

# HOLLISTER URBAN AREA WATER AND WASTEWATER *Master Plan*

## A Water Resources Master Plan is Underway

***The Hollister Urban Area Water and Wastewater Master Plan (Master Plan), will provide a long term vision to guide water resource improvements to the Hollister Urban Area. Overall goals for the Master Plan include improving water quality to the urban area and increasing the reliability of the water supply, while integrating the goals and recommendations from the long-term wastewater and groundwater management programs, and considering regional issues and solutions.***



## What are Total Dissolved Solids and Where Do They Come From?

Total dissolved solids (TDS) is the measurement of the concentration of dissolved minerals in the water and is commonly known as salts. The Hollister Urban Area water supplies have high TDS, or salt, levels.

The Hollister Urban Area obtains its drinking water from groundwater with a small amount of imported surface water. As water naturally passes over or through soil and rocks before it reaches your home, it slowly dissolves materials and picks up their various mineral constituents. The longer the period of contact between water and soil or rocks, the greater the opportunity for these minerals to dissolve. Homeowners often think of high salt content as hard water and they install a water softener, which in turn, generates even higher salt levels in the water that leaves the home.

The Master Plan is considering alternatives for reducing salt levels in the water before it arrives at your home or treating wastewater so it can be used for growing crops.

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*The Master Plan is a cooperative effort of the City of Hollister, San Benito County and the San Benito County Water District.*

## How Do Salts Affect Hollister Homes?

***TDS is usually not a health concern, but can be a taste, odor, and color concern for drinking water. At levels over 500 mg/L, TDS can cause gastrointestinal irritation to consumers not used to these levels. Excess sodium may affect those restricted to low sodium diets or those suffering from toxemia. Other concerns include scaling on sinks and fixtures, leaving white spots on cars, deposits and corrosion of hot water heaters and pipes, and reduced effectiveness of detergent and shampoo.***

***The buildup in water using appliances can shorten appliance life and increase costs to consumers. Preliminary estimates indicate that local groundwater supplies may reduce the life expectancy of residential appliances by up to 25 percent, as compared with a water supply having a TDS level of 500 mg/L. Other residential costs include home softeners, bottled water and increased use of soap and detergents.***

## How Do Salts Affect Agricultural Production?

At high levels in the soil, salts can interfere with the uptake of water and nutrients by plants. During irrigation, water will evaporate or be taken up by plants, leaving the salts behind. Unless the salts are flushed out of the soil, salts will accumulate over time and make it difficult to grow crops.

## How are Salts Removed From the Water?

An in-house water softener with a special reverse osmosis system can reduce TDS levels, but is more expensive than typical water softeners. Softeners remove concentrated minerals and dispose of them to the sewers. This increases the minerals in the water leaving the wastewater treatment facility as the Hollister treatment facility is not designed to remove salts.

Large scale demineralization or other treatment will be required for the alternatives the Master Plan considers: reducing salt levels in the water before it arrives at your home or treating wastewater so it can be used for growing crops. The disadvantages of treatment include high costs and the disposal of brine concentrate. The advantage is that the water produced is of excellent quality. All solutions are costly, which is why the Master Plan technical studies are needed.

## What TDS Levels Are Acceptable?

Average TDS levels currently range from an average of approximately 875 milligrams per liter (mg/L) in the Hollister groundwater supply to 1200 mg/L in the San Juan groundwater basin. Generally speaking, the imported water has TDS levels of 250 to 300 mg/L. For comparison, seawater contains about 35,000 mg/L TDS.

Hollister and Sunnyslope's treated drinking water meets all federal and state drinking water regulations. The State Department of Health Services has recommendations (not requirements) for TDS in drinking water. The recommended upper limit is 1000 mg/L, with a short term maximum of 1500 mg/L. The recommended standard is 500 mg/L. The Master Plan target is a TDS concentration of not greater than 500 mg/L. The target TDS for recycled water used for agriculture is 500 mg/L, not exceeding a maximum of 700 mg/L.

***For more information, contact:***

Harry Blohm, Program Manager | 831.637.8218

