

# **“2015” Annual Drinking Water Quality Report**

## **“City of Newton”**

Water System Number: “01-18-015”

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information because informed customers are our best allies. **If you have any questions about this report or concerning your water, please contact Garrett Gilbert, WTP superintendent at 828-695-4312. We want our valued customers to be informed about their water utility.**

### **What EPA Wants You to Know**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. City of Newton 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 the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

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 the 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; and radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

### **When You Turn on Your Tap, Consider the Source**

The water that is used by this system is surface water and is located at the Jacobs Fork park off highway 10 and the lake is located at the end of Boston road. The Jacob Fork River is the primary water source for Newton’s drinking water. The city has a secondary source for water, which is the City Lake, a reservoir that holds approximately 40 million gallons. The Jacob Fork flows approximately 20 miles over solid bedrock where it is well oxygenated, and most volatile contaminants are removed. The Jacob Fork River has no commercial or city discharge facilities located along its 20-mile stretch adding to the purity of the water.

## Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for the City of Newton was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

### Susceptibility of Sources to Potential Contaminant Sources (PCSs)

| Source Name                   | Inherent Vulnerability Rating | Contaminant Rating | Susceptibility rating | SWAP Report Date |
|-------------------------------|-------------------------------|--------------------|-----------------------|------------------|
| Jacobs Fork/<br>Catawba River | Moderate                      | Lower              | Moderate              | July 2015        |
| City Lake                     | Moderate                      | Lower              | Moderate              | July 2015        |

The complete SWAP Assessment report for the City of Newton may be viewed on the Web at: [www.ncwater.org/pws/swap](http://www.ncwater.org/pws/swap). Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to [swap@ncdenr.gov](mailto:swap@ncdenr.gov). Please indicate your system name, number, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the system’s potential to become contaminated by PCSs in the assessment area.

## Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2015.** The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Important Drinking Water Definitions:

**Not-Applicable (N/A)** – Information not applicable/not required for that particular water system or for that particular rule.

**Non-Detects (ND)** - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

**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 (ug/L)** - 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.

**Million Fibers per Liter (MFL)** - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

**Nephelometric Turbidity Unit (NTU)** - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**Maximum Residual Disinfection Level Goal (MRDLG)** – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfection Level (MRDL)** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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## Tables of Detected Contaminants

### Microbiological Contaminants in the Distribution System - For systems that collect *less than 40* samples per month)

| Contaminant (units)                                    | MCL Violation Y/N | Your Water | MCLG | MCL  | Likely Source of Contamination       |
|--|-------------------|------------|------|--|--------------------------------------|
| Total Coliform Bacteria (presence or absence)          | N                 | 0          | 0    | one positive monthly sample  | Naturally present in the environment |
| Fecal Coliform or <i>E. coli</i> (presence or absence) | N                 | 0          | 0    | 0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive) | Human and animal fecal waste         |

### Turbidity\*

| Contaminant (units)   | Treatment Technique (TT) Violation Y/N | Your Water | Treatment Technique (TT) Violation if:                        | Likely Source of Contamination |
|---|--|------------|---|--------------------------------|
| Turbidity (NTU) - Highest single turbidity measurement                              | N                                      | 0.08NTU    | Turbidity > 1 NTU   | Soil runoff                    |
| Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits | N                                      | 100%       | Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU |                                |

\* Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

### Inorganic Contaminants

| Contaminant (units)       | Sample Date | MCL Violation Y/N | Your Water | Range |      | MCLG | MCL | Likely Source of Contamination  |
|---------------------------|-------------|-------------------|------------|-------|------|------|-----|---|
|                           |             |                   |            | Low   | High |      |     |   |
| Antimony (ppb)            | 1/12/15     | N                 | ND         | N/A   |      | 6    | 6   | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder   |
| Arsenic (ppb)             | 1/12/15     | N                 | ND         | N/A   |      | 0    | 10  | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes                              |
| Barium (ppm)              | 1/12/15     | N                 | ND         | N/A   |      | 2    | 2   | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits  |
| Beryllium (ppb)           | 1/12/15     | N                 | ND         | N/A   |      | 4    | 4   | Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries            |
| Cadmium (ppb)             | 1/12/15     | N                 | ND         | N/A   |      | 5    | 5   | Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints |
| Chromium (ppb)            | 1/12/15     | N                 | ND         | N/A   |      | 100  | 100 | Discharge from steel and pulp mills; erosion of natural deposits  |
| Cyanide (ppb)             | 1/12/15     | N                 | ND         | N/A   |      | 200  | 200 | Discharge from steel/metal factories; discharge from plastic and fertilizer factories   |
| Fluoride (ppm)            | 1/12/15     | N                 | .76        | N/A   |      | 4    | 4   | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories           |
| Mercury (inorganic) (ppb) | 1/12/15     | N                 | ND         | N/A   |      | 2    | 2   | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland                   |
| Selenium (ppb)            | 1/12/15     | N                 | ND         | N/A   |      | 50   | 50  | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines                                    |
| Thallium (ppb)            | 1/12/15     | N                 | ND         | N/A   |      | 0.5  | 2   | Leaching from ore-processing sites; discharge from electronics, glass, and drug factories   |

### Nitrate/Nitrite Contaminants

| Contaminant (units)         | MCL Violation Y/N | Your Water | Range |      | MCLG | MCL | Likely Source of Contamination  |
|-----------------------------|-------------------|------------|-------|------|------|-----|---|
|                             |                   |            | Low   | High |      |     |   |
| Nitrate (as Nitrogen) (ppm) | N                 | <0.10      | N/A   |      | 10   | 10  | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Nitrite (as Nitrogen) (ppm) | N                 | <0.10      | N/A   |      | 1    | 1   | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

### Unregulated Inorganic Contaminants

| Contaminant (units) | Sample Date | Your Water | Range |      | Secondary MCL |
|---------------------|-------------|------------|-------|------|---------------|
|                     |             |            | Low   | High |               |
| Sulfate (ppm)       | 1/12/15     | ND         | N/A   |      | 250           |

