# SSHCZO Metadata Worksheet

|  |  |
| --- | --- |
| Data File Name | **SC\_2014StreamwaterChemistry\_DOI.xlsx**  **SC\_2015StreamwaterChemistry\_DOI.xlsx** |
| Date Prepared | 03/03/2015 (Updated 9/7/2016) |
| Descriptive Title | Shaver’s Creek Discharge and Water Chemistry |
| Update Frequency | Bi-monthly |
| Abstract | Chemistry for water samples collected from the Shaver's Creek Watershed are presented as part of Shale Hills Critical Zone Observatory research. Water samples were collected from 2 subcatchments in the watershed: Shale Hills (SH) and Garner Run (GR). Samples were also collected from three sites along the mainstem of Shaver's Creek: above Lake Perez (SCAL), below Lake Perez (SCBL), and near the stream outlet (SCO). Grab samples were collected from the stream sites on a bi-weekly to monthly basis during 2014. Samples were processed for major cations, anions, and general physiochemical parameters as soon as possible following collection. This work was funded by NSF Critical Zone Observatory program grants to C. Duffy (EAR 07-25019) and S. L. Brantley (EAR 12-39285, EAR 13-31726). |
| Investigator  Contact Info | *Dr. Tess Russo,* – Assistant Professor, Department of Geosciences, 310 Deike Building, Pennsylvania State University, University Park, PA 16802, [*russo@psu.edu*](mailto:russo@psu.edu)*,* (814)865-7389  *Beth Hoagland,* [*neh137@psu.edu*](mailto:neh137@psu.edu)*, Graduate Student, 502-432-0755* |
| Data Value Descriptions | BDL = below detectable limits  umol L-1 = micromole per liter  Data value descriptions are included in file.  Stream water Chemistry 2014: [DOI: 10.1594/IEDA/100611](http://get.iedadata.org/doi/100611)  2015: [DOI: 10.1594/IEDA/100612](http://get.iedadata.org/doi/100612) |
| Keywords | Solute chemistry, concentration-discharge |
| Methods | Water samples collected according to standard methods, weekly to bi-weekly. Field measurements were taken using a YSI Multiprameter Sonde. Samples were analyzed using Perkin-Elmer Optima 5300DV ICP-AES, Dionex 2500 IC, and a Shimadzu TOC Analyzer. |
| Sites | |  |  |  | | --- | --- | --- | | Shaver's Creek/Lake Perez Upstream | Fall 2013 - present | 1507992.961 2106402.546 | | Shaver's Creek/Lake Perez Downstream | Fall 2013 - present | 1506880.122 2104228.875 | | Shaver's Creek/ "Outlet" | Fall 2013 - present | 1500705.528 2097873.697 | | Shaver's Creek/Shale Hills | 2006 - present | N 40°40'00" W 77°54'10" | | Shaver's Creek/Garner Run | 2014 - present | N 40° 41' 32.892" W 77° 55' 41.052 | |
| 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 | Brantley, Susan L., et al., (2016), Susquehanna Shale Hills Critical Zone Observatory - Shaver's Creek Watershed Stream Chemistry (2015). Integrated Earth Data Applications (IEDA). [DOI:10.1594/IEDA/100612](http://get.iedadata.org/doi/100612)  Brantley, Susan L., et al., (2016), Susquehanna Shale Hills Critical Zone Observatory - Shaver's Creek Watershed Stream Chemistry (2014). Integrated Earth Data Applications (IEDA). [DOI: 10.1594/IEDA/100611](http://get.iedadata.org/doi/100611)  Brantley, S. L., DiBiase, R. A., Russo, T. A., Shi, Y., Lin, H., Davis, K. J., Kaye, M., Hill, L., Kaye, J., Eissenstat, D. M., Hoagland, B., Dere, A. L., Neal, A. L., Brubaker, K. M., and Arthur, D. K (2016): Designing a suite of measurements to understand the critical zone. Earth Surface Dynamics 4: 211-235. [DOI: 10.5194/esurf-4-211-2016](http://dx.doi.org/10.5194/esurf-4-211-2016) |
| Data Use Notes | The user of Shale Hills Susquehanna CZO data agrees to provide proper acknowledgment with each usage of the data. Citation of the name(s) of the investigator(s) responsible for the data set, in addition to the generic statement above, constitutes proper acknowledgment. Author(s) (including Shale Hills Susquehanna CZO investigators) of published material that makes use of previously unpublished Shale Hills Susquehanna CZO data agree to provide the Shale Hills Susquehanna CZO data manager with four (4) copies (preferably reprints) of that material for binding as soon as it becomes available. The user of Shale Hills Susquehanna CZO data agrees not to resell or redistribute shared data. The user of these data should be aware that, while efforts have been taken to ensure that these data are of the highest quality, there is no guarantee of perfection for the data contained herein and the possibility of errors exists. These data are defined as either public or private, such that a password may be required for access. |