

Water Conservation Messaging During Droughts

**An analysis of water conservation public outreach methods
used in California, Colorado, Georgia, Oklahoma and Texas**

MASSACHUSETTS
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San Antonio Water System
Texas Water Development Board

Disclaimer

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Introduction

The drought that hit Massachusetts last summer caught many people unprepared. Our state agencies had not faced a drought this severe since the 1960's and the state's Drought Management Plan, drafted in 2000 and updated in 2013, had not been tested in a drought of this magnitude. Agency staff had to quickly familiarize themselves with the state's drought response protocols, and scrambled to find the resources to respond to the drought. As a result, communication with the public about drought conditions and water conservation was limited, especially in the drought's critical early stages.

During a drought, communications with the public are essential to ensuring that water is used efficiently and both water supplies and stream flows are sustained for as long as possible. Public outreach campaigns are often used as a means to engage with water consumers about drought conditions and water scarcity. The effectiveness of these informational campaigns can vary widely.

Droughts, along with floods, are expected to increase in frequency and severity as the climate changes, elevating the importance of drought resiliency even in traditionally water-rich states like Massachusetts. As we saw last year, the effects of drought can be far-reaching. An extended dry period can seriously threaten our public health and safety, affect our economy, harm plant and animal life, and limit outdoor recreation due to dry streams and toxic algal blooms. It is our hope and expectation that our state will be far more prepared for the next drought. This paper focuses on communications during a drought, and summarizes strategies to encourage water conservation, provides examples of public outreach methods used in California, Colorado, Oklahoma, Georgia and Texas. The paper concludes with recommendations for effective public messaging about water conservation in Massachusetts.

Background

Policymakers frequently attempt to modify behavior in a community, often by instituting information-based campaigns to encourage a specific behavior. These campaigns can appear in various forms, from newspaper advertisements to Facebook posts, but the effectiveness of these persuasive informational campaigns can be difficult to gauge.

Coercive appeals to the public may produce an attitude change, but the effects can be short-lived. Even when messages praising the value of water conservation are successful in changing people's attitudes, there is no guarantee that new attitudes will translate into new behaviors.¹ In addition, if messaging is too heavy-handed, it could create backlash.²

Tone and Messaging

Messaging programs use information to try to influence customers' mindsets, prior assumptions, habits and behaviors. Messaging strategies to encourage behavior changes may include the following:

- Commitment - Spoken, written or public statements; i.e. a "pledge to save."

¹ Wicker, A., "Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects," *Journal of Social Issues*, 1969, p. 25

² Aronson, E., "Persuasion via self-justification: Large Commitments for small rewards," 1980, p. 3-21

- Social diffusion - How we follow signals from trusted peers
- Social norms - The tendency to want to “fit in”
- Prompts - Signs or other reminders to take action on an issue
- Communication- Providing relevant and impactful messages in a vivid and personal way
- Incentives - Opportunities to encourage action through recognition or financial rewards
- Convenience - Lowering the barriers to taking a perceived inconvenient action³

Behavioral economists assert that policymakers can change people’s behavior by harnessing their natural inclination to conform to social norms. For example, customers make decisions based on social cues, self-image, local values and identities.⁴ Increasingly, social norms messaging programs seem to offer promising ways to affect and reduce water use among consumers, especially when customers are shown their water use is out of alignment with their perceptions, and more importantly, with that of similar households. Changing behaviors through the appearance of collective action creates additional motivation and a sense of support from the community. Making behavior impacts visible and comparable increases the likelihood that these social norms will be promoted in the community. In addition, removing barriers that discourage behavioral changes, such as the high cost of appliance upgrades, can be achieved through incentives.

