

Why conserve water?

If water professionals in the 1930s and into the 1960s were asked, “What is water conservation?” most would have said “Water Conservation involves building a reservoir to capture runoff that would otherwise be wasted by flowing into an unusable water body, like the ocean.”



Starting in the 1970s water professionals became aware that minimizing water waste was essential. American Water Works Association’s water resources policy in 1975 included that statement, “Every effective means to prevent and minimize waste and promote wise use should be employed by all entities, public and private, engaged in water resource activities.”

A common public perception is that water conservation means restricting or curtailing customer use as a temporary response to drought. Though water use restrictions are a useful short-term drought management tool, most utility-sponsored water conservation programs emphasize lasting long-term improvements in water use efficiency while maintaining quality of life standards. Water conservation, very simply, is doing more with less, not doing without.

There are many reasons for water utilities to pursue wise water use and establish a water conservation program. The specific reasons will be different for each utility, and the appropriate level of conservation for a utility should be tailored to local needs.

There is a broad array of reasons to pursue efficient water use, for example:

- **Cost savings** – lowering water production and/or distribution costs will save the utility and its constituents money in reduced operation cost and possibly deferred capital costs. Conservation is often an important part of a least-cost future water supply plan.
- **Wastewater treatment and disposal benefits** – reduction of interior water use cuts wastewater flows, resulting in cost savings and lower environmental impacts of treated wastewater disposal.
- **Environmental benefits** – water removed from a water body for human use could be used for environmental or other purposes. For example, protection of endangered species often requires a reliable source of good quality water, which might be diminished by water withdrawals.
- **Competing beneficial uses** – in addition to environmental uses, water left in place could be used for agriculture, power production, recreation and aesthetic enjoyment.
- **Water supply limitations** – few places now enjoy unlimited water supplies. Water conservation can stretch existing supplies, whether supply is from groundwater or surface water.
- **Utility stewardship and sustainability** – utilities that conserve water demonstrate leadership in resource management and are working towards a goal of sustainability. More economic activity can occur on the same water resource.
- **Energy savings** – reducing water production will save energy and reduce greenhouse gas emissions.

- **Improved supply reliability** – conservation can reduce the frequency and duration of drought water use curtailments by essentially increasing supply.
- **Customer benefits** – customers who conserve water may enjoy lower water bills and possibly lower wastewater and energy bills.
- **Regulatory compliance** – some state regulatory agencies require water conservation plans and/or implementation progress to qualify for permits, grants, and loans.
- **Public perception** – the public often insists on demonstrating efficient use of existing water supplies before supporting expansion of supplies to meet new water needs.

Are there any drawbacks to pursuing efficient water use? Sometimes there are factors that must be carefully weighed before deciding to pursue aggressive conservation.

1. Reduction of water use often requires utilities to modify their demand and revenue forecasts, rates, and/or rate structures
2. Some utilities need assistance from specialists in water conservation to provide specific expertise on how to implement conservation programs and properly assess the benefits from such programs. Selling less water seems unconventional.
3. Many utility billing systems do not support customer-sector water use data needs and analysis.
4. In some locations, conservation can threaten the “use it or lose it” doctrine of water law or water rights.

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