

# **Dinosaur Pee and The Future of Our Water**

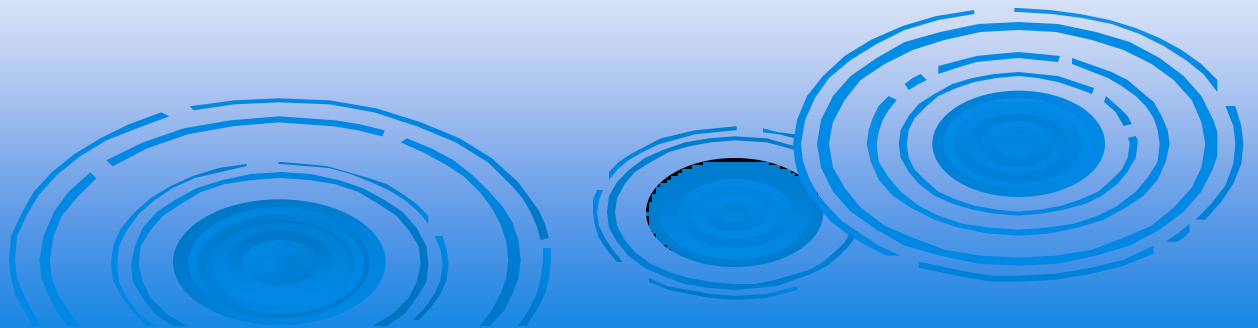
**David Slade**  
**Cowichan Watershed Board**  
**VIU Speaker Series**  
**May 2014**





# This Evening

- **My place in Cowichan**
- **The Water Story**
- **What's the problem?**
- **Why Conserve?**
- **How do we get there?**

