

### In Summary

- **Nature plays a major role in Gibsons infrastructure**
  - Recognizing it
  - Understanding its value
  - Implementing stewardship and monitoring plans
- **The importance of preventative maintenance**
  - Investing pennies to save dollars
  - Updating practices/training – Asset Management 2.0

### Natural Asset Management

Applying Asset Management Principles to the Gibsons Aquifer

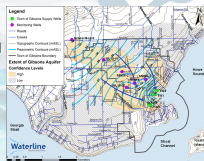
### Overview

- Background on Gibsons Water
- Asset Management (AM)101
- Applying AM Principles to the Gibsons Aquifer
- Setting Water Rates

### Town of Gibsons Water Sources

- ~25% supplied by the Regional District
- ~75% supplied from the Gibsons Aquifer

- Gibsons Aquifer: sand & gravel aquifer lying predominantly under the Town



### A Decade of Water History in Gibsons

- 2004
  - Development of Water Supply Strategic Plan
- 2005
  - OCP Council Policy: *“Identify the extents of the Gibsons Aquifer”*
- 2007
  - Application to Towns for Tomorrow for Aquifer Mapping
- 2008-2009
  - Updated grant applications submitted

### A Decade of Water History in Gibsons

- 2009
  - \$400,000 Towns for Tomorrow Aquifer Mapping Grant received (\$100,000 contribution from the Town)
- 2009 – 2013
  - Aquifer Mapping Study
  - Universal Water Metering – 1<sup>st</sup> step in equity
  - Distribution configuration changes

### A Decade of Water History in Gibsons

- 2013
  - Water Rate Review = 15% rate increase
  - Year One – Aquifer Monitoring
- 2014
  - Refined Water Rate Review = 10% overall increase & rate equity
  - Aquifer Protection Development Permit Area
  - Water Monitoring Policy
  - Intensive Asset Management analysis
  - Year Two – Aquifer Monitoring

### Asset Management (AM) 101

The Principles of Asset Management

*“The application of sound technical, social and economic principles that considers present and future needs of users, and the desired level of service from the asset”.*

### Asset Management (AM) 101

The Principles of Asset Management

1. What assets do you own?
2. What is the asset worth?
3. What is the asset condition?
4. What is the impact of increased demand?
5. What is your operation and maintenance plan?
6. Establishment of a financial plan
7. Ongoing assessment

### AM Principles & the Gibsons Aquifer

#### 1. What assets do you "own"?

- ✓ Map extents
- ✓ Determine recharge area



### AM Principles & the Gibsons Aquifer

#### 2. What is the asset worth?

- ✓ What is the cost of a new water source?
- ✓ Cost for replacement if managed properly?

\$0.00



### AM Principles & the Gibsons Aquifer

#### 2. What is the asset worth? (cont'd)

- Built Assets:
  - Total Replacement Value of Gibsons water utility
    - \$18,800,000
  - Annual Budget for ongoing replacement
    - approx 2.5% of replacement value (\$490,000/year)
- Natural Assets
  - Include in operations and maintenance
  - Indefinite lifespan
    - no budget required for replacement

### AM Principles & the Gibsons Aquifer

#### 3. What is the asset condition?

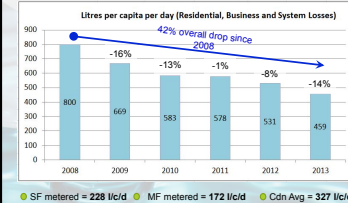
- ✓ Aquifer Mapping results: excellent condition

#### 4. What is the impact of increased demand?

- ✓ What is the ultimate sustainable supply capacity?



### AM Principles & the Gibsons Aquifer



### AM Principles & the Gibsons Aquifer

#### 5. What is your operation and maintenance plan?

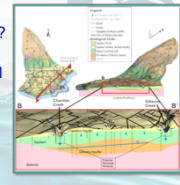
- Plans, bylaws, policies

#### 6. Establishing a financial plan

- ✓ Setting appropriate water rates

#### 7. Ongoing assessment

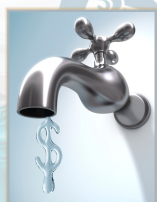
- ✓ Monitoring program



### The Challenge

#### Water is...

- Under valued
- Under priced
- Over used



### Setting Water Rates

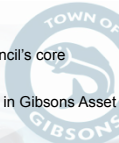
- Aquifer awareness
- Water is free
  - Cost of reliable delivery is not
- Public awareness & understanding



### Setting Water Rates

- Establish annual operation and maintenance budgets
- Establish appropriate annual contribution for replacement and new infrastructure
- 20-year financial plan
- 100-year forecast
- Review rates
- Adjust as appropriate





### In Closing

1. Asset Management is part of Council's core business;
2. Natural Assets are being included in Gibsons Asset Management Plan;
3. Ongoing public awareness and understanding are essential to our success;
4. Water rates are being set to reflect true costs.

**"The best time to plant a tree was 20 years ago;  
the second best time is now."**



### Questions?

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