

A FINAL FAREWELL

to our Becks Run Pump Station

Pennsylvania American Water's Beck's Run Pumping Station has been a part of the community's landscape for more than a century, providing a critical role in the delivery of drinking water service to area communities. After decades of quality service, the time has finally come to bid farewell to the station that has served the community so well over the years. Plans are underway for the former structure to be removed, and replaced with a new pump station to better serve the community.

About the pump station

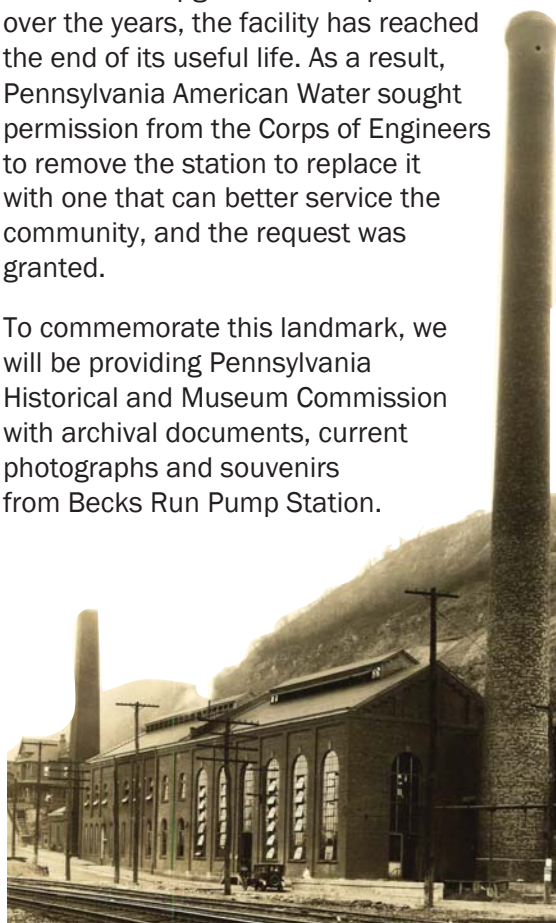
The Becks Run Pumping Station, located at 4702 Carson Street in Baldwin Borough, is critical to providing water service to the region. The building houses the intake facilities which draw up to 60 million gallons per day (MGD) of water a day from the Monongahela River. The primary source of supply for Pennsylvania American Water's Pittsburgh district, the water drawn by this pump station accounts for more than 45 percent of the water used to serve the area. The remaining 55 percent is supplied by the E.H. Aldrich Treatment Complex in Elrama, Pa.

From the intake station, the water is pumped to the Hays Mine water treatment plant, where it is treated to meet drinking

water standards and ultimately delivered to more than 291,000 customers in Allegheny and Washington Counties.

Originally constructed circa 1894, with a number of upgrades and expansions over the years, the facility has reached the end of its useful life. As a result, Pennsylvania American Water sought permission from the Corps of Engineers to remove the station to replace it with one that can better service the community, and the request was granted.

To commemorate this landmark, we will be providing Pennsylvania Historical and Museum Commission with archival documents, current photographs and souvenirs from Becks Run Pump Station.



PENNSYLVANIA
AMERICAN WATER

FORMER BECKS RUN PUMP STATION FACTS AT A GLANCE

Built: circa 1894 as the St. Clair Water Works Pumping Station

Retired: 2012

Customers Served: More than 291,000

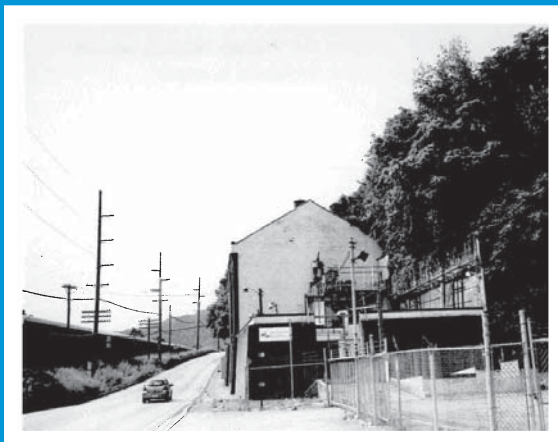
Communities Served: 173

The history of the pump station

The Becks Run Pumping Station was determined eligible for the National Register in 2001. One of three buildings on the site, it is the original pumping station used to deliver water to residents in the nearby communities, and represents a good example of a late 19th century pumping station in the Pittsburgh area.

