U.S. Geological Survey
Alkali Coulee, 1948; Ameliepe, 1948;
Catalis, 1950; Coyote Coulee, 1950;
Culbertson, 1969; Fort Kipp, 1948;
Homestead, 1947; Homestead NW,
1983; Johnson Lake, 1949; Reserve,
1948; Rocky Point, 1947. Provisional
editions as of 1988 and 1989. 1:24,000

Table 3. Elevation reference marks along Big Muddy Creek
(Abbreviations: ft, foot; in, inch; mi, mile)

Reference mark	Elevation (feet above sea level)	Description of location
RM1	1,920.10	A standard U.S. Coast and Geodetic Survey bench mark disk, stamped "T 543 1980" and set in the south end of the west bridge abutment, on bridge crossing Big Muddy Creek, is located along U.S. Highway 2, 15.4 ft south of the centerline of the highway, 0.5 ft west of the west end of the bridge, 2.0 mi upstream from mouth of Big Muddy Creek.
RM2	1,923.52	A standard U.S. Geological Survey aluminum disk, stamped "11-S-1946" and set in concrete post projecting 0.3 ft above ground, is located 1,300 ft north of U.S. Highway 2, 20 ft east of gravel road, 2.2 mi upstream from mouth of Big Muddy Creek.
RM3	1,945.00	Top of brass cap, stamped "S18, 19, 1908" and set in top of iron section post projecting 0.6 ft above ground, is located along Big Muddy Creek, on right bank, 3.5 mi upstream from mouth of Big Muddy Creek.
RM4	1,946.60	Top of brass cap, stamped "1947, T28NR55E" and set in top of iron section post projecting 0.4 ft above ground, is located along Big Muddy Creek Road, at corner of secs. 5, 6, 7, and 8, 165 ft east of centerline of gravel road, 4.9 mi upstream from mouth of Big Muddy Creek.
RM5	1,914.84	Top of brass cap, stamped "1946, T28NR54E/R5SE, U.S. Land Office" and set in top of iron section post projecting 0.9 ft above ground, is located along Big Muddy Creek, at corner of secs. 1, 6, 7, and 12, on right bank, 5.3 mi upstream from mouth of Big Muddy Creek.
RM6	1,915.73	Top of 2-in. by 3-in. by 0.5-in. angle iron painted orange, on left upstream bridge abutment, is located on county bridge crossing Big Muddy Creek, 4.5 mi upstream from mouth of Big Muddy Creek.
RM7	1,918.26	Top of brass cap, stamped "1950, T28NR54E, U.S. BLM" and set in top of iron section post projecting 0.3 ft above ground, is located along Big Muddy Creek, at corner of secs. 27, 28, 33, and 34, on left bank, 7.4 mi upstream from mouth of Big Muddy Creek.
RM8	1,917.59	Top of brass cap, stamped "Indian Allotment 356 357" and set in top of iron section post projecting 0.4 ft above ground, is located along Big Muddy Creek, on right bank, 8.5 mi upstream from mouth of Big Muddy Creek.
RM9	1,926.79	A standard U.S. Geological Survey aluminum disk, stamped "11-S-1946" and set in concrete post projecting 0.7 ft above ground, is located at corner of secs. 13, 18, 19, and 24, 1.0 ft north of Government Loan Office section corner marker, on right bank, 10.1 mi upstream from mouth of Big Muddy Creek.
RM10	1,920.06	Top of brass cap, stamped "S4 S9 M.C." and set in top of iron section post projecting 0.9 ft above ground, is located along Big Muddy Creek, on right bank at slab crossing, 12.8 mi upstream from mouth of Big Muddy Creek.
RM11	1,926.02	A standard U.S. Geological Survey aluminum disk, stamped "20-S-1946" and set in concrete post projecting 0.6 ft above ground, is located 300 ft west of line between secs. 25 and 30, 12 ft south of south bank of Big Muddy Creek, 17.1 mi upstream from mouth of Big Muddy Creek.
RM12	1,927.70	Top of chiseled square, stamped "1936.7," on old bridge abutment, at old bridge crossing over Big Muddy Creek, is located near corner of secs. 16, 17, 20, and 21, on left upstream abutment, 19.7 mi upstream from mouth of Big Muddy Creek.
RM13	1,927.87	Upstream crown of 8-ft corrugated metal culvert, is located at crossing along Irish Coulee, at culvert on Secondary Highway 344, 8.1 mi west of State Highway 16, 3.6 mi west of main channel of Big Muddy Creek, 18.4 mi upstream from mouth of Big Muddy Creek.