### Synthetic Organic Chemical (SOC) Contaminants Including Pesticides and Herbicides

| Contaminant (units)                    | Sample Date    | MCL Violation Y/N | Your Water | Range |      | MCLG | MCL | Likely Source of Contamination  |
|--|----------------|-------------------|------------|-------|------|------|-----|---|
|  |                |                   |            | Low   | High |      |     |   |
| 2,4-D (ppb)                            | Jan./June 2014 | N                 | ND         | N/A   |      | 70   | 70  | Runoff from herbicide used on row crops   |
| 2,4,5-TP (Silvex) (ppb)                | Jan./June 2014 | N                 | ND         | N/A   |      | 50   | 50  | Residue of banned herbicide   |
| Alachlor (ppb)                         | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 2   | Runoff from herbicide used on row crops   |
| Atrazine (ppb)                         | Jan./June 2014 | N                 | ND         | N/A   |      | 3    | 3   | Runoff from herbicide used on row crops   |
| Benzo(a)pyrene (PAH) (ppt)             | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 200 | Leaching from linings of water storage tanks and distribution lines                   |
| Carbofuran (ppb)                       | Jan./June 2014 | N                 | ND         | N/A   |      | 40   | 40  | Leaching of soil fumigant used on rice and alfalfa                                    |
| Chlordane (ppb)                        | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 2   | Residue of banned termiticide   |
| Dalapon (ppb)                          | Jan./June 2014 | N                 | ND         | N/A   |      | 200  | 200 | Runoff from herbicide used on rights of way   |
| Di(2-ethylhexyl) adipate (ppb)         | Jan./June 2014 | N                 | ND         | N/A   |      | 400  | 400 | Discharge from chemical factories   |
| Di(2-ethylhexyl) phthalate (ppb)       | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 6   | Discharge from rubber and chemical factories  |
| DBCP [Dibromochloropropane] (ppt)      | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 200 | Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards |
| Dinoseb (ppb)                          | Jan./June 2014 | N                 | ND         | N/A   |      | 7    | 7   | Runoff from herbicide used on soybeans and vegetables                                 |
| Endrin (ppb)                           | Jan./June 2014 | N                 | ND         | N/A   |      | 2    | 2   | Residue of banned insecticide   |
| EDB [Ethylene dibromide] (ppt)         | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 50  | Discharge from petroleum refineries   |
| Heptachlor (ppt)                       | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 400 | Residue of banned pesticide   |
| Heptachlor epoxide (ppt)               | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 200 | Breakdown of heptachlor   |
| Hexachlorobenzene (ppb)                | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 1   | Discharge from metal refineries and agricultural chemical factories                   |
| Hexachlorocyclopentadiene (ppb)        | Jan./June 2014 | N                 | ND         | N/A   |      | 50   | 50  | Discharge from chemical factories   |
| Lindane (ppt)                          | Jan./June 2014 | N                 | ND         | N/A   |      | 200  | 200 | Runoff/leaching from insecticide used on cattle, lumber, gardens                      |
| Methoxychlor (ppb)                     | Jan./June 2014 | N                 | ND         | N/A   |      | 40   | 40  | Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock       |
| Oxamyl [Vydate] (ppb)                  | Jan./June 2014 | N                 | ND         | N/A   |      | 200  | 200 | Runoff/leaching from insecticide used on apples, potatoes and tomatoes                |
| PCBs [Polychlorinated biphenyls] (ppt) | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 500 | Runoff from landfills; discharge of waste chemicals                                   |
| Pentachlorophenol (ppb)                | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 1   | Discharge from wood preserving factories  |
| Picloram (ppb)                         | Jan./June 2014 | N                 | ND         | N/A   |      | 500  | 500 | Herbicide runoff  |
| Simazine (ppb)                         | Jan./June 2014 | N                 | ND         | N/A   |      | 4    | 4   | Herbicide runoff  |
| Toxaphene (ppb)                        | Jan./June 2014 | N                 | ND         | N/A   |      | 0    | 3   | Runoff/leaching from insecticide used on cotton and cattle                            |

