



## SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

Phone (717) 238-0423 • Fax (717) 238-2436

Web <http://www.srbc.net>

### Consumptive Use Application Summary

**Source Name:** Renewal Application - CWA and  
Artesian Water Company

**SRBC Pending No.:** 2021-069

This summary is only a portion of the application materials and is meant to provide general information about the proposed project.

#### 1.0 Application Background

This section requests pertinent information related to the application that is being submitted.

#### 1.1 Project Sponsor

Company Name: Chester Water Authority

Mailing Address Line 1: PO Box 467

Mailing Address Line 2:

City: Chester

State: PA

ZIP Code: 19016

#### Contact Person:

First Name: Brian

Last Name: MacEwen

Title: Director of Engineering

Telephone: 610-447-1818

Fax: 610-499-5993

Mobile: 610-256-8489

**E-mail:** [bpmacewen@chesterwater.com](mailto:bpmacewen@chesterwater.com)

#### 1.4 Requested Consumptive Use Quantity:

The consumptive use should be entered in million gallons per day (mgd) and rounded up to the nearest one thousand gallons (three decimal places). For multiple sources, provide the total quantity for existing and proposed consumptive use, as applicable.

##### 1.4.1 Projected Design Year:

2038

##### 1.4.2 Existing Consumptive Use

4.397(mgd)

##### 1.4.3 Projected Consumptive Use

3(mgd)

## 2.1 Project Facility Description

The Hillendale Road Booster Station pumps treated water from the CWA Transmission Main through a 20-inch diameter ductile iron water main to a meter pit located at the PA-DE state line where water is sold to Artesian Water Company.

From 1996 to current day, CWA has sold treated water to Artesian Water Company at the meter pit. The current agreement and docket allow sales of up to 6.0 MGD to Artesian Water Company. The current CWA-Artesian agreement expires on December 31, 2021. Artesian indicated that they no longer need to purchase high volumes of water from CWA. A new agreement has been negotiated between CWA and Artesian that calls for sales to Artesian of 0.5 MGD (minimum take or pay) with a maximum rate of 3.0 MGD.

The new agreement includes a drawdown schedule to facilitate the smooth transition from current minimum flow of 3.0 MGD to Artesian down to 0.5 MGD. This reduction in demand by Artesian will require modifications to the Hillendale Road Booster Station that CWA will undertake. These changes include pump modifications and control system modifications.

### Project Description

CWA is a governmental entity of the Commonwealth of Pennsylvania, and a municipal authority under the Municipality Authorities Act, 53 Pa.C.S. § 5601 et seq. CWA operates a public drinking water system serving a population of more than 200,000 people through direct and indirect service. In addition to providing water service to its direct customers, CWA's system also provides water to other drinking water systems, including Aqua Pennsylvania (5 metered locations), Suez (2 metered locations), Artesian Water Company, Borough of Kennett Square, Borough of Oxford, London Grove Township Municipal Authority, and the Town of Rising Sun.

The current SRBC Docket 19961104 granted CWA the right to sell/transfer up to 6.0 MGD based on a 30-day average to AWC. This approval expires December 31, 2021. The CWA and AWC have entered into a new agreement whereby the amount of water transferred to AWC will be significantly reduced. The new agreement calls for a daily usage of 0.5 MGD with the ability to increase up to 3.0 MGD, as needed by AWC. A copy of the new agreement is part of the Consumptive Use application submitted on-line for this project.

### Existing Withdrawal Approvals

CWA uses two (2) water sources, the Octoraro Reservoir ("Octoraro") and the Susquehanna River ("Susquehanna"). Under its current Water Allocation Permit, CWA has the right to withdraw up to 30,000,000 gallons per day (30 MGD) from each of the Octoraro and the Susquehanna. The 30 MGD limit on the Octoraro is measured as an annual average. As a matter of practice, CWA uses the Octoraro as its primary source, and utilizes the Susquehanna to the extent the water in the Octoraro does not have sufficient water quality and/or quantity to serve as the sole water supply.

