6.3 Public Outreach and Education

Applicability

Any utilities initiating a water conservation program can adopt this best management practice (BMP). A program for providing water conservation information to the public is an effective means of both promoting specific water conservation programs and practices and educating the public about the importance of using water efficiently.

Once a utility decides to adopt this BMP, the utility should consider the many strategies it outlines and track the results closely to adjust efforts over time.

Why this is a Strategic BMP

The Texas Water Code §11.002 states that BMPs are voluntary efficiency measures that save "a quantifiable amount of water, either directly or indirectly...". BMPs that are useful in implementing other measures but for whom quantifiable savings cannot be identified are described as Strategic BMPs.

Description

Public outreach and education programs, though not directly related to equipment or operational change, can result in short- and long-term water savings. Increasing customer participation in conservation measures will only occur if a reasonable yet compelling case is presented with sufficient frequency to be recognized and absorbed by customers. To be effective, water conservation education and outreach should be planned and implemented in a consistent and continual manner. Many low-cost or free resources are available which can be used to effectively carryout public outreach and education efforts.

The goal of water conservation education is to educate customers on the overall picture of water resources in the community. This includes how conservation is important for meeting the goals of managing and sustaining existing water supplies and avoiding or delaying building of new facilities. Equally important, the program should provide information on specific actions and measures customers can take to implement community goals. Showing customers the results of those actions can encourage greater participation in conservation efforts.

Implementation

1. Target audience analysis:

An early step in developing a public information program is to identify target audiences and what messages need to be conveyed. Themes should be selected that convey the importance of water conservation and provide customers an opportunity to act (for example, watering the lawn less frequently in the fall). Thematic messages that stress the

importance of water as a natural resource can be linked with specific tips or water conserving activities. The most successful public outreach programs allow customers to obtain information, understand their role in water conservation, and/or respond to a call to action, such as participating in utility programs.

- 2. Identify barriers and develop priority messages:
 - Identify barriers to customer water conservation and to staff implementation of the communication plan. If barriers include lack of awareness from a specific segment of the customer base, then this provides a target group for a campaign. If a barrier is a lack of understanding of a particular program and how it helps customers, then this becomes a priority message.
- 3. Assess resources and develop strategies to meet priority needs:
 - There are a variety of tools that can be effectively used to communicate water conservation to the public. When starting a program within a small utility, there is often limited budget to work with, but low-cost, effective resources are available. Examples include print and electronic media, community events such as spring clean-up days, public library events, the school district, collaboration with community groups, and state or federal agencies. Social media and internet opportunities are also low-cost with significant impact.
 - a. Print options: Print media activities can include articles on internal publications such as utility bill stuffers, the actual water bill, and employee newsletters. They can also include external activities such as submitting articles to homeowner association newsletters or other local group newsletters. Printed material, specifically door hangers, can be left by meter readers to target specific neighborhoods.
 - b. Internet options: An internet presence is crucial, as more and more residents turn to electronic media to locate information. A comprehensive website with pages dedicated to water conservation broken down into various subsections such as indoor use, outdoor use, rainwater harvesting, irrigation, appliances, graywater, landscaping, and other relevant topics is an invaluable tool that is relatively easy to maintain, edit, and expand on as needed. Websites offer an easy means to direct residents to other resources regarding water. In addition, creating an electronic newsletter to send out seasonal water conservation facts or reminders is possible to do with email addresses collected from the billing department.
 - c. Social media options: Social media applications, such as Facebook and Twitter, are another avenue to reach residents. Short educational messages and news stories can be relayed quickly and frequently with no real cost and reach far more customers than a direct mailout. Choose the best social media platforms for the utility's audiences;

there is no need to be on every site. Consider staffing and plan 5-10 hours a week for someone to manage each account. Develop a social media policy and guidelines for employees, including any legal, regulatory, or utility requirements and best practices. It is important to ensure there is a process for training new employees and removing access as employees leave the utility.

