

the 50's

THE 70's

The 90's

The 80's

2000

THE 60's

2001

52 **1951** Beginning assets total \$180,000

54 **1951** NWWA customers total 2,700

56 **1952** NWWA has two 100,000 gallon standpipes located on Fourth Street.

58 **1956** NWWA customers total 3,100

1958 Harry Borchers was hired as the first full-time manager of 1 full-time office clerk and 2 full-time operations personnel.

1951 Fire Hydrant installation

1952 The Authority had a 1-room office on Montgomery Ave.

72 **1971** NWWA customers total 6,250

74 **1976** Bicentennial Parade

76 **1976** NWWA customers total 8,075

78 **1976** Agreement signed to build the water project on the Delaware River at Point Pleasant.

1978 Point Pleasant Agreement cancelled

1979 NWWA moves to Walnut Street in North Wales.

1977 Peter Lukens becomes manager of NWWA.

92 **1990** Construction begins on Forest Park water treatment facility.

94 **1991** NWWA customers total 20,250

1993 Montgomeryville 3.1 MGD Hydropillar constructed

96 **1996** NWWA customers total 23,400

98 **1998** Water Wizard introduced

1994 Forest Park water treatment facility on line

62 **1961** NWWA customers total 3,890

64 **1963** Drought Begins
It was during the drought that many private wells in Montgomery Township went dry and the township established water districts so public water could be introduced to the township.

66 **1966** NWWA customers total 4,100

68 **1967** Drought Ends
Returns to normal

1966 The Delaware Valley was well into the fifth year of its worst recorded drought.

1969 NWWA expanded by purchasing the old Blue Bell Water Company giving a presence in Whitpain Township.

82 **1981** NWWA customers total 11,550

84 **1981** Tower Hill system purchased

86 **1986** NWWA customers total 14,350

88 **1980** North Penn and North Wales Water Authorities built and brought on-line a 3.2 MGD interim treatment plant to provide some additional capacity until the permanent plant (now free of litigation) could be constructed.

1980 Point Pleasant Pumping Station completed and PECCO went on line.

2000 Friends of the PA Rural Water Award 1st Place - PMAA Award: Water Quality Report Annual Report Web Site Environmental Education Program of the Year: Clean Stream Program

2000 4.1 MGD High Point Hydropillar constructed

2001 NWWA customers total 26,531

2001 NWWA assets total \$153,000,000

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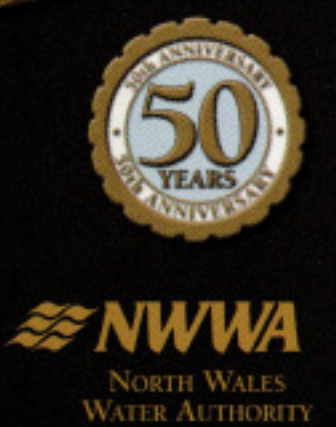
2001 WATER QUALITY REPORT



NWWA
NORTH WALES WATER AUTHORITY
200 West Walnut Street, P.O. Box 1339
North Wales, PA 19454-0339



Pure water, quality service
...naturally





At the North Wales Water Authority, we take great pride in delivering high quality drinking water to our 26,000 plus customers. Our staff of dedicated employees work to bring you the finest drinking water available by producing water that meets or significantly exceeds all current standards. Please read on to see how we are able to deliver you water of outstanding quality.

Your water source

Forest Park Water, which is jointly owned by North Wales and North Penn Water Authorities, consists of a 96 million gallon per day raw water pumping station on the Delaware River at Point Pleasant and transmission mains which discharge the Delaware River water into the North Branch of the Neshaminy Creek. Once discharged, the water flows down the Neshaminy Creek through Lake Galena. The water released from Lake Galena flows two miles downstream to the Forest Park Water Treatment Plant located in Chalfont, Pennsylvania. From the treatment plant, the North Wales and North Penn Water Authorities individually take their share of the supply for distribution within their respective service areas. Currently, 85% of our water comes from the Delaware River and 15% comes from ground water sources.

Your water quality

Since the Authority operates its own distribution system, as well as being a part owner of the Forest Park Water facilities, sampling under the SDWA (Safe Drinking Water Act) is conducted independently by both utilities in accordance with appropriate requirements. This ensures that the Authority takes all distribution samples for which it is responsible and Forest Park Water takes all samples related to a surface water treatment facility. To some extent, this arrangement results in duplication of testing but ensures an added measure of quality control.

The Forest Park Water Treatment Plant utilizes ozone as both a pre-treatment and post-treatment oxidant to replace chlorine in the process. Forest Park Water is one of only a handful of ozone plants currently in operation in the United States. In addition to the use of ozone and the normal treatment train of flocculation, sedimentation and filtration, Forest Park Water was constructed with granular activated carbon (GAC) contactors after the filtration train. These contactors, in combination with the use of ozone, are designed to be biologically active. This extra "polishing step" in the process ensures that any remaining organics or taste and odor compounds are removed before the water leaves the treatment plant. As a result of this process, organic contaminants that may find their way into the raw water source are effectively dealt with automatically in the process.