Messaging can have great value when it is thoughtfully applied to specific local barriers. Avoiding traditional “cookie-cutter” messages is crucial to increase the likelihood of customer interest and desire to change behaviors. Maintaining a local aspect to messaging may involve determining what time of day or week an audience is most likely to listen, who is the best messenger to deliver a message and what types of messages will resonate with local cultures, values and identities. The best “messenger” may vary from region to region. In a United Kingdom water efficiency analysis by WaterWise, 81% of customers surveyed indicated that they had heard about drought conditions from a televised news report. Fifty percent of respondents heard about drought conditions from a newspaper, 44% from a radio station and only 29% from their local water company. When asked who they considered a trusted source of advice on drought issues, televised news reports were selected by 63% of respondents, radio news was selected by 38% of respondents, newspapers were selected by 36% of respondents and water suppliers were selected by only 31% of respondents.⁵ In California, a 2015 poll conducted by a Latino environmental group, Mujeres de la Tierra, indicated that Hispanics in the region viewed water departments as their most trusted source of information about the drought and conservation.⁶ Understanding which messengers may be most effective in communicating with the public and what form the message should take is essential to encouraging behavior changes.

Analysis of Water Conservation Messaging Techniques

³ Mazur-Stommen, Susan and Vigen, Michell, “Community Based Social Marketing: State of Play 2012,” American Council for an Energy Efficient Economy, October 2012

⁴ Hastings, Nola and Rustamov, Galib, “Potential Best Management Practice: Customer Water Use Messaging,” March 2015, p. 2

⁵ Waterwise, Water UK, WWF-UK, *Water Efficiency and Drought Communications Report*, July 2013, p. 15

⁶ Carpenter, Susan, “In the drought, O.C agencies learn to say ‘conserve’ in many languages,” *The Orange County Register*, June 2015

The state agencies and water suppliers included in this report were asked to share their most effective and successful messaging strategies and campaigns. With few exceptions, the majority of the states interviewed did not conduct formal assessments to compare the impact of their different messaging techniques. Many noted that it was difficult to determine the effectiveness of a single technique because of the variety of initiatives that were deployed at once. For this reason, that information is not included in this report.

California

In California, following an extreme five-year drought which destroyed crops and threatened public water supplies, the state launched a statewide water conservation program, “Save Our Water.” The program was created through a partnership between the California Department of Water Resources and the Association of California Water Agencies. The program’s goal is to make water conservation a daily habit among Californians, much like recycling and energy conservation are today. This is reflected in the primary slogan for the program, “Water Conservation. It’s for Life.” The “Save Our Water” program reaches millions of Californians each year through partnerships with local water agencies, community-based organizations, social marketing efforts, and paid media and event sponsorships. The “Save Our Water” program uses Facebook, Twitter, Instagram and a frequently-updated website to highlight water-saving tips for outdoor spaces, homes and workplaces.

The “Save Our Water” program suggests simple changes that can be made inside and outside the home to save energy and money on monthly water bills. The program provides contact information for garden and landscape experts, as well as individual stories from California homeowners who have made changes to their yards and gardens to use less water. The California Department of Water Resources and the Association of California Water Agencies hope that these personal stories will encourage water consumers to see water conservation as the norm. The program also provides resources targeted toward young children. These include interactive tours of water usage in the home, coloring books with conservation messages and YouTube videos with “quests to save water.” The goal of this messaging is to encourage a conservation mindset in youth that they will maintain into the future. In addition, the program encourages youth to share conservation reminders with their family at home to reach customers at the local level. The “Save Our Water” program also pairs conservation messaging with information about rebates so that water consumers are encouraged to make changes that will have long-lasting impacts. The program uses the slogan, “Save Money. Save Water.” to encourage participants to make changes that will benefit themselves and their water supplies. Rebates are offered through the California Department of Water Resources for high efficiency toilet installations and turf removal at California single-family residences.

The “Save Our Water Program” also provides a “Water Agency and Partner Toolkit” with sample graphics and messages that communities can use to encourage water conservation. Though the state has provided this resource to all water suppliers, there was no requirement for them to adopt these materials. However, because California Governor Jerry Brown mandated a 25% water use reduction by users of urban water supplies across California in 2015, many cities used the “Save Our Water” resources, while others chose to develop their own creative campaigns to encourage water conservation.

The City of San Diego Water Department

Beginning in 2009, the City of San Diego Water Department initiated a concentrated water conservation messaging campaign in the midst of an extreme drought. Messages to the public focused on three components: the drought status, the scale of severity and how individuals could take action. A particularly challenging barrier for San Diego was that its residents had limited understanding of where public water supply resources were and how the drought was impacting them. General public education on this topic was critical to ensuring the community understood the severity of the issue.

