Non-Price Approaches to Conservation

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Two Approaches to Conservation

Pricing signals through your rates

Non-price strategies
System Level Conservation
Fix Real Water Loss

Volume From Own Sources

System Inputs

Water Exported

Authorized Consumption

Water Exported

Billed Authorized Consumption

Authorized Consumption

Unbilled Authorized Consumption

Unbilled Authorized Consumption

Apparent Losses

Unauthorized Consumption

Customer Metering Error

Systematic Data Handling Errors

Revenue Water

Water Exported

Billed Metered

Billed Unmetered

Unbilled Metered

Unbilled Unmetered

Real Losses

Mains Leaks

Service Leaks

Tank Overflows

Imported Water

Supplied To Your System

Water Exported

Billed Unmetered

Unbilled Metered

Unbilled Unmetered

Non-Revenue Water
Customer Focused Conservation

- Increase customer information
- Help customers reduce usage
- Usage restrictions
- Alternative sources for outdoor irrigation
Use Monthly Billing

Customers are more aware of their usage with monthly billing

Able to catch leaks on the customer side of meter more quickly
How often do you bill customers?

A. Monthly
B. Bi-monthly
C. Quarterly
D. Less frequently than quarterly

100%
Provide Price and Historic Use Information on Customer Bills

Bills are the main way we communicate with customers.

This information will help customers understand usage and pricing better to conserve.
## Rate Structure

### Historic Usage

<table>
<thead>
<tr>
<th>ACCOUNT NUMBER</th>
<th>SERVICE ADDRESS</th>
<th>BILL CYCLE</th>
<th>NO. OF USAGE DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chapel Hill, NC</td>
<td>700</td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>METER #</th>
<th>CURR. READ DATE</th>
<th>CURRENT READING</th>
<th>READING TYPE</th>
<th>PREV. READ DATE</th>
<th>PREV. READING</th>
<th>USAGE (1000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>06404859</td>
<td>5/19/2016</td>
<td>365</td>
<td>Actual</td>
<td>4/18/2016</td>
<td>353</td>
<td>2</td>
</tr>
</tbody>
</table>

- **Previous Balance**: $26.35
- **Balance Forward**: $26.35
- **Late Payment Fee**: $2.40
- **Overdue Interest**: $0.11

**Water Service Charge - 5/8"**
- **Water Usage Charge - Block 1-2000 gal X $2.63**
- **Bank Draft - Do Not Pay**

**Current Charges**: $14.70
**Total Due**: $5.26
**Total Due**: $22.47

**Total Due**: $48.82
Compare Customer Usage to Local Averages

Help customers put their usage into context

Stoke competition!
Thank you for being an efficient water user!

Your water use last month shows you stayed within your personalized water budget. Your efficiency helps reduce the water demand on the environment and the need to import additional water to the valley. Efficient water users save money with tiered rates. For more information about water conservation and how to improve your efficiency even more visit Coachella Valley Water District's web site at www.cvwwd.org.

Your water efficiency rating this month is: Efficient

<table>
<thead>
<tr>
<th>Water Usage</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec.</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Nov.</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>Oct.</td>
<td>20</td>
<td>16</td>
</tr>
</tbody>
</table>
For customers who don’t pay bills directly, they can be unaware of their usage.

Often also don’t understand the impact of leaks.
Understanding Your Water Bill

The first step in changing the way you use water in the future is by understanding how much water you use today. The best place to find this information is on your monthly water bill. Pull out your water bill and follow the steps below to learn more about it and your own water use.

<table>
<thead>
<tr>
<th>How much do you use?</th>
<th>+</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your usage trend?</td>
<td>+</td>
</tr>
<tr>
<td>How does your use compare to that of your neighbor?</td>
<td>+</td>
</tr>
<tr>
<td>How are you being charged?</td>
<td>+</td>
</tr>
</tbody>
</table>
Increase Customer Information

Is your system doing any of these items?
Help Customers Reduce Usage
Reduce Indoor Water Use

• Help customers afford fixtures and appliances that use less water

• Also help customers fix leaks
City of Ashland

Giveaways

The Water Conservation Department is offering FREE showerheads, bathroom aerators, kitchen aerators, and moisture meters. Ask at the front counter for more information!

Showerhead
Moisture Meter
Kitchen aerator
Bathroom aerator

51 Winburn Way
Toilets

Gallons per Flush:

- Pre-1950: 7.0 gallons
- 1950-1980: 5.0 gallons
- 1980-1994: 3.5 gallons
- 1994-Present: 1.6 gallons

Faucets

Source: Penn State Extension https://extension.psu.edu/water-conservation-how-much-water-and-money-can-you-save

Gallons per Minute:

- Pre-1994: 3.0
- 1994-Present: 2.5
- Low-Flow: 1.5

8 Minutes/Day

Source: Penn State Extension https://extension.psu.edu/water-conservation-how-much-water-and-money-can-you-save
Showerheads

Gallons per Minute:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-1980</td>
<td>4.3</td>
</tr>
<tr>
<td>1980-1994</td>
<td>3.0</td>
</tr>
<tr>
<td>1994-Present</td>
<td>2.5</td>
</tr>
<tr>
<td>Low-Flow</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Washing Machines

Gallons per Load:

- Pre-1980: 56
- 1980-1990: 51
- 1990-Present: 43
- Front-Loading: 27

Dishwashers

Gallons per Load:

- 1980-1990: 14 gallons
- 1990-1995: 11 gallons
- 1995-Present: 8 gallons
- Water Efficient: 4.5 gallons

Reduce Outdoor Water Use

• Help customers replace grass and other water-intensive landscape with vegetation that requires less water to maintain
Landscape Conversion Rebates

Landscape Rebate Program

This program is designed to encourage residents and businesses to convert approved high water use landscape, such as lawns and pools, to low water use landscape as well as to retrofit existing irrigation equipment with approved high efficiency irrigation equipment.