The pump station, which was last owned by Pennsylvania American Water, was originally built by the St. Clair Water Company. The St. Clair Water Company purchased the lot in 1895 from James F. and Annie Grimes. In 1897, the Chartiers Valley Water Company took a lease on the property. According to the Allegheny County Recorder of Deeds Office, Baldwin Borough had constructed a "brick pumping station with a battery of boilers, pump, and other machinery and appliances" (Volume 962, Folio 47).

The 3½-story building was expanded in 1904 after it was acquired by the South Pittsburgh Water Company. In the first decade of the 20th century, a coal house and an oil house were added adjacent to the building. Additional renovations took place late in the second decade.



Ownership

- **Circa 1895** - The pump station was originally built by the St. Clair Water Company.
- **1897** - the Chartiers Valley Water Company took a lease on the property.
- **1904** - South Pittsburgh Water Company acquired the property. The lot grew in size with the purchase of an adjacent .18 acre (.073 hectare) lot in 1911 from Stella D. Hays. South Pittsburgh Water Company is the predecessor to the Western Pennsylvania Water Company.
- **1988** - the South Pittsburgh Water Company was incorporated into the Pennsylvania-American Water Company.

The development of utilities in the area

Baldwin Borough was settled by German and Irish immigrants who worked in James Hays' coal works on Beck's Run Road. By 1876, these were some of the most extensive coal works in the country. During the course of the twentieth century, the township lost most of its original acreage to new boroughs and annexations. Between 1901 and 1954, at least eight areas broke away to form their own communities. Baldwin is currently a small township of only 400 acres and is primarily residential.

The development of utilities was influential to the nineteenth and early-twentieth century prosperity of several communities, and the well being of residents. The rapid growth of communities due to thriving industries in the late nineteenth century led to poor quality of water and an inadequate supply. With this lack of availability, people resorted to using spring and well water after it was declared unfit for use. In 1906, Pittsburgh reported the highest rate of Typhoid Fever in the nation. The following year, to remedy the situation, the city opened its first filtration plant with engineer Chester F. Draker (Place 1959).

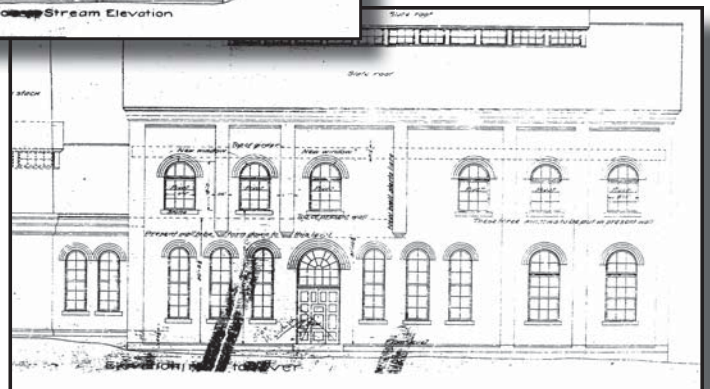
It was the Becks Run pump station that provided the source water for the new water treatment plant located on Agnew Street. From this plant the water is sent out to its customers. With the construction of this new plant, the water company was projected to "improve the health of people in general... be the cause of hundreds of families wanting to locate" to areas reached by this company and "be the cause of rapid increases in the value of property lying within the territory reached." (Anonymous 1906)



Pump station renovations

The building has housed pumping equipment from 1894 to the time the facility was retired in 2012. Through the years, the pump station has provided a reliable means of delivering water from the Monongahela River to a portion of the population of Southwestern Pennsylvania. Below is an outline of early renovations, based on construction maps and historical resources.