San Diego first launched the “No time to waste. No water to waste.” campaign in 2009 and used their website, Facebook and Twitter to reach the public. They also used traditional media sources, in particular coordinating with nightly news stations and inviting public figures such as the local mayor to speak publicly about the importance of conservation during the drought. They wrapped local buses in advertisements detailing the importance of water conservation, developed signs for local malls and beaches, and launched popular local competitions for youth to develop advertisements promoting water conservation during the drought. Over the last few years, San Diego’s slogan to promote water conservation has developed into “San Diegans Waste No Water.” This message encourages individuals to think of their actions within the scope of the broader community and promotes a social norm of water conservation. Community engagement has continued even when the city was declared free from drought. The city continues to use its social media accounts daily to educate the public. Messaging during periods of drought stressed the severity of drought conditions and the potential for severe water shortages. As conditions improved, the City of San Diego continued to promote the slogan “San Diegans Waste No Water” in an effort to affirm conservation-minded behavior and promote continued conservation. Information on city rebate programs is often paired with conservation materials so customers are encouraged to make long-term investments in conservation.

Metropolitan Water District of Southern California

The Metropolitan Water District of Southern California communicates with the public through a variety of traditional and social media outlets during a drought. When a drought occurs, they issue news releases, hold press conferences, visit editorial boards, speak with public affairs programs, and make all efforts to be available to the media to communicate information about drought status and water conservation. Metropolitan also produces and pays for radio ads, community newspaper ads, television commercials and various publications with programs such as the L.A. Clippers, San Diego Chargers, L.A. Angels and San Diego Padres. In addition, Metropolitan developed a partnership with the L.A. Galaxy Major League Soccer team and featured star soccer players in messaging about water conservation. Metropolitan also regularly posts updated drought status information to their website and they developed a web page solely for drought and conservation information. They use major social media venues such as Instagram, Facebook and Twitter daily to communicate specific targeted methods for water conservation. Messages are tailored to the audience they feel is best served by the medium.

Metropolitan has received national awards for their advertising campaigns, including the 2014 American Water Works Association Public Communication’s Achievement Award for “significant accomplishments in communication.” In 2013 Metropolitan launched a \$5.5-million three-year multi-lingual outreach and advertising campaign created in conjunction with Fraser

Communications, a Los Angeles-based advertising company. Features of the campaign included more than 10,000 advertisements on television, radio, print, and the Internet. It debuted the Miss California character and the tag line, "Don't Waste Another Minute Wasting Water." The campaign also included news conferences, news releases, special TV news segments, and celebrity conservation public service videos. More recently, as the drought conditions have improved, Metropolitan has transitioned to a new campaign, "Love Water. Save Water." which encourages customers to make conservation a way of life. These campaigns have been part of larger outreach efforts on educational, legislative and business fronts to create a consistent message for water conservation. Metropolitan makes a continued effort to promote positive messaging by encouraging customers to be part of the larger conservation community and thanking them for their efforts. Conservation messages are often paired with information about local rebates for appliance upgrades.

Regardless of the drought status, Metropolitan meets monthly with their member agency conservation staffs to discuss new programs, new marketing strategies, and studies that promote water conservation. Sharing information and sample messaging templates promotes uniformity in messaging and the pooling of resources has proven more effective in terms of costs for the messaging campaigns. Metropolitan has found that long term water conservation messaging has proven more effective as compared to static drought messaging. Customers are more likely to accept needed conservation behavioral changes if their awareness of this issue is heightened and they understand their water supply's value to their community.

Colorado

In Colorado, the Colorado Water Conservation Board (CWCB) emphasizes conservation throughout the year because of the semi-arid climate of the state. They use both traditional and social media sources to raise awareness about water conservation during the year and increase their messaging during periods of drought. Social media accounts include Facebook and Twitter and traditional media sources typically include newspapers and radio stations. During the 2012-2013 drought, CWCB created a Twitter account solely for drought updates. The account featured drought stories from across the state and CWCB also shared weekly updates from the U.S. Drought Monitor with maps of drought conditions. They also created a website with listings of every water provider that had watering restrictions. Individuals could check on this page for their watering restrictions and see Colorado's monthly drought declarations, updates on snowpack information and current reservoir statuses. CWCB also has educational brochures and informational fliers that are available to the public. Conservation messaging tends to be generally positive, though CWCB draws attention to the water supply limitations of the state with its semi-arid climate and rapidly growing population.

