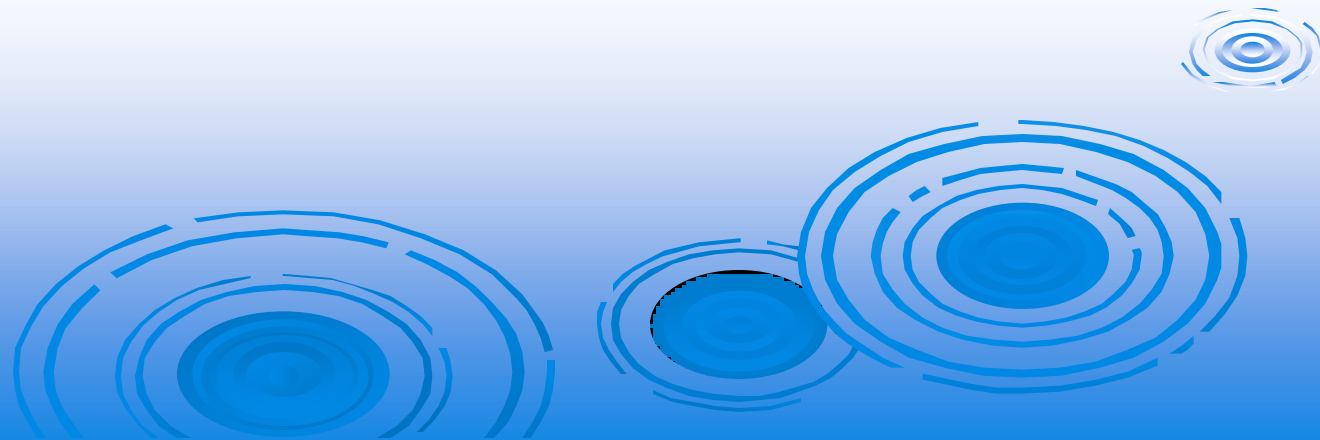


Cowichan Water Conservation Challenge

2014 Summary

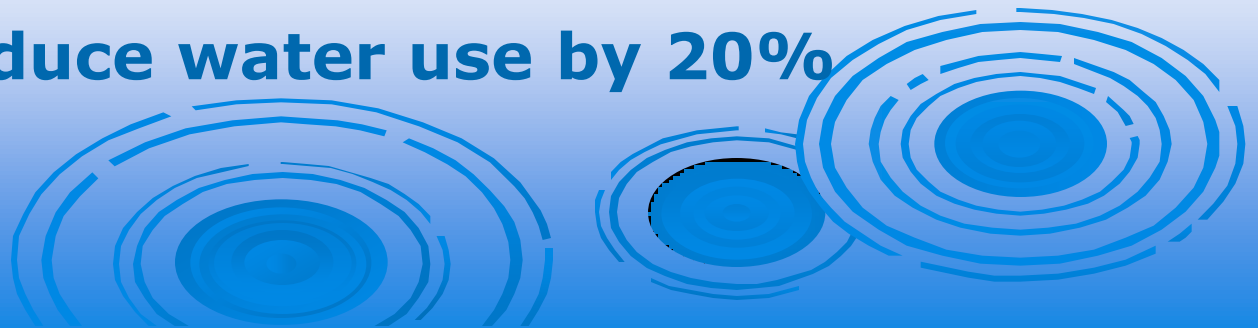


The Cowichan Water Conservation Challenge



Water Suppliers: Meet or beat Ladysmith's daily average domestic water use level of 246L/person/day (or >20% reduction)

Residents: Reduce water use by 20%



10 Super Slide Shows... to Major Water Suppliers + Public



David Slade, groundwater expert
(and now PowerPoint expert too!)

- **1 VIU/CWB Speakers' Series presentation - "Dinosaur Pee"**
- **8 presentations to major water purveyors (+ Ladysmith next)**
- **1 CVRD staff Lunch & Learn**



1 Super-hero... >40 Public Appearances



Lots more photos on Facebook:
Cowichan Water Challenge

500 Pledges to Save Water



Residents were asked to take **the 20% challenge** – a water saving pledge.

