

Water Use Advisory Council 2020

Data Committee – Recommendation on standards & protocols for collection and use of new data within the program

9-9-20: draft as reported out of Data Committee

Background

The water withdrawal assessment tool and assessment process both rely on the use of existing data sets, and the use of new additional data. To provide a means for continually refining the assessment process and its outcomes, the program was structured to allow for the use of new data in the program. This both aids in water user applicants being able to provide more accurate location specific data in their registration assessments, and for improvements in data to be used by the program to aid in preventing adverse resource impacts. The statute laid forth general conditions for the collection and use of these new data types, and the previous WUAC (2014) recommended further development and publication of specific protocols for the collection and use of new data for different purposes within this program.

Findings & Recommendations

For collection of new data, standards have been developed for this program. For streamflows, the standards for data collection are the USGS standards, which are published and maintained on the USGS website. For aquifer performance tests (which allow for inferences of how geology and groundwater dynamics exist in relation to water withdrawal pumping at specific locations, the EGLE has developed standards for the collection of these tests for use in this program, and is currently working with this WUAC to finalize them. In the future, we anticipate also needing to further develop data collection procedures for other types of data that are emerging in location-specific modeling refinement efforts. In this regard, the WUAC Data Committee will continue to evaluate the results of the Cass County Pilot Study, to review and determine whether additional data collection standards need to be developed, adopted and published in the near future.

Data use protocols involve details of how new data, once collected, are to be adjusted, summarized, and used for different purposes within the program. We find that currently, some of these protocols for data use are developed, and others are not yet fully developed. One example of data use protocols needing further development, is in the use of streamflow data for the purpose of modifying stream index flows used both in the assessment tool and assessment processes. Following USGS standards for collection of streamflow data does not fully by itself, establish needed protocols for how much data needs to be presented, how it should be adjusted for appropriate analogy to statutory definitions, and conditions for modifying index flows given new data. Filling these gaps in data use protocols will require the additional work by the WUAC in conjunction with EGLE. We are recommending that the WUAC Data Committee address these needs through its work in 2021.

Investment proposed. No additional new investment requested. Work needed will be conducted by WUAC members and EGLE/USGS staff through the WUAC process in 2021. Recommendations developed will be brought to the WUAC for consensus approval, and adopted for use by EGLE and published online, when complete.

Relevant Previous WUAC 2014 recommendations addressed: EM 1.3, 1.4, 1.5, 2.2, 2.4