This presentation premiered at WaterSmart Innovations

watersmartinnovations.com
Pressure Off Your Line is Pressure Off Your Mind
Program Overview

- Background
- Guidelines
- Services
- Process
- Pilot Summary
- Lessons Learned
Who Are We?

- Regional wholesale supplier of imported water and wastewater treatment services
- Founded in 1950 (Chino Basin Municipal Water District)
- Covers 242-square miles – western San Bernardino County
- Serves a population of 875,000 people
- Retail Member Agencies serving the communities of:
  - City of Chino
  - City of Chino Hills
  - City of Upland
  - Cucamonga Valley Water District (Rancho Cucamonga)
  - Fontana Water Company (City of Fontana)
  - Monte Vista Water District (Montclair, Chino, Ontario)
  - Ontario Municipal Utilities Company
  - San Antonio Water Company
Key Areas of Service

- Securing and supplying imported water
- Collecting and treating wastewater
- Producing high-quality renewable products
- Promoting sustainable use of local water resources
Regional Water Portfolio

- Local Supplies: 70%
- State Water Project: 30%

Water Portfolio:
- Water Recycling
- Groundwater
- Conservation Programs
- Desalter
- Recharge
- Stormwater capture, recycled water
Why Deploy a Pressure Regulation Program?

- High water pressure can cause pipes to deteriorate faster
- Prevent and/or reduce indoor fixture leaks
- Adjustment/retrofit/installation of Pressure Regulation Valves (PRV) can extend life of fixtures
- Installing/retrofitting a PRV under high pressure, saves water
- High pressure zone areas identified between 80 psi - 150 psi
- Educate customers in an area that is not well known
- Promote efficient use of water and save energy
Program Guidelines

- Participant must reside in a high pressure zone area identified by its retail agency
- Initial assessment of pressure must be over 80 PSI
- Newly installed PRV must remain in-place for a minimum of two years
- Participant agrees to check pressure once a year to ensure PRV is working properly
- Participant agrees to sign program contract
- Participant agrees to water use monitoring and sharing of information with program partners
- Participant agrees to allow photos taken of the process
- Program is free of charge – Participant is ineligible for rebate
Program Services

- Initial assessment of Home Pressure
- Evaluation of existing PRV for operational efficiency or install new PRV if one doesn’t exist
- Adjust existing PRV if applicable
- Repair and maintenance existing PRV if the device can be repaired
- Replace PRV in the event it has failed and cannot be repaired
- One-year warranty on newly installed PRV from date of installation, includes equipment, parts, and labor
- Free water pressure test gauge – customer training
- One-year customer support from date of installation, as needed
Program Process

IEUA Manages Program

Retail Member Agencies Identify Participants

Pre-Qualification Checklist Completed by Retailer

Contractor Receives Checklist and Schedules Site Visit

Contractor Completes Program Services

Contractor Submits Invoicing Documenting Pressure Changes

IEUA Calculates Pressure Reductions and Estimated Water Savings

IEUA Tracks Pre- and Post-Water Use by Customer Account
Pilot Program Summary
Fiscal Year 2016-2017

Total Sites Completed: 141 Participants
Total Sites that Reduced Pressure: 99 Participants

Projected Annual Water Savings: 10 AF
Lifetime Water Savings (10 yrs): 100 AF

Average Per Site Cost: $375
Program Budget: $249,000
FY Expenditure: $50,000

External Funding Received: $25,342
*Metropolitan Water District of Southern CA
Program Flyers

Take the Pressure off your Pipes!

BANG! BOOM! DRIP!
High home water pressure can cause more damage than you think!

Installing or fixing a water regulator will SAVE

- Water
- Energy
- Maintenance Costs
- Life of Appliances
- Longevity of your home’s pipes

Leaking faucets and banging pipes?
Install a Water Pressure Regulator

Installing or fixing your regulator can:
- Save Water
- Save Energy
- Save Maintenance
- Save your home’s pipes

Pressure off your water, Pressure off your worries!

Take the PRESSURE off your pipes!
Residential Home Pressure Regulation Pre-Qualification Check-List

<table>
<thead>
<tr>
<th>Retail Agency:</th>
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<tbody>
<tr>
<td>Account No.</td>
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<tr>
<td>First Name</td>
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<tr>
<td>Last Name</td>
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<td>Street Address</td>
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<td>Phone No.</td>
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<tr>
<td>Alt. Phone No.</td>
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<tr>
<td>E-mail Address</td>
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<tr>
<td>Year of Home</td>
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<td>Lot Size</td>
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<table>
<thead>
<tr>
<th>Do you have an existing Pressure Reduction Valve?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is current home pressure available?</td>
<td></td>
<td></td>
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<tr>
<td>If yes, PSI</td>
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Additional Notes

Residential Pressure Regulating Program
Participation Contract

The undersigned (“Participant”) is interested in reducing water consumption and promoting the efficient use of water on the property located at (Property). The Inland Empire Utilities Agency (“IEUA”) and (“Retail Agency”) have agreed to assist the Participant by providing a Residential Pressure Regulating Program (“Program”). It is the Participant’s option to implement all or part of the recommendations made by the contractor, EcoTech Services Inc., as a result of the Program. IEUA, the Retail Agency, and EcoTech Services Inc., collectively shall be referred to as “the Parties.”

Program Services
- Step 1: Initial assessment of Home Pressure
- Step 2: Evaluate existing Pressure Regulating Valve (PRV) for operational efficiency or install a new PRV if one does not exist;
- Step 3: Adjust existing PRV if applicable;
- Step 4: Repair and maintenance existing PRV if the device can be repaired;
- Step 5: Replace PRV in the event it has failed and cannot be repaired;
- Step 6: One-year warranty on newly installed PRV from the date of installation which includes equipment, parts, and labor, and
- Step 7: Site follow-up for up to one-year from date of installation, as needed.

Participant Requirements
The Participant hereby agrees to allow representatives from EcoTech Services Inc., the Retail Agency, or the IEUA to enter the Property for the following purposes:
- Performing the Program Services as outlined above; and,
- Taking photos throughout the project.
Lessons Learned

- Pressure is adjusted to PRV Industry Standard (60-70 psi)
- Best locations to check pressure is Laundry Room or Faucets
  - Problem with PRV location and hose bib bypass
  - Five communities in Chino Hills had bypass hose bibs
- Many customers are unaware of PRV’s and how they perform
- Customers are unaware that knocking pipes can mean high pressure
- Reducing home pressure doesn’t result in customer complaints
Lessons Learned

- Program doesn’t result in complaints about retailer’s water delivery
- In certain areas, home developer did not install PRVs
- Lowering pressure doesn’t cause toilets or appliances to leak
- Avoid extraordinary circumstances (older homes-Upland)
- Allow customers to correct issues that prohibit participation
- Your only as good as your contractor
- Education and training is key
- Agency site inspections - recommended
- Home Pressure Regulation – low hanging fruit – preventing interior leaks

Inland Empire Utilities Agency
A Municipal Water District
Questions?