

# **Tips for Saving Water**

# When in Drought or Not - We All can do Our Part!

#### **OUTDOOR WATER USE**

#### 1. Limit lawn watering, especially during a drought1

Lawns naturally go dormant during dry conditions. They'll revive when conditions improve.

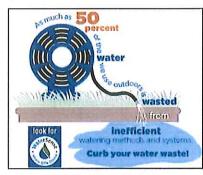
- If you are in a Region in Drought Warning (Severe Drought Conditions):
   DO NOT WATER YOUR LAWN.
- If you are in a Region in Drought Watch (Moderate to Severe Drought):
   Limit watering to hand-held only or drip irrigation. Water after 5PM or before 9AM to avoid evaporative losses.
- If you are in a Region in Drought Advisory (Abnormally Dry Conditions): Limit watering to 1 day per week at most. Water after 5PM or before 9AM.

# 2. Minimize landscape water needs through water-smart landscaping principles<sup>2</sup>:

- Maintain healthy soils (a minimum of 6-inches in depth, where possible).
- Choose native plants or plants and turf that need less water.
- Use mulch to reduce evaporation and moderate soil temperature.
- Leave grass clippings on lawn to shade and return nutrients to soil.

#### 3. Minimize your use of water outdoors

- Sweep driveways, walks, patios, and other outdoor areas with a broom rather than hosing them off.
- Wash vehicles using a bucket and sponge, employing a hose with a shut-off nozzle for rinse only, or, if available, use a commercial car wash that recycles water (most do).
- Cover swimming pools when not in use to prevent evaporation.



To check your drought region

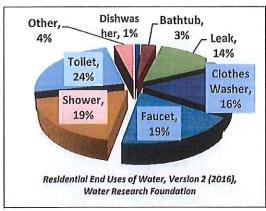
and status go to:

www.mass.gov/dcr/drought

Source: https://www3.epa.gov/watersense/

#### INDOOR WATER USE

- 1. Take shorter showers (5 minutes or less) and use water-saving showerheads.
- 2. Turn off water while brushing teeth or shaving: "Never Let the Water Run."
- 3. Wash only full loads of laundry and dishes.
- 4. Choose high-efficiency plumbing products and appliances (look for the WaterSense or Energy Star labels).
- Fix leaks! Dripping faucets and leaking toilets, pipes, and appliances can add up to hundreds of gallons of water lost per week.
- Create a kitchen compost bin instead of using the garbage disposal.
- Collect and reuse clean household water (water running while you
  wait for hot water to reach your faucet or shower; leftover water
  from cooking, etc.) and use this to water plants.



Daily percent of indoor water use, per person

<sup>&</sup>lt;sup>1</sup> Certain water uses are not subject to mandatory restrictions, such as water used: for health or safety reasons; for production of food and fiber; for maintenance of livestock; to meet the core functions of a business (for example, irrigation by plant nurseries as necessary to maintain stock).

<sup>2</sup> Adapted from Water-Smart Landscapes Start with WaterSense (EPA WaterSense)

# WAYS TO CONSERVE WATER INSIDE





### **Brushing Teeth**

Don't run water while brushing teeth. Fill a glass for rinsing.

#### **Faucets**

Repair leaks and install a low-flow aerator.

#### **Pipes**

Wrap hot water pipes with insulation to avoid waiting for hot water.

#### Shaving

Use a partially filled sink or short blasts of water to rinse your razor.

# **Bathing**

An average tub holds more than 50 gallons of water. Conserve water by only partially filling the tub.

# Shower

Install water-saving shower heads. Turn off water while soaping up or shampooing. Take shorter showers.

# **Drinking**

Keep a bottle of water in the refrigerator and use ice instead of running the tap until water is cold.

### **Toilet**

Add food coloring to the water in the tank. If color appears in the bowl without flushing, there is a leak. Fix or replace toilet.

# Dishwasher & Washer

Run only full loads. Remodel with machines that use less water and are more energy efficient.

# WAYS TO CONSERVE WATER OUTSIDE





### **Sidewalks and Driveways**

Use a broom instead of a water hose to clean debris from patios, driveways and sidewalks.

#### **Sprinklers**

Don't water the pavement! Position sprinklers so that lawn and garden receive all the water.

#### **Lawn Care**

Deep soak weekly in the early morning or evening when the least evaporation occurs. Aerate lawn.

# Landscaping

Drought-tolerant plants need less water. Mulch your garden to slow evaporation.

# **Mowing**

Longer grass means less evaporation. Let grass grow taller in hot, dry weather. Set the mower one notch higher.