RM14	1,928.39	Top of brass cap, stamped "Indian Allotment 207" and set in top of iron section post projecting 0.1 ft above ground, is located near line between T30N and T31N, by canal bank, 22.0 mi upstream from mouth of Big Muddy Creek.
RM15	1,940.82	A standard U.S. Coast and Geodetic Survey bench mark disk, stamped "H 269 RESET 1957" and set in top of concrete post projecting 0.6 ft above ground, is located at a bridge crossing Big Muddy Creek, 13 ft north of the centerline of the road, 0.8 ft above the roadway slab, on Secondary Highway 350, 1.0 mi west of Homestead, 24.5 mi upstream from mouth of Big Muddy Creek.
RM16	1,939.49	A standard U.S. Coast and Geodetic Survey bench mark disk, stamped "Y64 1934" and set in top of concrete post projecting 0.6 ft above ground, is located 2.0 mi north along the Burlington Northern Railway from Homestead, 94 ft north of milepost 28, 41 ft east of the centerline of the track, 4.0 ft west of the right-of-way fence, 26.8 mi upstream from mouth of Big Muddy Creek.
RM17	1,936.34	A standard U.S. Coast and Geodetic Survey bench mark disk, stamped "264 1934" and set in top of concrete post projecting 0.8 ft above ground, is located 2.0 mi south along the Burlington Northern Railway from Medicine Lake, 39 ft north of milepost 30, 43 ft east of the centerline of the track, 4.0 ft west of the right-of-way fence, 29.1 mi upstream from mouth of Big Muddy Creek.
RM18	1,950.29	A disk, stamped "1935 (BM1) 1937.59" and set in concrete gate wall by Medicine Lake diversion ditch, 4.8 ft above ground, is located 2.0 mi west of Medicine Lake, on left bank, 31.0 mi upstream from mouth of Big Muddy Creek.
RM19	1,941.77	A standard U.S. Coast and Geodetic Survey bench mark disk, stamped "B90 1934" and set in top of concrete post projecting 0.4 ft above ground, is located 2.0 mi north along the Burlington Northern Railway from Medicine Lake, opposite milepost 34, 44 ft west of the centerline of the track, 5.0 ft east of the right-of-way fence, 33.6 mi upstream from mouth of Big Muddy Creek.
RM20	1,949.35	A standard U.S. Coast and Geodetic Survey bench mark disk, stamped "E90 1934" and set in top of concrete post projecting 0.8 ft above ground, is located 0.2 mi north of the Burlington Northern Railway station at Reserve, 20 ft north of milepost 40, 91 ft west of the centerline of the track, 11 ft east of the right-of-way fence, 39.7 mi upstream from mouth of Big Muddy Creek.
RM21	1,955.00	Top of brass cap, stamped "SEC 26-25 M.C." and set in top of iron section post projecting 1.0 ft above ground, is located along Big Muddy Creek, at corner of secs. 25, 26, 35, and 36, on right bank, 900 ft east of Burlington Northern Railway bridge, 37.1 mi upstream from mouth of Big Muddy Creek.
RM22	1,966.12	Top of steel "U" channel post on right end of downstream side of bridge, 1.5 ft above ground, on bridge crossing Big Muddy Creek, is located on Secondary Highway 258 at Reserve, 39.4 mi upstream from mouth of Big Muddy Creek.
RM23	1,959.81	A standard U.S. Coast and Geodetic Survey bench mark disk, stamped "E90 1934" and set in top of concrete post projecting 0.8 ft above ground, is located 0.2 mi north of the Burlington Northern Railway station at Reserve, 20 ft north of milepost 40, 91 ft west of the centerline of the track, 11 ft east of the right-of-way fence, 39.7 mi upstream from mouth of Big Muddy Creek.
RM24	1,970.32	A standard U.S. Geological Survey aluminum disk, stamped "TT 37 C 1946" and set in concrete post projecting 0.2 ft above ground, is located 2.0 mi north of Reserve, along State Highway 16, in NE quarter of section 7, 41.2 mi upstream from mouth of Big Muddy Creek.
RM25	1,966.66	Top of concrete highway right-of-way post, stamped "540" projecting 2.5 ft above ground, west of highway, is located 2.1 mi north of Reserve, along State Highway 16, 41.3 mi upstream from mouth of Big Muddy Creek.

