This presentation premiered at WaterSmart Innovations

watersmartinnovations.com
Beyond Reasonable Doubt: Data Loggers Dispel Water Use Discrepancies

www.chandleraz.gov/water
City of Chandler
Water Conservation

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Gear Driven Meters

- Manual Read
- Oldest technology in our City
- Accuracy
- Requires isolation to verify water loss
Displacement Meter w/Encoder Receive Transmitter

- Electronic Read
- Accuracy issues
Digital Meters

- **Leak & Flow Icons**
  - Leak Icon = Dripping Faucet
  - Flow Icon = Arrow

- **Rate of Flow Tool**

- **Newer Meters are data log capable**
Rate of Flow Tool
Data Logging

Requires on-site visit with handheld unit to download data.

Handheld unit allows test reads without opening meter box as well as ability to capture 3 months of prior water use data.
Data Log Examples

Pool Fill Valve / Irrigation Leak

City of Chandler Municipal Utilities Division
E-Coder R900i Data Logging Report
MI#: 1830676125 Acc#: 00034278 Mtr #: 1830676125 Addr: 4842 W OAKLAND ST for 05/24/2014 through 08/28/2014, WATER, 5/8" - 1" T-10, GALLONS

- Minor Reverse Flow Flag
- Major Reverse Flow Flag
- Intermittent Leak Flag
- Continuous Leak Flag

Interval (Daily)

Daily Consumption
Data Log Examples

Pool Fill Valve / Irrigation Leak
Data Log Examples

Irrigation Overwatering

City of Chandler Municipal Utilities Division
E-Coder R900i Data Logging Report
MIU#: 1830472552 Acct#: 00058848 Mtr #: 1830472552 Addr: 4456 W RICKENBACKER WY for 05/24/2014 through 08/28/2014, WATER, 5/8" - 1" T-10, GALLONS

Minor Reverse Flow Flag  Major Reverse Flow Flag  Intermittent Leak Flag  Continuous Leak Flag

Interval (Daily)
Data Log Examples

Irrigation Overwatering
Data Log Examples
Faulty Water Softener/Irrigation – Intermittent

ARB H. SIGHT Mobile Report
E-Codec R9000 Data Logging Report
MIU#: 1830016378 for 06/25/2011 through 08/30/2011

Daily Consumption
Backflow Flag
Leak Flag

Leak Flag
Date/Time: 07/30/2011
Intermittent (01:10 - 07:10)
Data Log Examples
Faulty Water Softener/Irrigation – Intermittent Cont’d

[Data logging chart showing hourly consumption with backflow and leak flags.]
Data Log Examples
Faulty Water Softener/Irrigation – Intermittent  Cont’d
Data Log Examples
Vet Clinic Leak - Continuous
Data Log Examples
Vet Clinic Leak - Continuous
Data Log Examples

Vet Clinic Leak - Continuous
Data Log Examples
Commercial Laundry Service Leak - Continuous
Data Log Examples
Commercial Laundry Service Leak - Continuous
Data Log Examples

Commercial Laundry Service Leak - Continuous
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Thank You

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