

WATER WATCH

The 1998-2002 drought was South Carolina's worst since modern record keeping began in the late 1800s. This drought devastated agriculture for five years, created hazardous navigation and ceased the flow of some rivers, dropped lakes to record low levels, endangered forestry resources, lowered shallow and deep groundwater resources, and threatened public drinking water supplies and the quality of water for millions of South Carolinians. The economic repercussions associated with the 1998-2002 drought may surpass any other drought and many other natural hazards in South Carolina's history.



Climatological records show that South Carolina has been plagued with recurrent drought conditions for nearly a century. Periods of dry weather have occurred in each decade since 1818. The most damaging droughts in recent history occurred in 1952-1956, 1986, and 1998-2002. The 1998-2002 drought is considered the worst drought on record because of its nearly five-year duration, the longest drought since the 1950s, coupled with the increased demand on the state's water resources.








Undoubtedly, the recent drought was one of the worst on record, but its effects were also compounded by population increases that have taken place during the past 50 years. South Carolina's population has nearly doubled since 1950. The state's population will continue to grow and the demand for water will correspondingly increase, but the amount of water that is available will remain essentially the same. South Carolina's water resources are under increasing stress because of the many uses they serve, including hydroelectric power generation, nuclear-plant cooling, industrial cooling and process water, drinking water, water-based recreation, and disposal of sewage and non-point source pollution. With today's increasing demands, impacts from future droughts will be greater than those witnessed in the past.




The realization that the state's water supply is limited brought the issue of water to the forefront for many policy-makers. The 1998-2002 drought marked a turning point in how we view our water resources. The belief that only water-starved Western states could run out of water was replaced by the stark realization that we could run out of water, too. State agencies such as the SC Department of Natural Resources are developing management strategies to ensure water availability for future generations. Many of these strategies are presented in the recently revised second edition of the South Carolina Water Plan.



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The future of our state's water resources doesn't just depend on improved management by government agencies during drought; it depends on you and your actions each and every day. There are countless ways that each of us as homeowners, business people, and students can make a difference, because no water conservation is too minimal and every drop counts. Listed below are a few **General Water Saving Tips**:

-  **GET INVOLVED** in water-management issues. Voice your questions and concerns by calling and writing the DNR Water Resources team and at public meetings conducted by your local government or water system.
-  **BE AWARE** of and follow all water conservation and water shortage rules in effect in your community. Don't assume – even if you get your water from a private well – that you need not observe good water use rules. Every drop counts.
-  **ENCOURAGE YOUR EMPLOYER** to promote water conservation in the workplace. Suggest that water conservation be put in employee orientation and training programs.
-  **REPORT ALL SIGNIFICANT WATER LOSSES** (broken pipes, open hydrants, errant sprinklers, abandoned free-flowing wells, etc.) to the property owner, local authorities, or your water supplier. Repair dripping faucets and leaky toilets. Dripping faucets can waste about 2,000 gallons of water each year. Leaky toilets can waste as much as 200 gallons each day.
-  **ENCOURAGE YOUR SCHOOL** system and local government to help develop and promote a water conservation ethic among children and adults.
-  **SUPPORT PROJECTS** that will lead to an increased use of reclaimed waste water for irrigation and other uses.
-  **ENCOURAGE YOUR FRIENDS** and neighbors to be part of a water-conscious community. Promote water conservation in community newsletters, on bulletin boards, and by example. Encourage your friends, neighbors, and co-workers to “do their part.”

-  **CONSERVE WATER** because it is the right thing to do. Don't waste water just because someone else is footing the bill, such as when you are staying at a hotel.
-  **TRY TO DO ONE THING** each day that will result in saving water. Don't worry if the savings are minimal. Every drop counts. You can make a difference.
-  **KNOWING YOUR FACTS** will help you realize ways to conserve water:
 - On average, 50 to 70 percent of residential water is used outdoors for watering lawns and gardens.
 - Daily indoor per capita water use in the typical single family home with no water-conserving fixtures is 74 gallons. Here is how it breaks down:

Use	Gallons per Capita	Percentage of Total Daily Use
Showers	12.6	17
Clothes Washers	15.1	21
Dishwashers	1.0	1
Toilets	20.1	28
Baths	1.2	2
Leaks	10.0	14
Faucets	11.1	15
Other Domestic Uses	1.5	2

**Data provided by American Water Works Association*

For additional information on South Carolina's Drought Response Program and South Carolina Water Plan visit the Web site: www.dnr.state.sc.us/climate/sco.

References

- Castro, J. E., and J. Hu, *Distribution and rate of water use in South Carolina*, Water Resources Report 18, South Carolina Department of Natural Resources, 1997.
- National Water Summary 1988-1989 - Hydrologic Events and Floods and Droughts*, United States Geological Survey, Water-Supply Paper 2375, Denver, Colorado, 1991.
- South Carolina Water Plan*, second edition, South Carolina Department of Natural Resources, 2004.



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