



# SUSQUEHANNA RIVER BASIN COMMISSION

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## Groundwater Withdrawal Application Summary

**Source Name:** ECTA Well F

**SRBC Pending No.:** 2021-129

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

### 1.1 Project Sponsor

Company Name: East Cocalico Township Authority  
Mailing Address Line 1: 102 Hill Road  
Mailing Address Line 2:  
City: Denver  
State: PA  
ZIP Code: 17517

#### Contact Person:

First Name: Scott  
Last Name: Carl, Sr.  
Title: Authority Administrator  
Telephone: 717-336-1731  
Fax:  
Mobile:  
**E-mail:** [SCarl@ECocalicoTWPAuth.com](mailto:SCarl@ECocalicoTWPAuth.com)

### 1.3 Existing and Projected Facility Water Use

The usage should be entered in million gallons per day (mgd) and rounded off to the nearest one thousand gallons (three decimal places).

Projected Design Year:  
2038

Total Project Water Usage	Existing Usage (mgd)	Projected Usage For Design Year (mgd):
Maximum 30-day Average Water Demand :	0.8	1.395
Maximum Daily Water Demand :	1.152	1.395
System Capacity :	1.395	1.395

### 1.4 Requested Withdrawal Amount:

Estimated Daily Hours of Operation per Day (Ex. = 5): 24  
Maximum Instantaneous Withdrawal Rate (gpm): 797  
Maximum 24-Hour Day (mgd): 1.15  
Maximum 30-Day Average (mgd): 1.15

### 2.2 Facility Location

Please enter the address of the parcel where the Project Facility is located.

Street Address: 77 Stevens Road, Stevens

State: PA

County: Lancaster

Municipality: East Cocalico Township

Zip Code: 17578

Subbasin: Lower Susquehanna

## 2.1 Project Facility Description - East Cocalico Township Authority Well F

The East Cocalico Township Authority (ECTA) owns and operates a public water supply system (Total System) that includes 14 wells (Wells 2A, 3A, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, F and M, with Well M not currently operating). Water usage in East Cocalico Township (Township) includes industrial use and domestic use for households and businesses. ECTA also supplies water to 12 connections in neighboring West Cocalico Township and to two connections in Ephrata Township. A Total System withdrawal limit (maximum 30-day average) of 1.395 mgd is currently approved by the Susquehanna River Basin Commission in Docket No. 20160304. The recent maximum 30-day average water demand of the Total System was 0.800 mgd, which occurred in July 2020, and is projected to be 1.395 mgd in 15 years. The recent maximum daily water demand (peak day) was 1.152 mgd on July 22, 2019. From Well F alone, the maximum 30-day average withdrawal to date occurred in October 2020 at 0.357 mgd. ECTA does not have an interconnection with other water systems and does not purchase water from other providers.

With the exception of Wells F and M, each well has 4-log treatment associated with the individual well. A water treatment plant is currently used to treat water from Well F and will be used for Well M when it begins operating. 4-log treatment for viruses also is employed at the treatment plant mainly through CL-2 disinfection and retention time. The water treatment plant is approved by the Pennsylvania Department of Environmental Protection (DEP) to treat 267 gallons per minute (384,480 gallons per day) at the present time. As demand increases during the 15-year SRBC approval period for Wells F and M, the ECTA intends to increase the treatment capacity of the plant by adding additional “treatment banks” at the existing plant. Increases in treatment capacity at the plant also will be needed as ECTA begins to retire some of the lower yielding wells in the system that are treated at their individual well houses and not at the treatment plant. As the treatment capacity increases, the ECTA intends to increase withdrawals from Wells F and M.

ECTA maintains four storage tanks throughout the Township, with a combined storage capacity of 4.7 million gallons. ECTA does not utilize any surface water impoundments.

The majority (approximately 92 to 97 percent) of the East Cocalico Township’s wastewater is treated by Ephrata Borough’s Wastewater Treatment Plant #2 located at 43 Springhouse Road, Ephrata, Pennsylvania, where treated water is discharged to Cocalico Creek. Approximately three to eight percent of the township’s water is sent to the Adamstown Treatment Plant located at 235 East Swartzville Road, Denver, Pennsylvania where water is discharged to the Little Muddy Creek.

Near-term modifications to the ECTA system include the following. ECTA anticipates beginning operation of Well M at the end of 2021. Therefore, the Authority does not intend to seek renewal of the withdrawal approval for low-yielding Well 12 when SRBC Docket No. 19920702 expires on July 9, 2022.

The drilling of Well F was completed in June 2004 in East Cocalico Township, Lancaster County, Pennsylvania. The well was drilled in limestone of the Millbach Formation near the contact with the Richland Formation which is composed predominantly of dolomite and limestone. Well F is constructed as a telescoping twelve to six-inch diameter open-rock well to a depth of 440 feet. Steel casing extends to 121.5 feet below the ground surface and the upper water bearing zone occurs at an interval between 128 feet and 136.5 feet below the ground surface. The blown well

yield at the conclusion of drilling was greater than 1,500 gallons per minute.

Operation of Well F was initiated on July 14, 2015. For the docket renewal, ECTA is requesting a maximum 30-day average withdrawal rate of 1.150 million gallons per day (mgd) from Well F and a maximum instantaneous withdrawal of 797 gallons per minute (gpm), which are the currently approved rates by the SRBC. The current treatment plant limitations and the associated DEP permit limits preclude the use of Well F at the requested rate at the present time. However, renewal of the currently approved rates are being requested because ECTA intends to upgrade the treatment facility prior to expiration of the new SRBC docket. Well F can yield the requested rates as indicated by aquifer testing performed in November 2004.

Well F is approved by the Susquehanna River Basin Commission (Commission or SRBC) in Docket No. 20070606 for a 30-day average withdrawal of 1.150 mgd. As of July 2021, Well F has not been used up to its capacity, but based on projected needs, Wells F and M will eventually be used as the primary sources for the System. Docket No. 20070606 expires on June 13, 2022 and this ground water withdrawal application is being submitted to the Commission for renewal at the current rates.