- Circa 1894** - The Saint Clair Water Works Pumping Station was built. The exposed portion of the structure consisted of block foundations, concrete floors, large block and brick masonry walls, and what appears to be a wood truss roof. The rear (west) wall of the upper structure was constructed with lower courses of large block, which act as a retaining wall, and upper courses of brick. The east, north, and south walls were brick construction. Architectural features included rounded windows and two roof parapets. The lower, buried portion of the structure consisted of block walls



and concrete floors. The structure included three rooms: the boiler room, dynamo room and pump room. The pump room included three wells which collected water piped in from the river. A large chimney was constructed in front of the pump station building. Construction of the pump station structure included cutting the existing hillside at the rear of the building and constructing a retaining wall.

Pump station renovations (cont.)

(continued)

- **1904** - The building was expanded. At this point, the building belonged to the South Pittsburgh Water Company, and the structure was called the Becks Run Pumping Station. The boiler room and pump room were expanded. This expansion set the building height to current day configuration. A steel or iron truss roof system was utilized. The new roof included ventilators and slate covering. New windows and doors were added to the structure.
- **1907** - The pump room floor was replaced, and a coal house was constructed.
- **1909** - An oil house was constructed adjacent to the boiler room.
- **1915** - New pumps were installed and the pump sumps were modified.
- **1917 - 1918** - Major renovations occurred, including expanding to the north with the addition of a new boiler house, an additional pump and pump sump, and a new chimney. The east wall of the boiler house was constructed with large, rounded windows and a main door with a large transom window. The majority of the new boiler room roof was slightly lower than the main structure. A roof cornice was constructed near the interface of the old structure and new boiler room. This cornice could be seen on the north end of the structure when it was retired. Pile foundations were utilized for this construction. A steel or iron roofing system was installed, and the roof covering for the addition was slate. A new section of retaining wall was also added to the rear of the property.
- **1919 to 1921** - pump and boiler modifications were completed. A lime mixing and feed system was installed.
- **1922** - the portion of Becks Run adjacent to the pump station was enclosed in a culvert. The pump room floor was modified.
- **1939** - A concrete flood wall was added to the front of the building.
- **1953** - Additional pumping units, an office and locker room were added to the building. Soda ash and lime storage tanks were constructed across the railroad tracks, west of the structure. Fly ash removal equipment was installed. The last available construction drawings for the pump station are dated 1953.



Water record is set in 1970

South Pittsburgh Water Company topped the 22 billion gallon mark for the first time in its 66-year history during the past year.

The company, which serves more than a half-million people in Allegheny and Washington counties, pumped and treated a record 22.8 billion gallons of water at its three stations. The net system delivery total was an increase of 9.91 per cent over 1969.

The 1970 record breaks down to about 495 gallons a day used by each South Pittsburgh customer—including industrial, commercial, and residential accounts. The average household used 189 gallons of water each day during 1970.

SYSTEM'S LARGEST

Already the largest of 85 companies in the investor-owned American Water Works Company System, South Pittsburgh increased even more in size when it acquired Monongahela Valley Water Corporation in December. The latter provided water service to 14,000 customers in the Clairton-Elizabeth area.

Monongahela Valley Water Corporation began purchasing nearly all its water from South Pittsburgh last May at the rate of about 4.8 million gallons a day. The supply was made possible after a new 24-inch water line was installed from South Pittsburgh's modern E. H. Aldrich Station at Elrama to West Elizabeth.

The E. H. Aldrich Station was completed in 1961 at a cost of \$6.5 million. Two years ago, a second-stage expansion program was completed at a cost of an additional \$2.8 million. The station is designed for additional growth as the need requires. South Pittsburgh also has stations at Beck's Run in Baldwin and at Hays Mine, located on the line between Baldwin and the City of Pittsburgh.

CLEARING THE SKY

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Water record set in 1970

Continued from Page 1

South Pittsburgh is clearing the sky over its Beck's Run Station. Pumps have been steam-driven at the Beck's Run Station for more than 50 years. And, coal has been burned to heat boilers to power the pumps.

But this spring, work will be completed on converting the station from steam to electricity. Total cost of the project will be \$192,000.