# Car Washing

Use a bucket to wash. Keep a nozzle on the hose to save water. Use a commercial car wash that recycles water.

## **Pool Care**

Use a pool cover to keep water clean and reduce evaporation. Recycle water for use on lawn or garden.

# **Valves and Hoses**

Regularly check pipes, hoses, valves and faucets for leaks.



# **WILLY WATER SAYS:**

# EVERY HOUSEHOLD CAN EASILY TAKE STEPS TO SAVE WATER AND MONEY

# Check and repair water leaks in your home.

- · Check pipes in the basement and beneath sinks.
- Check for dripping faucets. A slow steady drip wastes 90 gallons of water in a week.
- Check for leaking toilets. Put a few drops of food coloring in the tank. If the color seeps into the bowl in 15 minutes, you have a leak. Many toilet leaks are silent, wasting about 10 gallons of water an hour.

# Don't waste water. Develop water conservation habits.

- Shut off the tap while brushing your teeth, shaving or washing dishes.
- Take a short shower instead of a bath. If you take a bath, close the drain before turning on the water. Filling the tub ¼ full should be enough.
- Turn off the shower when lathering up.
- Take shorter showers. One or two minutes will make a difference.
- Don't flush the toilet needlessly. Don't use the toilet as a wastebasket or ashtray.
- Run washing machines and dishwashers only when full.
- · Fill your sink or basin when washing or rinsing dishes.
- Keep a bottle of cold drinking water in the refrigerator instead of running the water continuously from the tap.
- Run the garbage disposal only when necesssary. This will not only save water, but will
  prolong the life of your septic system. Throw bones, rinds, eggshells, etc. into the trash
  or even build a compost pile.
- Wash fruits and vegetables in a basin, and then guickly rinse them under the tap.
- Don't thaw food under running water.

# Install water conservation devices.

- Install low-flow shower heads, which use 2.4 gallons a minute, saving up to 7 gallons per minute.
- Install aerators on kitchen and bathroom faucets. Installing an aerator cuts water usage from 4 gallons to 2.5 gallons a minute.
- Install a low-flush toilet or a toilet dam and save 1-5 gallons per flush.

Showerheads and aerators are available for purchase from the Water and Sewer Department.

IN ORDER TO ENSURE AN ADEQUATE WATER SUPPLY FOR THE FUTURE, WE MUST CONSERVE TODAY.

# Lawn Care

Significant savings in water use can be made without affecting grass quality.

#### Watering

Watering your lawn too frequently makes it rely on more water than it needs. Remember to give your lawn a deep watering during the early morning or evening to minimize water loss through evaporation. A good soaking one or two evenings a week is more beneficial than a sprinkling every day. In addition, this allows the soil to dry out between waterings, reducing the risk of fungal infections.

Watering Tips

- Delay watering as long as possible in the warmer months.
- Soak the soil by using a fine spray and allowing water to soak to the full depth of the root zone.
- Aerate or spike the soil to allow more rapid soaking.
- Never water in the heat of the day; for maximum benefit, water at night.

#### Mowing

By cutting no lower than 1 inch, the grass will develop a more extensive root system which will go deeper into the soil to find water and nutrients. Additionally, the soil surface will be shaded by the grass, greatly reducing heat stress damage.

#### Mowing Tips

- Use sharp blades; dull blades increase the damage done by mowing.
- Don't mow if the temperature will exceed 98 degrees.
- Keep the mowing height at 1 inch or higher.
- Mow weekly in the growing season and monthly during slow growth periods.

#### Run-Off

Overwatering removes vital nutrients from the soil and wastes expensive fertilizer. These products often find their way into rivers and streams causing damage to the environment.

#### **Tips**

To stop run-off, especially on steep slopes with clay soils:

- use a fine spray at 5 minute intervals;
- improve soil structure;
- use mulch; and
- spike or aerate the lawn.

While lawns prefer mildly acidic soil, very acidic soil may need alkali, such as lime, to be added, preferably in winter. Soil which is too acidic or too alkaline will reduce your lawn's tolerance to heat, stress and disease. Fertilizing of lawns should be done in moderation. In watershed areas, it should not be done at all. A correctly fed lawn can use 20 percent less water while retaining its greenness. However, over-feeding will encourage the growth of leaves at the expense of the root system, reducing the lawn's ability to withstand heat and wear and increases water use.



