## HAWQS v1.0

Inputs

Version 1.0 – Released September 2017

Version 1.0

## **HAWQS** Inputs

Input	Source	Notes	Date Accessed
Weather	NCDC NWS/NOAA <sup>1</sup>	1961-2010 (Thiessen Polygon)	October 2010
	PRISM <sup>2</sup>	1981-2015 (gridded)	and July 2017
	NEXRAD <sup>3</sup>	2005-2015(gridded)	
	NEXRAD PRISM corrected	2005-2015(gridded)	
Soil	USDA-NRCS <sup>4</sup>	STATSGO	October 2010
Land Use	MRLC (Fry) <sup>5</sup>	NLCD (2006) and CDL (2011-2012)	October 2010 and
			January 2015
<b>Aerial Deposition</b>	NADP <sup>6</sup>	(1980-2010) monthly	October 2010
Watershed	USGS <sup>7</sup>	HUCS 8, 10, and 12	October 2010
Boundaries			
Stream Networks	NHDPlus <sup>8</sup>	Reduced form	October 2010
Elevation	NED <sup>9</sup>	30 meter DEM	October 2010
Point Sources	USGS <sup>10</sup>	Regression of population and SPARROW model outputs	October 2010
Management Data	USDA <sup>11,12</sup>	CDL (tillage, fertilizer/manure, crop yields) (NRCS field database) and Cropland Management Dataset	January 2015
Reservoirs	USACE <sup>13</sup>	National Inventory of Dams	October 2010
Livestock and Crops	USDA-NASS <sup>14</sup>		October 2010
Model	USDA-ARS and Texas A&M	Soil Water Assessment Tool	January 2015

- 1. Menne, M.J., I. Durre, R.S. Vose, B.E. Gleason, and T.G. Houston, 2012: An overview of the Global Historical Climatology Network-Daily Database. Journal of Atmospheric and Oceanic Technology, 29, 897-910, doi:10.1175/JTECH-D-11-00103.1.
- United States Department of Agriculture, Natural Resources Conservation Practices, Climate—Parameter-elevation Regressions on Independent Slopes Model (PRISM). Available online: http://www.wcc.nrcs.usda.gov/climate/prism.html (Accessed on 1 October 2010)
- 3. NOAA National Weather Service (NWS) Radar Operations Center (1991): NOAA Next Generation Radar (NEXRAD) Level 2 Base Data. NOAA National Centers for Environmental Information. doi:10.7289/V5W9574V [Accessed on 1 July 2017].
- 4. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. U.S. General Soil Map (STATSGO2). Available online at http://sdmdataaccess.nrcs.usda.gov/. (Accessed on 1 October 2010)
- 5. Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J., 2011. Completion of the 2006 National Land Cover Database for the Conterminous United States, *PE&RS*, Vol. 77(9):858-864.
- 6. University of Illinois at Urbana-Champaign, Atmosphere Deposition—National Atmospheric Deposition Program (NADP). Available online: http://nadp.sws.uiuc.edu/ (Accessed on 1 October 2010)
- 7. Coordinated effort between the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), the United States Geological Survey (USGS), and the Environmental Protection Agency (EPA). The Watershed Boundary Dataset (WBD) was created from a variety of sources from each state and aggregated into a standard national layer for use in strategic planning and accountability. Watershed Boundary Dataset for {county, state, or HUC#}, State [Online WWW]. Available URL: "http://datagateway.nrcs.usda.gov" [Accessed 1 October 2010].
- 8. United States Environmental Protection Agency and United States Geological Survey, National Hydrography Dataset Plus-NHDPlus. Available online: <u>http://epa.gov/waters</u> (Accessed on 1 October 2010)
- 9. United States Geological Survey, National Elevation Dataset-NED, Available online: http://nationalmap.gov/elevation.html (Accessed on 1 October 2010)
- Schwarz, G.E., Hoos, A.B., Alexander, R.B., and Smith, R.A., 2006, The SPARROW surface water-quality model: Theory, application and user documentation: U.S. Geological Survey Techniques and Methods, section B, chapter 6-B3, 248 p., available only online at http://pubs.usgs.gov/tm/2006/tm6b3/

- 11. United States Department of Agriculture, National Agricultural Statistics Service (NASS). Land Use - Cropland Data Layer (agricultural). Available online: http://nassgeodata.gmu.edu/CropScape/ (Accessed on 1 January 2015)
- White, Michael, Marilyn Gambone, Haw Yen, Prasad Daggupati, Katrin Bieger, Debjani Deb, and Jeff Arnold, 2016. Development of a Cropland Management Dataset to Support U.S. Swat Assessments. Journal of the American Water Resources Association (JAWRA) 52(1): 269-274. DOI: 10.1111/1752-1688.12384
- 13. United States Corps pf Engineers, Reservoirs—National Inventory of Dams (NID). Available online: http://nid.usace.army.mil/cm\_apex/f?p=838:5:0::N0 (Accessed on 1 October 2010)
- 14. United States Department of Agriculture, National Agricultural Statistics Service (NASS). Land Use - Cropland Data Layer (agricultural). Available online: http://nassgeodata.gmu.edu/CropScape/ (Accessed on 1 October 2010)