

NORTHAMPTON COUNTY

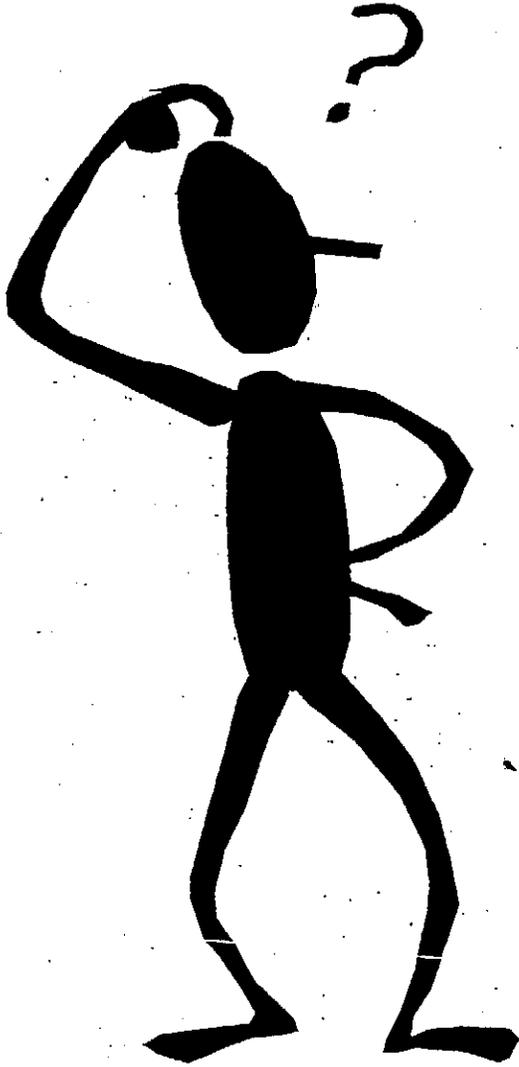
Water Conservation Policy



**Adopted by the Northampton County
Board of Commissioners on**

December 3, 2001

**NORTHAMPTON COUNTY LOCAL GOVERNMENT
DEPARTMENT OF PUBLIC WORKS**



Why Should I Conserve Water?

Like many things around us, we seldom appreciate what is plentiful and easy to obtain. And what could be more plentiful than water? To get water all we do is just turn on the faucet 24 hours a day and it's there, ready to use. But think again - the water we use doesn't just magically appear.

Treated water is a carefully manufactured product that appears in your home only after traveling through many miles of pipeline and lengthy treatment processes. It's a valuable resource that shouldn't be wasted.

Just 1% of the entire water supply in the world is available for human use - the rest is salty or locked in ice caps and glaciers, and just this relatively small 1% keeps all the world's agricultural, manufacturing, community and personal household and sanitation needs operating. We actually drink very little of our processed "drinking water"; around 1% of all treated water. The rest goes on lawns, in washing machines, and down toilets and drains!

As concern for our environment has increased in recent years, so have the federal and state demands on our local water treatment and pollution control plants to improve their processes and facilities.

In the face of rising costs for water and sewer services, conservation can be a way for citizens to do themselves a favor to the environment and to their pocketbook at the same time. You pay for every drop, whether it's used wisely or wasted, so water conservation is something we should all practice.

When you conserve water, you also save on other services. When you use less hot water, there is less energy needed to heat that water, thereby reducing your gas and electric bill. When you use less water, you also put less water down your sewer drains, thereby reducing your sewer bill. So you can see, by implementing a simple conservation program, you are helping the environment by helping ease the burden on water storage, purification, distribution and treatment facilities.

A good water conservation program is mostly a matter of using common sense and taking the time to think about water and how you use it. Get your entire family involved in this program, since the habits learned at an early age will make your children better environmental citizens in the future.

Northampton County Public Works Department

Water Conservation Policy

Section A: Purpose

The purpose of this Water Conservation Policy is to provide guidelines to the citizens and business of Northampton County to receive maximum use of their water dollars.

1. Inform customers of the cost of water loss by the size of leaks or drips they may have.
2. Recommend the proper times of day in which to irrigate/water their lawns, flowers, gardens, etc.
3. Suggest a water reuse idea whenever possible.
4. Recommend the customer use or replace bathroom and other fixtures with low flow fixtures.

Section B: Scope

This Policy will be available to all citizens and business of the County upon request or delivered to citizens and business when they have questions about ways in which to conserve water.

Section C: Responsibilities

A. Northampton County Public Works

1. Northampton County Public Works Department, Water and Sewer Division personal will meet with the Customer and discuss their situation with them and suggest ways in which to conserve water.
2. The Water Division personal will deliver to the customer a list of suggestions on ways to conserve water.
3. The Water Division personal will follow up with the Customer to see if any suggestion helped and if they have any suggestions that might help someone else.

