

PA DEP Small Drinking Water Systems Engineering Services Program (ESP) Case Study

Client Name: Eastville Community Water Association
Location: Greene Township, Clinton County
Project Name: Well Development Project



Background:

The Eastville Community Water Association (ECWA) Public Water System serves approximately 63 people through 23 service connections with an average demand of 4,400 gallons per day (gpd). Forestry Spring serves as the only water supply source. Treatment consists of corrosion control and disinfection. Treated water is stored in a 16,000-gallon tank, which is buried adjacent to the treatment building.

Public Health Challenges:

The Forestry Spring water has been classified as groundwater under the direct influence (GUDI) of surface water. It is considered unfiltered surface water and the current treatment system does not meet the requirements of the PA Filter Rule.

Capacity Issues:

Technical – The source is providing a sufficient yield and has met all Surface Water Identification Protocol (SWIP) excluding the microscopic particulate analysis (MPA) portion of the testing because of the presence of diatoms and algae. The source must be filtered, abandoned, or brought into compliance with the PA Filter Rule.

Managerial – ECWA could not effectively operate and maintain the system due to insufficient volunteer labor and the increased regulatory requirements.

Financial – Due to the small customer base, ECWA had limited financial capabilities to raise capital funds for source rehabilitation, additional treatment or new source development. Community Development Block Grant (CDBG) Funding was obtained through the SEDA Council of Governments to help complete system improvements.

Actions:

ECWA completed development of a new well source. Design services were used to supplement the well design through SEDA COG. These services included a booster pump evaluation to facilitate a water service connection to the Pennsylvania Department of Conservation and Natural Resources Bureau of Forestry buildings located adjacent to the treatment building and storage tank and permit assistance that will allow ECWA to construct a permanent access road to the well site.

Outcomes:

ECWA completed SWIP analysis for the new well source and the source was determined to be groundwater. The new well source brings ECWA into compliance with current regulations.



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