Staff Gauge Survey Data Sheet

Lake Information

Lake Name

_____

County

_____

Data Collectors

Primary Data Collector

_____

Email

_____

Phone No.

(_____) _____ - _____

Additional Data Collector(s)

_____

Reference Mark and Staff Gauge Information

Reference Mark #1 (RM1)

Reference Mark Type: _____

Latitude: _____ Longitude: _____ Mean Sea Level Yes ☐ No ☐ Elevation: _____ Photograph ☐

Location Description: _____

_____

Reference Mark #2 (RM2)

Reference Mark Type: _____

Latitude: _____ Longitude: _____ Mean Sea Level Yes ☐ No ☐ Elevation: _____ Photograph ☐

Location Description: _____

_____

Reference Mark #3 (RM3)

Reference Mark Type: _____

Latitude: _____ Longitude: _____ Mean Sea Level Yes ☐ No ☐ Elevation: _____ Photograph ☐

Location Description: _____

_____

Staff Gauge

Latitude: _____ Longitude: _____ Mean Sea Level Yes ☐ No ☐ Elevation: _____ Photograph ☐

Location Description: _____

_____

Date: _____ Time: _____ 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})	_____			
Back sight 1 (BS1)	+_____			
Height of Instrument (HI1)	[____]	- Staff Gauge	_____	= [_____]
	HI1	- Ref Mark 2	_____	= [_____]
	HI1	- Ref Mark 3	_____	= [_____]

Survey Equations:

$HI1 = GE_{RM1} + BS1$

$CE1 = HI1 - FS1$

Survey Stage 2 – Reset instrument at different height

	Staff Gauge		Fore sight (FS2)	Calculated Elevation (CE2)
Calculated Elevation1	_____			
Back sight 2 (BS2)	+_____			
Height of Instrument (HI2)	[____]	- Ref Mark 1	_____	= [_____]
	HI2	- Ref Mark 2	_____	= [_____]
	HI2	- Ref Mark 3	_____	= [_____]

Survey Equations:

$HI2 = CE_{SG1} + BS2$

$CE2 = HI2 - FS2$

Quality Assurance Checks:

Reference Mark 1:	BS1 _____	FS1 _____
GE = CE2	BS2 +_____	FS2 +_____
	[_____]	= [_____]

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.
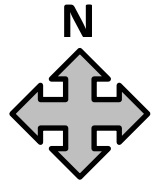
Staff Gauge Survey Data Sheet

Lake Level Reading: _____ ft   Revised 2016

Site Diagram (including Staff Gauge and Reference Marks)

N

Notes

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

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: _____

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