B. Customer

1. To use the suggestions presented to them to the best advantage to themselves to conserve water.

Section C: Cost

There will be no cost to the Customer for these services.

Section D: Enforcement

There will be no enforcement of this policy unless the Customers neglects his/her plumbing to a point in which it is a violation set forth by the Rule and Regulations governing the Northampton County Water System.

Section E: Appendices

1. Home owners
2. Business

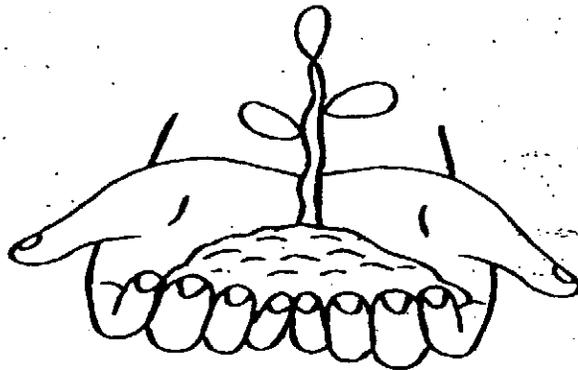
Northampton County Public Works Department

Water Conservation Tips and Suggestions

1. Use bath water for watering plants and shrubs.
2. Purchase water saving appliances when replacing old appliances.
3. Request that water saving commodes and water fixtures be used when constructing or remodeling bathrooms and kitchens, etc.
4. Avoid constantly running water while brushing your teeth or shaving.
5. Take showers instead of tub baths. The usual tub bath takes about 30 to 50 gallons of water, while a shower will use about half that much water.
6. Store drinking water in the refrigerator instead of running tap water until it reaches the desired temperature.
7. Check and repair household plumbing regularly. A dripping tap (one drop per second) can leak as much as 190 gallons per day.
8. Water lawns during early morning or late evening hours. See attached Lawn Irrigation Tips for reasons and other suggestions.
9. Replace shower heads with new water saver heads. The old shower heads use about seven(7) gallons per minute, while low flow heads use only about half that much water.
10. When installing new plumbing, use the most direct routes for new hot water lines.
11. Wash vehicles with water from a bucket and sponge, then rinse to avoid unnecessary water lost.
12. Hand wash dishes by hand instead of using the dishwasher. At the lest, always make sure your dishwasher is full.
13. Lower the water level in the commode tank to reduce the volume of water used when flushing.
14. Set water levels on your washing machine to the appropriate size of cloths to be washed. A washing machine usually uses from 30 to 50 gallons of water per full load of cloths. A lesser amount of water is used for a small or medium load.

LAWN IRRIGATION TIPS

- ◆ Water before 8 A.M. or after 6 P.M. and avoid watering on windy days. As much as 40% of water can be lost to evaporation by watering the lawn during midday.
- ◆ Water in several short sessions rather than one long one. For example, three ten minute sessions spaced 30 minutes to a hour apart will allow your lawn to better absorb moisture than one straight 30 minute session.
- ◆ Only water when your lawn is thirsty. Over watering promotes shallow root growth making you lawn less hardy. Step on the grass; if it springs back up when you move your foot, it does not need water.
- ◆ Water only when a soil probe shows dry soil or a screwdriver is difficult to push into the soil.
- ◆ Keep lawn free of weeds. Weeds are water thieves and will rob your plants of water and nutrients. Spot spray or remove weeds as they appear.
- ◆ Move sprinkler heads away from curbs or sidewalks. A mulch, bark, or rock area at least 8 inches wide adjacent to sidewalks and curbs will help eliminate water waste.
- ◆ Accept a less than lush lawn. Grass will naturally go dormant during periods of drought, but will readily regenerate when water becomes available. Reduce traffic on stressed turf areas if possible.
- ◆ Mow higher than normal. Longer leaf surfaces promote deeper rooting and shade the root zone. Never remove more than 1/2 of the leaf blade in one mowing. Return mulched clippings to the lawn.



FINDING THE LEAKS

Leaks unseen or ignored can drip hundreds or thousands of gallons of water literally down the drain. Not only is that precious fresh water wasted, but also you have to pay for it.

Since the water you waste through leaks is your responsibility, it is important to track down leaks and repair every one you find, regardless of its size. Even a pinhole size leak such as a slowly dripping faucet in need of a new washer can waste up to 180 gallons of water a day!

Household leaks are found in bathroom and kitchen fixtures, around laundry rooms, in garden hoses, outside faucets and lawn sprinkler systems. A little detective work can catch a leak before it goes too far.

