

## Bottled Water versus Tap Water Understanding the True Cost and Value of Water



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Located in Northeastern Pennsylvania

water reuse   hydrogeology   soil testing



## Presented by:

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## Tap Water – Some Facts

Sources are Regulated by the PADEP and EPA

- Regulated via the “Safe Drinking Water Act”
- Act sets Primary and Secondary Standards that address public health issues and aesthetics
- The Act regulates the construction on operation of water facilities and require monitoring and inspections.
- Your cost for water - 0.0062 cents per gallon

## Tap Water Source

- Most tap water sources are a combination of deep groundwater wells and surface reservoirs.
- The water is treated to meet drinking water standards.
- In general, most public water systems no longer use spring water sources because of the vulnerability for contamination.

# Tap Water – Complaints

## Common Tap Water Complaints

- Water has a strange taste.
- The water is cloudy or has an odor or smell.
- The water is sometimes dirty and not clear.
- The water has a metallic taste.
- The ice from my ice maker has a strange odor.



## Reasons for Tap Water Problems

The cause for most of these complaints area associated with the following:

- Use of chlorine in the water to prevent the regrowth of bacteria.
- Inadequate chlorine residuals in the piping allowing slime and other bacteria to re-grow.
- Aging distribution systems that require more frequent flushing and upgrades and leaks.
- Leaching of metals from the household plumbing.



## Bottled Water

- About 25 % to 40% of bottled water are just more highly treated public water.
- Examples are Dasani (Coca-Cola) and Aquafina on the label it will be marked purified water.
- Systems are inspected and Monitored.
- Bottled Water is Regulated by the FDA and Local State Agency
- The bottled spring water may be from the same source, but the bottle will be labeled spring water.
- Bottled water cost - \$ 5.60 to \$ 8.00 per gallon- this is more expensive than gasoline !

## Cost of Bottled Water

- Bottled water cost - \$ 5.60 per gallon; whereas tap water is only \$ 0.006 per gallon.
- Spring water at the source sells for \$ 0.02 per gallon.
- Hidden costs for transporting and delivery of the water.
- Only a small percentage of the plastic bottles are recycled.
- The estimated hidden cost to a 1 liter bottle of water is \$ 2.70. Therefore, the actual total cost for a 1 –gallon of water may be as high as \$ 8.00 per gallon.

## Why Landowners Sell Spring Water ?

- Spring water at the source sells for \$ 0.02 per gallon.
- Client pays for hauling cost.
- At a flow of 100 gpm- that is \$ 2.00 per minute
- \$ 2.00 per minute equals \$ 2880.00 per day.
- Annually - \$1,051,200 per year.

## Making Better Choices

1. At home use tap water for drinking – if necessary install a point of use water filter to improve water quality of the water. A POU system may cost \$0.05 to \$ 0.10 per gallon or a home pitcher system may cost \$ 0.10 to \$ 0.20 per gallon.
2. Consider bottling your own tap water rather than buying purified water- Use a stainless steel water bottle.
3. If you like the taste of spring water, make sure to purchase a spring water that is locally produced, such as: Three-Springs, Fox Ledge, Tomhicken to name a few.
4. Read the label before you buy !
5. Make sure to recycle any plastic bottles!

## New Community Resource



Download a Free Copy (pdf) or Link to a copy at <http://www.wilkes.edu/water>

Also:

1. We are Working on a Regional Citizen Water Quality Database.
2. We provide informational water testing- not Certified Test

Add Your Data to the Citizen Database

## Questions

- Not so sure if I have answers?
- Resources
  - Water Testing -Treatment System – Point Of Use Water Treatment Systems
  - <http://www.water-research.net>
  - University Informational Site on Drinking Water
  - <http://www.wilkes.edu/water>

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