



States face water wars

BY MELISSA TAYLOR

Water, which used to be considered a ubiquitous resource, is now scarce in some parts of the country. This scarcity, combined with growing demand, is creating conflicts over water rights and water usage.

A number of conditions have combined to create the current crisis. The recent drought, water quality issues, overallocation and overuse of water sources, aging water infrastructure and land development have affected water supply. In addition, population growth and trends in water usage are putting higher demands on water sources.

To alleviate water supply problems, states can create drought plans, encourage good water quality, discourage overuse, improve infrastructure quality and integrate water planning with land-use planning.

Today, 35 states have drought plans, two entrust the plans to local authorities and four are developing plans, according to the National Drought Mitigation Center.

Legislators in many states have responded to public demand for better water quality for recreational and environmental purposes by implementing minimum flow requirements, which also address the problem of overuse. States have also taken other actions to curb overuse. Maine, for instance, recently passed a law requiring major water users to file annual water-use reports and allowing the state environmental protection agency to designate areas that are in danger of overuse.

States can also promote infrastructure improvements to increase water supply. In addition to repairing leaks, officials may consider a water-loss prevention program, which can include various elements that prevent leaks in the first place, such as inspecting, cleaning and lining pipes.

Water supply considerations can be a part of land-use plans. California, for example, requires developers proposing subdivisions of 500 or more houses and large commercial projects to show that water will be available to meet these domestic and commercial needs even during prolonged droughts. In addition, another California law requires cities and counties to create water supply assessments for large development projects.

Looking at the other side of the equation – water demand – states can't easily change their demographics, but they can encourage conservation efforts to stem the growing demand for water. Conservation efforts may include:

- *Water metering.* Interestingly, many of the biggest water savers are basic concepts like metering, which measures the amount of water used.
- *Tiered rate structure.* If residential, commercial and

industrial users are rewarded by lower rates for using less water, this will lead to efficiencies.

- *Audits of domestic, commercial and industrial users.* Audits can help customers understand their water-usage patterns and identify ways to conserve water.
- *Promotion of efficient landscaping and irrigation.* States can require that public grounds use water-efficient landscaping. States can support efficient irrigation techniques by restricting outdoor water usage, requiring users to irrigate at certain times and requiring drip irrigation rather than hose irrigation.
- *Water reuse and recycling.* States can encourage the recycling and reuse of graywater from sinks, showers and baths and help identify potential uses for graywater, such as industrial applications, agricultural irrigation, groundwater recharge and direct reuse.
- *Management of water-system pressure.* Systemic water pressure reduction can decrease the number of leaks and the amount of water that escapes through leaks.
- *Retrofit and replacement of water fixtures and encouragement of water-efficient appliances.* Water officials can facilitate the retrofit and replacement of inefficient fixtures by providing free fixtures, offering rebates to consumers who purchase their own fixtures or negotiating with suppliers to provide lower-cost fixtures. Some states have required water-efficient appliances.
- *Conservation education.* Conservation education can entail a wide variety of tactics, ranging from relatively simple methods such as including conservation tips in water bills to more involved methods such as creating school conservation programs.

As the saying goes, “An ounce of prevention is worth a pound of cure.” One way to mitigate the effects of future water shortages and subsequent water rights disputes is to address future water supply and predicted water demands. Water plans are more comprehensive than drought plans and should include predictions of future water supply levels, an account of existing and possible water sources and an assessment of water-management alternatives.

For more information on water rights conflicts, state water laws and policy options to prevent, or at least deal with, water supply shortages and increasing demand for water resources, download CSG's latest *TrendsAlert: Water Wars* at www.csg.org (keyword: water wars).

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