The Landscape Rebate Program includes:

- Landscape Conversion Rebate
- In-Line Drip Irrigation Conversion Rebate
- Irrigation Equipment Upgrade Rebates (including Weather Based Irrigation Controllers)

Important Program Updates

Starting on July 1, 2017, all requests for Pre-Inspections and applications for the Landscape Rebate...
Help Customers Reduce Usage

Is your system doing any of these items?
Restrict Usage
Regular Water Use Restrictions

All the time, restrict the days and times that customers can do outdoor irrigation

Ensure water is used when evaporation loss is least
South Florida Water Mgmt District

SFWMD 3-Day-A-Week Watering

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Days</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Before 10 am</td>
<td>1, 3,</td>
<td>After 4 pm</td>
</tr>
<tr>
<td></td>
<td>After 4 pm</td>
<td>5, 7,</td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td>Before 10 am</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>After 4 pm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>Before 10 am</td>
<td>0, 2,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>After 4 pm</td>
<td>4, 6,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before 10 am</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Restrict days of the week

Restrict time

NO WATERING between 10 a.m. to 4 p.m.
Low Water Supply Restrictions

Limit customer usage during times of low water supply or drought
Sonoma County

Water Use Restrictions

Water Restrictions Continue in 2016

With California still experiencing severe drought despite recent rains, the State Water Board adopted an extended and revised emergency regulation to ensure that urban water conservation continues in 2016. You can learn more about the regulation here.

Outdoor Watering Restrictions for Sonoma County Water Districts

When is it OK to water outdoors?

Outdoor watering for ornamental landscaping is limited to two days a week: Tuesday and Friday, between 12:00 AM and 6:00 AM, or between 8:00 PM and 11:59 PM. Restrictions do not apply to food grown for consumption.

- Sunday: Outdoor watering is not permitted.
- Monday: Outdoor watering is not permitted.
- Tuesday: Outdoor watering is OK between 12:00 AM and 6:00 AM, or between 8:00 PM and 11:59 PM.
- Wednesday: Outdoor watering is not permitted.
- Thursday: Outdoor watering is not permitted.
- Friday: Outdoor watering is OK between 12:00 AM and 6:00 AM, or...
Restrict Usage

Is your system doing any of these items?
Alternative sources for outdoor irrigation
Non-Potable Water for Irrigation

- Use raw water, discharge water from water treatment, or treated wastewater for irrigation in lieu of using potable water
Water

2017 Watering Restriction Information

Billing

Conservation

Non-potable Water 101

Water Master Plan Hydrant Project

Water

Municipal water systems have been around a long time – almost 4,000 years – and the City of Evans continues this longstanding tradition by ensuring our residents have constant access to the water they need. Whether it be for drinking, cleaning, or cooking, you can rest easy knowing that your water is taken care of.

Not all water is treated to pass drinking standards. In Evans non-potable water can come from a wastewater treatment plant or the Evans ditch, and while it may not be treated, it can still be used in many areas. The City of Evans supplies non-potable water for irrigation, industrial sites, and even everyday items like car washes.
Rain Barrels

• Help customers collect rain water for outdoor irrigation in lieu of using potable water

• Check local ordinances
Parish of Lafayette

RAIN BARREL PROGRAM

Save a raindrop. Save so much more.

Lafayette Utilities System | Lafayette Consolidated Government

Help save the Bayou Vermilion Watershed along with some green of your own!

Email: RainBarrel@LUS.org

LUS/LCG Rain Barrel Program
The Rain Barrel Program is a Lafayette Consolidated Government (LCG) interdepartmental collaboration between Lafayette Utilities System (LUS) and the Environmental Quality division of Public Works (PW). The purpose of the program is to promote outdoor water conservation and sustainable stormwater management of the Bayou Vermilion Watershed.

The LUS/LCG Rain Barrel Program is designed to offer rain barrels to Lafayette Parish residents at a reduced retail cost and make them easily available for purchase during the spring season of each calendar year. 2018 orders will be taken through this program from March 2, 2018 – April 22, 2018. Click here to order your Rain Barrel now.

Program Eligibility
There will be a limited supply of 300 rain barrels were available for the subsidized price of $37.50 and up. Before any purchase will be granted, the LUS/LCG program conditions must be read and accepted. Click here to register online through LUS/LCG's program.
Alternative sources for outdoor irrigation

Is your system doing any of these items?
What non-pricing strategies do you use at your water systems?

What works best?
Other Non-Price Approaches to Conservation

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