Staff can be a great source of content for the utility's social media managers as they attend events or perform their day-to-day work. Provide employees with periodic training and encourage them to send photos and short videos for posting. Take time to develop online relationships with partner organizations, the media, and key influencers who may then be willing to share conservation messages. Utilities may also consider inviting a trusted employee, partner, or community member to do a social media "takeover" and guest host their account for an event or set period. Takeovers often bring new followers and increase engagement.

- d. Community events: Community events are good opportunities to directly interact with customers and supply more specific topical information to them. These events could include staffing a booth, presenting special topics to groups as requested, homeowner association meetings, and school presentations.
- 4. Determine where partnerships can expand the message:

Other utility departments, municipal staff, and local groups that are promoting the same message you are, such as Texas Master Gardeners, Texas Master Naturalists, gardening clubs, universities, the county Texas AgriLife Extension agent, river authorities, and conservation or environmental groups are all tremendous resources in distributing the water conservation message to a larger audience than a singular effort from any one source. Collaborating with other utilities in the area or utilities that share a similar water situation is another way to expand the water conservation program by working together on messages that will target all groups of customers. Joint mailouts, advertising, and products can be paid for by several groups to expand the audience and cost-effectiveness. Creating an environmental or conservation committee that incorporates staff from various departments within the utility or municipality will ensure that messages are promoted during community events that could include staff from parks, watershed protection, storm water management or drainage, forestry, recycling, water treatment, development and planning, and energy conservation. Consider establishing a collaborative online forum, such as a Facebook group, for members to ask questions or share best practices on an ongoing basis.

An ambassador program can be a great opportunity for students or young professionals to develop skills and gain experience while providing valuable assistance to the organization.

A successful model involves training the participants, partnering them with a department or mentor, and requiring them to complete three projects: a service project, a social media project, and assisting with a community outreach. Projects must be completed within an appropriately established time frame dependent on project scale (i.e. six months, two months, one year, etc.).

If staff and resources are limited, utilities can also partner with university classes to offer project-based learning opportunities that are completed in shorter periods of time, such as a Digital Media 101 course that covers an event. Students complete media projects during the event and post them to their social media accounts to help share conservation messages with new audiences. The assignment might include short video interviews, Instagram posts, Facebook Live video, or Snapchat Story, and students agree to make the photos and video content available for the utility's future use.

5. Consider a recognition program:

Creating a recognition program for water conservation efforts is another successful outreach tool. This can be focused on the commercial customers that perform a water saving measure such as water reuse at a laundry facility, regionally appropriate landscaping, or efficient irrigation. The positive attention focused on those customers promotes water efficiency to their customers and among their peers or competitors. The award could be a sign on the property, recognition at a city council meeting, or a picture and article on the utility's website. A positive image benefits the company and reiterates the importance of water conservation among all customer classes. Similarly, utilities can establish a loyalty program to reward customers who participate in water-saving measures and educational programs.

Scope and Schedule

Utilities using this BMP should implement it according to the following schedule:

- 1. Complete a conservation promotion plan within six months of adopting this practice.
- 2. In the second year and each year thereafter, complete a revised conservation promotion plan.
- 3. In the second year and every three years thereafter, conduct and complete a survey of customers to determine the effectiveness of the message and actions the customers have taken.

The conservation promotion plan should provide conservation information on those BMPs implemented at least four times per year. For utilities focused on reducing summertime peak usage, themes and scheduling of messages should be repeated numerous times during the spring and summer months, rather than spaced evenly throughout the year.

Measuring Implementation and Determining Water Savings

The first step in implementation is to develop a conservation promotion plan and calendar for the first year. It should focus on what the message will be, when it will be promoted, and what form(s) it will be in. At a minimum, conservation messages should be promoted at each season change or quarterly. Collaborate with internal staff in the public information or communications department so that messages will be coordinated with other utility or municipal promotional activities that may be happening. Outreach can also be planned around other national water conservation events such as "Fix-a-Leak" week or "Smart Irrigation" month. The plan should be updated each year thereafter to integrate new ideas and means of conveying the messages. Work with the public information or communications staff to determine if messages are effective in reaching customers; this may involve taking a survey of residents. Revise the conservation promotion plan as needed.