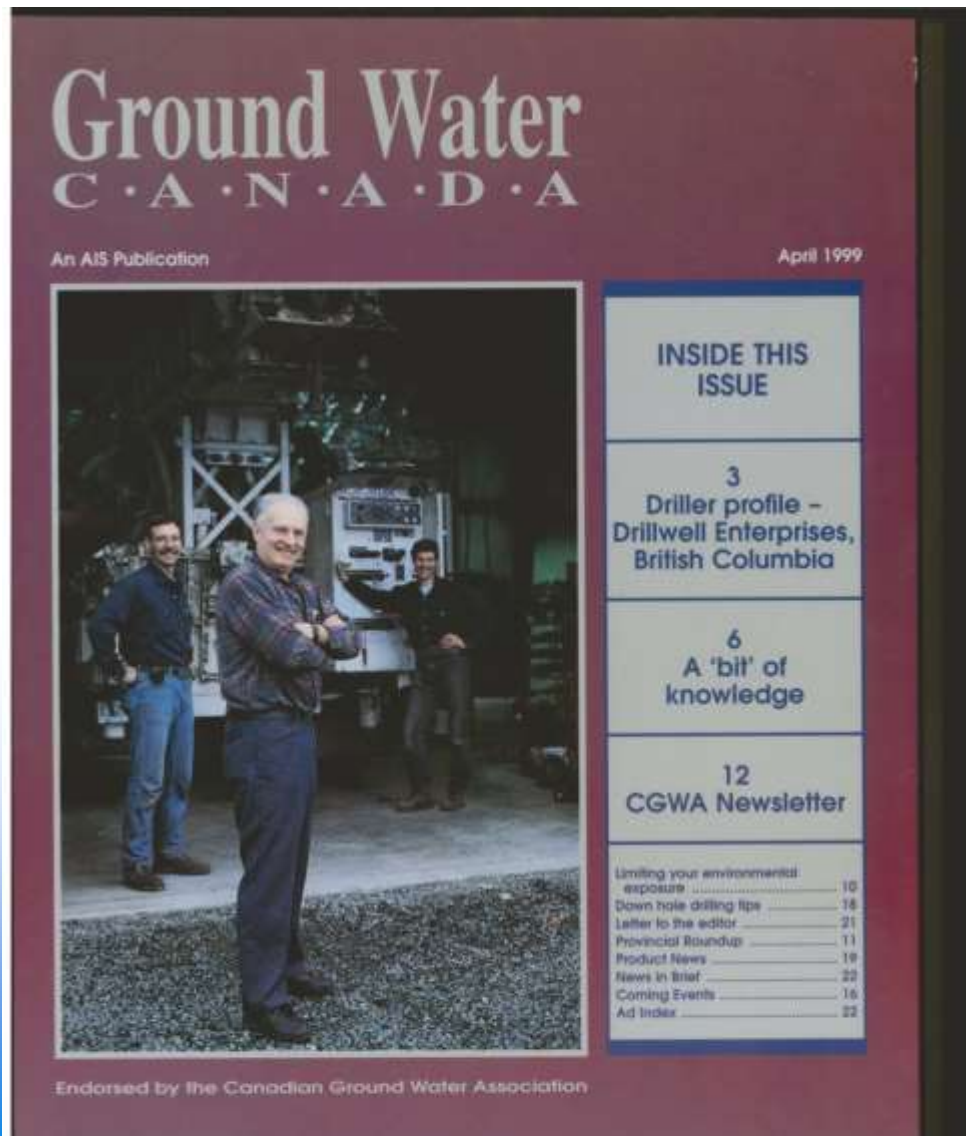




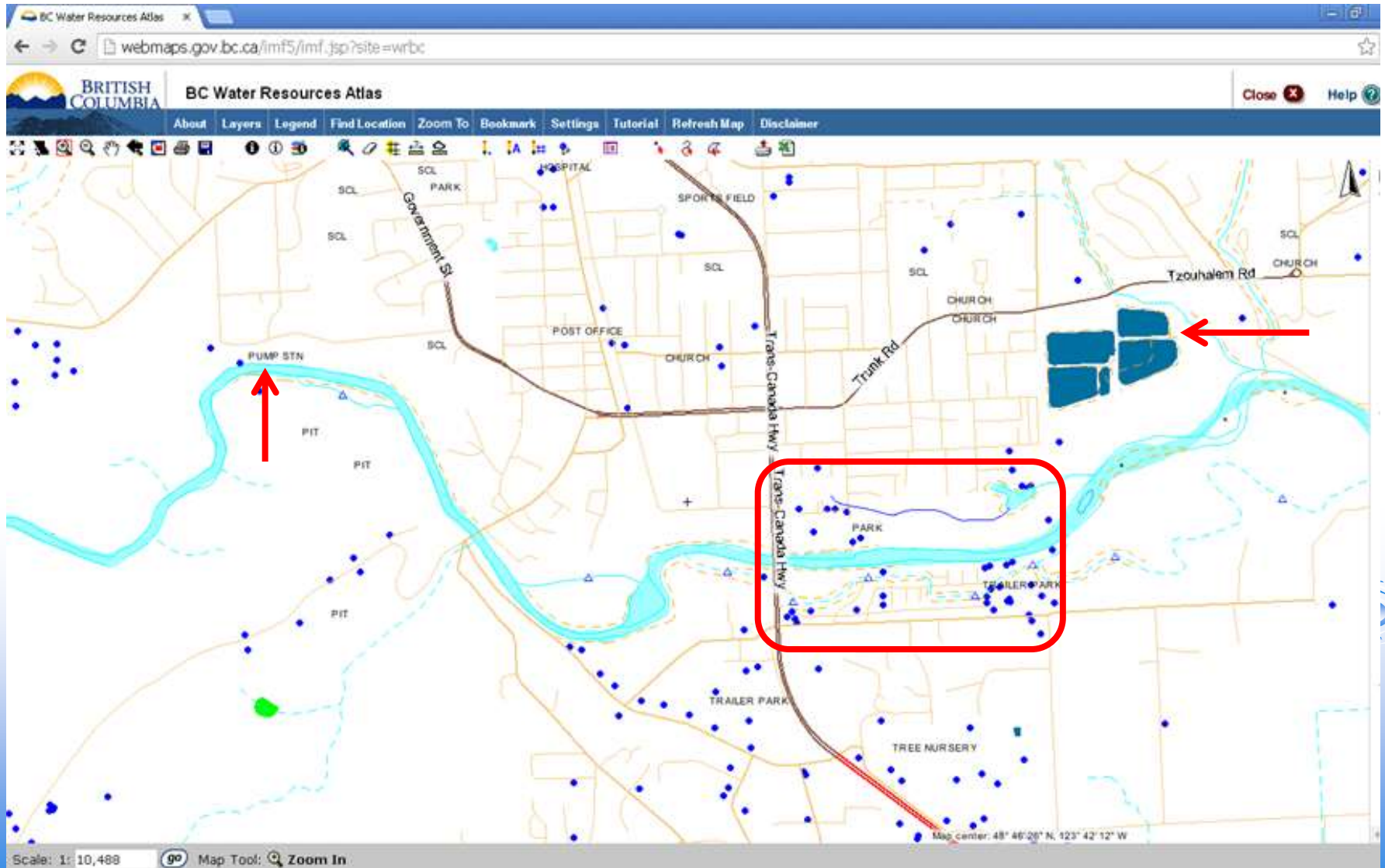
# WANTED



# My place in Cowichan

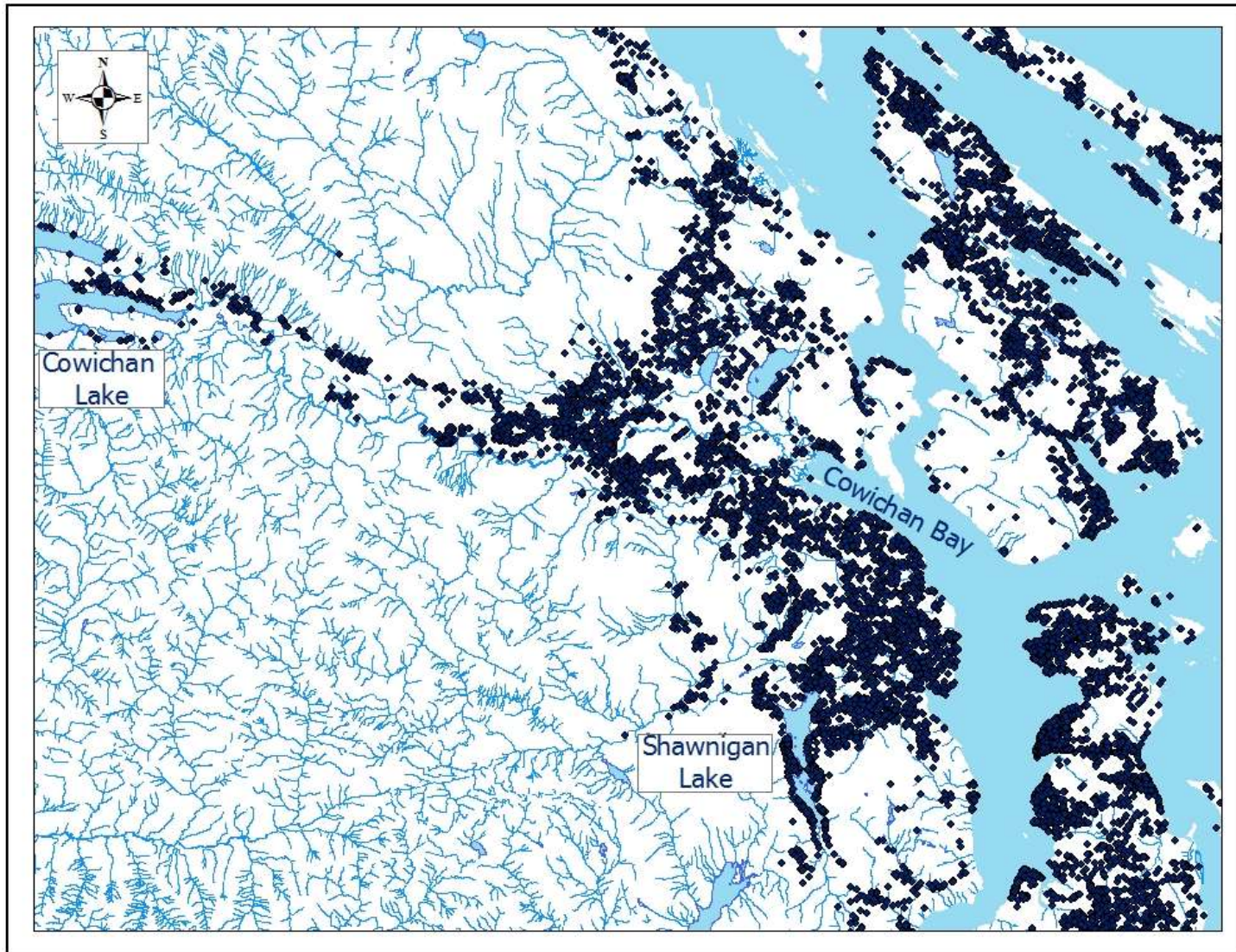