The authorization to withdraw 30 MGD of water from the Octoraro was first granted in 1947 under Water Allocation Permit WA-275, and the authorization to withdraw 30 MGD of water from Susquehanna was issued in 1965 under Water Allocation Permit WA-275A. The current version of the Water Allocation Permit is permit WA-23-275D, and a copy is attached for reference.

Despite the grandfathering of the pre-compact water withdrawal approvals, certain aspects of CWA's water use and distribution have been the subject of SRBC review and approval, including pursuant to SRBC Resolutions 87-7, 88-1, 88-2, 89-07, 89-10, 91-10, and 92-03, SRBC action on Application 19961104 and SRBC Docket No. 20161203.

CWA's long-term use of the Octoraro and Susquehanna as water supply sources is already incorporated into the SRBC's Comprehensive Plan. Approval of these existing out-of-basin diversions will not impose any new load or burden on these water sources in the Susquehanna River Basin.

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There are no other available sources that can provide a similar consistent and reliable water supply to CWA's customers in Southeast Pennsylvania. The existing Octoraro Treatment Plant relies on the Octoraro and Susquehanna water supply sources, and cannot reasonably or feasibly be redirected or repurposed for any water supply source located out of the Susquehanna River Basin. Similarly, the existing transmission and distribution network is designed to accomplish the distribution of treated water from the Octoraro and Susquehanna, and could not reasonably be reconfigured to utilize water sources outside of the Susquehanna basin.

The water utilized and supplied by CWA is a vital component of the economic development of Southeast Pennsylvania and adjacent areas in Maryland and Delaware, including locations both within and outside of the Susquehanna River Basin. A lack of continued and consistent access to these water supply sources would have a devastating impact to the local economy within the areas that receive water from CWA, and to the health and lives of the 200,000 people who are dependent upon CWA's water supply.

Accordingly, CWA seeks the SRBC's approval of the proposed reduction in the transfer/sale of water to AWC.

#### Out-of-Basin Diversion Request

CWA's water supply needs require the 30 MGD level sought from both sources. At times, CWA has needed to draw as much as 38.5 million gallons on a given day from the Octoraro and as much as 29.44 million gallons from the Susquehanna River. These withdrawals do not happen at the same time, but are balanced between the sources depending on water quality and quantity. A listing of actual consumptive use quantities for 2020 is attached.

In order to meet the water supply needs to serve AWC at the interconnection, CWA seeks approval for the sale of 0.5 MGD with the ability to sell a maximum of 3.0 MGD, as required by AWC.

#### Coordination with Member Jurisdictions

CWA's operations are already subject to and have received all necessary permits from the Commonwealth of Pennsylvania, including the Pennsylvania Department of Environmental Protection (PA DEP). The set of permits issued over time is voluminous and dates to the 1970s. A new minor construction permit will be required by the PA DEP as two pumps need to be changed in the Hillendale Road Pump Station to more efficiently meet the reduced demand of AWC. This minor permit application will be submitted later this summer to the PA DEP Southeast Regional office.

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Project Schedule

This application involves an existing and continuously operating public water supply project. Minor modifications to the Hillendale Road Pump Station will be necessary and will be completed on or before July 2022. The transfer of water to AWC will include a phased step-down in volume from January to July 2022 to accommodate the pump changes and to not impose a sudden flow change in either the CWA or AWC distribution systems..

Thank you for your attention to this application.

Sincerely yours,



Brian P. MacEwen, P.E.  
Director of Engineering

BPM/sdc

c: R.A. Judge  
F.J. Catania  
M.F. College, SRBC

Enclosures:

Draft public notice  
Project location map  
Metering Plan  
Water Allocation Permit No. WA-23-275D  
Consumptive Use Reports (2020)  
Application fee check