

**SURVEY NOTES:**

- 1) HORIZONTAL DATUM:  
NAD83 (2011) MISSOURI EAST 2401, US SURVEY FOOT
- 2) VERTICAL DATUM:  
NAVD88 (GEOID18), FOOT
- 3) DEPTHS SHOWN ARE BELOW LWRP2014 SURFACE.
- 4) SURVEY INFORMATION:  
SURVEY VESSEL: PRAIRIE 20' BOAT  
ECHO SOUNDER: TELEDYNE ECHOTRAC E20  
GNSS RECEIVER: TRIMBLE R10  
GNSS SOURCE: MODOT RTN  
TIDE METHOD: REAL-TIME KINEMATIC  
TIDE SOURCE: MODOT RTN
- 5) THE SURVEY WAS COMPLETED IN ACCORDANCE WITH QUALITY CONTROL PLAN PROCEDURES.


JULY 26, 2023  
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 16:00	WSE @ 20:00	LWRP 2014	LWRP DIF @ 16:00	LWRP DIF @ 20:00
165	370.17	370.62	368.03	2.74	2.59
166	371.82	371.08	368.31	2.91	2.77
167	371.67	371.53	368.58	3.09	2.95
168	372.12	371.99	369.21	2.91	2.78

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
151.9	Herculaneum, MO	368.23	16:00	-3.33	20:00	-3.58
168.7	Jefferson Barracks, MO	377.34	16:00	-4.91	20:00	-5.03



St. Louis District

DATES OF SURVEY: <small>JULY 26, 2023</small>	FIELD BOOKS: _____ _____ _____
SCALE: 1" = 800' (ANSI B)	FIELD BOOKS: _____ _____ _____
Approved: _____ <small>FIELD CARTOGRAPHER</small>	Approved: _____ <small>CIVIL ENGINEERING TECHNICIAN</small>
Approved: _____ <small>ASST. CHIEF OF SURVEY</small>	Approved: _____ <small>CHIEF OF SURVEY</small>
Approved: _____ <small>U.S. ARMY CORPS OF ENGINEERS ST. LOUIS, MISSOURI</small>	SURVEYED BY: <small>FRANKIE ENGINEERS, P.C.</small> PROCESSED BY: <small>BOWEN ENGINEERING AND SURVEYING, P.C.</small>
UPPER MISSISSIPPI RIVER BASIN MISSISSIPPI RIVER PRE DREDGE SURVEY RIVER MILES 168.0 - 165.5	
SHEET NO. _____	

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