More than **500 local people signed up to:**

- Test toilets for leaks
- Let their lawns go brown
- Learn and follow watering restrictions.
- Etc.



www.cowichanwaterchallenge.ca

7 Participating Water Suppliers

Each completed a Water Conservation Questionnaire RE:

Cowichan Watershed Board
6 STEP WATER MANAGEMENT & CONSERVATION
Annual Status Report

Water Purveyor: _____ Reporting Date: _____
Water System: _____

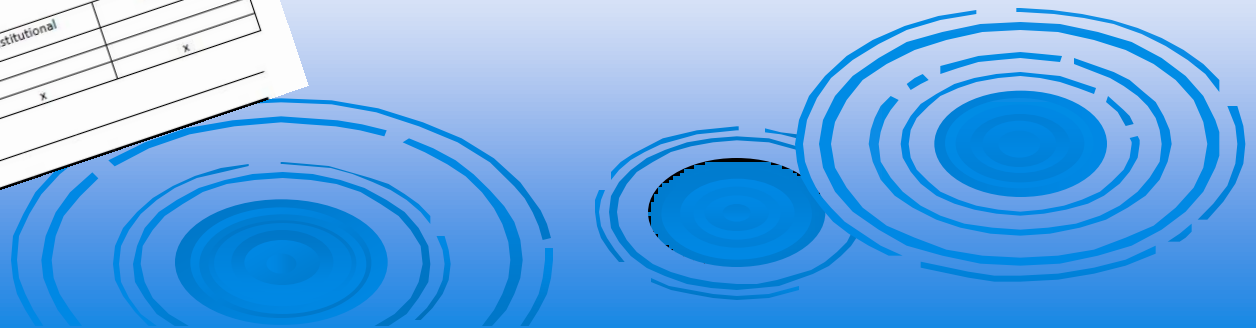
Step 1 - Define Leadership
 A committee/team is empowered to oversee water management and conservation. Please describe.

Step 2 - Know Your Water System

Usage Details	Domestic	Institutional	Business
# of customers served			
# of customers metered			x
Per capita use		x	

Types of businesses with highest water use:
 Types of institutions with highest water use:

1. Defining leadership.
2. Water system and usage info.
3. Full costs of system.
4. Pricing tools.
5. Billing tools.
6. Monitoring for improvement.



Results

Preliminary* Baseline Info from Participating Water Suppliers

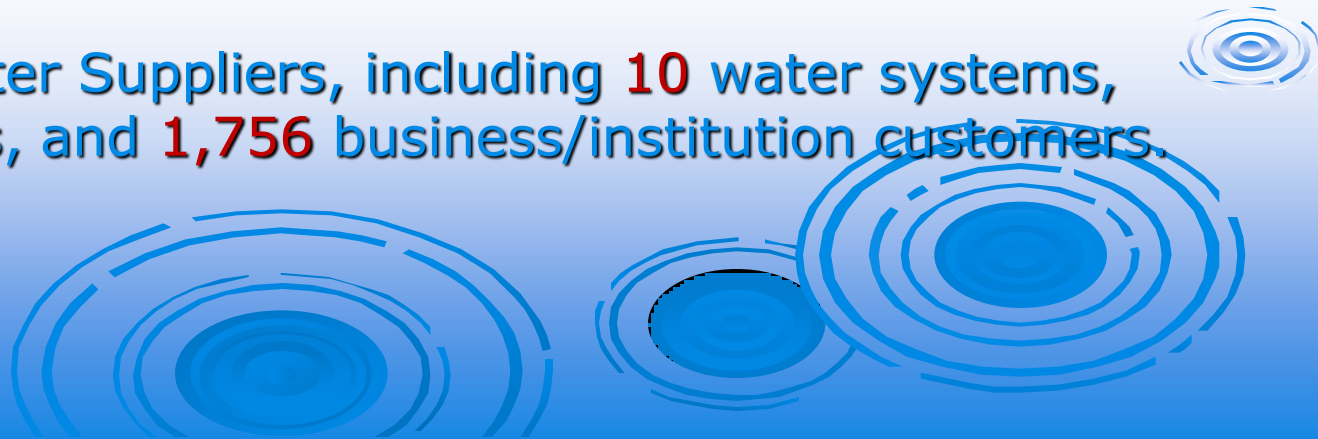
*some details still “trickling” in and some work to follow on comparing “apples to apples”



WHO: The Challengers!

