



Indoor Water Conservation

Presented by Travis Andrews
City of Arlington Water Utilities



Indoor Water Conservation

Step 1

Install
Water
Efficient
Devices

Step 2

Practice
Simple
Water
Saving
Techniques

Step 3

Repair
Leaks and
Replace
Faulty
Equipment



City of Arlington Water Utilities

Indoor Water Conservation

Kitchen

Bathroom

Laundry Room

Leak Detection



City of Arlington Water Utilities

Water Saving Ideas for the Kitchen



City of Arlington Water Utilities

Water Saving Ideas for the Kitchen

- Water Efficient Devices for the Kitchen
 - Faucet Aerators
 - Aerators mix air with water, reducing the amount of water used without affecting the pressure
 - Water Efficient Dishwashers
 - Use 5-7 gallons of water per wash



1.5 (gpm) Faucet Aerator



Water Saving Ideas for the Kitchen

- Practice Water Saving Techniques
 - Scrape food from plates instead of rinsing
 - Operate automatic dish washers only when full
 - Don't use running water to thaw meat, defrost food in the refrigerator
 - Wash vegetables and fruits in a bowl, don't let water run
 - Capture tap water while waiting for hot water



City of Arlington Water Utilities

Water Saving Ideas for the Bathroom



City of Arlington Water Utilities

Water Saving Ideas for the Bathroom

- Water Efficient Devices for the Bathroom
 - Faucet Aerators
 - High Efficiency Toilets (HETs)
 - Old toilets use 5-7 gallons per flush, newer models use only 1.28 (gpf) a savings of 27,000 gallons per household
 - Low Flow Showerheads
 - Can save over 2 gallons of water per minute



1.28 (gpf) Toilet



Low-Flow Showerhead



City of Arlington Water Utilities

Water Saving Ideas for the Bathroom

- Practice Water Saving Techniques
 - Turn off water while brushing teeth, save 4 gallons per minutes – 200 gallons week for a family of 4
 - Take shorter showers (5 minutes)
 - Turn water off while shampooing and conditioning
 - Place a bucket in shower to collect excess water to irrigate plants
 - Avoid flushing unnecessarily, place larger items in a waste basket (tissues, insects, etc,)



City of Arlington Water Utilities

Water Saving Ideas for the Laundry Room



City of Arlington Water Utilities

Water Saving Ideas for the Laundry Room

- Water Efficient Devices for the Laundry Room
 - High Efficiency Washing Machines
 - A high-efficiency washing machine reduces energy use by up to 70% and water use by up to 50%



Front – Loaded High Efficiency Washer



City of Arlington Water Utilities

Water Saving Ideas for the Laundry Room

- Water Saving Practices
 - Only wash full loads
 - Wash delicates by hand



City of Arlington Water Utilities

Additional Water Saving Ideas

- On-Demand Hot Water System
 - Demand (tank less or instantaneous) water heaters provide hot water only as it is needed
 - Heaters heat water directly without the use of a storage tank
- Pressure Reducing Valves
 - Reduces the overall water pressure in a home
- Gray Water System
 - Install a system to collect wastewater from sinks, showers, bathtubs, and washing machine for irrigation



City of Arlington Water Utilities

Leaks

Water Loss

Common Leaks

Testing

Solutions



City of Arlington Water Utilities

Leaks = Waste

Leaks in gallons per minute

Days	0.10	0.25	0.75	1	3	5	10
1	144	360	1,080	1,440	4,320	7,200	14,400
7	1,008	2,520	7,560	10,080	30,240	50,400	100,800
14	2,016	5,040	15,120	20,160	60,480	100,800	201,600
21	3,024	7,560	22,680	30,240	90,270	151,200	302,400
31	4,464	11,160	33,480	44,640	133,920	223,200	446,400



