Ted Svendsen was born in San Diego in 1937.  He attended San Diego City College where he was trained as an aircraft engine technician and came to work at SDG&E in 1965 as a Surveyor. He also worked as a Title Examiner, handled Street Vacations, was an Indian Affairs Agent, and ended his 31-year career as a Right of Way Agent.

Since retiring from SDG&E in 1996, Ted has been the owner/operator of The Svendsen Travel Group until 2012 and he and his wife have enjoyed taking 108 cruises!

He also participates in flying 4 line stunt kites with the San Diego Kite Club and is active with his church, singing tenor in choir. Ted and his wife Freeda love getting together with their family of 2 kids, 4 grandkids and 7 great grandkids in Julian.

The article below was written by Ted and appeared in the June 3rd edition of the Clairemont Times.  Reprinted with permission.

Make Low Flush 1.6 Gallon Toilets into “dual flush” Ultra Low Flush Without any New Parts

June 3, 2014 by [Chris O'Connell](http://www.clairemonttimes.com/author/chrisoc/) [Leave a Comment](http://www.clairemonttimes.com/lowflushtoilets.html#respond)

**Use as little as two or three quarts of water per flush.**

By Ted Svendsen

[](http://www.clairemonttimes.com/wp-content/uploads/2014/06/tedsvendsen.jpg)

Most toilets needlessly flush over and over, two, three or four times with every flush.  The fact of the matter is only one flush is necessary to flush liquids.  This simple dual flush adjustment gives you the option of a single flush or multi flush as needed.  It can reduce water used in old style large tank toilets from 5 gallons to as little as 2 gallons.  A single flush of today’s low flush toilet uses over six quarts (1.6 gallons) of water.  This simple adjustment can cut that volume in half or better to make your low flush toilet an ultra-low flush toilet.

**Application:** Applies to any residential low flush and even old standard high volume toilets that use the typical standard “flapper”valves.  This adjustment prevents the flapper valve from “floating” in the open position, needlessly draining the entire tank. [](http://www.clairemonttimes.com/wp-content/uploads/2014/06/toilet-tank.jpg)

**Step 1** Close the water shut off-off valve to the toilet.  Remove the tank cover, and place a mark on the inside of the tank at the water lever (pencil works best).  Disconnect the chain from the toilet handle lever, remove any float balls that may be attached to the chain.  Lengthen the chain several links until the handle lifts the flapper valve off its seat about half an inch.  A half inch is all you need for a flush, there is no need for the flapper to float wide open, hence the water savings. Open the shut off valve and fill the tank. Leave the tank lid off formeasuring water used.

When the chain is properly adjusted, pressing the toilet handle for 1 or 2 seconds and quickly releasing will cause the flapper valve to immediately close and stop water from entering the toilet bowl.  (Note: if more than one flush occurs, the flapper valve is still “floating”.  Continue to lengthen the chain, link by link until the flapper closes when the handle is released and a single flush occurs.  Non-liquids may require more than one flush, so simply hold the flush handle down a little longer.  Even though it is a “double flush” you are still saving water.

**Step 2** Next, remove the end of the rubber tube pouring water down the overflow tube.  Clip or fasten it to the outside of the overflow tube so that water from the rubber tube helps fill the tank.  A simple reverse of the hose clip from an inside tube fill to an outside fill is all that is required.

If the toilet handle is pushed down for a second or two and the toilet does not flush properly, simply shorten the chain, so when the handle is pushed for a second or two and the toilet water is moving, quickly release the handle.

**Step 3** Flush away.  For liquids it is always a simple flush.  For solids, you may have to simply hold the handle for another 1 or 2 seconds.  You will still be saving water.

To measure the volume of water used per flush, shut off the water supply valve after the toilet fills.  Push the handle down for a second or two until the water in the toilet bowl starts moving.  Quickly release the handle.  After the flush, determine the volume of water used by pouring a quart of water at a time until the water reaches your pencil mark in the bowl.  A minimum flush should only take 2 or 3 quarts of water instead of 1.6 gallons.  In standard 5 gallon tanks a flush can be cut to 2 or 3 gallons of water.

As stated, these simple adjustments cut water used per flush in half or less!! If these adjustments were made on toilets across the nation, imagine the water that could be saved.

**Notes:**

I have been using this technique for over 20 years without a single problem.  People sometimes ask, “By using such small amounts of water per flush could that cause a sewer line to back up?” The answer is “No”because you are only flushing liquids. Solids may take 2 or 3 flushes by holding the lever a second or two longer.  In addition, many gallons of water from other sources like your shower, dishwasher, washing machine, sinks etc. also flow through your sewer line.