This presentation premiered at WaterSmart Innovations

watersmartinnovations.com
Abbottsford’s Conservation Success Using Advanced Metering Infrastructure

WaterSmart Innovations Conference & Exposition
October 9, 2014
Regional Water System

- Abbotsford Mission Water & Sewer Commission
- 2 surface sources
- 19 groundwater wells
Abbotsford Water System

- Serviced population of 128,000
- 26,000 accounts
- Universal metering
2006/2007 Water Supply Issues

Abbotsford Mission Water Demand

1 day capacity of 155 MLD
3+ day capacity of 125 MLD
Advanced Metering Infrastructure

- Meters
- Endpoints
- Collector stations
- Data repository
- Data processing software
Barriers and Misconceptions

- Funding
- Political support
- Public perceptions
Abbotsford AMI Project

- 19,000 new meters
- 25,000 endpoints (now ~26,000)
- 28 collector stations
Abbotsford AMI Project

- Installed 2010-2011
- Billing in 2011
- 230 million data points per year (600,000 per day)
- Customer data hourly, weekly, monthly
Benefits of AMI

• Remote and continuous monitoring
• Usage information to customers
• Accurate meter reading data
Benefits of AMI

• Accurate profile classes
• Improved security and tamper detection
• Less financial burden correcting mistakes
Benefits of AMI

- Better manage supply in times of shortages
- Improved billing and tracking of usage for the customer
- Effective conservation programs
Why AMI Is Important For Conservation

• Customer awareness
  – Bi-monthly billing
  – Usage reminders
  – Audits
  – Leak notification
  – Consumer engagement
Program Success

- Continued drop in base demand
- Reduced summer demand
- Ongoing leak notifications to customers (prevent large bills)
Program Success

- Smaller gap between peak day and summer average
- Reduced stress on Regional System
Future Initiatives

• Improved prioritization of capital spending
• Analysis of sector use
• User rate options
• Leak detection
• Real-time analysis of data
Future Initiatives

- Monitor sprinkling infractions
- Accurate growth projections
- Calibration of hydraulic model
- Web portal
Questions?

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