Water providers in Colorado are not required to share a particular conservation message, but many message heavily throughout the year and particularly during periods of drought to protect the long term sustainability of their water suppliers. CWCB does offer a grant program for non-profits and water providers that want to provide K-12 or adult education initiatives focused on water conservation.

City of Thornton

The City of Thornton has maintained a robust public outreach campaign for water conservation since 2007. The yearly campaign budget averages around \$164,000 and includes a WaterWise demonstration garden promotion and tours. Maintaining an annual campaign keeps the water conservation ethic alive, even in wet years, and makes it easier for the public to transition into water restrictions when necessary.

Thornton uses a number of traditional and social media outlets to reach the public. They maintain active Facebook and Twitter accounts which post daily or weekly depending on drought conditions. To engage with particular communities, they use NextDoor, a neighborhood specific social media site, to announce community events that have a conservation focus. In addition, Thornton's water conservation website contains conservation tips, how-to water savings videos and drought status updates. They also share conservation messages on water bills and bill inserts. They have found that their most effective mode of communication is direct mailings. Thornton also works with volunteers called "Water Ambassadors" who are charged with sharing conservation messages in their local community. During the 2012-2013 drought, Thornton was involved in a regional workgroup to pool resources and develop more uniform drought messaging, but it was difficult to coordinate with multiple stakeholders. In addition, response time to changing conditions was slower because of the time needed to reach consensus among the larger group.

Thornton has used various taglines over the years for their annual water conservation campaigns. The current campaign slogan is "Without Water Life Would be Pretty Dry" to emphasize the value of water in everyday use. A past slogan, "League of Water Savers" was geared towards families and featured cartoon character toilets, washers and sprinklers with conservation information. Drought and rebate messaging is often paired because it gives residents a way to take immediate action to address the problem. Messaging is generally positive, though Thornton makes an effort to emphasize the term "water waste" in an effort to get residents to recognize this as a negative behavior. The City's hope is to draw the attention of high water users who may not realize their behavior has a negative impact.

Denver Water

Denver Water has approached drought messaging through a series of creative efforts to draw attention to drought conditions and promote water conservation. Beginning in 2002, Denver Water launched a water conservation marketing program with the slogan "It's A Drought. Do Something." to prompt the public to reduce their water use. The current slogan is "Use Only What You Need." The program suggests specific actions individuals can take to reduce their water use. Water conservation messages focus primarily on outdoor water use, though information is also provided on water saving opportunities inside homes.

To communicate with customers, Denver Water maintains several social media accounts and relationships with local media outlets. Social media accounts include Facebook, Twitter, Instagram and YouTube. Messages are shared daily or weekly depending on the severity of drought conditions. Denver Water purchases commercial slots on local radio stations and television channels and coordinates messaging with local newspapers. In addition, Denver Water has partnered with a few advertising firms to design unique billboards and public signage that feature artwork and often "edgy" images to promote conservation. They use a guerrilla

marketing strategy to reach the broadest audience possible. At the height of their most recent campaign, they surveyed customers and found that 88% of their customers were actively aware of their conservation campaign. Messaging tends to be positive overall with the goal of using unique imagery or slogans to cultivate interest in water conservation. Drought messaging often pairs educational material with rebate information to give customers the tools to make significant and immediate changes to their water consumption.

Although Denver Water has partnered in regional efforts to share drought educational materials, for the most part they coordinate messaging efforts on their own. Working with a handful of smaller water suppliers in the region, in the past they developed the slogan “Some Natural Disasters are Quieter Than Others” to emphasize that drought is a slow-moving, though significant, natural disaster. According to Denver Water, it was difficult to coordinate this large group of stakeholders and often discussions of messaging and marketing ideas would become political.

Oklahoma

The Oklahoma Water Resources Board (OWRB) engages with the public as directed by the Oklahoma Drought Management Plan and their communications are primarily limited to drought declaration updates. OWRB does maintain a website which provides regularly updated information on precipitation and climate changes, reservoir storage levels, streamflow conditions, groundwater levels, fire danger information, crop moisture levels, and community drought impact contacts.