# **WILLY WATER SAYS:**

#### START CONSERVING TODAY! THE WATER YOU SAVE DOES MAKE A DIFFERENCE.

Water is a limited resource. There is only so much groundwater available in an aquifer for consumer use. When excessive water withdrawals occur, the environment is impacted. During drought periods, low stream flows put heavy stress on fish and other stream wildlife. Their survival may depend on how carefully you manage your water use. You can reduce your water usage by at least 40% by practicing these conservation measures.

#### HERE ARE SOME WATER CONSERVATION TIPS THAT WILL MAINTAIN YOUR LAWN AND SAVE WATER:

- Water slowly; deeply; infrequently. Frequent watering encourages shallow roots which may predispose the lawn to increased disease and insect damage. Overwatering encourages weak grass to compete with other grasses.
- Grass does not need watering if it springs up after you walk on it.
- Raise the blade level on your mower to 2-1/2 3-1/2 inches or more. Longer grass retains more moisture.
- Do not apply fertilizer in the summer. New growth requires more water.
- Plant lawns with fescue grasses. They are more tolerant to dry conditions. Or, plant less grass. Apply mulch around flowers, shrubs, vegetables and trees to reduce evaporation, promote plant growth and control weeds. Shrubs, drought-tolerant plants and ground cover require less water and maintenance.
- Water only when needed. When watering established lawns and gardens, apply the one-inch rule only one inch of water a week is needed including rainfall.
- Placing several empty cans, such as tuna cans, under the sprinkler will allow you to determine the appropriate amount.
- Use drip irrigation or soaker hoses to water your garden. Drip irrigation can save 30%-70% of water used by overhead sprinkler systems.
- Be sure your hose has a shut-off nozzle. Regularly check pipes, hoses, valves and faucets for leaks.
- Incorporate organic matter into your flower and vegetable beds, preferably 12" 18" deep.
- Water early in the morning or in the evening to minimize evaporation.
- Don't water the pavement. Position sprinklers carefully so that lawn and garden receive all the water.
- Wash your car by wetting it, turning off the spray, then using soapy water from a bucket and rinsing rapidly.
- Wash bicycles and trash cans on the lawn to give grass an extra drink.
- Never hose off sidewalks or driveways. Sweep instead.
- Use a pool cover to keep water clean and reduce evaporation.



# **WILLY WATER SAYS:**

# HOW TO RECYCLE USED MOTOR OIL

We conserve water when we protect our drinking water from contamination. When waste motor oil is disposed of improperly by pouring it on the ground, down storm drains or into streams, it contaminates groundwater and eventually, our water supply. According to an EPA report, one gallon of improperly disposed of motor oil can ruin the taste of one million gallons of water!

Massachusetts law requires retailers selling oil to accept your used oil, without charge, if you have a sales slip from that business. They must accept two gallons a day from a customer. To recycle your used motor oil, follow these steps:

- 1. Before buying oil, make sure the retailer will take it back and has the means to collect it properly. If not, buy your oil elsewhere, and report the store to the Board of Health or call the DEP oil hotline at (617) 556-1022.
- 2. Save your sales slip. If you need to send the original slip in for a refund, make a copy to be able to return your oil.
- Collect the used oil in a clean sealable and unbreakable container.
- 4. DO NOT MIX the oil with gasoline, antifreeze, engine degreaser, solvents, or water. Collect it as it comes from your vehicle.
- 5. Once you have collected two gallons, take the oil with your sales slip to the place of purchase. If you bought a case of oil (three gallons), the store will mark off the amount returned, so you can use the sales slip to return the rest of the oil at a later date.
- 6. If you have no sales slip, many services stations will accept your oil for a nominal fee. You can also bring it to a Household Hazardous Waste Day, but next time, save your sales slip.

REMEMBER, recycling used oil protects the environment and saves a non-renewable resource.



# SEPTIC SYSTEM MAINTENANCE

**WILLY WATER SAYS:** The protection of groundwater conserves our drinking water resources. Improperly maintained septic systems are one of the major sources of groundwater contamination. Most people do not think about their septic system until it ceases to function. Yet, if people maintained their septic system on a regular basis, the system's life is not only extended, but groundwater pollution is minimized. Here are some tips for preventing septic system failures adapted from the Department of Environmental Protection's brochure, "What You Should Know in Order to Identify and Maintain Your Sewage System".