# My place in Cowichan





# My place in Cowichan





# My place in Cowichan



**Cobble Hill  
Quinoa**





# My place in Cowichan

**Oliver, 1yr old at harvest**



# My place in Cowichan



**Slade house Cobble Hill**



# My place in Cowichan

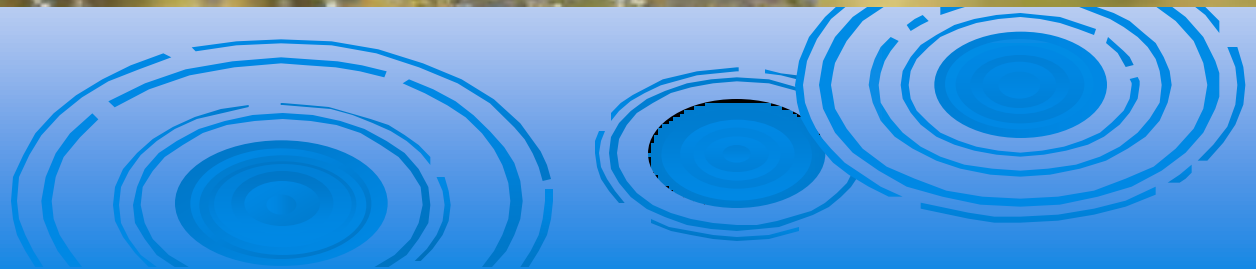


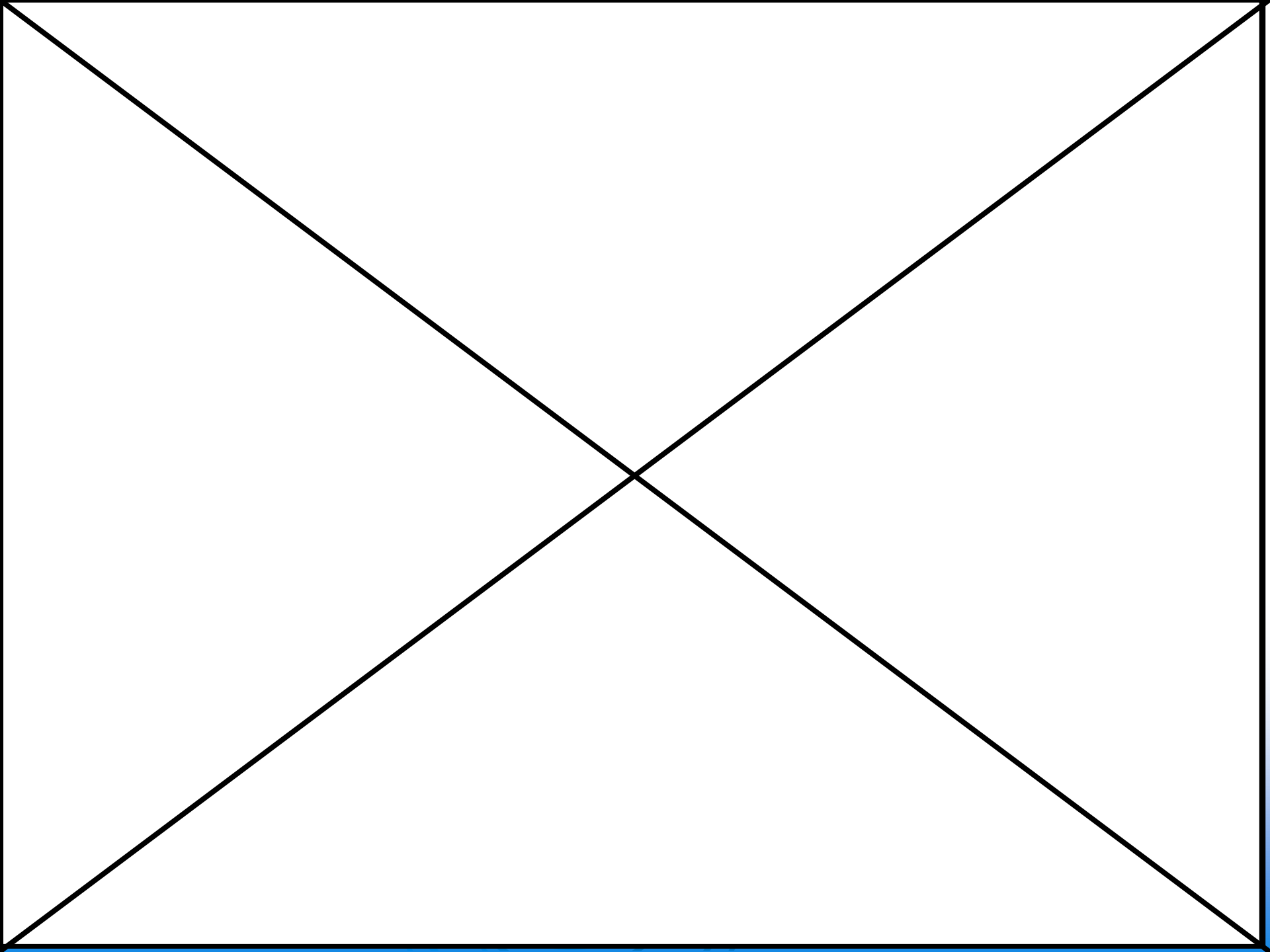
**And it's not cheap either**



# The Water Story

**Where  
does it  
come  
from?**



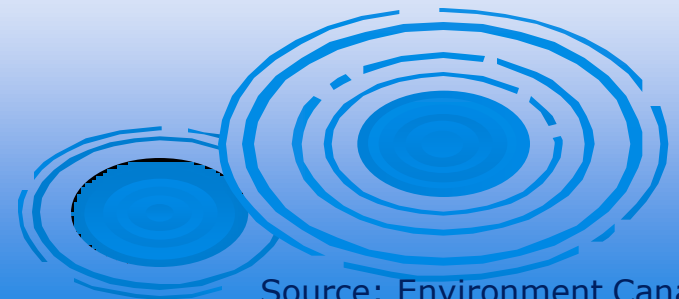
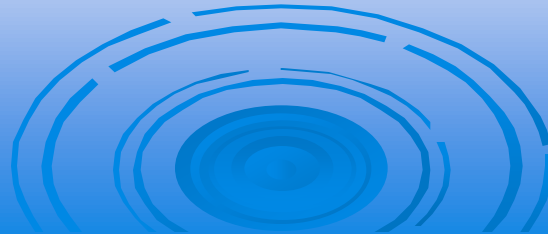


