United States
Environmental Protection
Agency

20W-0002
July 1990

OW (WH-556)

OPPE (PM-222)

EPA

# Preventing Pollution Through Efficient Water Use

## How Efficient Water Use Helps Prevent Pollution

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## What Individuals Can Do


## What Communities Can Do

# How Efficient Water Use Helps Prevent Pollution

*Using water more efficiently can help prevent pollution as well as protect and conserve our finite water resources. More efficient water use by you and your community has many other benefits.*

## Fewer Pollutants

- Using less water reduces the amount of wastewater discharged into our lakes, streams, rivers, and marine waters.
- The amount of pollutants wastewater carries can also be reduced, as treatment efficiency improves.
- Recycled process water can reduce pollutants from industry.
- More efficient irrigation can minimize runoff of agricultural pollutants and reduce the use of fertilizers and pesticides.

## Protection of Aquatic Habitats

- Building fewer and smaller new water projects can help preserve wetlands, which naturally treat pollutants.
- Diverting less water preserves more streamflow to maintain a healthy aquatic environment.

## Protection of Drinking Water Sources

- Less pumping of groundwater lowers the chance that pollutants will be drawn into a water supply well.
- With less water use, septic system performance can improve, reducing the risk of groundwater contamination.
- Highest quality water sources are preserved for drinking water by using treated wastewater for other uses.

## Energy Conservation

- Efficient water use means less power needed to pump and treat water and wastewater.
- Less water use reduces the amount of energy required for heating hot water.
- Less energy demand results in fewer harmful by-products from power plants.

## Other Reasons to Use Water Wisely

*Preventing pollution is only one reason why using water efficiently makes sense. Here are a few more:*

### Money Saved

- Less water use results in fewer pumping and treatment costs.
- Saving money on water and wastewater operations frees money for meeting water quality, public health and water treatment goals.
- Water saved is also energy, and money, saved for you and your community.

### Improved Reliability

- Water conservation provides a hedge against drought impacts.
- Improving water efficiency may be quicker and cheaper than developing a new supply.
- Reduced water use may extend the life of your water or wastewater facility.
- Reduced water use may increase the efficiency of wastewater treatment, and reduce overflows during storms.
- Communities which use water efficiently are better prepared to cope with effects of possible future climate change.

## What Individuals Can Do

*More efficient water use begins with individuals, in the home and place of work. Taking these and other steps, and encouraging others to do so, makes good economic as well as environmental sense.*

### In The Home

- ☞ Install a toilet dam or plastic bottle in your toilet tank.
- ☞ Install a water-efficient showerhead (2.5 gallons or less per minute).
- ☞ When you buy a new toilet, purchase a low flow model (1.6 gallons or less per flush).

### Outdoors

- ☞ Water in the morning or evening, to minimize evaporation.
- ☞ Install a drip-irrigation watering system for valuable plants.
- ☞ Use drought-tolerant plants and grasses for landscaping, and reduce grass-covered areas.

### At Work or School

- ☞ Adopt the same water-saving habits that are effective at home.
- ☞ Ask about installing water-efficient equipment and reducing outdoor water use.
- ☞ Encourage employers to explore the use of recycled "gray-water" or reclaimed wastewater.

## What Communities Can Do

*A water supplier or wastewater system operator (public or private) has cost-effective options to process and deliver water more efficiently. A community can do the same, and can foster ways to use water wisely.*

*Not all of these steps are expensive. The best choices vary by region and by community; start by asking if these are appropriate where you live and work.*

### A Water Supplier or Wastewater Processor Can:

- ☞ Identify who uses water, and reduce unaccounted-for water use.
- ☞ Find and repair leaking pipes.
- ☞ Consider a new pricing scheme which encourages conservation.
- ☞ Reduce excess pressure in water lines.
- ☞ Explore the reuse of treated wastewater for uses other than drinking water.
- ☞ Charge hookup fees which encourage more efficient water use in new buildings.
- ☞ Build water efficiency into future demand projections, facility planning, and drought planning.

### A Community Can:

- ☞ Adopt plumbing and building codes that require water-efficient equipment and practices.
- ☞ Adopt a water-efficient landscaping ordinance to reduce the water used for golf courses and commercial landscapes.
- ☞ Retrofit older buildings with water-efficient equipment, starting with public buildings.
- ☞ Reduce municipal water use for landscaping and other uses.
- ☞ Conduct a public education campaign.
- ☞ Require developers to build in water efficiency measures.

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*For more information on what you and your community can do to use water more efficiently, contact:*

**U.S. Environmental Protection Agency**
**Office of Water**
**401 M Street, S.W.**
**Washington, D.C. 20460**

*For more information on pollution prevention programs at U.S. EPA, contact:*

**U.S. Environmental Protection Agency**
**Office of Pollution Prevention**
**401 M Street, S.W.**
**Washington, D.C. 20460**