

THE BUSINESS CASE FOR WATER CONSERVATION

Meeting Summary

March 22, 2011

Cedar Park, Texas

Water Conservation can be a fiscally prudent long-term strategy for providing an affordable water supply, delaying costly infrastructure investments, and keeping utility costs down. When properly implemented, it's simply a good way to do business, though one size does not fit all.

Buddy Garcia, TCEQ Commissioner, said in Texas, 23% of future demand will be addressed through conservation but conservation measures will need to be tailored to regional needs and implemented using a balanced approach to allow communities to pay for needed infrastructure. He encouraged everyone to stay involved and share success stories with the rest of Texas.

WATER CONSERVATION MAKES GOOD BUSINESS SENSE

Conservation, explained **Mary Ann Dickinson**, President of the Alliance for Water Efficiency, is “not about what feels good, but what makes good business sense.” Myths about water supply, infrastructure, efficiencies, and water conservation abound but are simply untrue.

Often, cities keep rates flat, even during an inflationary period, postponing the inevitable increase until there is a crisis. For the most part, utility costs increase, even in areas where there is no conservation; rates need to move accordingly.

In contrast to the general thinking, new housing developments, despite the use of water-saving technologies, actually use 12% to 60% more water than existing infrastructure because most include irrigation systems, which, if not properly managed, waste water. With that kind of data, many feel that water conservation doesn't work and costs too much. But studies of residential water use for conserving and “non-conserving” homes demonstrate a difference

of 22.9 gallons per day, due to a combination of efficient appliances and lifestyles.

Ms. Dickinson said conservation measures may be paid for directly by rate payers through a surcharge, with incentives offered to customers for efficiency savings. Ultimately, rate payers and utilities enjoy long term cost savings due to avoided costs of purchasing new water supplies or building new infrastructure.

Conservation strategies for communities should be developed that cost the utility less than the cost of new supplies. The Alliance for Water Efficiency has a conservation tracking tool that assesses the benefit/cost ratio and helps utilities to choose which programs make the best sense (Available on-line: www.allianceforwaterefficiency.org/Tracking-Tool.aspx).

Conservation can have a negative short-term financial impact, but in the long term, the rate payers reap huge benefits because of lowered utility costs. Ms. Dickinson cautioned that the “worst way to pay for conservation is from current operating revenue.”

She noted that politicians are fearful conservation will drive rates up. Often, cities keep rates flat, even during an inflationary period, postponing the inevitable increase until there is a crisis. For the most part, utility costs increase, even in areas where there is no conservation; rates need to move accordingly. Ultimately, conservation should be a cost-reducer by avoiding a supply crisis. “Customers need to realize that water conservation is a bargain,” especially relative to the cost of new supplies and treatment capacity. Utilities need to drive that message home through education.

The bottom line: “If conserving makes rates rise, it is due to the failure to plan, rather than a failure of economics.”

THE BUSINESS CASE FOR WATER CONSERVATION AND ITS IMPACT ON RATES

Doug Evanson, Senior Vice President/Chief Financial Officer for the San Antonio Water System (SAWS), described his personal transformation from a CFO who believes conservation drives up costs, to an advocate of conservation as a cost-saving strategy. When he joined SAWS, the utility’s rates were the 2nd highest in Texas and had planned rate increases ranging from 13.6% to 50%. But with a long-term conservation strategy in place, monthly water/wastewater charges increased only 3.8% over 4 years, the lowest of all major cities in Texas.

The success of any water conservation initiative depends on rate design and its incorporation as part of a long term business plan.

Mr. Evanson encouraged attendees to view and evaluate conservation as a source of water supply; consider the impact of conservation on other capital expenditure requirements such as the need for new wastewater treatment capacity; focus on the big picture; and increase the public perception of the value of water. Ultimately, the success of any water conservation initiative depends on rate design and its incorporation as part of a long term business plan.

WATER CONSERVATION REGULATIONS AND ORDINANCES FOR WATER DISTRICTS

Alia Vinson, Associate with Allen Boone Humphries Robinson LLP – Houston, explained that water districts, which are board-operated, small government providers serving between 1000 and 2000 homes, have the authority to encourage water conservation through pricing, rules, and incentives. Conservation makes good business sense in the short-term through savings in operations and maintenance. But the big savings ultimately come from deferred investments in new infrastructure.

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Water districts generally control the pricing of water and water rates can impact water use. Often the “true cost” of water in a water district is hidden from the customer because capital costs are paid for by taxes, not utility payments. Ms. Vinson encouraged Districts to restructure their bills and break out the detail, especially if invoices include garbage and fire safety costs.

Avoid flat rates for minimum use. Rather, use a tiered rate system to encourage conservation. Ultimately, a properly structured rate should result in the same revenue stream, with higher volume users paying more than conservative consumers.

