

RESOLUTION FOR THE MINUTES

A RESOLUTION authorizing the Executive Director to enter into a professional services contract for the development of a data management tool for water supply planning simulations.

WHEREAS, the Commission is in the process of evaluating water supply availability for the future in the context of the DRBC study entitled *Strategy for Sustainable Water Resources – 2060*; and

WHEREAS, in October of 2015, the USGS completed a hydrologic model of the Delaware River Basin known as “WATER” (an acronym for “Water Availability Tool for Environmental Resources”) that can be used to model a variety of potential future hydrologic conditions based on different climate scenarios and future land use changes; and

WHEREAS, DRBC staff are in the process of using WATER to generate climate-driven hydrologic input data for the Delaware River Basin Planning Support Tool (DRB-PST) for the purpose of simulating current and alternative flow management scenarios under potential future hydrologic conditions; and

WHEREAS, outputs from WATER are voluminous (8.2 GB per scenario) and require significant processing prior to use in DRB-PST, such that a data management tool is needed to convert WATER outputs to suitable DRB-PST inputs; and

WHEREAS, Steven Chesterman, an expert in hydraulic modeling and geographic information systems (“GIS”), who has extensive experience in the use of GIS and global positioning systems (“GPS”) by large cities and utilities, has developed a data management program similar to that required by the DRBC to perform the required conversion of WATER outputs to formats suitable for incorporation into PST, and which can be modified to perform such conversion; and

WHEREAS, in the view of DRBC technical staff, as the original developer of a data management program similar to that now required by the DRBC, Mr. Chesterman is singularly qualified to provide the services the DRBC currently needs – i.e., to customize his data management program to process WATER outputs for use in DRB-PST; moreover, Mr. Chesterman has a clear understanding of the scope of services the DRBC requires and has exhibited a high level of professionalism in providing similar specialized services to other agencies with which DRBC partners; and

WHEREAS, simulating current and alternative flow management scenarios under potential future hydrologic conditions for the purpose of evaluating water supply availability is directly related to operation of the Commission’s water supply storage in the basin’s federal reservoirs; now therefore,

BE IT RESOLVED by the Delaware River Basin Commission that:

1. The Executive Director is hereby authorized to enter into a contract with Steven Chesterman for the development of tools to facilitate the processing of WATER output for input to PST in accordance with Mr. Chesterman's proposal dated May 5, 2016.
2. The value of the contract with Steven Chesterman shall not exceed \$8,000.
3. The funds will be disbursed from the Commission's Water Supply Storage Fund upon final delivery of the data management program.
4. Because the services to be provided are of a professional nature, the competitive bidding requirements of Section 14.9 of the *Delaware River Basin Compact* are waived, in accordance with subsection 5 of that section.

This Resolution shall take effect immediately.

Adopted: June 15, 2016