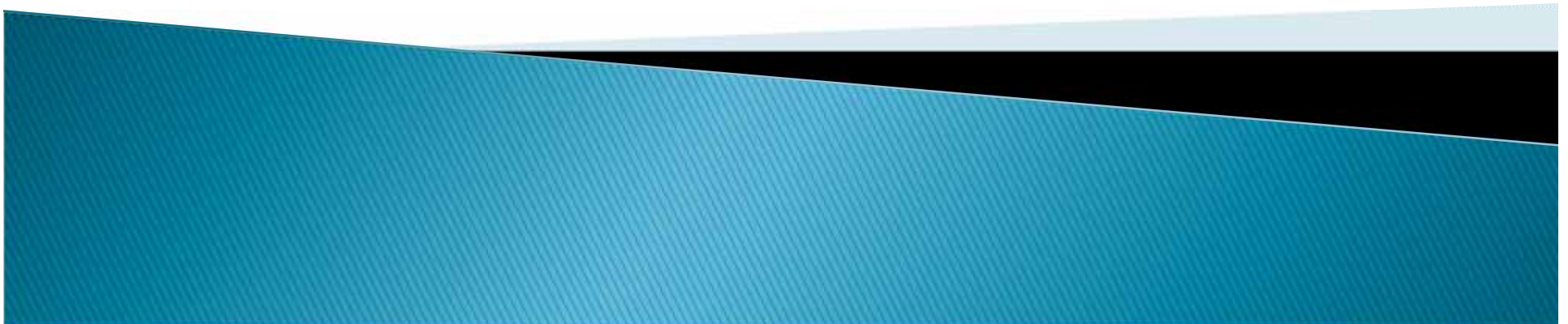


Regional Water Operator Program

Clean and Safe Drinking Water Workshop 2014
Churence Rogers, Mayor CWT



Regionalization Concept

- ▶ What is regionalization?
 - Sharing of services & human resources by municipalities in a geographic area.



The Application Process

- Initiative of the Bonavista North Joint Council
- Proposal submitted to the Department of Municipal Affairs to assist with hiring an individual to help manage and maintain water systems throughout the Bonavista North Loop road region
- 90/10 cost-share funding
- Municipality financial contribution based on a per capita share
- One year pilot project



Project Rationale

Benefits of a regional water operator include:

- better trained maintenance personnel in each individual town
- cost savings in regular repairs through implementation of maintenance program
- safer and more efficient water systems
- improved emergency response times to repair water systems in event of equipment failure or shut down



Participating Municipalities

- All towns within the Bonavista North Loop road region were invited to participate
- ~50% of municipalities agreed to participate in project
- Participating municipalities included:
 - Centreville-Wareham-Trinity (pop. ~ 1120)
 - Carmanville (pop. ~ 750)
 - Musgrave Harbour (pop. ~ 1080)
 - New-Wes-Valley (pop. ~2480)
 - Dover (pop. ~ 690)



Types of Water Systems

- Variety of different types of water systems being operated in these municipalities
- A few of the municipalities operate more than one system as a result of amalgamation processes (CWT and New-Wes-Valley)
- All systems use surface water supplies as their source water
- 1 hypochlorite system, 1 water treatment plant, remaining systems gas chlorination with filtration and pH treatment



Key Objectives of Project

- ▶ Regional water operator will be responsible for:
 - Constantly monitoring all water systems
 - Complete regular maintenance and provide assistance with resolving issues that arise within the water systems
 - Conduct an evaluation of each system's functionality and recommend upgrades
 - Instruct maintenance staff on importance of a proper and regular maintenance program
 - Recommend preventative maintenance methods and programs

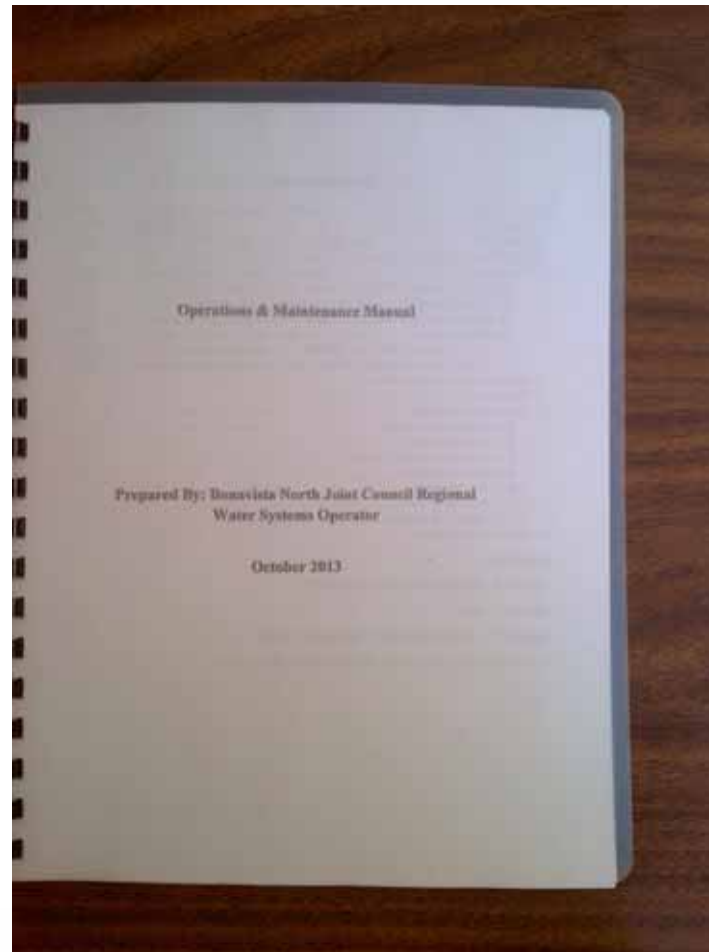


Project Results

- ▶ Development of a ***Maintenance and Operations Manual*** for each individual town
- ▶ Improved recordkeeping and monitoring of water distribution systems
- ▶ Identification of equipment deficiencies
- ▶ Increased training opportunities
 - Coordinated on-site training sessions with Jim Pollett offered through Dept. of Environment (including sessions on fire hydrant maintenance, disinfection, hypo-chlorination, gas chlorination, leak detection and distribution system flushing)
 - Certifications obtained by some of the current municipal maintenance personnel



Operations and Maintenance Manual (O & M Manual)



Purpose of O & M Manual

- ▶ A tool to aid municipalities in establishing and implementing procedures and practices that will ensure delivery of a safe and reliable water supply to consumers.
- ▶ Reduce repair costs by implementing a regular maintenance and monitoring program



Highlights of O & M Manual

Standard Operating Procedures (SOP's)

- Water Main Flushing & Disinfection, Hydrant Maintenance, O & M of Pocket Colorimeter, HACH Secondary Standards Verification, Changing Chlorine Cylinders, O & M of Chlorine Gas Sensors, O & M of SCBA, O & M of Water System Valves, O & M of Storage Tanks, Boil Order Procedures

Record-keeping Forms

- Routine monitoring and maintenance

Disinfection Procedures



Highlights Continued

Preventative Maintenance Procedures

➤ Site specific equipment maintenance, valve maintenance, hydrant maintenance, corrosion control, leak detection, cross connections, storage tank maintenance

Water Quality Review

- Bacteriological and chemical parameters
- Review conducted on both internal data and 10 years of water quality monitoring conducted by the Department of Environment & Conservation
- Highlighted parameters outside guidelines (**GCDWQ**) for each municipality based on this review
- Discussed with each municipality significance of each exceedence and what if any action should be taken in response to parameters outside guidelines



Future Direction?