The conservation promotion plan should be a substantial part of the utility's overall water conservation plan. The implementation of the plan should be integrated with the implementation of specific BMPs included in the water conservation plan. A successful public education effort will promote participation in other practices.

To track progress of this BMP, the utility should gather and have the following documentation available on an annual basis:

- 1. Monthly water production volumes
- 2. Total population in the utility service area
- 3. Number and schedule of activities or information pieces related to promoting specific BMPs adopted by the utility
- 4. Number of pieces of information that were conveyed and what form they took (i.e. number of direct mailers, e-newsletters, articles in newspaper)
- 5. Number of web visits, unique and repeat visitors, average length of web visits per year, sources for incoming traffic, bounce rate, page views, conversions, etc.
- 6. Statistics regarding social media reach, impressions, and engagement, such as the number of page followers, posts, and link clicks
- 7. Number of activities (presentations, booths, etc.) conducted that year and participants at each activity
- 8. Results of customer survey to determine the reach and impact of the program
- 9. Total budget for conservation program and budget specifically for public education information, if applicable

This progress tracking can be completed as part of the Water Conservation Annual Report that is conducted and submitted to the Texas Water Development Board.

Water savings due to public information efforts are difficult to quantify, but digital engagement makes it easier than ever to quantify how many people are reached. If the public information effort was for a specific action, such as showerhead distribution, the savings can be calculated under this BMP if the utility did not implement the BMP containing the product or action, such as the Showerhead, Aerator, and Toilet Flapper Retrofit BMP. Water savings for other public information programs that result in specific actions by customers, such as changes in irrigation scheduling or reduction in water waste occurrences, could also be quantified through surveys or analysis of water waste reporting.

Cost-effectiveness Considerations

The cost for implementing this BMP depends on the scope of the public information effort. There may be costs for administration and materials. Within a small utility, the costs will be in the lower range, as the majority of the education efforts will be managed by utility staff. The largest cost will be printing of materials for mailouts, door hangers, or signs along with postage costs for direct mailouts. Internet outreach, collaboration with other groups, and community activities are virtually free from expense, as staff time is the largest cost. Purchasing of promotional or give-away materials, such as showerheads, aerators, and dye tablets, is an additional expense that is not necessary to have effective water conservation outreach, though it can enhance a water conservation education program. A comprehensive program would range in costs starting at \$0.25 per customer per year, to several dollars per customer, depending on the budget and utility size.

References for Additional Information

Developing a Water Conservation Public Awareness Program: A Guide for Utilities: Texas Water Development Board:

www.twdb.texas.gov/conservation/outreach/doc/Public Awareness UtilityGuid e.pdf

Water Conservation Brochures; Texas Water Development Board:

www.twdb.texas.gov/publications/brochures/conservation/index.asp

Raising Your Water IQ: Texas Water Development Board:

www.wateriq.org

EPA WaterSense:

https://www.epa.gov/watersense

American Water Works Association:

https://www.awwa.org/resources-tools/water-knowledge/water-conservation.aspx#2868249-resources-and-guidance

Texas A&M AgriLife Extension Service Water Education Network:

https://water.tamu.edu/water-conservation/

Take Care of Texas

http://takecareoftexas.org/

Texas Water Resources Institute:

http://twri.tamu.edu/resources/water-conservation/

Social Media Best Practices: U.S. Fish & Wildlife Service:

https://www.fws.gov/home/socialmedia/practices.html

Social Media Fact Sheets: Pew Research Center:

http://www.pewinternet.org/fact-sheet/social-media/

Texas State Parks Ambassador Program

https://tpwd.texas.gov/spdest/programs/state_parks_ambassador/

Other Resources to Consider:

- Councils of Government
- Economic Development Centers
- Nature Rocks Texas [Formal/Informal Education Opportunities] (www.naturerockstexas.org)
- Real Estate Councils
- Texas Master Gardeners (www.txmg.org)
- Texas Master Naturalists (www.txmn.org)