## Volatile Organic Chemical (VOC) Contaminants

| Contaminant (units)              | Sample Date | MCL Violation Y/N | Your Water | Range |      | MCLG | MCL | Likely Source of Contamination  |
|----------------------------------|-------------|-------------------|------------|-------|------|------|-----|---|
|                                  |             |                   |            | Low   | High |      |     |   |
| Benzene (ppb)                    | 1/12/15     | N                 | ND         | N/A   |      | 0    | 5   | Discharge from factories; leaching from gas storage tanks and landfills |
| Carbon tetrachloride (ppb)       | 1/12/15     | N                 | ND         | N/A   |      | 0    | 5   | Discharge from chemical plants and other industrial activities          |
| Chlorobenzene (ppb)              | 1/12/15     | N                 | ND         | N/A   |      | 100  | 100 | Discharge from chemical and agricultural chemical factories             |
| o-Dichlorobenzene (ppb)          | 1/12/15     | N                 | ND         | N/A   |      | 600  | 600 | Discharge from industrial chemical factories                            |
| p-Dichlorobenzene (ppb)          | 1/12/15     | N                 | ND         | N/A   |      | 75   | 75  | Discharge from industrial chemical factories                            |
| 1,2 – Dichloroethane (ppb)       | 1/12/15     | N                 | ND         | N/A   |      | 0    | 5   | Discharge from industrial chemical factories                            |
| 1,1 – Dichloroethylene (ppb)     | 1/12/15     | N                 | ND         | N/A   |      | 7    | 7   | Discharge from industrial chemical factories                            |
| cis-1,2-Dichloroethylene (ppb)   | 1/12/15     | N                 | ND         | N/A   |      | 70   | 70  | Discharge from industrial chemical factories                            |
| trans-1,2-Dichloroethylene (ppb) | 1/12/15     | N                 | ND         | N/A   |      | 100  | 100 | Discharge from industrial chemical factories                            |
| Dichloromethane (ppb)            | 1/12/15     | N                 | ND         | N/A   |      | 0    | 5   | Discharge from pharmaceutical and chemical factories                    |
| 1,2-Dichloropropane (ppb)        | 1/12/15     | N                 | ND         | N/A   |      | 0    | 5   | Discharge from industrial chemical factories                            |
| Ethylbenzene (ppb)               | 1/12/15     | N                 | ND         | N/A   |      | 700  | 700 | Discharge from petroleum refineries                                     |
| Styrene (ppb)                    | 1/12/15     | N                 | ND         | N/A   |      | 100  | 100 | Discharge from rubber and plastic factories; leaching from landfills    |
| Tetrachloroethylene (ppb)        | 1/12/15     | N                 | ND         | N/A   |      | 0    | 5   | Discharge from factories and dry cleaners                               |
| 1,2,4 –Trichlorobenzene (ppb)    | 1/12/15     | N                 | ND         | N/A   |      | 70   | 70  | Discharge from textile-finishing factories                              |
| 1,1,1 – Trichloroethane (ppb)    | 1/12/15     | N                 | ND         | N/A   |      | 200  | 200 | Discharge from metal degreasing sites and other factories               |
| 1,1,2 –Trichloroethane (ppb)     | 1/12/15     | N                 | ND         | N/A   |      | 3    | 5   | Discharge from industrial chemical factories                            |
| Trichloroethylene (ppb)          | 1/12/15     | N                 | ND         | N/A   |      | 0    | 5   | Discharge from metal degreasing sites and other factories               |
| Toluene (ppm)                    | 1/12/15     | N                 | ND         | N/A   |      | 1    | 1   | Discharge from petroleum factories                                      |
| Vinyl Chloride (ppb)             | 1/12/15     | N                 | ND         | N/A   |      | 0    | 2   | Leaching from PVC piping; discharge from plastics factories             |
| Xylenes (Total) (ppm)            | 1/12/15     | N                 | ND         | N/A   |      | 10   | 10  | Discharge from petroleum factories; discharge from chemical factories   |

## Asbestos Contaminant

| Contaminant (units)  | Sample Date | MCL Violation Y/N | Your Water | Range |      | MCLG | MCL | Likely Source of Contamination                                    |
|----------------------|-------------|-------------------|------------|-------|------|------|-----|---|
|                      |             |                   |            | Low   | High |      |     |   |
| Total Asbestos (MFL) | 5-31-11     | N                 | ND         | N/A   |      | 7    | 7   | Decay of asbestos cement water mains; erosion of natural deposits |

## Lead and Copper Contaminants

| Contaminant (units)                        | Sample Date | Your Water | # of sites found above the AL | MCLG | AL     | Likely Source of Contamination                                       |
|--|-------------|------------|-------------------------------|------|--------|--|
| Copper (ppm) (90 <sup>th</sup> percentile) | June 2015   | .289       | 0                             | 1.3  | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) (90 <sup>th</sup> percentile)   | June 2015   | 0          | 0                             | 0    | AL=15  | Corrosion of household plumbing systems, erosion of natural deposits |

### Radioactive Contaminants

| Contaminant (units)    | Sample Date | MCL Violation Y/N | Your Water | MCLG | MCL  | Likely Source of Contamination |
|------------------------|-------------|-------------------|------------|------|------|--------------------------------|
| Alpha emitters (pCi/L) | 4/18/12     | N                 | ND         | 0    | 15   | Erosion of natural deposits    |
| Uranium (pCi/L)        | 4/18/12     | N                 | ND         | 0    | 20.1 | Erosion of natural deposits    |

