

# WHAT'S NEW IN CONSERVATION BEST PRACTICES?

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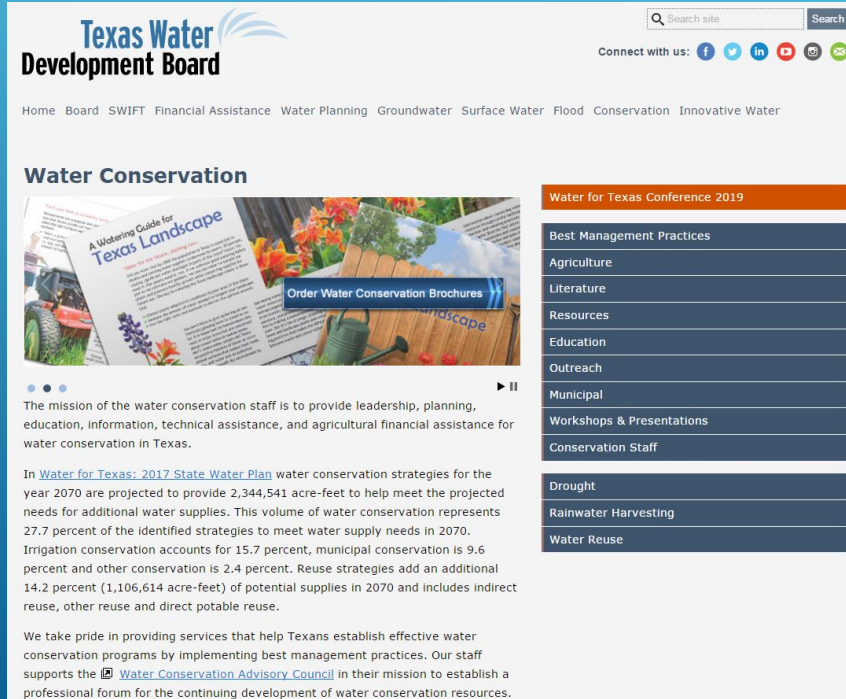


**SAVE TEXAS WATER**

Water Conservation Advisory Council

# CONSERVATION PLANNING

## Five Year Plans Are A BIG Deal!



The screenshot shows the Texas Water Development Board website. At the top left is the logo with the text "Texas Water Development Board". To the right is a search bar and social media icons for Facebook, Twitter, LinkedIn, YouTube, Instagram, and RSS. Below the navigation bar, there is a "Water Conservation" section. It features a banner for "A Watering Guide for Texas Landscape" with a button that says "Order Water Conservation Brochures". Below the banner is a paragraph of text: "The mission of the water conservation staff is to provide leadership, planning, education, information, technical assistance, and agricultural financial assistance for water conservation in Texas." This is followed by a link to "Water for Texas: 2017 State Water Plan" and another paragraph of text. At the bottom, there is a paragraph about providing services to help Texans establish effective water conservation programs. On the right side of the screenshot, there is a vertical menu titled "Water for Texas Conference 2019" with a list of items: Best Management Practices, Agriculture, Literature, Resources, Education, Outreach, Municipal, Workshops & Presentations, Conservation Staff, Drought, Rainwater Harvesting, and Water Reuse.

- ▶ Resources are available to help!
- ▶ Check TWDB
- ▶ Consider NEW Best Practices
- ▶ Go for the GOLD...extra recognition for a GREAT plan!



# TWDB BMP GUIDE

## What Do They Contain?

- ▶ Why this strategy?
- ▶ How to implement it?
- ▶ How to evaluate if it is working?
- ▶ Tips to Make it Work
  
- ▶ Several edits: Coming Very Soon!

- **Introduction to BMPs for Municipal Water Providers**
  - [About BMPs for Municipal Water Providers](#)
- **Conservation Analysis and Planning**
  - [Conservation Coordinator](#)
  - [Cost Effective Analysis](#)
  - [Water Survey for Single-Family and Multi-Family Customers](#)
- **Financial**
  - [Water Conservation Pricing](#)
  - [Wholesale Agency Assistance Programs](#)
- **System Operations**
  - [Metering of All New Connections and Retrofit of Existing Connections](#)
  - [System Water Audit and Water Loss Control](#)
- **Landscaping**
  - [Athletic Field Conservation](#)
  - [Golf Course Conservation](#)
  - [Landscape Irrigation Conservation and Incentives](#)
  - [Park Conservation](#)
  - [Residential Landscape Irrigation Evaluation](#)
- **Education & Public Awareness**
  - [Public Information](#)
  - [School Education](#)
  - [Small Utility Outreach and Education](#)
  - [Partnerships with Nonprofit Organizations](#)
- **Rebate, Retrofit, and Incentive Programs**
  - [Conservation Programs for ICI Accounts](#)
  - [Residential Clothes Washer Incentive Program](#)
  - [Residential Toilet Replacement Programs](#)
  - [Showerhead, Aerator, and Toilet Flapper Retrofit](#)
  - [Water Wise Landscape Design and Conversion Programs](#)
- **Conservation Technology**
  - [New Construction Graywater](#)
  - [Rainwater Harvesting and Condensate Reuse](#)
  - [Water Reuse](#)
- **Regulatory & Enforcement**
  - [Prohibition on Wasting Water](#)
  - [Conservation Ordinance Planning and Development](#)