This treatment process ensures that customers of the NWWA are receiving the finest quality drinking water available today from any surface water treatment plant in the United States.

Monitoring your water

The North Wales Water Authority routinely monitors for constituents in your drinking water according to Federal and State laws. The North Wales Water Authority tables show the results of our monitoring for the period of January 1st to December 31st, 2001. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Every year the Authority receives a new set of monitoring requirements from the Pennsylvania Department of Environmental Protection (DEP) based on our previous results. Individual and groups of contaminants may be required to be monitored weekly, monthly, quarterly, annually, etc. Currently, the Authority monitors for ninety-three (93) contaminants at nine entry points and throughout the distribution system. We constantly monitor the water supply for various constituents. Our 2001 monitoring detected cryptosporidium in our raw water once during the year.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 or visit the EPA website at www.epa.gov/safewater/dwhealth.

Volatile Organic Contaminants

Contaminant (Unit of Measurement)	Violation Yes/No	NWWA Level Detected	Range	MCLG	MCL
TTHM [Total trihalomethanes] (ppb)	No	11	3-38	0	100
HAA5 [Haloacetic Acids] (ppb)	No	4	1-8	0	80

Benzene (ppb), Carbon tetrachloride (ppb), Chlorobenzene (ppb), o-Dichlorobenzene (ppb), p-Dichlorobenzene (ppb), 1,2 - Dichloroethane (ppb), 1,1 - Dichloroethylene (ppb), cis-1,2-Dichloroethylene (ppb), trans-1,2-Dichloroethylene (ppb), Dichloromethane (ppb), 1,2-Dichloropropane (ppb), Ethylbenzene (ppb), Methyl tertiary butyl ether (MTBE) (ppb), Styrene (ppb), Tetrachloroethylene (ppb), 1,2,4-Trichlorobenzene (ppb), 1,1,1 - Trichloroethane (ppb), 1,1,2 - Trichloroethane (ppb), Trichloroethylene (ppb), Toluene (ppm), Vinyl Chloride (ppb) and Xylenes (ppm) were monitored but not detected.

Data presented in the above table is from the most recent testing performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection. VOC monitoring was last performed 2/01. TTHM and HAA5 monitoring was performed quarterly throughout 2001.

Likely Source of Contamination: TTHM (Total trihalomethanes): By-products of drinking water disinfection. HAA5 (Haloacetic Acids): By-products of drinking water disinfection. *MTBE is a non-regulated contaminant monitored by the Authority

Inorganic Contaminants

Contaminant (Unit of Measurement)	Violation Yes/No	NWWA Level Detected	Range	MCLG	MCL
Copper* (ppm) 901	No	0.6	0-0.8	1.3	AL=1.3
Lead* (ppb) 901	No	3	0-3	0	AL=15
Nitrate (as Nitrogen) (ppm) 2/01	No	1.84	0-3.0	10	10

Antimony (ppb), Arsenic (ppb), Asbestos (MFL), Barium (ppm), Beryllium (ppb), Cadmium (ppb), Chromium (ppb), Cyanide (ppb), Fluoride (ppm), Mercury (inorganic) (ppb), Nickel (ppb), Nitrite (as Nitrogen) (ppm), Selenium (ppb) and Thallium (ppb) were monitored but not detected.

Data presented in the above table is from the most recent testing performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection. IOC monitoring was last performed 4/00.

Likely Source of Contamination: Copper: Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives; Lead: Corrosion of household plumbing, erosion of natural deposits; Nitrate (as Nitrogen): Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.

**Naturally occurring levels of lead and copper in the source water are non-detectable. This table represents the level detected in the 95th percentile of homes monitored in accordance with the US-EPA Lead and Copper Rule. None of the homes monitored for these contaminants exceeded the Action Level.



Definitions

In these tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/l) - picocuries per liter is a measure of the radioactivity in water.

Radioactive Contaminants

Contaminant (Unit of Measurement)	Violation Yes/No	NWWA Level Detected	Range	MCLG	MCL
Alpha Emitters (pCi/l) 6/00	No	< .8	N/A	0	15
Combined Radium (pCi/l) 7/96	No	< 1	N/A	0	5

Data presented in the above table is from the most recent testing performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection.

Likely Source of Contamination: Alpha Emitters and Combined Radium: Erosion of natural deposits

Microbiological Contaminants

Contaminant (Unit of Measurement)	Violation Yes/No	NWWA Level Detected	Range	MCLG	MCL
Total Coliform Bacteria	No	0	N/A	0	presence of coliform bacteria in 5% of monthly samples
Fecal Coliform and E. coli Bacteria	No	0	N/A	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive
Turbidity (NTU)	No	0.04	0.03 - 0.06	N/A	TT

Data presented in the above table is from calendar year 2001 monitoring performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection. Coliform bacteria, disinfection residual and turbidity are monitored on a continuous basis and reported monthly. Monitoring for Giardia and Cryptosporidium performed at Forest Park was negative.

