



When it comes to salinity in water softeners...

- The salts from self-regenerating water softeners contribute to increased salinity in our water supplies as well as impacting beneficial uses, such as drinking water and agricultural irrigation.
- It makes sense to remove salinity at the source rather than remove it at the treatment plant, which would require additional technologies and significantly raise utility rates.
- Reducing salinity from residential self-regenerating water softeners is an important first step toward protecting the quality of our existing water supplies.



What type of water softener do you have?

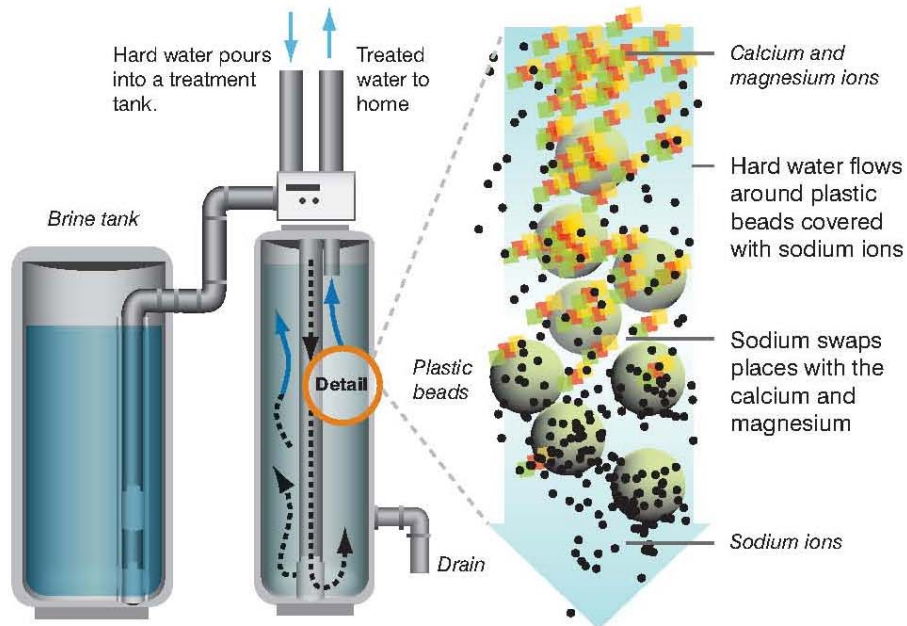
If you add potassium chloride or salt (sodium chloride) to your water softener, or have a service do it for you, then you have a self-regenerating water softener. If your water conditioning service regularly changes out the resin tank of your water softener, then you have a portable exchange water softener. Check with your vendor if you have someone that regularly visits your house to service your system but are not certain what service they are providing.



