# SSHCZO Metadata Worksheet

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| Data File Name | **CF\_CFW\_W2.csv** |
| Date Prepared | 2018-07-18 |
| Descriptive Title | CFW\_2: Cole Farm Well 2 |
| Update Frequency | Quarterly |
| Abstract | Groundwater level data and water temperature for CFW\_2 measured every 15 minutes using a HOBO U20-001-01 non-vented pressure transducer from 2018-02-23 to present. Sensor level during this period is set to 9.59 meters below ground level.  |
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| Data Value Descriptions | * COL1: label = TmStamp\_UTC; Timezone = Coordinated Universal Time
* COL2: label = WaterTemp\_C; water temperature; Units = degC
* COL3: label = Abs\_Press\_Barom\_kPa; barometric pressure; Units = kPa
* COL4: label = WL\_BLG\_m; water level below ground; Units = meters

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| Keywords | Groundwater Depth, Groundwater Temperatures, Hydrology |
| Methods | Groundwater level measurements are recorded every 15 minutes on a HOBO U20-001-01 non-vented 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. Water level below ground determined using the suspended cable length to sensor below ground and taking the difference of the SensorDepth\_m [WL\_BLG\_m = 9.59 - SensorDepth\_m]. TOC above land surface = 0.3 metersSensor location down borehole from MP = 9.89 metersWell Depth = 37.795 metersCasing type = steelCasing diameter = 15.2 cmCasing depth = 6.401 metersThe water table below land surface obtained by subtracting the head pressure and above ground casing length from the sensor depth. Quality control:Data were checked by graphing data in R package and comparing to precipitation and manual water level measurements using a Solinist electric tape. Bad, missing, or erroneous data values were removed or marked with -9999 which could be caused during data downloads and/or malfunctioning sensors. Data gaps present:2018-04-17: sensor removed during well samplingExplained data variations:2018-07-11: well was pumped/sampled with sensor in place from 14:00 to 15:30 |
| Sites | Cole Farm, Huntingdon County, Barree Township Lat/Long DMS: 40.636272/ -77.938443; (NAD\_1983\_StatePlane\_Pennsylvania\_South\_FIPS\_3702); Elevation 269.138m |
| Publications | none |
| Citation | The following acknowledgment should accompany any publication or citation of these data: Logistical support and/or data were provided by the NSF-supported Susquehanna Shale Hills Critical Zone Observatory. |
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