SEMIANNUAL LEAK DETECTION CHECKLIST

KITCHEN

- Sink Faucet*
- Spray Hose*
- Dishwasher*
- Refrigerator (icemaker)*

BATHROOM

- Toilet*
- Bathtub Faucet*
- Showerhead*

UTILITY ROOM/BASEMENT

- Washing Machine*
- Water Softener*
- Humidifier*
- Hot Water Tank*

OUTDOORS

- Lawn Sprinkler*
- Swimming Pool*
- Faucets*
- Garden Hose*

WATER CONSERVATION

Save Water in the Kitchen & Laundry

- ◇ Use your automatic dishwasher only for full loads.
- ◇ Use your automatic washing machine only for full loads.
- ◇ If you wash dishes by hand, don't leave the water running to rinse.
- ◇ Don't let the faucet run while you clean vegetables.
- ◇ Keep a bottle of drinking water in the refrigerator.
- ◇ Check faucets and pipes for leaks.

Save Water in the Bathroom

- ◇ Check your toilet for leaks.
- ◇ Do not use the toilet to flush a cigarette butt, facial tissue or other small bits of trash.
- ◇ Use a toilet tank displacement device to save a gallon each time you flush.
- ◇ Install water-saving showerheads.
- ◇ When shaving, rinse your razor in a filled sink.
- ◇ Check faucets and pipes for leaks.

Save Water Outside

- ◇ Observe lawn watering restrictions of odd/even day according to your address and no watering between 10:00am and 4:00pm any day.
- ◇ Water your lawn only when it needs it-not just because it's your day.
- ◇ Use a broom, not a hose to clean driveways and sidewalks.
- ◇ Water during the cool parts of the day. Early morning is best since it helps prevent growth of fungus.
- ◇ Check for leaks in pipes, hoses, faucets and couplings and lawn sprinkler systems.

WATER CONSERVATION IDEAS FOR COMMERCIAL BUILDINGS

GENERAL SUGGESTIONS

- ◆ Increase employee awareness of water conservation.
- ◆ Install signs encouraging water conservation in employee and customer restrooms.
- ◆ When cleaning with water is necessary, use budgeted amounts.
- ◆ Determine the quantity and purpose of water being used.
- ◆ Read water meter weekly to monitor success of water conservation efforts.
- ◆ Assign an employee to monitor water use and waste.
- ◆ Seek employee suggestions on water conservation; locate suggestion boxes in prominent areas.
- ◆ Determine other methods of water conservation.

BUILDING MAINTENANCE

- ◆ Check water supply system for leaks.
- ◆ Turn off any unnecessary flows.
- ◆ Repair dripping faucets, showers and continuously running or leaking toilets.
- ◆ Install faucet aerators where possible.
- ◆ Reduce the load on air conditioning units by shutting off air conditioning when and where it is not needed.
- ◆ Reduce toilet water by adjusting flush valves or installing dams and flapper mechanisms.
- ◆ As appliances or fixtures wear out, replace them with water-saving models.
- ◆ Shut off water supply to equipment rooms not in use.
- ◆ Minimize the water used in cooling equipment in accordance with manufacturer's recommendations. Shut off cooling units when not needed.

CAFETERIA AREA

- ◆ Turn off the continuous flow used to clean the drain trays.
- ◆ Turn dishwasher off when not in use. Wash full loads only.
- ◆ Use water from steam tables to wash down cooking area.
- ◆ Do not use running water to melt ice or frozen foods.
- ◆ Use water-conserving ice makers.

WATER CONSERVATION IDEAS FOR HEALTH CARE FACILITIES

GENERAL SUGGESTIONS

- ◆ Increase employee awareness of water conservation.
- ◆ Seek employee suggestions on water conservation; locate suggestion boxes in prominent areas.
- ◆ Conduct contests for employees (e.g. posters, slogans, or conservation ideas).
- ◆ Determine other methods of water conservation.
- ◆ Install signs encouraging water conservation in employee and customer restrooms.
- ◆ When cleaning with water is necessary, use budgeted amounts.
- ◆ Read water meter weekly to monitor success of water conservation efforts.
- ◆ Assign an employee to monitor water use and waste.
- ◆ Determine the quantity and purpose of water being used.
- ◆ Install signs encouraging water conservation in patient and nonpatient rooms and restrooms.
- ◆ Use paper cups for drinking water instead of free-flowing drinking fountains.

BUILDING MAINTENANCE

- ◆ Check water supply system for leaks and turn off any unnecessary flows.
- ◆ Repair dripping faucets, showers and continuously running or leaking toilets.
- ◆ Reduce the water used in toilet flushing by either adjusting the vacuum flush mechanism or installing toilet tank displacement devices (dams, bottles, or bags).
- ◆ Install flow reducers and faucet aerators in all plumbing fixtures whenever possible. As fixtures wear out, replace them with water saving models.
- ◆ Shut off water supply to equipment and rooms not in use.
- ◆ Discontinue water circulation pumping in unoccupied areas.
- ◆ Ensure return of steam condensate to the feed water tank for re-use.
- ◆ Shut off spray coil units, except where humidity in critical areas cannot be maintained by other means or where the units are used to reduce chiller operation.
- ◆ Keep hot water pipes insulated.
- ◆ Avoid excessive boiler and air conditioner blow down. Monitor total dissolved solids levels and blow down only when needed.
- ◆ Minimize the water used in cooling equipment, such as air compressors, in accordance with the manufacturer recommendations.