Water Districts are authorized to require an irrigation installer to hold a license and obtain a permit before installing a system. If such rules are adopted, they should include minimum standards and specifications for designing, installing, and operating irrigation systems. When permits for installing new systems are issued, utilities

should charge a fee to cover the cost of system inspection and approval. Ms. Vinson noted that no MUDs in Houston have adopted irrigation rules, due to a lack of staff with the expertise to oversee such rules, and reticence to charge the permit fee which would cover the cost of hiring qualified staff.

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Water districts with more than 3300 connections are required to have a water conservation plan either by contract or because they are receiving surface water from a water authority. Examples of conservation strategies include irrigation system evaluations, rebates for water saving irrigation upgrades, recommended watering schedules, customer education, and rebates for water efficient indoor fixtures.

WATER CONSERVATION THAT WORKS

Experts from a large and two medium sized water utilities shared their experiences with implementation of water conservation measures.

“EASY” WATER CONSERVATION DURING HARD TIMES

Conservation is not a drought response, but is a long-term strategy for extending supplies and delaying infrastructure investments, said **Drema Gross**, Water Conservation Manager for Austin Water. She discussed “easy” water conservation during hard times and noted that customer education is a good approach to sustain a program through tight budgets, because it can be accomplished as part of a utility’s existing operations. Austin Water adds messages to utility bills, uses electronic communication, and includes inserts with utility bills (free versions available from EPA). Printing costs can be minimized especially if utilities collaborate to get better pricing.

Revenue-positive conservation tactics:

- Scan monthly bills for zero-reads to ID meter tampering or malfunction
- Examine back billing policies to ensure you collect what you’re owed.
- Examine leak adjustment policies in order to not give away revenue.
- Test and repair meters, especially large meters and high-use customers.

Customer service helps to build relationships with consumers while reducing water use. Austin Water speaks with customers about excessively high bills, a practice which has produced a sustained 80% reduction in water use.

Revenue-positive and/or revenue-neutral conservation is particularly important when the economy is tight. Ms. Gross suggested leaders examine their utility’s or City’s water practices. Agencies should conduct a thorough water loss audit and minimize unmetered or unbilled use in other departments. Additionally, agencies can look for lost revenue through inefficient billing practices, leak adjustment policies, and meter testing and repair schedules.

WATER CONSERVATION FOR MEDIUM SIZED UTILITIES

Jessica Woods, Water Conservation Specialist for the City of Round Rock, **Jan Klein**, Conservation Coordinator with the City of San Marcos, and **Katherine Woerner**, Utilities Program Manager for the City of Cedar Park discussed their experiences with implementing water conservation in a medium sized utility.

Ms. Woods encouraged utility directors to first know their systems, customer base, and policies, and then design programs that will work best in their particular situation. As part of its water conservation program, Round Rock has used water irrigation evaluations, education, rebates/incentives, and a tiered rate structure.

The City of Cedar Park implemented a “Water IQ Public Education Campaign” in 2007 in response to a City Council directive to focus on education. Ms. Woerner described the campaign, its budget, and goals. She encouraged attendees to “start somewhere . . . don’t let the budget stop you,” to create partnerships with other community entities in order to stretch resources, set goals, and evaluate what works. The goals of Cedar Park’s Water IQ campaign include: encouraging residents to follow their watering schedule, increasing awareness of the importance of conservation, and inform the community about Cedar Park’s water source.

Ms. Klein briefly discussed the various San Marcos conservation initiatives, including public and school education programs, rebate and incentive programs, conservation rate structures, and conservation regulations. Her presentation focused on implementation of regulatory programs such as ICI (industrial, commercial, institutional) ordinances, irrigation system requirements, and drought rules.

THE WATER EFFICIENCY NETWORK OF NORTH TEXAS

The Water Efficiency Network of North Texas (WENNT) was established in 2006 in response to excessive drought, explained **Lorrie Reeves**, Urban Water Programs – Texas Agrilife Research and Extension. Seven individuals started meeting and developed the “Texas Urban Landscape Guide” to reduce outdoor water use. The document was initially issued in print and then revised for distribution as a water conservation DVD. WENNT has continued to meet over the years and has grown to a membership of 60, representing 45 organizations. Members meet regularly over lunch to share ideas, receive legislative updates, purchase cooperatively, and share data, outcomes, and vendor comparisons.

CENTRAL TEXAS WATER EFFICIENCY NETWORK

Of the 100+ Symposium attendees, 35 expressed interest in participating in a Central Texas Water Efficiency Network to share information and best practices, and explore cost saving opportunities. The Symposium sponsors will organize an initial meeting of interested stakeholders.

For more information on the Symposium or to join the Central Texas Water Efficiency Network, visit www.texaswater.org/centraltexas/.