Big Sucker Creek nr Palmers, CR258
STATION ID: H02-031-002
NWS ID: SUCM5
EQUIS ID: S007-601

LOCATION:

Lat:	46° 57' 11.6"	**UTMX:**	584525.7	**Township:**	Duluth				
Long:	91° 53' 21.0"	**UTMY:**	5200563.5	**PLS:**	TWP	RNG	SEC	Q	QQ
					52 N	12 W	29	SE	SW

County: St. Louis
Drainage area (acres): 22,592
Driving directions: From the intersection of I35 and MN Hwy 61 in Duluth, take MN Hwy 61 northeast approximately 11.5 miles to the intersection MN Hwy 61 and Bergquist Rd (CR 258). Turn left north onto Bergquist Rd (CR 258) and travel north 3.2 miles to river and the gage.

History: Gage first installed by the Minnesota Department of Natural Resources on 09/25/08 on the Old Northshore Rd (CR 290), but was washed out during the 06/20/12 historic Duluth flood. The site was temporarily reinstalled in 2012 and monitored through 2014, but was moved upstream to a new location on 10/02/14.
Cooperation: Minnesota Pollution Control Agency and Minnesota Department of Natural Resources Clean Water Legacy site.

GAGE: Design Analysis H-350XL Pressure Transducer and H-355 Gas Purge System are housed in a 2' x 1.5' x 6' Hoffman look-in type shelter on right DS side. Instruments are powered by a 1.2 ampere solar panel run to a deep cycle marine battery through a Sunsaver power regulator. Solar panel and a rain gage are attached to side of shelter on a 10' mast. Data collected at 15-minute intervals.

Goes ID:	D550A0C8	Random Channel:	119
Primary Channel:	95	Azimuth:	156
Transmit Time (GMT):	00:58:55	Elevation:	32

CHANNEL AND CONTROL: High flow control is channel. Low flow control is rock riffle approximately 100ft downstream of the bridge.

DISCHARGE MEASUREMENTS:
Low flow: Wading approximately 75ft downstream of the bridge or 20ft upstream of the riffle.
High flow: Measurement off of the downstream side of the bridge or tagline upstream or downstream of bridge.

REFERENCE MARKS:
R.M. 1: Three saw marks in bolt plate next to wire weight on downstream, north side of the bridge.
Elevation: 101.26ft assumed datum (Surveyed on 10/02/14 by MN DNR)
R.M. 2: Spike in the base of an ash tree approximately 1ft above ground on east side of the road, downstream right bank, approximately 39 ft east from the end of the wood bridge.
Elevation: 84.15ft assumed datum (Surveyed on 10/02/14 by MN DNR)
R.M. 3: Spike in base of balsam tree approximately1ft above ground on the east side of the road, downstream right bank. Tree is approximately 10ft north from the end of guard rail and then approximately 46 ft east from guard rail and/or the edge of the road.
Elevation: 89.02 ft assumed datum (Surveyed on 10/02/14 by MN DNR)
R.M. 4: Wire weight located on the downstream, north side of the bridge. (Installed on 10/02/14 by MN DNR)
Elevation: 100.00 ft assumed datum (1042.24ft NAVD 1988 Surveyed in April 2015 by MN DNR)

Primary Reference: R.M. 4 (CHECKBAR)