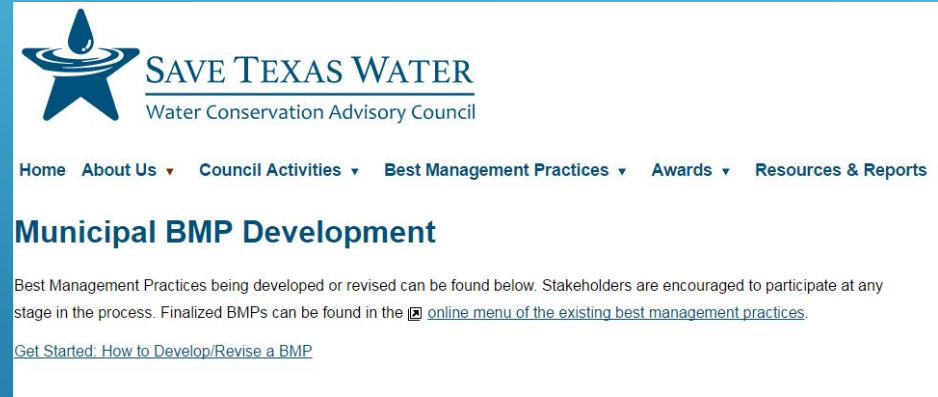
# CONSERVATION BMP'S SO NEW...YOU NEED TO KNOW HOW TO FIND THEM

1. Search: SaveTexasWater

2. Click: Municipal BMPs



The screenshot shows the Save Texas Water website homepage. At the top left is the logo, a blue star with a water drop above it, followed by the text "SAVE TEXAS WATER" and "Water Conservation Advisory Council" below it. A navigation menu includes "Home", "About Us", "Council Activities", "Best Management Practices", "Awards", and "Resources & Reports". Below the menu are three image-based buttons: "Council Meetings" (with a photo of a meeting), "Best Management Practices" (with a photo of greenery), and "Awards" (with a photo of a blue award). At the bottom, there is a white box with the text "Upcoming Council Meeting".



The screenshot shows the "Municipal BMP Development" page on the Save Texas Water website. It features the same logo and navigation menu as the homepage. The main heading is "Municipal BMP Development". Below it, a paragraph states: "Best Management Practices being developed or revised can be found below. Stakeholders are encouraged to participate at any stage in the process. Finalized BMPs can be found in the [online menu of the existing best management practices](#)." Below this paragraph is a link: "Get Started: [How to Develop/Revise a BMP](#)".



# ISSUE: WHY ARE WE DOING THIS?

Not once size fits all!

- ▶ **What is our community water story?**
- ▶ **What have we already accomplished?**
- ▶ **Who uses our water? Who drives peak? Are we growing?**
- ▶ **What do we value?**

- ▶ 30% of future Texas water needs will be met by conservation.



# CUSTOMER CHARACTERIZATION

## Analysis to Prioritize BMP Selection

- ▶ **Should be called: DO THIS FIRST!**
- ▶ **Asks about patterns in housing, water usage of customers, challenges of your system.**
- ▶ **Fundamental: Why do conservation at all? What does our community need?**
- ▶ **THEN: pick the BMP's that will get you there**

### Questions This will Get AT:

- ▶ Does your system have a peak summer problem? Getting worse?
- ▶ Do irrigation systems drive production patterns?
- ▶ Do you have customers who are economically disadvantaged struggling with water costs?
- ▶ Do you have old housing stock with high flow fixtures?
- ▶ Are you growing faster than you supply?
- ▶ Are droughts a big challenge?



