# SSHCZO Metadata Worksheet

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| Data File Name | **SCAL\_Discharge.csv** |
| Date Prepared | 08/26/2016 |
| Descriptive Title | Shaver’s Creek Above Lake Discharge and Rating Curve |
| Update Frequency | Quarterly |
| Abstract | Surface water discharge data for Shaver’s Creek Above Lake Data interval was measured every 10 to 15 min and a rating curve was built with manual measurements from a FlowTracker. All data contributes to the goals of concentration-discharge relationships spatially and temporally. Data spans from 2015-Oct 23 to present.  |
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| Data Value Descriptions | * COL1: label=ValueAttribute, value=TmStamp\_UTC, TimeZone=UTC
* Col2: label=Air\_Press\_kPa(Barometric pressure), Units=kPa
* COL3: label=AirTemp\_C (air temperature), Units=degC
* Col4: label=WaterTemp\_C(water temperature), Units=DegC
* Col6: label=SpecCond(specific conductance), Units= μS/cm
* Col7: label=Stage\_m(Corrected sensor depth), Units=meters(m)
* Col8: label=dischg\_m3s - 15 min discharge calculated from the rating curve data, Units=m3/s
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| Keywords | Hydrology, Stream discharge, rating curve  |
| Methods | Discharge measurements were collected using a FlowTracker monthly to build and maintain rating curves. Stage was measured every 15 min using a HOBO U20-001 pressure transducer. Data are manually downloaded monthly using HOBO-Ware Pro software. Sensor depth is calculated in the software by processing with barometric pressure data recorded on a separate HOBO U20-001-01 pressure transducer. Discharge was calculated for each stage measurement based upon the rating curve. Drift and calibration adjustments occasionally made due to sensor electronic drift and cleanliness/calibration of sensors. Adjustments to the stage levels were prorated between visits and peak events based on staff plate readings. Specific Conductivity and water temperature readings were measured using a HOBO U24-001 conductivity meter. Sensor drift and calibration corrections applied using the HOBOWare Pro software and R. Corrections determined by using a calibrated YSI ProPlus multi-meter and measuring beside the HOBO sensor for direct comparisons during each visit. QA/QC:* The period between 2016-06-15 to 2016-10-20 had little or no recordable flow due to an exceptional dry year
* 2017-04-21 to 2017-0628 no recorded data due to sensor system being vandalized and removed from stream
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| Sites | Shavers Creek Above Lake: 40.672967 -77.901864 |
| Citation | The following acknowledgment should accompany any publication or citation of these data: Logistical support and/or data were provided by the NSF-supported Shale Hills Susquehanna Critical Zone Observatory. |
| Publications |  |
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