- **City of Duncan**
- **District of North Cowichan (3)**
- **Cowichan Valley Regional District (2 only)**
- **Town of Lake Cowichan**
- **Town of Ladysmith**
- **Mill Bay Water Works**
- **Cowichan Bay Water Works**

7 participating Water Suppliers, including 10 water systems, 18,165 households, and 1,756 business/institution customers.



The Starting Line: 2014 Water Use

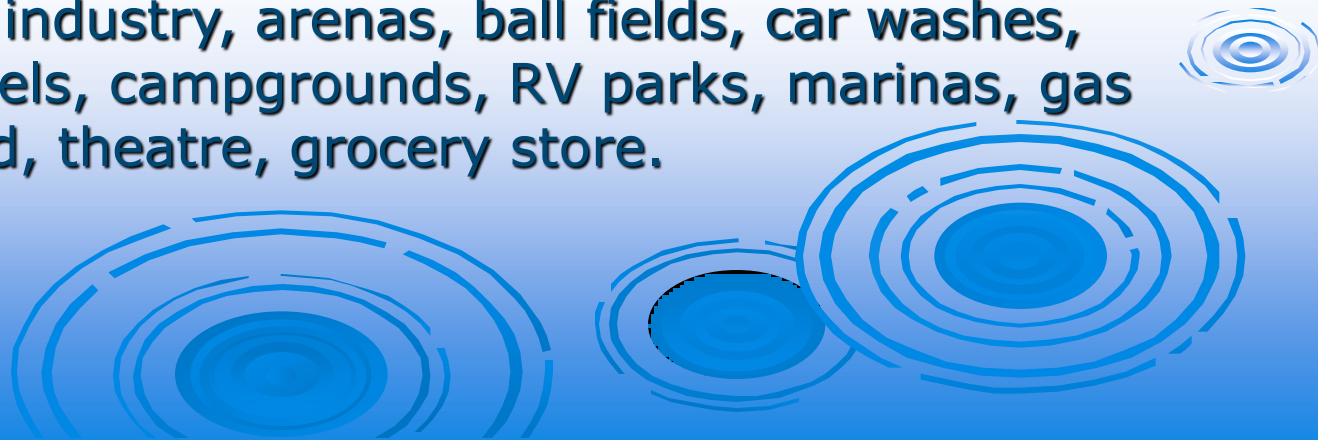
Residential (LCD=litres/capita/day)

- Lowest provided: **246 LCD** (Mill Bay and Ladysmith – but need to work on comparing apples to apples)
- Highest provided: **580 LCD**
- Average of all provided: **316.3 LCD**

For comparison: 2011 average daily residential water use in Canada was **251 LCD**, based on municipal water systems only, and excluding leaks/losses before point of connection. (Environment Canada 2011)

Highest Institution / Business Users

- sawmills/forest industry, arenas, ball fields, car washes, laundromats, hotels, campgrounds, RV parks, marinas, gas stations, fast food, theatre, grocery store.



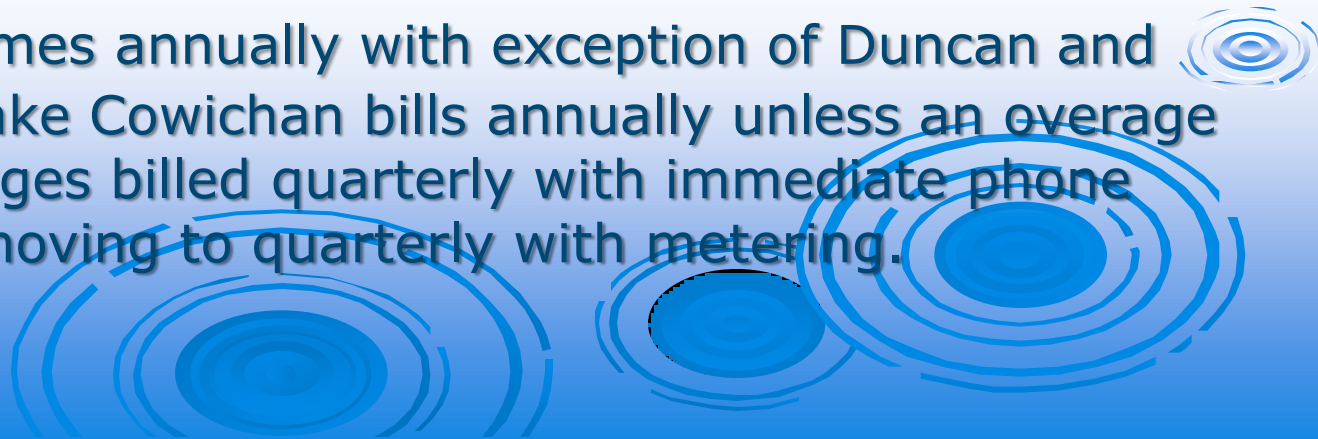
Showing us the Money!