# The Water Story



**70% of  
earth is  
covered in  
water,**

**and yet...**

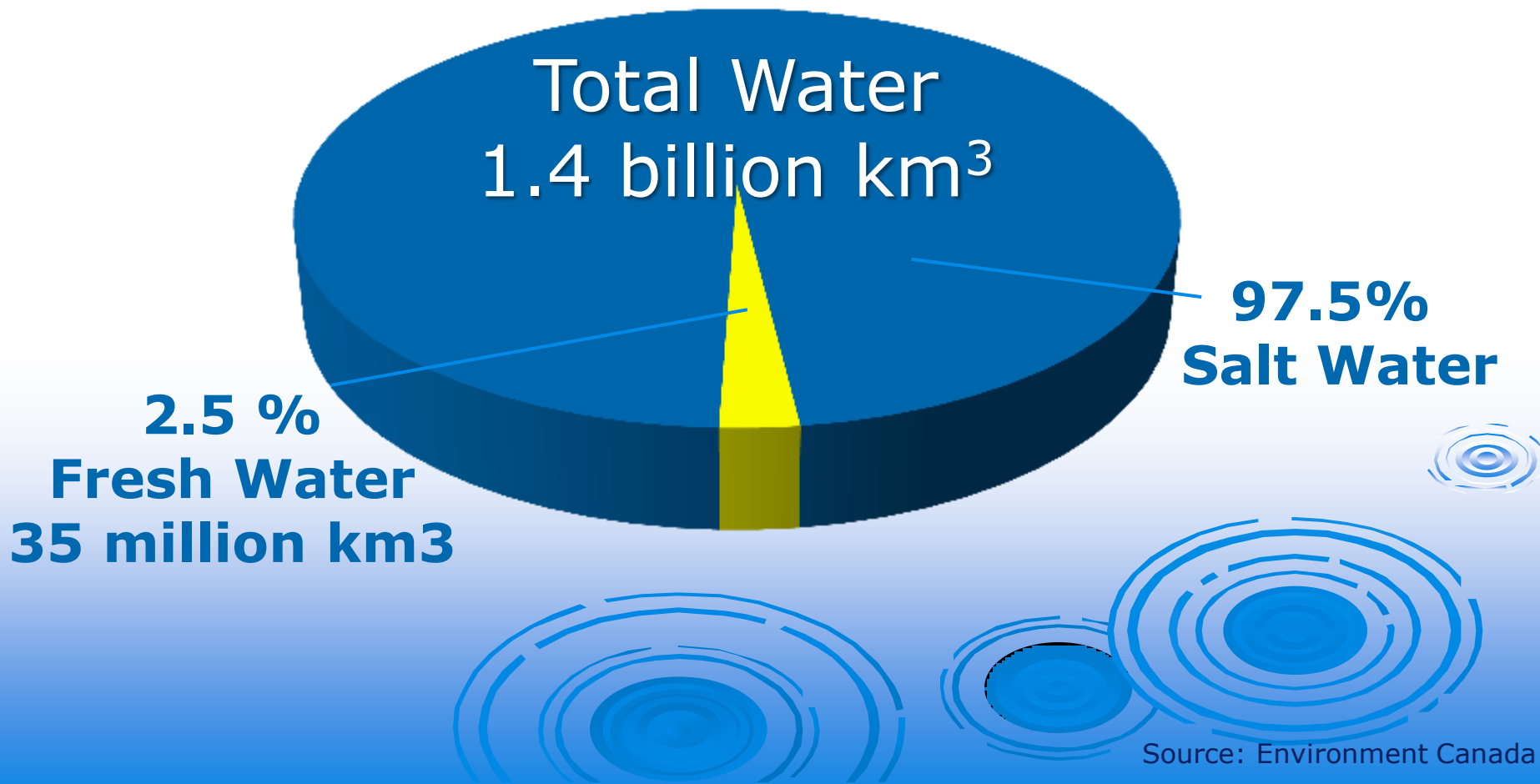


Source: Environment Canada