### Total Organic Carbon (TOC)

| Contaminant (units)                                | TT Violation Y/N | Your Water (RAA Removal Ratio) | Range Monthly Removal Ratio Low - High | MCLG | TT | Likely Source of Contamination       | Compliance Method (Step 1 or ACC#_) |
|--|------------------|--------------------------------|--|------|----|--------------------------------------|-------------------------------------|
| Total Organic Carbon (removal ratio) (TOC)-TREATED | N                | 1.93                           | 1- 2.86                                | N/A  | TT | Naturally present in the environment | ACC2                                |

### Alternative Compliance Criteria (ACC)

|        |   |
|--------|---|
| Alt. 1 | Source Water TOC < 2.0 mg/L   |
| Alt. 2 | Treated Water TOC < 2.0 mg/L  |
| Alt. 3 | Source Water SUVA $\leq$ 2.0 L/mg-m   |
| Alt. 4 | Treated Water SUVA $\leq$ 2.0 L/mg-m  |
| Alt. 5 | Treated Water Alkalinity < 60 mg/L (for softening systems only)                             |
| Alt. 6 | THM & HAA RAA's $\leq$ 1/2 MCL & uses only chlorine   |
| Alt. 7 | Source TOC RAA < 4.0 mg/L and Source Alkalinity > 60 mg/L and THM & HAA RAAs $\leq$ 1/2 MCL |

### Disinfectants and Disinfection Byproducts Contaminants

| Contaminant (units)                 | MCL/MRDL Violation Y/N | Your Water RAA (Stage 2) | Range Low High | MCLG      | MCL      | Likely Source of Contamination            |
|-------------------------------------|------------------------|--------------------------|----------------|-----------|----------|---|
| TTHM (ppb) [Total Trihalomethanes]  | N                      | 33                       | 11- 63         | N/A       | 80       | By-product of drinking water chlorination |
| HAA5 (ppb) [Total Haloacetic Acids] | N                      | 28                       | 2- 47          | N/A       | 60       | By-product of drinking water disinfection |
| Chlorine (ppm)                      | N                      | 1.47                     | 0.7-2.2        | MRDLG = 4 | MRDL = 4 | Water additive used to control microbes   |

### Other Miscellaneous Water Characteristics Contaminants

| Contaminant (units) | Sample Date | Your Water | Range Low/High | SMCL       |
|---------------------|-------------|------------|----------------|------------|
| Sodium (ppm)        | 1/12/15     | 5.67       | N/A            | N/A        |
| Sulfate (ppm)       | 1/12/15     | ND         | N/A            | 250 mg/L   |
| pH                  | 1/12/15     | 6.6        | N/A            | 6.5 to 8.5 |

## ***Cryptosporidium***

Our system monitored for *Cryptosporidium* from April 2008 through March 2010 as required by the USEPA and found 0 levels of which indicated the contaminant is not present at the level of detection as set by the USEPA.

*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

## **Letter from the Superintendent-ORC of the Water Treatment Plant Garrett Gilbert**

The City of Newton Water Treatment Plant staff takes pride and is committed to producing the safest, most aesthetically pleasing water possible. The plant operates 24 hours a day, 7 days a week and is never left unattended. The City of Newton water has received the AWOP (Area Wide Optimization Program) award for 13 consecutive years for water far exceeding the requirements for purity, quality, safety, and cost for production. The only city to qualify every year since the start of program. We take the customers opinions very seriously if you should ever have any problems don't hesitate to call me or email me at [ggilbert@newtonnc.gov](mailto:ggilbert@newtonnc.gov).

The City of Newton Water Treatment plant is staffed by very capable operators with many years of service. Each operator has obtained a license from the State of North Carolina and receives at least 6 continuing education hours a year. There years of service to the City are listed below and as you will see they are very dedicated to the city.

Garrett Gilbert- 3 year Supt./ ORC  
Eddie Copeland- 28 years  
Eric Wheeler- 21 years  
Charlie Wishon- 18 years

Glenn Bach- 17 years  
Victor Russell- 1 year  
Nolan Hallman- 8 months  
Chris Sigmon- 4 months