During periods of drought, OWRB shares condition updates through their Facebook and Twitter accounts. These accounts are updated daily with drought stories and weekly with drought updates from the U.S. Drought Monitor. State funding for these outreach initiatives continues to decline every year and Oklahoma is becoming increasingly dependent on municipalities and water providers to share conservation messages with their communities.

Despite the decline in state resources for drought messaging, Oklahoma has developed a new directive to promote water conservation daily. In 2012, Oklahoma became the first state in the nation to establish a bold, statewide goal of holding fresh water use in 2060 to its 2010 level. “Water for 2060” relies on education and incentives, rather than mandates, to achieve this ambitious goal.

Oklahoma City

As a result of a severe drought from 2010-2011, Oklahoma City pulled together their first campaign to promote water conservation. They partnered with Oklahoma State University’s horticulture program to gather information on water conservation techniques for lawns and gardens. They also partnered with local homeowners’ associations to develop a program that offers free assessments of irrigation systems and flag heads to make sure these systems are operating efficiently. They coordinated with local landscaping and irrigation companies to offer workshops on efficient sprinkler systems and information on adjusting sprinkler program controllers to meet watering restrictions. Oklahoma City still maintains strong relationships with local gardening associations today to spread conservation tips on a smaller scale to interested parties.

Oklahoma City maintains a water conservation program with the title “Squeeze Every Drop.” The program operates year-round and increases messaging frequency during periods of drought. The program’s website offers suggestions for saving water inside and outside the home, conservation focused workshops and events, details for sprinkler checkup programs, information on landscape awards for water-efficient properties, contact information for water savings experts for both inside and outside of the home and information for restaurants certified as “H2Outstanding” for their water savings.

During periods of drought, Oklahoma City engages with customers through traditional media and social media outlets. They provide drought condition updates on both Facebook and Twitter. Messages are posted daily or weekly depending on conditions. They also use radio, television and newspaper media sources to engage with the public. In addition, Oklahoma City sends monthly bill inserts to customers with drought status information and conservation requests during the summer. Messaging is generally positive and provides suggestions for direct actions customers can take to change their water usage.

Georgia

The Georgia Environmental Protection Division, within the Georgia Department of Natural Resources, is responsible for communicating with the public when a drought is declared. The Division organizes a conference call with local utilities to discuss local drought conditions and supply issues to determine appropriate levels of action. When a drought is declared, the Division issues a press release and shares this update with all major newspapers. The Division then asks all major stakeholders, primarily water utilities, to share this information with their membership. The Division relies on the Georgia Municipal Association, Association of County Commissioners, Georgia Association of Water Providers and the Georgia Rural Water Association to contact their members regarding drought conditions. In addition, all water utilities are asked to include billing inserts with information on drought conditions.

The Division primarily communicates with the public through traditional media (newspapers, radio and television) as they do not have the funding at this time to hire a staff person to manage their social media accounts. The Division asks local water suppliers to share water conservation information with their customers through their own education initiatives. Though the state of Georgia does not require communities to adopt their suggested water conservation messaging and materials, they do often promote and share materials from innovative messaging campaigns by individual water suppliers.

Cobb County, Georgia: A Social Norm Messaging Success Story

In the midst of an extreme drought in 2007, Cobb County Water System’s (CCWS) in Georgia revisited their customer education initiatives in an effort to reduce water consumption. In conjunction with Georgia State University, CCWS implemented a randomized control trial in which households were assigned to one of four treatment groups. The goal of the program was to assess the impacts of different conservation messages on residential water use.

