North Penn Water Authority (NPWA) is pleased to present to you this Annual Drinking Water Quality Report. This brochure is a snapshot of last year’s water quality. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and Pennsylvania Department of Environmental Protection (PA DEP) state standards. We are committed to providing you with information because informed customers are our best allies. The Authority’s staff of professionals is dedicated to ensuring that our customers receive a safe, economical, and continuous supply of water.

Since July 2011, the primary source of water for Sellersville Borough is treated surface water from the Forest Park Water Treatment Plant (FPW) located in Chalfont. As the water leaves FPW and travels to the Borough, it contains water from wells located within Hilltown at times called Dutch Island and from wells located within Sellersville. Well 6, the well located in West Rockhill Township, still continues to supply water to the Borough. This well has no water quality problems and meets all Federal and State drinking water regulations. All groundwater wells with arsenic concerns have been permanently shut down and are no longer being used. NPWA has made significant strides in improving the water quality and system reliability improvements. NPWA’s routine monitoring for constituents in your water meets all Federal and State standards. We are committed to providing you with information because informed customers are our best allies. The Authority’s staff of professionals is dedicated to ensuring that our customers receive a safe, economical, and continuous supply of water.

HOW NPWA IS PROTECTING THE WATER YOU DRINK

To enhance water quality, NPWA performs an annual hydraulic flushing program which takes place in the spring of each year. The flushing programs help improve water quality by removing any possible build-up of mineral deposits from the inside of the water distribution system. NPWA also has an aggressive water main replacement program to improve the quality of water that we deliver to our customers. Old unlined cast iron main lines can affect water quality and restrict flow, which is replaced on a regular basis. These projects are scheduled with your Water Distribution Operations staff or our member municipalities are doing the work on the roads to reduce inconvenience to the community.

In 2011, NPWA became the first water utility in Pennsylvania to join American Water Works Association’s (AWWA) JAWWA Distribution System Optimization Program. This program is part of AWWA’s Partnership for Safe Water whose objective is to identify opportunities for improvement in system operations and to empower system operators with knowledge to recognize and apply procedures that result in water quality and system reliability improvements. NPWA’s participation in this voluntary program demonstrates our commitment to providing the best water quality to our customers.

The Authority has continued to work proactively to protect its sources of water. The North Branch Watershed Assessment Program is responsible for educating the public, hosting meetings at various locations, performing riparian buffer plantings, stream cleanings and wetland restorations, and implementing a plan to mark stream input locations on roadways and private areas. NPWA is dedicated to protecting the North Branch of the Neshaminy Creek, which provides approximately 85% of North Penn Water Authority’s source water. Any individuals wishing to become involved in the North Branch Watershed Assessment Association may contact Marianne Morgan at the Authority at 215-855-3617 or Marianne.morgan@northpennwater.org.

A Source Water Assessment of Sellersville’s groundwater source was completed in 2005 by the PA DEP. The area allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants are normally low. However, if a contaminant of concern is found at or above the detection level in the data, then the Authority will work with the local government to develop an action plan to reduce the concentration of the contaminant. NPWA continues to supply water to the Borough. While NPWA tests for over 100 contaminants to ensure water quality, only detected values of contaminants are included in the tables of this report. A list of contaminants that NPWA monitors for but were not detected is in a separate report at the Authority’s office.

North Penn Water Authority serves over 32,000 customers in the following municipalities:

Hatfield Borough
Lansdale Borough
Sellersville Borough
Souderton Borough
Francopia Township
Hatfield Township
Lower Salford Township
Shippan Township
Upper Gwynedd Township
Upper Salford Township
West Rockhill Township
Whitemarsh Township
Worcester Township

Owners of multiple family dwellings, commercial businesses, public housing, or similar situations, are encouraged to obtain one and/or distribute copies of this report, available on our website at North Penn Water Authority’s operations center or by calling (215) 855-3617. This report is also available online at www.northpennwater.org.
## CONTAMINANTS – Tested at Sellersville Well 6, Forest Park Water Treatment Plant and Hilltown Township Well 2012

### Disinfectant Residuals and Disinfection By-products (DRBY)

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation Yes/No</th>
<th>Average Detected</th>
<th>Range Detected</th>
<th>MCLG</th>
<th>MCL</th>
<th>Major Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bromate (ppb)</td>
<td>No</td>
<td>0.9 0.19</td>
<td>0.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorine (ppm) Concentration Plant</td>
<td>No</td>
<td>1.15 0.93 1.22</td>
<td>MRDL=40pCi/L</td>
<td>MCL=4</td>
<td></td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>Chlorine (ppm) Jordan Well</td>
<td>No</td>
<td>1.02 0.23</td>
<td>MRDL=40pCi/L</td>
<td>MCL=4</td>
<td></td>
<td>Water additive used to control microbes</td>
</tr>
</tbody>
</table>