Total Costs: annual water budgets range from \$60,000 to >\$3million. Factors include size of system and what is included (capital, conservation programs, etc.)

Metering: 9/10 reporting 100% metered. Duncan targeting 2019 completion. Installing meters consistently results in decreased consumption.

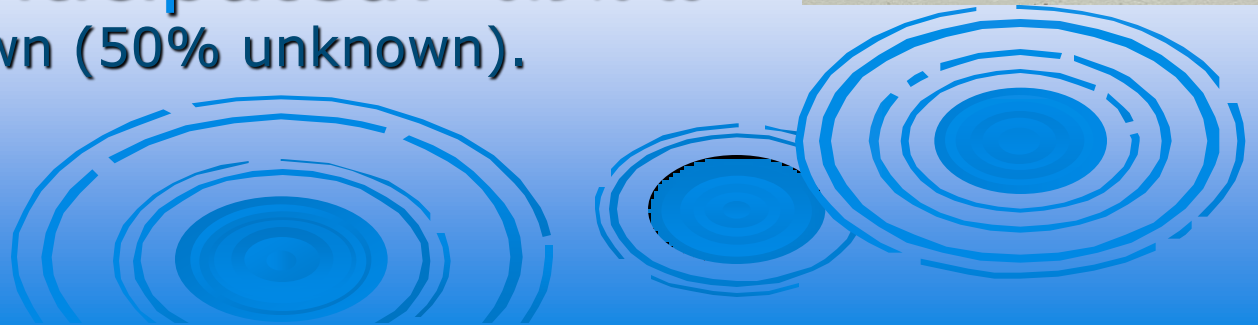
Tiered Pricing: 5/10 reported tiered pricing structure is helping to reduce consumption. In future – compare prices.

Billing: 3-4 times annually with exception of Duncan and Lake Cowichan. Lake Cowichan bills annually unless an overage is detected. Overages billed quarterly with immediate phone contact. Duncan moving to quarterly with metering.



Getting to Know our H2O

- **Water condition:** reported as good to excellent with the condition of Bannon Creek (Chemainus – seasonal summer supply)
- **Ages of infrastructure:** varies but most 30-40 yrs old. Oldest reported = 1930s.
- **Growth anticipated:** 0.9% to 2% where known (50% unknown).



Continuous Improvement: What do they think is working?

- Leak detection.
- Metering.
- Tiered pricing – customers try to stay in low tiers.
- Quickly alert customers RE high usage.
- Well-trained staff



Education and Innovation



- N. Cowichan, Cowichan Bay, CVRD - **school programs** include water conservation.
- Lake Cowichan – aggressive **leak detection**. Well-trained operators. Phone call/visit when 5-10% overages observed.
- Newsletters, websites and tips to **empower customers** to save.
- Open houses – **inform** residents about how water conservation saves future taxes.
- Toilet rebates, **incentives**
- Get to know H₂O – e.g. Mill Bay water system **map** (next slide)



Education and Innovation

Mill Bay Water Works poster – shows images of Mill Bay’s water sources, info about major water draws, and ways to save.

- Duplicate for other areas?



Next Steps:

Some ideas under consideration

Water Suppliers –

- Continuing to work on data format to improve comparability locally, provincially, nationally.
- Sharing info between each other and elsewhere RE finding cost-effective water savings.