- 1. DO NOT use garbage disposals; they add massive amounts of solids to the septic tank and are a leading factor of clogged systems.
- 2. DO NOT dispose of disposable diapers, paper towels, sanitary napkins, colored toilet paper or tissues in the septic system. These wastes do not decompose.
- 3. DO NOT put fat, grease, and oil (including cooking oil) down the drain. They can pass through the septic tank and clog the leaching field.
- 4. INSPECT on-site systems each year.
- 5. CONSERVE WATER: The less water used, the longer the retention period in the tank and the more solids the bacteria can decompose. Install water savings devices.
- 6. PUMP OUT on-site systems every two to three years.
- 7. DO NOT use enzymes or acid for treating your septic tank or cesspool.
- 8. AVOID extreme peak flows by spacing out laundry loads, bathing and dishwashing.
- 9. DO NOT put chemicals into the cesspool or leach pit for the purpose of maintaining or declogging it. There are no known chemicals, yeasts, bacteria, enzymes or other substances capable of eliminating or reducing the sludge and scum so that periodic cleaning is unnecessary. Many of the cleaners contain highly concentrated organic solvents that are not biodegradable and pose a serious threat to water supply wells.
- 10.DO NOT dispose of pesticides, disinfectants, acids, medicines, paint thinners and other household hazardous wastes in the septic system. These wastes will kill the helpful bacteria in the tank and may contaminate the groundwater. Such household hazardous wastes should be collected at a community-sponsored Household Hazardous Waste Collection Day.



### WATER SAVING TIPS FROM WILLY WATER

- 1. Do not use the toilet as a wastebasket or ashtray.
- 2. Consider showering instead of taking a bath.
- 3. Try to take a five minute shower.
- 4. Bathe small children together.
- 5. Turn off shower when lathering up.
- 6. When taking a bath, close the drain and turn the hot water on first; then, add the cold water. **CAUTION:** Use care with small children.
- 7. Fill the bath 1/4 to 1/3 full.
- 8. Do not leave the tap running while brushing your teeth, shaving, or washing your face or hands.
- 9. Do not thaw food under running water.
- 10. Wash vegetables and fruits in a pan or pot of water. (You can use the water saved in the pan for watering plants.)
- 11. Try not to use the garbage disposal. They can use as much as 2 gallons of water per minute.
- 12. When handwashing dishes, use two basins; one with soapy water for cleaning, the other for rinsing.
- 13. Do not pour grease or oil down the drain. It clogs the drain and large amounts of water are needed to rinse it out.
- 14. Keep a bottle of tap water in the refrigerator to avoid having to run the tap to get cold drinking water.
- 15. Wash only full loads of laundry or dishes, or set the cycle to match the size of the load.
- 16. Wash your car using a bucket instead of letting the hose run.
- 17. Sweep off your driveway don't hose it down.
- 18. Repair leaking faucets, showers and toilets.
- 19. Retrofit faucets, showers and toilets with water-saving devices such as faucet aerators, low-flow showerheads and toilet inserts. These devices can pay for themselves in a few months!

#### **Outdoor Use and Landscaping**

- 1. Infrequent deep watering of grass conserves more water than frequent light watering.
- 2. Do not overwater. This encourages weak grass to compete with other grasses.
- 3. In periods where there is a high probability of rain, don't water.
- 4. Watering should be done at night or in the early morning, when evaporation and wind are at a minimum.
- 5. Remove weak plants so that other plants can benefit from the water saved.
- 6. Older, established plants may only require infrequent watering.
- 7. Limit landscaping additions and alterations. In the future, design for landscapes and turfs which require less water.
- 8. Wash items such as bicycles and trash cans on the lawn and water grass at the same time.

#### **Grass and Soil Conservation Techniques**

- 1. Aerification and spiking relieve soil compaction and assist water entry into soil.
- 2. Use peat moss, redwood bark or calcine clay where possible to retain moisture at turf root levels.
- 3. Use mulch on bald spots to retain moisture and discourage weeds.
- 4. Wetting agents can improve water retention in some areas. Wetting agents react differently depending upon soil content; care should be taken in making a selection.
- 5. Fertilize in cool weather using small doses of nutrients to build a strong plant. Fertilizing in the summer months induces growth, which requires additional watering and should be avoided.
- 6. Apply anti-transpirants where beneficial.
- 7. Grass length is an important factor in water usage. In the summer, mower blades should be raised. The optimum grass length depends upon many conditions, including the type of grass.
- 8. Remove thatch, which restricts water, air and nutrient movement into the turf's root zone.
- 9. Weeds compete for water and should be controlled by use of an appropriate registered herbicide or by hand removal.

<u>ADDITIONAL INFORMATION</u>: The Massachusetts Drinking Water Educational Partnership has additional information available at its web site at http://www.madwep.org.