**Inorganic Contaminants**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation Yes/No</th>
<th>Average Detected</th>
<th>Range Detected</th>
<th>MCLG</th>
<th>MCL</th>
<th>Major Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic (ppb)</td>
<td>No</td>
<td>0 0.3 0.5</td>
<td>0.3 0.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barium (ppm)</td>
<td>0.03 0.061</td>
<td>0.0 0.029</td>
<td>0.0 0.029</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickel (ppb)</td>
<td>0.0 0.29</td>
<td>0.5 0.29</td>
<td>0.5 0.29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (ppm)</td>
<td>0.5 0.4 0.6</td>
<td>0.0 0.02</td>
<td>0.0 0.02</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sodium (ppm)**

- 3.6 15

**Nickel (ppb)**

- 30

**Turbidity (NTU)**

- 0.1 NTU

**Uranium (μg/L)**

- 3

**Trichloroethylene (ppb)**

- 5

**Tetrachloroethylene (ppb)**

- 5

**Trans-Chloroethylene (ppb)**

- 5

**VOCs**

- 5

**Nitrosamines**

- 5

**Bacteria in Tap Water**

- 5

**Bacteria in Tap Water**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation Yes/No</th>
<th>Action Level (AL)</th>
<th>Major Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria</td>
<td>No</td>
<td>0.00</td>
<td>Naturally present in the environment</td>
</tr>
</tbody>
</table>

**Lead and Copper**

- 5

**Performance Monitoring at the Treatment Plant**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation Yes/No</th>
<th>Range Detected</th>
<th>MCLG</th>
<th>MCL</th>
<th>Major Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>No</td>
<td>0.49 0.85</td>
<td>MRDL=4</td>
<td>MCL=4</td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>HAAS</td>
<td>6.7 0.16</td>
<td>0.00882</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TTHM</td>
<td>27.3 11.8</td>
<td>0.00019</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>No</td>
<td>0.525 1.3</td>
<td>1.3 0.05</td>
<td>0 0.2 0.02</td>
<td>Corrosion of household plumbing systems</td>
</tr>
<tr>
<td>Lead (ppb)</td>
<td>No</td>
<td>3.6 10</td>
<td>0.05 0.2 0.02</td>
<td>Corrosion of household plumbing systems</td>
<td></td>
</tr>
</tbody>
</table>

### DISINFECTANT RESIDUALS AND DISINFECTION BY-PRODUCTS – Tested Throughout the Distribution System

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation Yes/No</th>
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<th>MCLG</th>
<th>MCL</th>
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<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TTHM</td>
<td>27.3 11.8</td>
<td>0.00019</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### BACTERIA IN TAP WATER – Tested Throughout the Distribution System

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation Yes/No</th>
<th>Range Detected</th>
<th>MCLG</th>
<th>MCL</th>
<th>Major Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria</td>
<td>No</td>
<td>0.00 0.10</td>
<td>0</td>
<td></td>
<td>Naturally present in the environment</td>
</tr>
</tbody>
</table>

**Unregulated Contaminants**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation Yes/No</th>
<th>Range Detected</th>
<th>MCLG</th>
<th>MCL</th>
<th>Major Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>No</td>
<td>0.02 0.02</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate</td>
<td>No</td>
<td>0.03 0.04</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrites</td>
<td>No</td>
<td>0.93 1.21</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Maximum Contaminant Level Goal (MCLG)**

- 0.00882

**Maximum Contaminant Level (MCL)**

- 0.00019

**NTU**

- 0.00882

**pCi/L**

- 0.00019
This report is being mailed to you as a requirement of the federal Safe Drinking Water Act. “A dedicated, professional workforce committed to providing the community with a safe, reliable, and economical water supply.”

ANNUAL DRINKING WATER QUALITY REPORT
SELLERSVILLE
P.O. Box 1659 • Lansdale, PA 19446
Ph: 215-855-3617
This report is also available online at www.northpennwater.org

2012
PWSID#1460034

PEOPLE WITH SPECIAL HEALTH CONCERNS

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. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from EPA’s Safe Drinking Water Hotline at 1-800-426-4791 or visiting their website at www.epa.gov/safewater.

While your drinking water meets EPA’s standard for arsenic, it does contain low levels of arsenic. EPA’s standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. North Penn Water Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from EPA’s Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

In our unregulated contaminant assessment monitoring performed July 2009 – April 2010, n-nitrosodiethylamine (NDEA) was detected in 1 out of 4 samples collected at the Forest Park Water Treatment Plant. Nitrosamines can form as intermediates and byproducts in chemical synthesis and manufacture of rubber, leather, and plastics. Foods such as bacon and malt beverages can contain nitrosamines and there is evidence that they can form in the upper GI tract. Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

HEALTH EFFECTS INFORMATION

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Below is a list of contaminants which NPWA monitored for in 2012 but DID NOT DETECT:

Antimony  | Mercury  | Inorganic Contaminants
Beryllium | Nitrate  |  
Cadmium  | Selenium |  
Chromium | Thallium |  
Cyanide  | Chromium |  
Selenium  | Cadmium  |  
Beryllium | Nitrite  |  
Pentachlorophenol |  | Synthetic Organic Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.

The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline at 1-800-426-4778 or visiting their website at www.epa.gov/safewater.