# **ENGINEERED WATER**



# **AT A GLANCE**

Engineered water assets are infrastructure assets that are designed, built, operated and maintained to reliably provide clean water to our homes.

Assets include:

- 2 reservoirs
- 4 water supply wells
- 38 km of pipe
- 1 pump station
- 170 hydrants
- 1700 metered service connections

Residential water meter installation commenced in 2009 to help distribute the total costs associated with our water infrastructure more fairly.

Meters also help identify leaks, which has had a positive impact on overall consumption. In 2014, the Town commenced an annual rate review to ensure adequate finances were in place to operate and maintain the water system, as well as replace aging infrastructure.

Since implementing these measures, daily water consumption has fallen from an average of 800 litres per person to 350 litres per person (including business use, operations, and system losses.)

Typical residential use is approximately 200 litres per day.

# **COMMUNITY GOALS**

- Be proactive by maintaining and monitoring water quality and system capacity
- Plan for future growth by pursuing upgrades and expansion
- Preserve and conserve water supply through:
  - Education
  - Water restrictions
  - Incentive programs
  - Water metering
- Continue relationship with SCRD regarding water management
- Meet or exceed legislative requirements from Vancouver Coastal Health

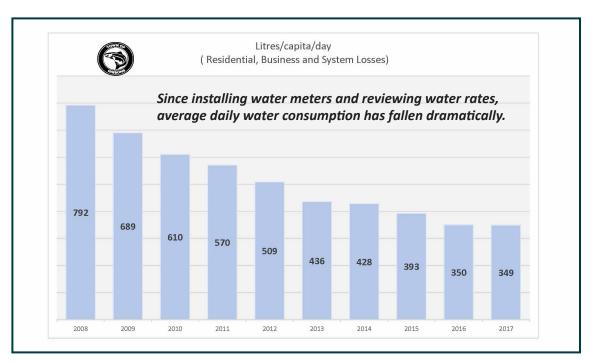
# **RELIABILITY AND RISKS**

## **Reliable service requires:**

- Regular water main replacements
- Water conservation & protection
- Adequate staffing for regular ongoing maintenance

## Risks of cutting costs are:

- Costly water main breaks and service disruptions
- Poor water quality



# **ASSET MANAGEMENT**

Replacement Value

\$35.0 million or \$7600 per person

Water rates are reviewed annually to reflect ongoing operations, maintenance and future replacement and capital costs.

## **Operations & Maintenance**

Unidirectional flushing, valve exercising, blow-off valve rehabilitation, consultant flushing program update, hydrant inspections, and chlorination

## **Long-term Financial Plan**

Goal: to achieve a self-sustaining water fund with sufficient reserves to address short and long-term operational and capital requirements.

## **Reserves Targets:**

*Operational Reserve with contingency:* 30% of annual O&M expenses

Rate Stabilization: 10% of sale of annual parcel taxes and user fees

Capital Reserve: 3% of total asset replacement value

#### Current & Planned Capital Projects 2018

• Watermain replacement Gibsons Way: \$669,000

#### 2019

- Watermain replacement: \$455,400 **2020**
- Watermain replacement: \$303,900 **2021**
- Watermain replacement: \$319,100 **2022**
- Watermain replacement: \$335,000

# Annual Replacement Costs

2.5M	
2.511	The 2017 Water Rates Review recommended that the Town
	budget \$602,000 annually for water infrastructure replacements
	in order to be sustainable for the next 100 years