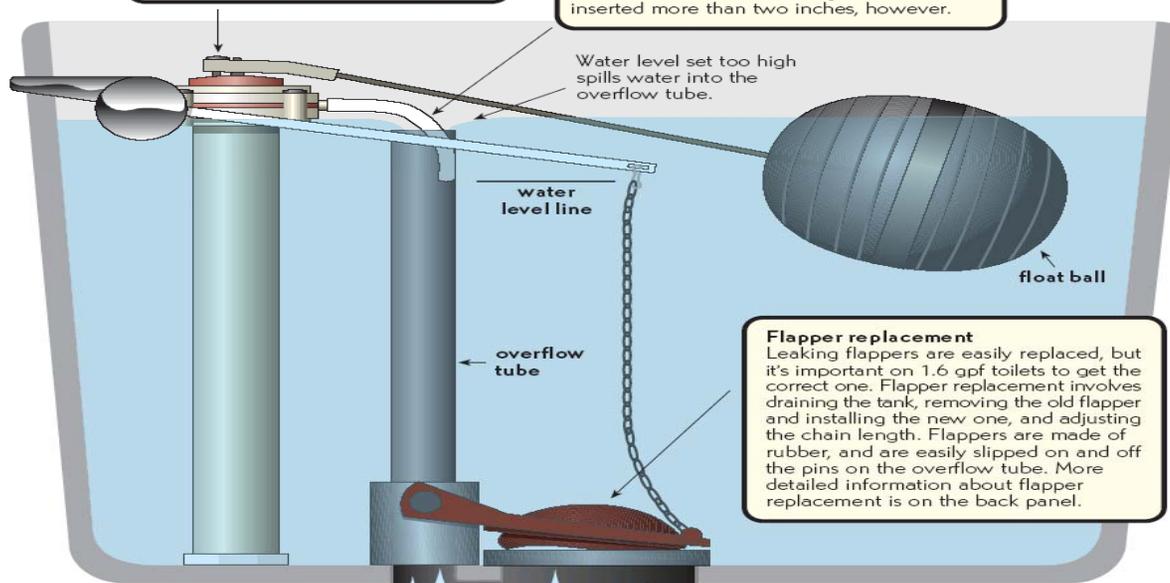
City of Arlington Water Utilities

Common Leaks

Finding and fixing Common toilet leaks

Adjusting the water level
Turn the FLOAT ROD ADJUSTING SCREW clockwise to lower the water level, and counterclockwise to raise it. If this adjustment is corroded or stripped, the unit will need to be replaced.

Refill tube placement
Make sure the refill tube is securely inside the overflow tube, so that it does not pop out when the toilet starts refilling. It should not be inserted more than two inches, however.



Flapper replacement
Leaking flappers are easily replaced, but it's important on 1.6 gpf toilets to get the correct one. Flapper replacement involves draining the tank, removing the old flapper and installing the new one, and adjusting the chain length. Flappers are made of rubber, and are easily slipped on and off the pins on the overflow tube. More detailed information about flapper replacement is on the back panel.

Incorrect water level. If your toilet constantly runs, it could be because the water level is too high, and is draining out the overflow tube. You can correct this with the FLOAT ROD ADJUSTING SCREW. Flush the tank and then turn this screw CLOCKWISE to lower the float ball, and cause the water to be cut off earlier. Adjust this screw until the water shuts off just before it reaches the top of the overflow tube or is even with the "water level" line. You may have another type. If so, visit our web site or call us for more info. If you have a Fluidmaster 400 refill

leaky flapper allows water to flow into toilet bowl

valve, visit www.toiletology.com/troubles.shtml to learn how to adjust the water level.

Leaking flapper. If water still flows from the tank to the bowl, it is likely that the flapper needs to be replaced. Before doing this, make sure you have the correct flapper for your toilet. 1.6 gpf toilets use special flappers, and using an incorrect or universal flapper could result in your toilet using much more water than it should.