The program design used a one-time mailing on CCWS letterhead to single-family, detached households. Customers were randomly selected to receive one of the following four treatments:

1. Technical advice - provided households with an “information only” message that listed ways to reduce water use.
2. Weak social norm message - augmented Treatment 1 and asked customers to act on the suggested conservation tips and “do their part” to protect the region's water resources.
3. Strong social norm message - augmented Treatment 2 with a comparison of the household’s water use to their average neighbors consumption based on a five-month average.
4. No treatment - the Control group which received no communications

Water bills were evaluated during and after the message deliveries. Final analyses indicated that households receiving the weak social norm message reduced summer water consumption by approximately 2.7% and households receiving the strong social norm message reduced water use by 4.8% compared to households in the control group. By December 2007, it appeared that there were no longer any visible changes in water use from the group which received the weak social norm message, however the strong social norm message’s treatment effect could still be detected two years after the message was delivered.⁷

CCWS indicated that the strong social norm messaging program resulted in the most significant water savings and drew the most customer attention of any program they have ever created. They anticipate that they will continue to use this program in the future should another extreme drought occur.

Cobb County Water System

In addition to messaging campaigns, Cobb County Water System’s (CCWS) launched a website which provides information on watering restrictions and conservation tips. This website is active even when Cobb County is not in a drought. CCWS maintains active communications with local media so that larger outlets have accurate up to date information on drought conditions. CCWS also maintains Facebook, Twitter and Instagram accounts to engage with the public about water conservation regularly. They have partnered with the County’s local mascot, a popular cartoon character named Tappy the Turtle, to share educational material about water conservation through YouTube videos. CCWS also maintains a NextDoor account so that they can send targeted drought information to individual communities. This resource also allows them to respond to questions from individual customers about drought conditions and watering restrictions. CCWS sends a quarterly climate update newsletter to their customers with information about current conditions including deviations from normal rainfall and soil moisture. CCWS hopes that these frequent updates about conditions will better prepare customers for drought declarations and give them a strong understanding of the conditions that lead to a drought.

⁷ Ferraro, P.J. and Price, J.J., “Heterogeneous treatment effects and mechanisms in information based environmental policies: Evidence from a large scale field experiment,” *Resource and Energy Economics*, 2013 p. 35, 318-322

In addition to these regular communications, CCWS has also organized several short-term public messaging campaigns. To engage with younger demographics, CCWS created a series of YouTube videos featuring “Droughtbusters,” a spoof of the *Ghostbusters* series, to share information about water conservation. CCWS also started a “Pick 10” campaign which encouraged customers to make simple water conservation changes to their day that add up to a savings of 10 gallons a day. The goal was to encourage conservation competitions among family and friends to promote conservation in a fun and effective way.

Overall, CCWS strives to make messaging campaigns positive, fun and humorous whenever possible. They feel that they receive more attention and are more likely to promote behavior changes when they use positive messaging strategies. In addition, CCWS tries to pair rebate information with all public communications about water conservation.

Texas

The Texas Water Development Board (TWDB) has an established drought messaging program that is prepared in advance of drought declarations. A year in advance, TWDB creates an editorial calendar for each month. Each month focuses on a different theme and water conservation is one of the primary topics. They have created several conservation infographics which are shared daily or weekly on social media. Active social media channels for TWDB include Facebook, Twitter, Instagram and YouTube. During periods of drought, TWDB does a “Water Weekly” post on social media and sends a press release to media stations with maps showing current drought conditions. They rely heavily on regular press coverage to raise awareness of the drought status and water shortages. Messaging to the public tends to be overall positive, though during periods of severe drought TWDB tries to stress severity through “grim” messaging. TWDB also created a statewide water conservation program, “Water IQ,” which is designed to raise public awareness about water resources and encourage conservation daily. Due to sparse state financial resources for the program, the program is often limited to infrequent messaging.

In addition to these continuing efforts, TWDB has pursued a number of short-term efforts to promote conservation. In 2011, TWDB created a photo campaign through Flickr called “What does your Texas drought look like?” Citizens across the state were asked to post pictures of the drought and a few were selected for a photo display at the state capitol at the end of the campaign. This past year, TWDB initiated a campaign with the state historical commission called “Windmills and Water Towers.” Citizens were asked to post pictures on Instagram of windmills and water towers with the hashtags #TXwindmills and #TXwatertowers to increase awareness about the location of water supplies and the importance of these resources. The campaign evoked a high level of public interest and will be repeated in the future. In 2017, TWDB plans to create a “history of Texas and its water” campaign to stress the importance of this resource in the development of Texas. TWDB hopes that by highlighting the value of water, there will be greater awareness of consumption and improved response for conservation when needed. Texas water providers are tasked with developing their own conservation programming, though they are able to use state resources when available.