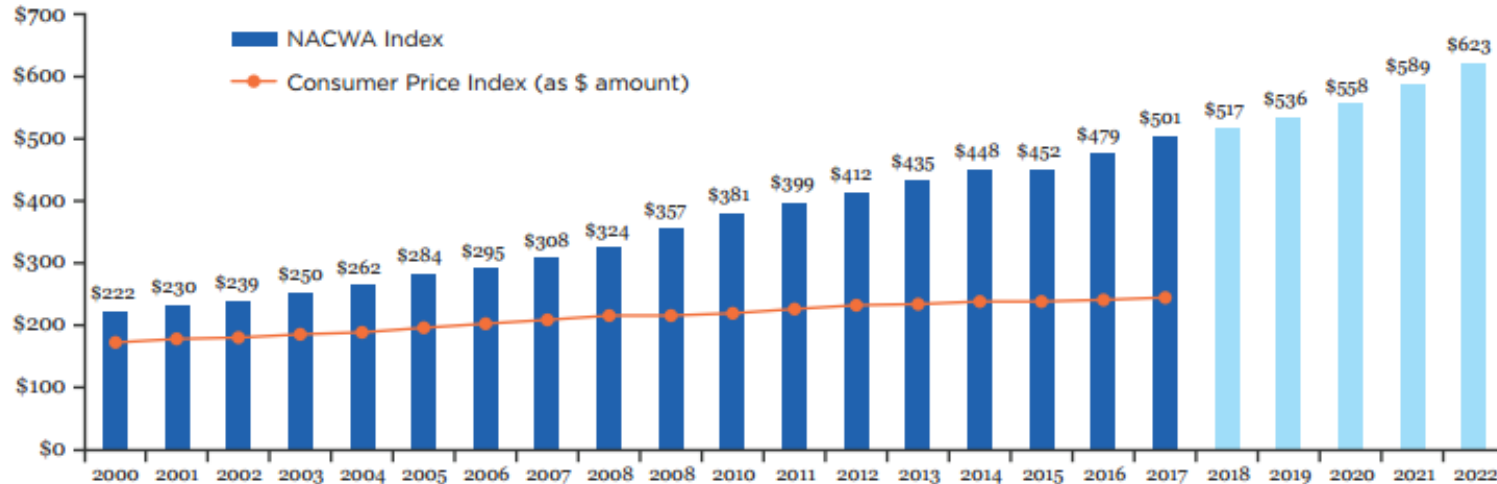
# ISSUE: WATER COSTS

THE AVENUE

## Water affordability is not just a local challenge, but a federal one too

Joseph Kane · Thursday, January 25, 2018

AVERAGE ANNUAL SERVICE CHARGE, 2000 - 2017 & PROJECTED



*Disclaimers: "The NACWA Index strives to use the best available data each year when determining current and historical household charges and trends. These data are intended for comparison purposes only, and are subject to change from one year to the next. While this document presents the most up-to-date data available, if better data become available in the future, the data presented here may be modified."*

Source: National Association of Clean Water Agencies (NACWA)



# BMP: PLUMBING ASSISTANCE FOR ECONOMICALLY DISADVANTAGED CUSTOMERS

## Why?

- ▶ **Water & sewer costs are going up**
- ▶ **Leaks account for on average 12% of household water usage**
- ▶ **Households in poverty may not be able to afford leak repairs or the water bill**
- ▶ **A defined assistance program mitigates rate increases**
- ▶ **Conservation for everyone**

## BMP

- ▶ Work with agencies that already qualify households in poverty
- ▶ Use contracts and firm program protocols to help... with limits
- ▶ Includes sample contracts, protocol documents, waiver of damages forms & more
- ▶ Can talk with other utilities doing this program area





# ISSUE: OUTDOOR IRRIGATION ADDS UP!



**The Data Shows:** Households with automatic irrigation systems use more water.

Reducing the operation of automatic irrigation saves water.



# BMP: OUTDOOR WATERING SCHEDULE

## Develop a Reasonable Regulation

- ▶ Determine what keeps landscapes healthy and what is excessive
- ▶ Work with stakeholders like HOA's, landscape and irrigation professionals, and other community groups
- ▶ Develop a schedule that sets and enforces reasonable limits on irrigation for landscapes



Not a deprivation message!



# ISSUE: IRRIGATION SYSTEMS CAN AND SHOULD BE BETTER!

We have a GREAT Texas irrigation license program. Let's use it!

- ▶ TCEQ licenses ALL who do professional irrigation work in Texas
- ▶ It is not legal to do irrigation work for pay without a license!
- ▶ Water efficiency rules are baked into that license
- ▶ Cities “shall” require permits of all systems with plans
- ▶ Even “new home build” irrigation must be done according to plans that assure reasonable design for future efficient operation



# BMP: ENFORCEMENT OF IRRIGATION LICENSE STANDARDS

## Develop enforcement program

- ▶ **Charge fees for irrigation permits that cover costs of checking plans and inspecting systems**
- ▶ **Make local ordinance against systems without permits and without proper irrigation design and irrigator oversight during installation**
- ▶ **Inform Customers of their rights**
- ▶ **Work with local irrigation association that will applaud this effort!**



# ISSUE: INDUSTRIAL, INSTITUTIONAL AND COMMERCIAL CUSTOMERS

- ▶ ICI customer count may be small, but they are important
- ▶ Standard rebates may not work for the companies that create jobs and use large amounts of water for operations



# BMP: CUSTOM CONSERVATION REBATE

## BMP Includes:

- ▶ **How to craft a rebate offer based on confirmed water savings by big customers**
- ▶ **Savings agreement negotiated and assured with a contractual agreement**

## Resources:

- ▶ Example program protocol
- ▶ Example contracts
- ▶ Case Study Examples: types of industry and what they can do to save with a little help



# GO FOR THE GOLD: RECOGNITION FOR A GREAT PLAN

## Gold Star Recognition

- ▶ **Strategy Discussion; tie the plan to your water story**
- ▶ **BMP Discussion; which ones and why**
- ▶ **Water Loss Strategy Discussion**
- ▶ **Evaluation Details**
- ▶ **Evidence of Community Outreach on Plan**

## How to Get Gold Star

- ▶ After submitting to TWDB
- ▶ Complete application which will be at [savetexaswater.org](http://savetexaswater.org)
- ▶ WCAC committee will review
- ▶ You will be added to the Gold Star Plan Recognition list and be issued a certificate if you meet criteria