BUILDING MAINTENANCE

- ◆ Check water supply system for leaks and turn off any unnecessary flows.
- ◆ Repair dripping faucets, showers and continuously running or leaking toilets.
- ◆ Reduce the water used in toilet flushing by either adjusting the vacuum flush mechanism or installing toilet tank displacement devices (dams, bottles, or bags).
- ◆ Install flow reducers and faucet aerators in all plumbing fixtures whenever possible. As fixtures wear out, replace them with water saving models.
- ◆ Shut off water supply to equipment and rooms not in use.
- ◆ Discontinue water circulation pumping in unoccupied areas.
- ◆ Ensure return of steam condensate to the feed water tank for re-use.
- ◆ Shut off spray coil units, except where humidity in critical areas cannot be maintained by other means or where the units are used to reduce chiller operation.
- ◆ Keep hot water pipes insulated.
- ◆ Avoid excessive boiler and air conditioner blow down. Monitor total dissolved solids levels and blow down only when needed.
- ◆ Minimize the water used in cooling equipment, such as air compressors, in accordance with the manufacturer recommendations.

CAFETERIA AND KITCHEN AREAS

- ◆ Turn off the continuous flow used to clean the drain trays of the coffee/milk/soda beverage island.
- ◆ Turn dishwasher off when not in use. Wash full loads only.
- ◆ Use water from steam tables to wash down cooking area.
- ◆ Do not use running water to melt ice or frozen foods. If necessary, use ponded water.
- ◆ Use water-conserving ice makers.
- ◆ Provide table signs in cafeteria urging water conservation.
- ◆ Wash vegetables in ponded water; do not let water run in preparation sink.
- ◆ Recycle rinse water from the dishwasher.

LAUNDRY FACILITIES

- ◆ Reprogram machines to eliminate a rinse or suds cycle, if possible, and not restricted by health regulations.
- ◆ Reduce water levels, where possible, to minimize water required per load of washing.
- ◆ Wash full loads only.
- ◆ Evaluate wash formula and machine cycles for water use efficiency.

OPERATIONS

- ◆ Turn off water required for film processing or cooling in the X-Ray department when not in use.
- ◆ Recycle water where feasible, consistent with state and county requirements.
- ◆ Use full loads in sanitizer, sterilizer, dishwasher, and washing machine consistent with infection control requirements.
- ◆ Overhaul faulty steam traps on sterilizers.
- ◆ As appliances or fixtures wear out, replace with water-saving models.
- ◆ Reduce the load on air conditioning units by shutting off air conditioning when and where it is not needed.
- ◆ Recover condensate from air conditioners, refrigerators, freezers, and ice machines; use it as make-up water.

EXTERIOR AREAS

- ◆ Inventory outdoor water use for landscaped areas.
- ◆ Do not water landscape every day; two-to-three times a week is usually sufficient.
- ◆ Wash autos, buses, and trucks less often.
- ◆ Discontinue using water to clean sidewalks, driveways, loading docks, and parking lots.
- ◆ Consider using brooms or motorized sweepers.
- ◆ Stop hosing down sidewalks, driveways, and parking lots.
- ◆ Wash autos, buses, trucks less often
- ◆ Avoid plant fertilizing and pruning that would stimulate excessive growth.
- ◆ Remove unhealthy plants so remaining plants can benefit from the water saved.
- ◆ In many cases, older, established plants require only infrequent irrigation. Look for indications of water need, such as wilt, change of color, or dry soils.

- ◆ Install soil moisture overrides or timers on sprinkler systems. Time watering, when possible, to occur in the early morning or evening when evaporation is lowest.

- ◆ Irrigation equipment should apply water uniformly.

- ◆ Investigate the advantages of installing drip irrigation systems.

- ◆ Mulch around plants to reduce evaporation and discourage weeds.

- ◆ Remove thatch and aerate turf to encourage the movement of water to the root zone.
- ◆ Avoid runoff and make sure sprinklers cover just the lawn or garden, not sidewalks.
- ◆ Do not water on windy days.

Water Shed Protection Plan

In 1998, Water Shed Protection provisions were incorporated into the Northampton County Zoning Ordinance. These Water Shed Protection provisions were incorporated into the County's Zoning Ordinance with the assistance of the Division of Community Assistance, the North Carolina Department of Commerce and various divisions of the North Carolina Department of Environment & Natural Resources.