San Antonio Water System

The San Antonio Water System (SAWS) has established a drought response plan to engage the public during droughts. SAWS maintains a strong relationship with the local media outlets and in addition to press releases and conservation ads, also sends bill inserts and mailers to customers. SAWS uses Constant Contact, a popular email marketing software, to send educational emails to customers. SAWS also maintains a number of social media accounts including Facebook, Twitter, Instagram, YouTube, Vimeo, NextDoor and Periscope. Social media messages are shared daily or weekly depending on drought conditions and through NextDoor, SAWS posts specific local updates to individual communities. Messaging tends to be overall educational and positive.

SAWS has tried several different messaging strategies, but rather than focus on an individual slogan, they have concentrated their efforts on improving communications with different sectors of the public. SAWS has over 8,000 email contacts that receive drought status updates and their emails have a 50% open rate for those messages. SAWS actively cultivates email and cellphone contact information for customers who want to receive updates on drought conditions regularly. They engage with homeowners associations frequently to share drought status updates with their membership. SAWS has also spent time fostering relationships with the landscape and irrigation industry to provide advance notification of drought conditions to this sector. In partnership with other departments, SAWS maintains the “Garden Style San Antonio” website which provides suggestions for lawn watering based on weather conditions, water saving tips, coupons and rebates, how-to conservation landscaping videos, and expert landscaping contacts for gardeners and landscapers in the city.

SAWS is currently working with WaterSmart Software to harness social comparisons in promoting water conservation. WaterSmart Software sends Home Water Reports to customers which tell them how much water they’re using, how it compares to their own past use, as well as how much water similar households and similarly sized water-efficient households are using. The reports also provide information on how to increase water efficiency, available rebates or other messaging from utilities. Currently 8,000 SAWS customers receive WaterSmart reports monthly. SAWS hopes to encourage awareness of water consumption and promote water conservation as a social norm.

Recommendations for Massachusetts

Based on information from these five states and analyses of water conservation messaging strategies, the following are a series of recommendations for the state of Massachusetts’ drought management response:

Recommendation #1: Develop a robust statewide water conservation message that can be shared year-round.

In Massachusetts, a state accustomed to ample rainfall, water conservation messaging has been static due to many years of abundant precipitation. States, such as California and Colorado, that were successful in decreasing water usage during droughts noted that a key element to their success was consistent messaging on water conservation, even when they were not in a drought. It is in Massachusetts’ best interest to develop consistent, clear communications with water consumers about the source of their water and the value of water conservation to ensure that when water resources are scarce, consumers will respond positively to requests for conservation.

An ongoing campaign to promote water issues and water efficiency would foster a solid foundation for understanding water resources in advance of the next drought.

Recommendation #2: Develop effective water conservation messaging materials in advance of a drought for easy deployment in the future.

While no single messaging strategy is likely to appeal to all Massachusetts residents, other states reported that positive, simple and consistent messaging has proven most effective. A conservation campaign should be developed with a slogan which promotes collective action and suggests conservation is a social norm. Rather than characterizing water conservation as a “sacrifice,” it should be characterized as not wasting a vital resource. Developing a message that uses humor or presents an interesting challenge to the public will better sustain public interest in the face of a long drought. In addition, partnering with popular public figures (i.e. local mascots, the Governor, or mayors) to draw interest and support for behavioral changes via messaging may prove useful. Messages should also be altered to respond to changing weather patterns. For example, in the United Kingdom, water suppliers tailored messaging to fit current weather scenarios in an effort to avoid confusion about drought conditions. They used the following message after weeks of heavy rainfall, “Two weeks of rain v. Two years of drought: Please continue to conserve water”.⁸ Messages should also be developed far in advance of a drought to allow for easy deployment when needed.

Recommendation #3: Expand the Massachusetts Office of Energy and Environmental Affairs (EEA) “Drought Information” webpage to include sample drought messaging for utilities and promote drought messaging techniques that have already been used effectively by Massachusetts water suppliers.