Table 2. Water-surface elevations for the computed 100-year flood discharge at Big Muddy Creek cross sections
(Elevations, in feet above sea level)

Cross section	Water-surface elevation	Cross section	Water-surface elevation
1	1,914.0	26	1,949.0
2	1,915.6	27	1,949.0
3	1,917.1	28	1,949.4
4	1,919.4	29	1,949.9
5	1,920.0	30	1,951.6
6	1,920.8	31	1,952.1
7	1,921.5	32	1,952.2
8	1,922.1	33	1,952.2
9	1,922.2	34	1,952.6
10	1,922.4	35	1,956.7
11	1,922.6	36	1,957.7
12	1,922.8	37	1,959.3
13	1,923.1	38	1,959.3
14	1,924.2	39	1,961.2
15	1,925.1	40	1,961.6
16	1,929.0	41	1,962.8
17	1,929.9		
18	1,930.2		
19	1,934.5		
20	1,935.3		
21	1,938.8		
22	1,939.0		
23	1,940.3		
24	1,942.2		
25	1,946.0		

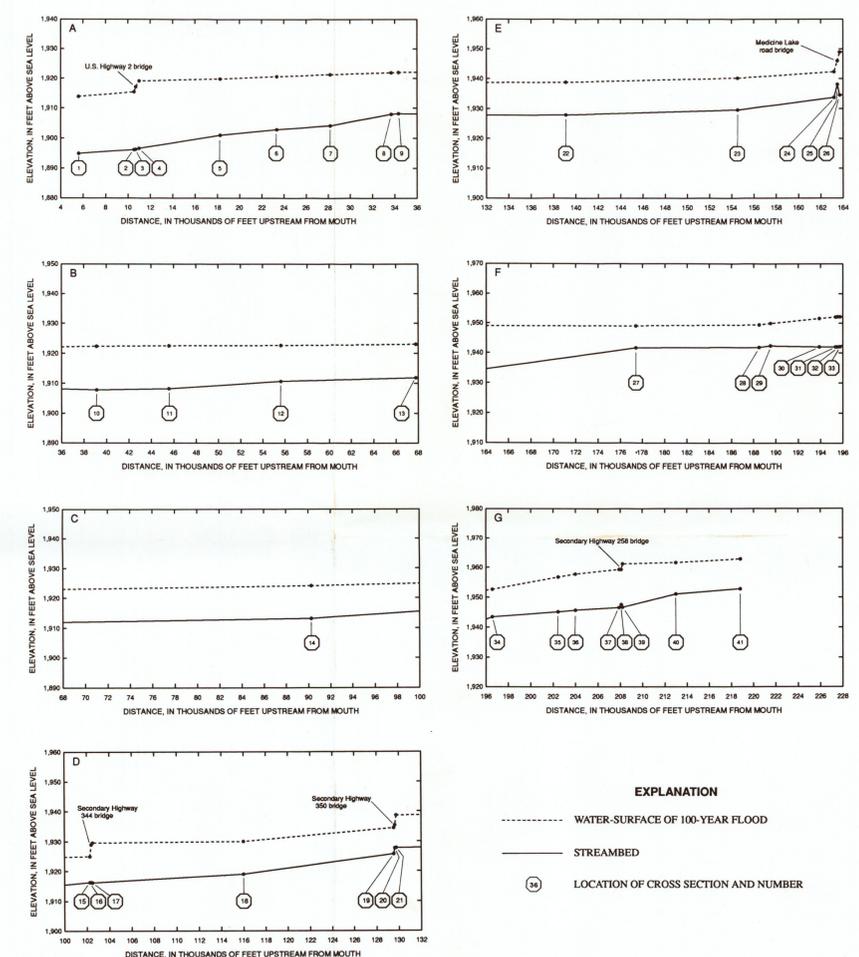
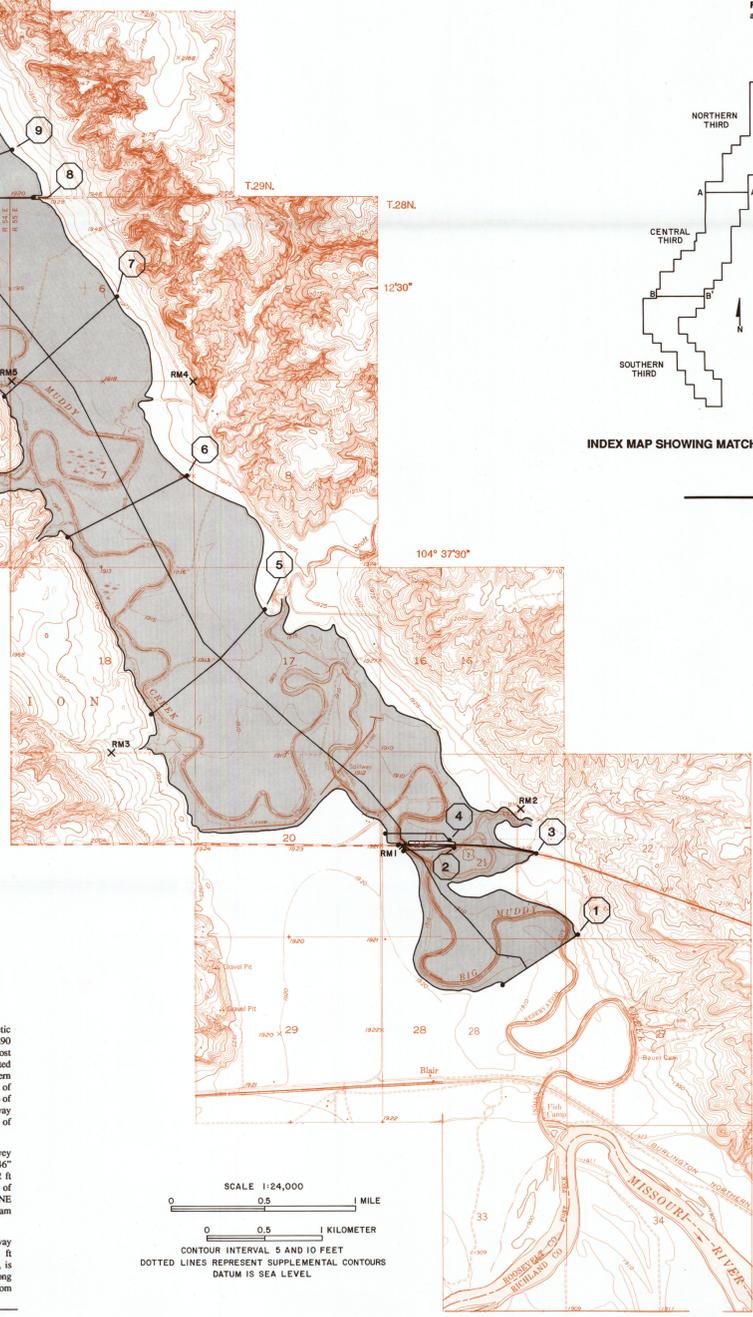
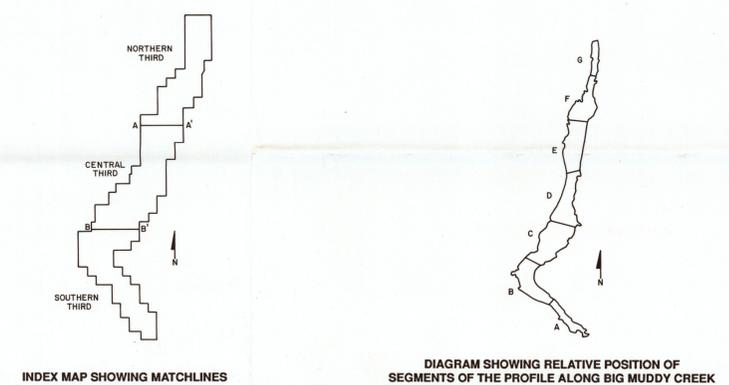


Figure 5. Profile of computed water-surface elevations for the 100-year flood, streambed elevations, and location of cross sections and bridges, Big Muddy Creek, northeastern Montana.



MAP SHOWING AREA INUNDATED BY THE 100-YEAR FLOOD, LOCATION OF CROSS SECTIONS, AND LOCATION OF ELEVATION REFERENCE MARKS

EXPLANATION

— AREA THAT WILL BE INUNDATED BY THE 100-YEAR FLOOD—Centerline connects the centroids of flow of water at cross sections during the 100-year flood

— STREAMBED

① CROSS SECTION AND NUMBER

B—B' MATCHLINE—Line separating northern, central, and southern thirds of the study area

RMx ELEVATION REFERENCE MARK AND DESIGNATION

For additional information write to:
District Chief
U.S. Geological Survey
Earth Science Information Center
Open-File Reports Section
Drawer 10078
301 South Park
Helena, MT 59628-0076

Copies of this report may be purchased from:
U.S. Geological Survey
Earth Science Information Center
Open-File Reports Section
Box 25286, MS 517
Denver Federal Center
Denver, CO 80225