Water Softening Process

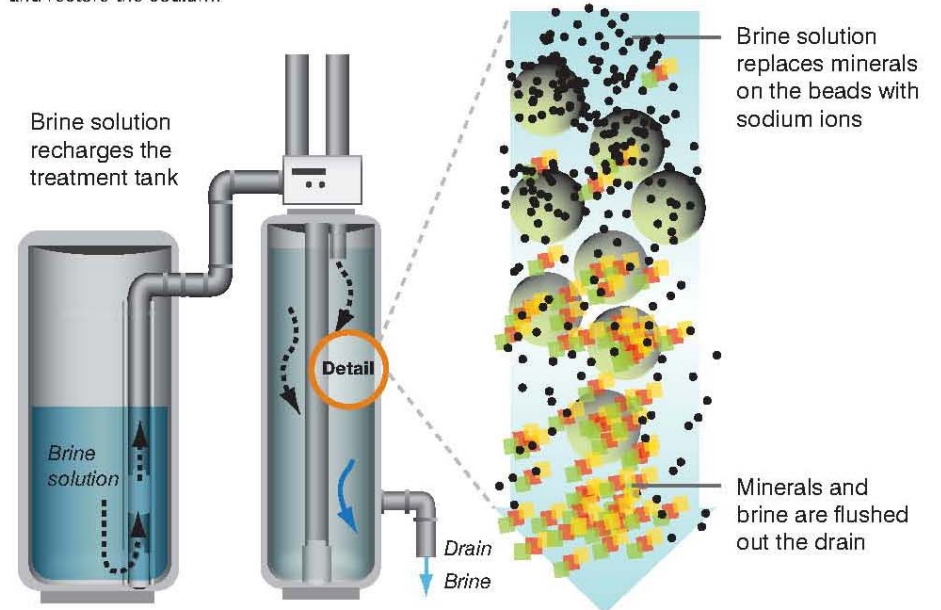
1 Switching minerals out

Calcium and magnesium ions in hard water are replaced with sodium ions, softening the water.



2 Recharging the unit

Plastic beads are soaked in a strong brine solution to remove the calcium and magnesium buildup and restore the sodium.





What is the Solution?

The use of residential self-regenerating water softeners to treat hard water is one of the contributing factors to high levels of salinity in our water supply. Residents can significantly decrease salinity by changing or eliminating their use of this type of water softener, which can average a pound a day of salts flushed into the wastewater collection system. Options include:

[Remove the water softener](#)

Hard water poses no health hazard. Also, by removing your water softener system, you can save thousands of gallons of water per year. If you must use a self-regenerating water softener, make sure it is set for the appropriate hardness level. Also reduce the number of backwash cycles. Finally, do not treat water through your softener that does not require softening. For example, there is no reason to soften water that is used for landscape irrigation.

[Portable exchange](#)

Devices are available that provide the exact same service as a self-regenerating water softener. The difference is that the water softening company discharges the salt brine into a permitted facility where the brine will not affect water supplies.

[Salt-free anti-scaling devices](#)

The water softener industry is actively developing salt-free devices that inhibit scale which are now becoming available.

[Reduce water use in your home](#)

The less water you treat through a water softener, the less salt you put down the drain.

How You Can Treat Your Water Without Using a Self-Regenerating Water Softener

The District provides its customers with water that meets strict federal, state and local standards. Use of a water treatment system is not necessary. If you still choose to have a water treatment system, select the one appropriate for your needs and less impacting to the environment.


- If the hardness of your water is causing problems in your home, you can use a portable exchange water softener to provide soft water for your use without causing excess salt to be discharged from your home.
- There are several commercially available products that are advertised for hardness treatment. These may or may not effectively soften water. Unproven water softening technologies include: magnetic water treatment, electrolysis, electronic inaudible waveforms, catalytic alloys, and carbon filtration. Even if these technologies do not effectively reduce hardness of your water, many of them may prevent scale formation, at least temporarily. For example, electronic inaudible wave technology will keep particles from attaching to metal surfaces and thereby prevent scale formation. Using one of these alternative technologies may be adequate to meet your needs.
- Depending on your other water quality desires, you may consider filtration, activated carbon, reverse osmosis or nanofiltration systems for treatment of the water used in your home. These technologies are not intended to reduce water hardness.
- Mission Hills Community Services District does not endorse any particular water treatment unit, nor does the District provide assurances regarding the effectiveness of any unit.



Managing Salinity in our Wastewater

Salinity is the concentration of dissolved mineral salts in water. Typical salts include calcium, magnesium, sodium, sulfate, and chloride. The amount of salts discharged to waters of the state and the underlying groundwater are controlled by the State Water Resources Control Board and its Central Coast Regional Board, whose responsibility is to protect the use of these waters as a source for drinking water, agricultural and environmental uses.

Why Salt is Bad for Water



Salinity can deteriorate residential, commercial, and industrial appliances and fixtures. Some industries require onsite treatment to address salinity.

High levels of salinity can also affect the ability to produce and use recycled water as agencies can be denied permits to recycle by the Regional Board if salt levels impair beneficial uses.

This publication is intended to educate the public on the environmental impacts associated with excess salt discharges from individual homes and to offer ways to minimize these discharges. It is also intended to partially satisfy pollution and salinity management goals set by the Central Coast Regional Water Quality Control Board.