A key component of an effective drought messaging strategy is strong collaboration between water suppliers and the state. Massachusetts should develop a resource similar to California’s “Save Our Water” “Water Agency & Partner Toolkit.” By sharing sample messaging with water suppliers, suppliers will expend less time and energy developing their own communications materials and conservation messaging may be more uniform. In addition, EEA should promote drought messaging and water conservation messaging techniques that are already being used effectively in the state. This will provide suppliers with an expert contact and provide proof to suppliers that these techniques are effective.

Recommendation #4: Connect the EEA “Drought Information” webpage to the Massachusetts Department of Environmental Protection (MassDEP) “Water Conservation” webpage.

The EEA “Drought Information” webpage makes reference to a number of water conservation tips but it does not link to the MassDEP “Water Conservation” webpage. Connecting these two resources would be useful so that during periods of drought, residents can view information on state Water Conservation Standards and tools for long term investments in water conservation.

Recommendation #5: Create EEA social media accounts via Facebook, Twitter and Instagram solely for drought condition updates and water conservation messaging.

Though the EEA “Drought Information” webpage and MassDEP “Water Conservation” webpage provide some public resources, many residents in Massachusetts may be unaware of these webpages or unwillingly to check these resources frequently for updates. By maintaining up to

⁸ Waterwise, Water UK, WWF-UK, *Water Efficiency and Drought Communications Report*, July 2013, p. 11

date social media accounts that residents can easily follow for updates on changing conditions, residents will be more likely to engage with this information and share these messages with others.

Recommendation #6: Develop incentives for Massachusetts water suppliers to create their own water conservation education programs.

While strong messaging at the state level is essential for encouraging the public to conserve water during a drought, this message also needs to be reinforced at the local level. Water suppliers should develop their own water conservation education programs that include information about efficient water usage both inside and outside of homes. If possible, suppliers should incorporate social norm messaging with billing information during droughts to encourage water conservation, similar to the program implemented in Cobb County, Georgia. As a component of this program, messaging templates and graphics should be prepared in advance of a drought. Suppliers should prepare drought communications plans for their communities as well so that accurate information can be shared through traditional local media and social media sources promptly.

Recommendation #7: Strengthen relationships between EEA and local media sources for improved communications with the public.

There is great value in having a central point of information about the drought and the impacts on water supplies, the environment and agriculture. This central point should be the Office of Energy and Environmental Affairs (EEA) as they are responsible for drought declarations. Establishing EEA as the clear leader as early as possible in the drought management process is essential to maintain an accurate flow of information. There would also be value in having a well-resourced and constantly updated industry source of information on water resources which could serve stakeholders, the media and the public.

During the 2014-2017 drought, despite the fact that EEA issued monthly drought declarations to the public, media stations often relied on the U.S. Drought Monitor drought updates when communicating with the public. This is likely because the U.S. Drought Monitor reports come out weekly and media stations want to keep their information as relevant as possible. Unfortunately, because the U.S. Drought Monitor and the EEA drought declarations use different terminology and may indicate different levels, this can create confusion when this information is shared with the public. EEA needs to establish itself as the primary source for media stations for drought declaration updates so that information is presented to the public in a simple and consistent manner.

Recommendation #8: Establish connections with key public sectors that will be impacted by drought conditions and can share drought condition updates with their members.

Lines of communication should be established with homeowner associations, landscape and irrigation companies, garden centers and local gardening associations for frequent updates on drought conditions. By connecting with these sectors directly and gathering up to date contact information, EEA can encourage these stakeholders to share drought condition updates with their memberships who will be directly impacted by these changes.

Recommendation #9: Develop a MassDEP “Where Does My Water Come From?” webpage for the public.

One issue during the 2014-2017 drought in Massachusetts was the need to increase general knowledge about water resources. MassDEP should provide information on the location and water supplier information for every town in Massachusetts so that residents can easily access information about their local supply. By cultivating an interest in and awareness of local supplies, consumers will be more responsive to requests for conservation during droughts.

Conclusion

Though there is no single messaging technique which will resonate with an entire community, it is in the best interest of Massachusetts to develop as many of these public outreach strategies as possible to improve water resource education and water conservation awareness. For the long-term health and sustainability of our water supplies and rivers, it is essential that the state develops a comprehensive statewide water conservation program and assists local water suppliers in developing their own communications with the public.