



## Alternative Water Solutions

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# Presenting Alternative Home Water Treatment

## A Proposal to:

## Presented on

# Physical Water Treatment vs. Traditional Water Treatment by Alternative Water Solutions

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Trust us, let us prove it



From fresh untreated



To chemical cocktail

Or:



Or Reverse Osmosis



Large Water Softener at VGH using massive

Alternative Water Solutions has devoted its endeavors to cutting edge and responsible water treatment processes and installations with over 25 years experience and is proposing a change in the method of water treatment and purification that will both improve water quality and save you, our customer money.

## 1 Traditional purification methods for potable and drinking water

Traditionally for the last 50 years water that leaves extensive scaling and calcium buildup, in other words "Hard Water" has been treated with ion exchange softeners. This treatment utilizes salt to regenerate the resin media that exchanges sodium ions with the calcium and magnesium ions – thus removing the "hardness mineral" from the water. The resulting soft water responds better to soaps and leaves much less in the way of water spotting and scale buildup.

### 1.1 Community chlorination for disinfection

Softeners require salt and frequent backwashing. This salt finds its way to the septic systems and eventually to the ground and surrounding water systems. Since salt is not naturally removed by the water cycle the resulting salt water gradually takes over the fresh water supply. Softeners also use large quantities of water to regenerate and backwash resulting in increased water usage.

### 1.2 Filtration systems

Every 1,000 gallons of water softened will require approximately 40 to 60 gallons of water for backwash and 9 to 15 lbs of salt.

### 1.3 Reverse Osmosis

Reverse Osmosis is a process utilizing membrane nano filtration that strips the majority of the solids by pushing some water through a very fine porous membrane, while continually washing the membrane with water. Thus this process "wastes" a large amount of water to produce product water. Also the product water is mostly void of mineral causing water PH levels to be less stable.

Although very useful for many specialty applications Reverse Osmosis is not always the best solution for general purpose water or for drinking water applications.

Reverse Osmosis is particularly practical when source water has chemical or mineral contaminants in it that are unfilterable or are not practical to remove by ion exchange.

Trust us, let us prove it



□ Vulcan stops scaling on surfaces by modifying the crystallization of scale

□ Vulcan sanitizes the piping system by increasing natural carbonic acid increasing descaling action leaving a thin protective layer inside of pipe. The Vulcan-Impulse-Technology generates a controlled



resin which  
protects  
onate  
urfaces.



Save Salt Save  
Labor  
Save \$\$\$\$\$

## 2 The Alternative Solution

With the increase in population and the higher concentrations of our population, the use of softeners has increased hugely in some areas. This has made a significant impact on surrounding water systems. As a result there is a resurgence of research being done to provide a “greener” more environmentally responsible solution to water hardness.

### 2.1 Hollow Fiber Ultra Filtration with Vectapure or Freshpoint

Also health studies have indicated the more natural spring or mineral waters to be healthier for plants and for drinking. A myriad of unique systems have become available to the consumer as a result. Most provide some benefit, but few produce the convenience of soft water.

### 2.2 Physical Water Conditioning with Dreamwater or Vulcan

We believe that we at Alternative Water Solutions have discovered systems that do provide not only the cleaning capability of soft water but also numerous life giving added qualities.

Vulcan with Redox is one such solution.

## 3 Electronic Conditioners Save Time and Money

Electronic conditioners change the structure of the mineral in water rather than remove the mineral. This greatly decreases scaling and “hardness” issues.

Electronic conditioners use no chemicals and waste no water, thus saving the cost of salt and of transporting the salt.

The Vulcan conditioned water will perform cleaning tasks somewhat equally to soft water while protecting equipment and pipes from scale build up better than soft water.

## 4 Alternative Solution

Alternative Water Solutions proposes to treat all the water for your household at the point of entry first of all with Redox media which neutralizes chlorine, realigns the mineral ions through a Redox exchange of electrons, and removes 99% of heavy metals. We would then pass the water through a sediment bag filter which efficiently removes visible sediment and any byproducts of the Redox process from the house water. The Redox very effectively prepares the water for the final stage – a Vulcan Electronic Conditioner which restructures the mineral crystal as well as tipping

