LOOKING BACK THROUGH TIME

Prior to the creation of The Brick Township Municipal Utilities Authority in 1969, The Brick Township Council discussed ways to prevent the degradation of the community's drinking water supply. Widely used septic systems threatened infiltration of ground water supplies and growing populations in coastal New Jersey towns were lowering the water table to the point that ocean salt water was beginning to invade fresh water supplies. The Council voted on April 3, 1969, to authorize the creation of The Brick Township Municipal Utilities Authority and appointed the first five-member Board of Commissioners. Upon its formation, the Authority, a non-profit, semi-autonomous agency, which must generate all its revenues from user fees, began the formidable tasks of planning, design, construction, and operation of comprehensive water and sewer systems. During its first year of operations the Authority serviced 93 customers with a staff of 5 from an office on Mantoloking Road.

After careful and extensive planning, water system construction began in 1971, resulting in a system comprising approximately 250 miles of ductile iron water mains, an 8 million gallon per day (MGD) water treatment plant, two storage standpipes with a combined capacity of 4 million gallons (MG), and 11 shallow wells to supply the water for treatment and subsequent distribution. By this time, the Authority had also constructed administrative and field offices at the current location; 1551 State Highway 88 West, Brick Township, NJ.

In 1970, the Authority purchased and began operating a sewer system and treatment plant originally built to service the Greenbrier I adult community. The Authority entered into an agreement with The Ocean County Utilities Authority (formerly The Ocean County Sewerage Authority) that called for the County agency to take over the treatment and disposal of all sewage delivered through the Authority's system. Major sanitary sewer construction began in 1976. Approximately 275 miles of gravity flow sanitary sewer main was installed, with 24 pumping stations. The majority of the pipes are installed at a depth of approximately 10 feet. However, it is possible to still find pipes at depths of up to 30 feet!

Between 1973 and 1980, water use in Brick Township alone increased from an average daily demand of 0.92 MGD to 4.8 MGD, while peak demands increased from 1.92 MGD to 8.6 MGD. By the early 1980s, the Authority was operating numerous shallow and deep wells and treating groundwater,

while also looking for an alternative water source. Restrictions associated with coastal New Jersey communities depleting critical ground water supplies led the State to order severe cutbacks in the amount of water the Authority could draw from its wells. Faced with only being allowed to pump 1.88 MGD from wells (a 70% reduction), the Board of Commissioners and Authority staff identified the Metedeconk River that flows through Forge Pond adjacent to the 46-acre headquarters facility as the best overall source for meeting Brick's future needs.

The Authority declined to join the New Jersey State Water Authority's Manasquan River Regional (Water) System and began preparations to introduce surface water from the river into the system. An associated expansion of the water treatment facilities allowed an increase in capacity to 12 MGD, and the first surface water source was introduced into the Authority's system in 1987.

Surface Water Treatment at Brick Township MUA (circa 1987)

By the early 1990s, development in Brick Township began to increase significantly and demand for drinking water increased accordingly. By 1994, the water treatment facilities were expanded, introducing a new raw water pump house, additional aeration towers, a pre- treatment building, additional sedimentation basins, additional filters and a finished water pump house, all contributing to the new capacity of 16 MGD, and providing safe drinking water to a growing service area in Brick

Township and surrounding communities.

By 1995, the Authority was searching for a site to develop plans for a reservoir to ensure a water secure future in the face of increasing drought conditions during summer high demand periods. In 1996, the Authority purchased a 120-acre site and subsequently began the process of planning for a design. In 1997, the Authority signed an agreement with the Borough of Point Pleasant Beach and by 1999 a pipeline was constructed to supply drinking water to the Borough for the next 25 years. The Authority also signed a 30-year lease agreement with a communications company to construct and maintain a communications tower on the property and effectively paying for the purchase of the land in 1996.

In 1998, the Authority awarded a contract to a consulting engineer for the design of the Pumped Raw Water Storage Reservoir, including upgrades to the raw water pump house intake on the Metedeconk River, and a 42" transmission main from the intake structure to the reservoir site. Over 1999 and 2000, the Authority contracted with several environmental consultants for the removal of 33,500 tons of steel slag, 4,500 tons of Kaofin (a by-product of Marcal paper products), and miscellaneous debris

from the site. By 2001, the Authority began excavation of over 1,000,000 cubic yards of overburden material from the reservoir site and by 2002 offered topsoil material to neighboring municipalities and the Townships of Howell, Freehold, Dover, Lacey, Keyport, Wall, as well as the New Jersey Department of Transportation and New Jersey Highway Authority. By 2002, all necessary permits were secured, and a contract was awarded for the construction of the 42" raw water transmission main, and a second contract was awarded

for construction of the Pumped Raw Water Storage Reservoir. In 2003, the reservoir liner was installed and work on the 42" transmission main was completed.

The Authority began filling the reservoir in April 2004 and this was completed by May. In September, the Brick Reservoir was substantially completed and dedicated for operational use.

The reservoir was opened to the public in May 2005. The reservoir offers a 1.6-mile travel way at the Reservoir rim, two side bank observations stations and other amenities for passive recreation activities.