continues →

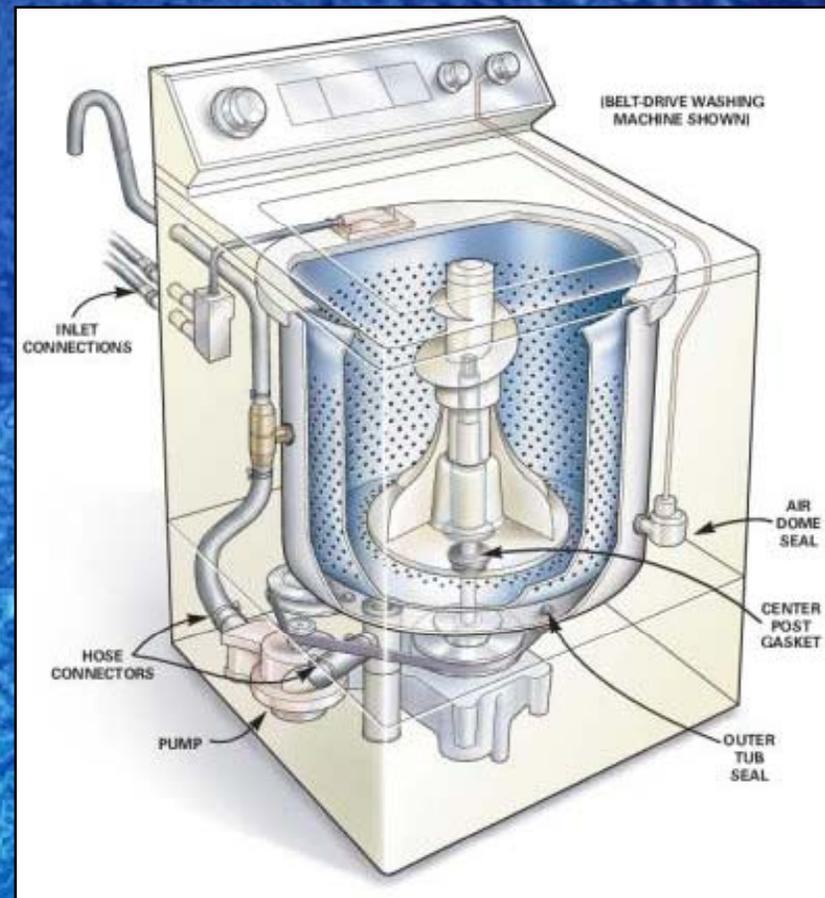


City of Arlington Water Utilities

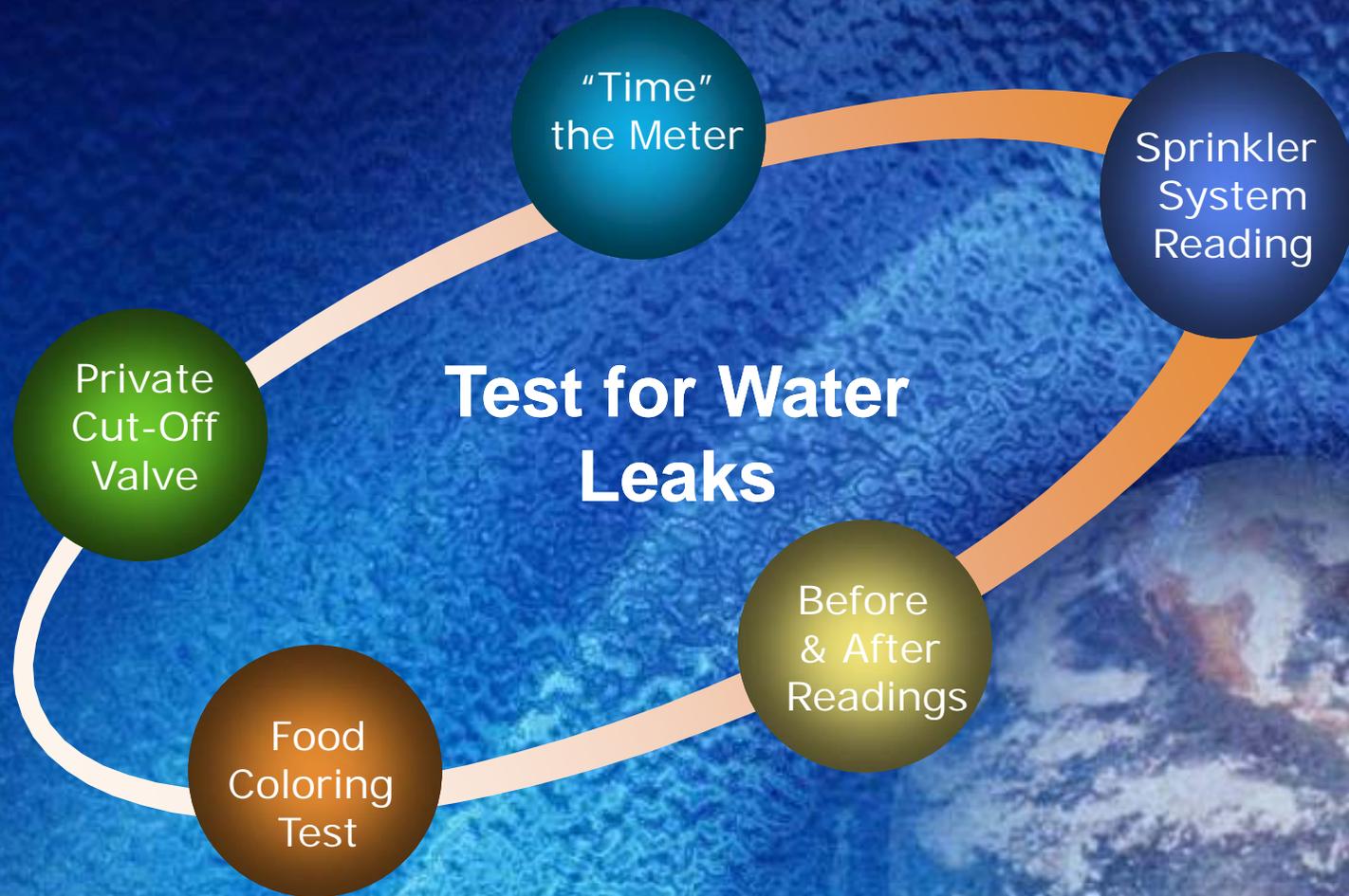
Common Leaks

- Washing Machines
 - Leaky supply hoses, internal hoses, a leaky pump and worn-out tub fittings are common problems

Common Leak Locations



Troubleshoot for Lost Consumption



City of Arlington Water Utilities

Leaks

- Check all water-using appliances, equipment, and other devices for leaks.
 - Repair Leaks/Replace Faulty Equipment
- Follow the 5 steps in the Lost Consumption Chart
 - Time the meter
 - Take a reading on the sprinkler system
 - Take before and after reading when leave the house.
 - Check for silent toilet leaks.
 - Use the private cut-off valve.



Any questions?

www.SaveArlingtonWater.com



City of Arlington Water Utilities