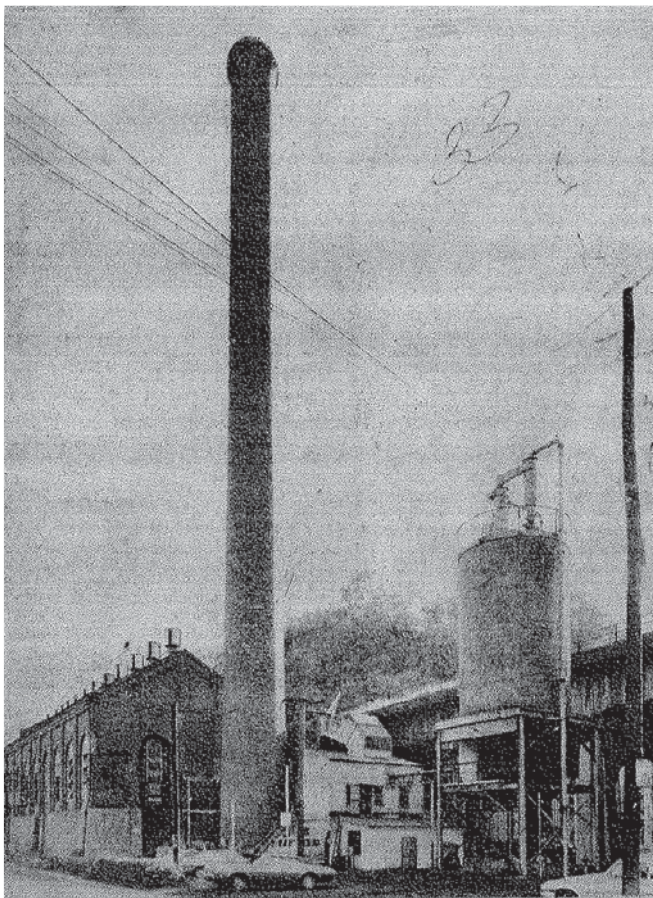
A casualty of the modernization will be a large smokestack—208 feet high with an inside diameter of six feet. When electrifications are completed this spring, the smokestack will be dismantled along with its fly-ash removal equipment and a room containing four out-of-service boilers.

INVESTOR-OWNED

As an investor-owned public utility, South Pittsburgh Water Company is bound to operate according to rules and regulations approved by the Pennsylvania Public Utility Commission. The Commission determines what is a fair return for the company and sets its water rates accordingly. The PUC granted the company an interim rate increase of 21 per cent last summer.

The company brings water to industries, businesses, and homes in 35 municipalities—including part of the City of Pittsburgh.

By adding 188 miles of mains to its distribution system with the Mon Valley acquisition, South Pittsburgh Water Company lines now total 1,400 miles. And if laid end-to-end facing south, would stretch from Pittsburgh to Havana, Cuba.



END OF AN ERA This large smokestack at the Beck's Run Station of South Pittsburgh Water Company will be torn down this spring as the station is fully converted from steam power to electricity. The smokestack is 208 feet high and has an inside diameter of six feet. Power from the station—located in Baldwin near the Pittsburgh city line—helps pump water to more than a half-million people.

Pump station renovations (cont.)

tric in 1970. The steam engines, which were replaced with electric motors, and the boilers were removed. An electrical sub-station was constructed on the south side of the property. It is believed that a portion of the original boiler house was partially demolished to accommodate the electrical sub-station.

- **Post 1970** - The majority of the 1917-1918 boiler house was demolished. A small portion remained. A chemical storage and feed and an unloading area was constructed in this location. The original ventilators were replaced. A new door was installed in the remaining portion of the original and the 1917-1918 boiler houses. Many of the windows and doors were also replaced or removed.



About the new pumping station

As we bid farewell to the former Becks Run Pumping Station, we welcome a new and improved pumping station, intake pipes and transmission mains. Construction is scheduled to begin in June 2010 and be completed and in service by December 2011. The new, state-of-the-art pumping station will enhance service to customers.

Improved operations and increased

reliability: The original pump station has documented structural, hydraulic and operational deficiencies, including two turbine pumps that work 50 percent of time. As part of the project, these pumps, pipes and obsolete equipment, will be replaced with modern infrastructure.

Improved flood protection: The new building will be multi-level to minimize the building's footprint and locate the equipment above flood levels. This will improve the reliability of service to the area and reduce potential outages due to flooding.