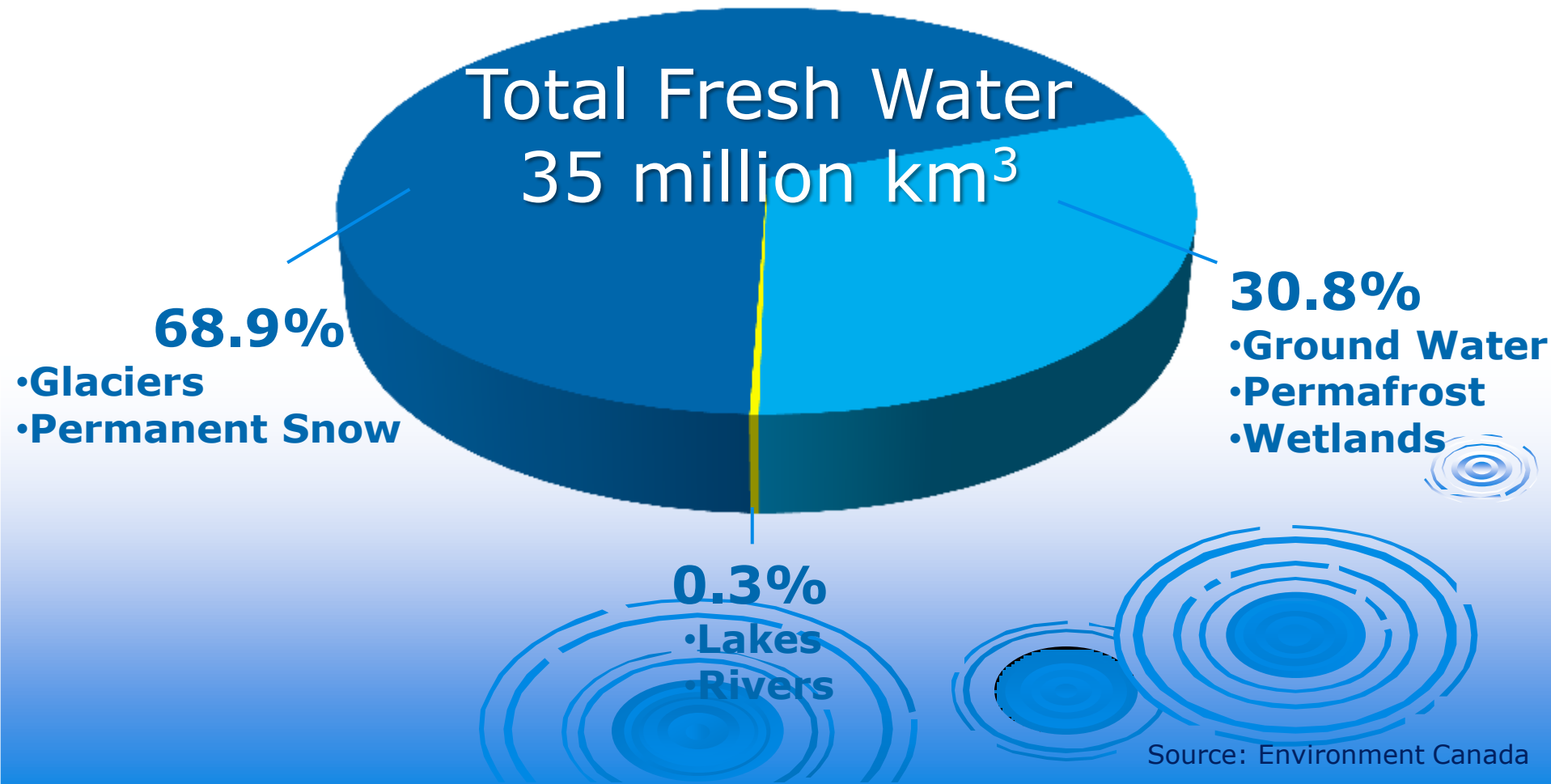
# The Water Story

## - Total Water Supply



# The Water Story

## - Fresh Water Supply

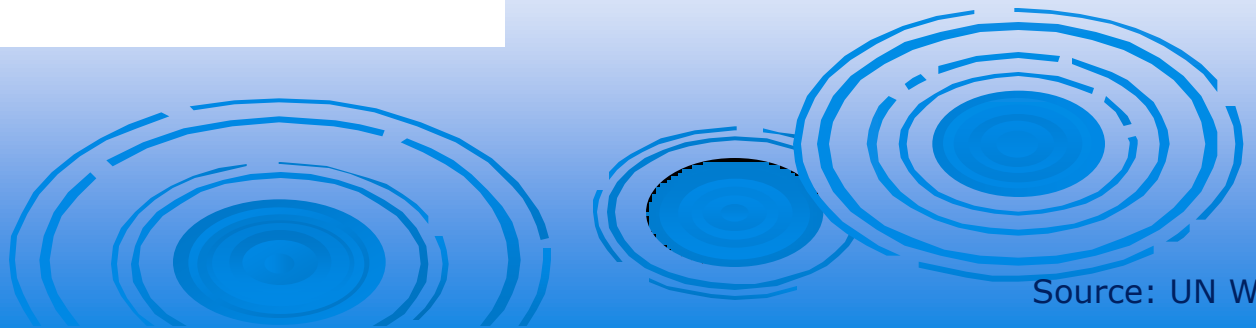


