

AUG 5, 2019 CORRECTIONS.

Wisconsin DNR – Lake Level Monitoring Staff Gauge Survey Data Sheet

Lake Information
 Lake Name: SPUR LAKE - WBE 1571800 County: ONEIDA

Data Collectors
 Primary Data Collector: JON SIMONSEN Email: JONATHAN.SIMONSEN@WISCONSIN.GOV Phone No.: (715) 367-1936
 Additional Data Collector(s): _____

Reference Mark and Staff Gauge Information
Reference Mark #1 (RM1) Reference Mark Type: PK NAEL
 Latitude: 45.7202 Longitude: -89.1525 Mean Sea Level Yes No Elevation: 100.00 Photograph
 Location Description: EAST EDGE OF ROADWAY - NORTH OF CULVERT
SURVEY NOTES - "CP-N"

Reference Mark #2 (RM2) Reference Mark Type: PK NAEL
 Latitude: 45.7198 Longitude: -89.1526 Mean Sea Level Yes No Elevation: 100.16 Photograph
 Location Description: EAST EDGE OF ROADWAY - SOUTH OF CULVERT
SURVEY NOTES - "CP-S"

Reference Mark #3 (RM3) Reference Mark Type: NAEL IN MAPLE
 Latitude: 45.7194 Longitude: -89.1527 Mean Sea Level Yes No Elevation: 100.12 Photograph
 Location Description: MAPLE TREE - EAST OF ROADWAY - SOUTH OF CULVERT
SURVEY NOTES - "TREE-S"

Staff Gauge
 Latitude: 45.7201 Longitude: -89.1526 Mean Sea Level Yes No Elevation: 98.25 ^{BOLT} ^{SMS 96.48} Photograph
 Location Description: WATER LEVEL READINGS ON GAGE = 5.20'
ELEVATION READINGS - BOLT @ BOTTOM OF GAGE

Date: 7/23/2019 Time: 12:30 AM/PM Check one: Install Midseason Removal

Survey Stage 1 - Instrument at first height*

	Reference Mark 1	Fore sight (FS1)	Calculated Elevation (CE1)	
Given Elevation (GE _{RM1})	<u>100.00</u>		<u>96.48</u>	Survey Equations: HI1 = GE _{RM1} + BS1 CE1 = HI1 - FS1
Back sight 1 (BS1)	<u>+ 3.45</u>	<u>6.97</u>	<u>96.48</u>	
Height of Instrument (HI1)	<u>103.45</u> - Staff Gauge	<u>5.20</u> ^{SMS}	<u>98.25</u> ^{SMS}	
	HI1 - Ref Mark 2	<u>3.29</u>	<u>100.16</u>	
	HI1 - Ref Mark 3	<u>3.33</u>	<u>100.12</u>	

Survey Stage 2 – Reset instrument at different height

	Staff Gauge	Fore sight (FS2)	Calculated Elevation (CE2)	
Calculated Elevation 1	<u>98.25</u> ←			Survey Equations: HI2 = CE _{SG1} + BS2 CE2 = HI2 - FS2
Back sight 2 (BS2)	<u>+</u>			
Height of Instrument (HI2)	<u> </u> - Ref Mark 1		<u> </u>	
	HI2 - Ref Mark 2		<u> </u>	
	HI2 - Ref Mark 3		<u> </u>	

Quality Assurance Checks:

Reference Mark 1:	BS1 <u> </u>	FS1 <u> </u>
GE = CE2	BS2 + <u> </u>	FS2 + <u> </u>
	<u> </u> = <u> </u>	

QA Equations:
 BS1 + BS2 = FS1_{SG} + FS2_{RM1}
 GE_{RM1} = CE2_{RM1}

*Accept Survey Stage 1 if QA checks within 0.01 ft. Use calculated elevations 1 for the rest of the season unless the gauge moves.

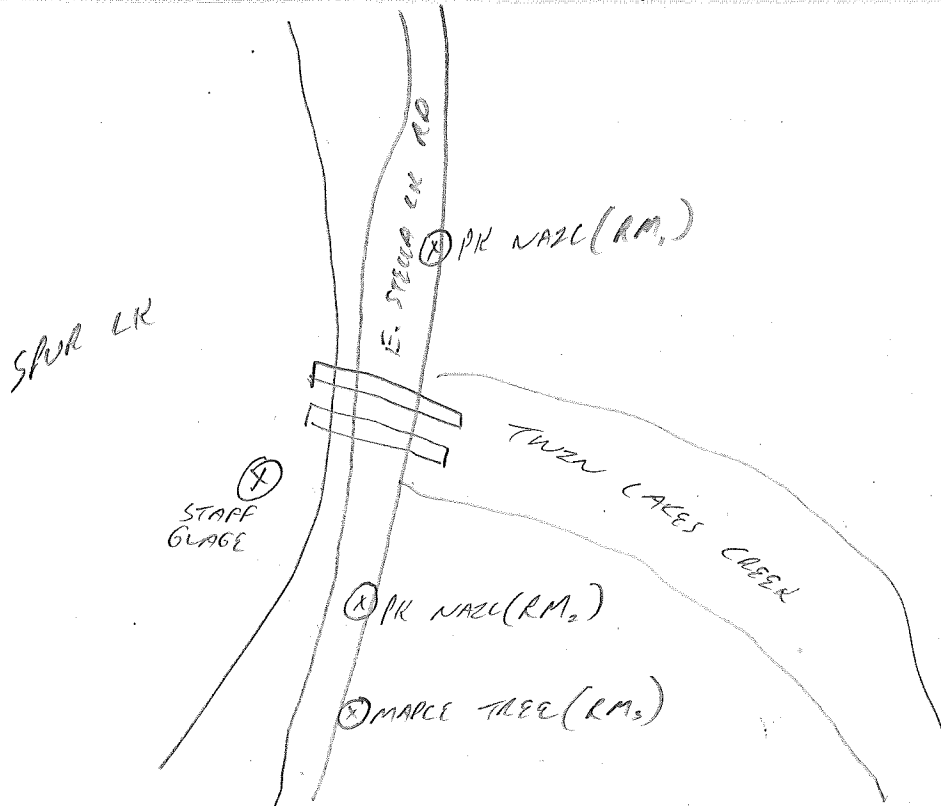


Wisconsin DNR – Lake Level Monitoring
Staff Gauge Survey Data Sheet

Lake Level Reading: 5.20 ft

Revised 2016

Site Diagram (including Staff Gauge and Reference Marks)



Notes

- BEFORE THE GAUGE INSTALLATION - VOLUNTEER MEASUREMENTS WERE RECORDED AS DEPTH OF WATER OVER THE TOP OF THE ~~AND~~ SOUTH CULVERT (INLET). SEE BELOW FOR DATA CROSSWALK.
- DATE OF GAUGE INSTALL

FS - TOP OF PIPE = 5.02' 103.45' - 5.02' = 98.43
 FS - SPUR LAKE ELEVATION = 5.11' 103.45' - 5.11' = 98.34
 FS - TWIN LAKES CREEK = 5.11' 103.45' - 5.11' = 98.34

Data Management

Survey Data uploaded to SWIMS? Yes No Date: _____ Name: _____
 Data Sheet scan uploaded to SWIMS? Yes No Date: _____ Name: _____

Equipment Maintenance

Replace bolts/screws on staff gauge? Yes No Date: _____ Name: _____
 Replace gauge plate on staff gauge? Yes No Date: _____ Name: _____
 Replace post or wooden board? Yes No Date: _____ Name: _____

