

CROSS CONNECTION CONTROL PROGRAMS

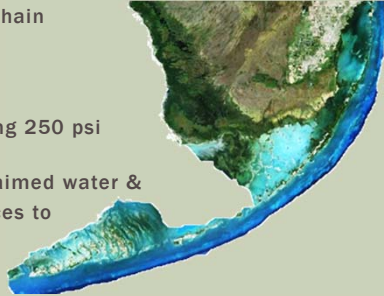
**TECHNOLOGY – BENEFITS & UNINTENDED CONSEQUENCES**

Presented to:  
TREEO Cross Connection Control Conference 2016

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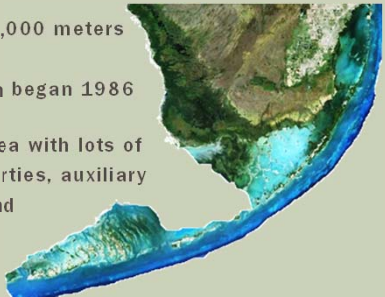
CCC AT THE FLORIDA KEYS AQUEDUCT AUTHORITY

- 130 mile island chain
- Cross 43 bridges
- Pressures reaching 250 psi
- Also provide reclaimed water & wastewater services to portions of the service area




CCC AT THE FLORIDA KEYS AQUEDUCT AUTHORITY

- Approximately 48,000 meters
- Backflow program began 1986
- Unique service area with lots of water-front properties, auxiliary water supplies and stilt homes



CCC AT THE FLORIDA KEYS AQUEDUCT AUTHORITY

- Backflow assemblies & devices tested by both the utility & plumbers
- Approximately 19,000 are tested by FKAA staff
- Automatic Meter Reading Began 2006



## TECHNOLOGY

- Technology
  - The application of scientific knowledge for practical purposes, especially in industry.



## DATABASES

- Database – A collection of information that is organized in one place so it can be easily accessed, managed & updated.
- Benefits –
  - Time Savings - Retrieving information
  - Reporting – Quick and flexible
  - Linking data – Ex. customer service and backflow database
  - Mailings – completed with a few clicks of a button.

## DATABASES

- Sometimes you get what you ask for, but not what you need.



## DATABASES

- Pitfall 1 - Inaccurate Data
  - Garbage in - Garbage out
  - Who is entering the data
- Pitfall 2 - Searching with correct parameters (asking the right questions)
- Pitfall 3 - Incomplete Data
  - Sometimes what you don't track is as important as what you do track.

These are not reasons to avoid databases, just items that need to be considered.

### AUTOMATIC METER READING

- Allows the collection of data from the meter without having to go to the meter
- Benefits -
  - Saves Time / Money for meter reading
  - Allows for collection of more detailed information (i.e. backflow reporting)
  - Improved services for customers

Interval Date Range: 02/08/2015 - 05/15/2015

Interval Read Date	Interval Reading	Interval Consumption	Minor Backflow	Major Backflow	Intermittent Leak	Continuous Leak
3/8/2015 19:59:51	150712.9	16.9				
3/8/2015 20:59:51	150726.9	17.0				
3/8/2015 21:59:51	150726.9	0.0				
3/8/2015 22:59:51	150731.9	2.0				
3/8/2015 23:59:51	150731.9	0.0				
3/9/2015 00:59:51	150732.0	0.1				
3/9/2015 01:59:51	150732.0	0.0				
3/9/2015 02:59:51	150732.1	0.1				
3/9/2015 03:59:51	150732.1	0.0				
3/9/2015 04:59:51	150735.7	3.6				
3/9/2015 05:59:51	150735.7	0.0				
3/9/2015 06:59:51	150736.1	0.4				
3/9/2015 07:59:51	150750.1	14.0				
3/9/2015 08:59:51	150764.2	14.1				
3/9/2015 09:59:51	150778.4	14.2				
3/9/2015 10:59:51	150800.9	22.5				
3/9/2015 11:59:51	150804.8	3.9				
3/9/2015 12:59:51	150804.9	0.1				
3/9/2015 13:59:51	150820.4	15.5				
3/9/2015 14:59:51	150812.6	-7.8		<input checked="" type="checkbox"/>		
3/9/2015 15:59:51	150812.6	0.0		<input checked="" type="checkbox"/>		
3/9/2015 16:59:51	150821.7	9.1		<input checked="" type="checkbox"/>		
3/9/2015 17:59:51	150842.4	20.7		<input checked="" type="checkbox"/>		
3/9/2015 18:59:51	150850.0	7.6		<input checked="" type="checkbox"/>		

### AUTOMATIC METER READING

Best of Intentions



### AUTOMATIC METER READING

- Pitfall 1 - Not needing/having employees visit the property regularly
  - Fewer eyes on
  - Reduced customer contact
  - Maintenance/Access

## AUTOMATIC METER READING



How the meter looks after months or years of no attention.



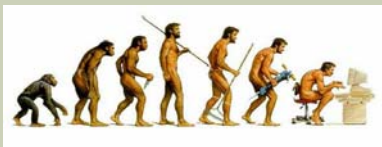
How the Meter Should Look in the Box

## AUTOMATIC METER READING

- Pitfall 2 – May shift workload – Less time reading – more time on analysis of data.
- Pitfall 3 – Accept that nothing is perfect

## TECHNOLOGY

- Does Technology = Advancement



Technology is a HUGE benefit.  
Just be prepared for the unintended consequences.

## QUESTIONS