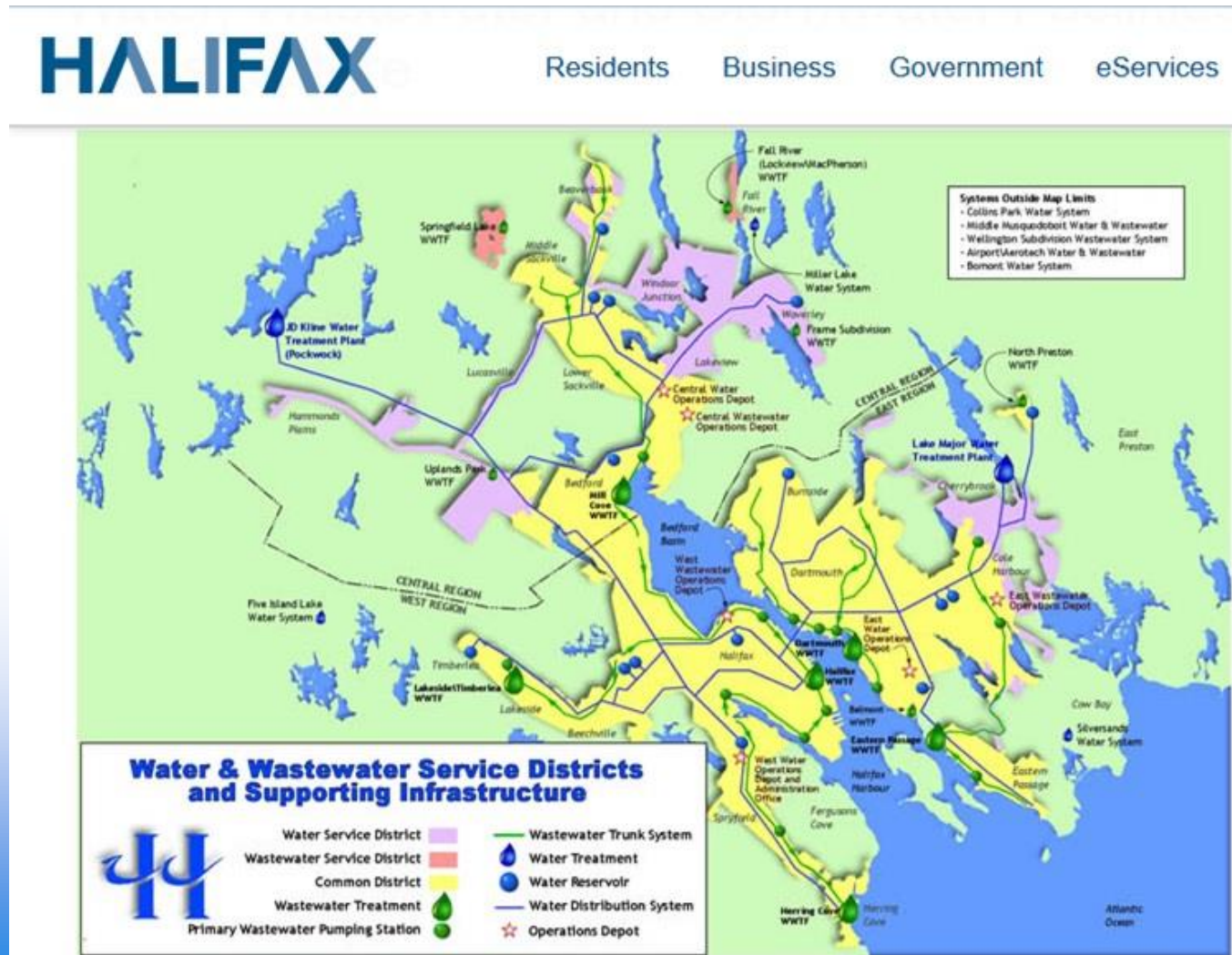


Next Steps: Some ideas under consideration

Example:

Drinking
Water
Week
(May)

Cowichan
Water Map?



Next Steps:

Some ideas under consideration

Summer

- Working with Summer Students to expand successful Water Woman outreach to all 7 targets.