Likely Source of Contamination: Turbidity: Soil runoff

Synthetic Organic Contaminants Including Pesticides & Herbicides

2,4-D (ppb), 2,4,5-TP (Silvex) (ppb), Alachlor (ppb) 5/01, Atrazine (ppb), Benzo(a)pyrene (PAH) (nanograms/l) 8/00, Chlordane (ppb), Carbofuran, Dalapon (ppb), Dicamba (ppb), Di(2-ethylhexyl) adipate (ppb) 8/00, Di(2-ethylhexyl) phthalate (ppb) 8/00, Dinoseb (ppb), Endrin (ppb), Heptachlor (nanograms/l), Heptachlor epoxide (nanograms/l), Hexachlorobenzene (ppb), Hexachlorocyclo-pentadiene (ppb) 4/00, Lindane (nanograms/l), Methoxychlor (ppb), Oxamyl (ppb) 5/00, Pentachlorophenol (ppb) 4/00, Picloram (ppb), Simazine (ppb) and Toxaphene (ppb) were monitored but not detected.

Data presented in the above table is from the most recent testing performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection. Unless otherwise noted, SOC testing was last performed 7/00.



Conservation Tips

On February 12, 2002, Governor Schweiker signed a proclamation declaring a drought emergency for both Montgomery and Bucks Counties. The North Wales Water Authority is asking for your cooperation to conserve water.

For additional drought information and water conservation measures please log on to our website at www.nwwater.com

"Water is life, take what you need but use what you take."

- Bathroom**
 - Check toilets for leaks. Food coloring or dye tablets* in the tank can easily show if you need to replace an inexpensive flapper or flush valve.
 - Take shorter showers.
- Just a few minutes less can save thousands of gallons per year.**
- Kitchen**
 - Use your dishwasher for full loads only. Regular cycles require about 12 gallons of water.
- Use a broom to clean driveways and sidewalks.**

Five minutes hosing wastes about 25 gallons of water.

- Savings if running full loads: Over 500 gallons per year.**
- Laundry room**
 - Use your washing machine for full loads only. A regular cycle uses 40-46 gallons of water.
- Savings: up to 100 gallons per week**



*Visit www.nwwater.com for free dye tablets



Kid Zone

Hey Kids! Need information for science projects?

Science projects are always a challenge; that is why we have dedicated an entire section on our website just for children. Your children can now log on to www.nwwater.com, click on **Kid Zone**, and learn all about the water they drink and use every day. Teaching proper water stewardship is a goal of the Authority and our website is an excellent way to communicate this.

NWWA SCHOLARSHIPS

NWWA recognizes its role and obligation in being an active participant in the promotion of sound water supply and environmental stewardship for the future benefit of all. To this end NWWA participates in a number of projects and cooperative efforts to ensure adequate water supply of the highest quality, to protect source water, to promote wellhead protection and improve water quality in our watersheds. We believe we need to encourage individuals to take an interest in education and careers in the water supply industry and related fields. The North Wales Water Authority Scholarship Program is designed to help meet the future needs of the water supply industry and promote proper stewardship of our most fundamental and precious resource.

These scholarships are available to customers of the Authority and immediate family members of Authority customers that claim the customer's address as their permanent residence. Authority board members, employees, members of the Borough Council of North Wales and their immediate families are not eligible to participate.

Applications may be obtained by contacting the Authority or visiting our web site at www.nwwater.com. After an initial screening by Authority staff to ensure that minimum requirements are satisfied, the board of the Authority will make the final selections in June of each year for the fall term. The application deadline will be May 1st of each year.

UNDERGRAD GRADUATE

- The Authority may award one (1) undergraduate scholarship each year in the amount of \$2,500.
- The Authority may award up to one (1) graduate scholarship each year in the amount of \$4,000.
- Applicants must file a complete application with supporting documents by the deadline date.
- Applicants must file a complete application with supporting documents by the deadline date.
- The applicant shall have completed 30 credits of undergraduate work with a minimum GPA of 2.5 at an accredited 4-year institution.
- The applicant must have received a bachelor's degree from an accredited institution in a water supply related field with a minimum GPA of 2.75.
- The applicant shall be pursuing a degree in a field applicable to the water supply industry.
- The applicant must have a letter of acceptance from a graduate school and be pursuing a degree in a field of study applicable to the water supply industry.
- The applicant's prior history of work and/or volunteer activities related to such things as pollution prevention, source water protection, stream biology and chemistry, water supply, etc., will be considered as an indicator of future goals.
- The applicant's prior history of work and/or volunteer activities related to the industry will be considered as an indicator of future goals.
- Although financial need will not be a major consideration, applicants that are not receiving full scholarships covering tuition and room and board will be given priority.

The application deadlines are May 1st of each year.

Special features of the site include:

- How to Conserve Water
- Water Glossary
- Water Treatment
- The Water Cycle
- Careers in the Water Industry
- Water Distribution
- How a Water Meter Works
- Water Related Reading List
- Water Links
- Scholarships
- Coloring and Activity Pages
- Frequently Asked Questions

We also have a number of experiments on hand and will gladly share them; simply call our public relations department for more information.

Don't delay, log on to www.nwwater.com and click on Kid Zone today!