# The Water Story

## - Water Shortages



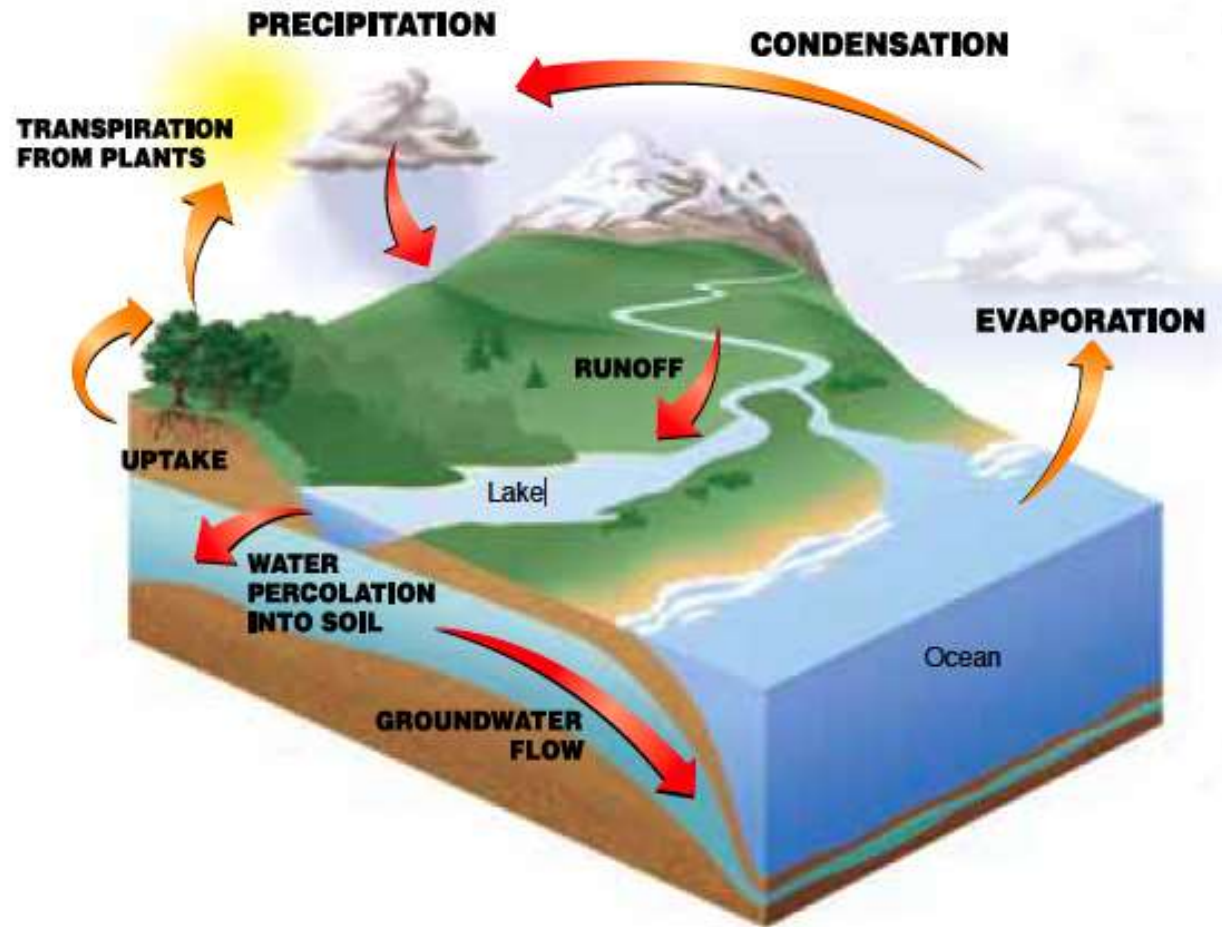
**Water use  
growing at more  
than twice  
population rate  
increase**





# The Water Story

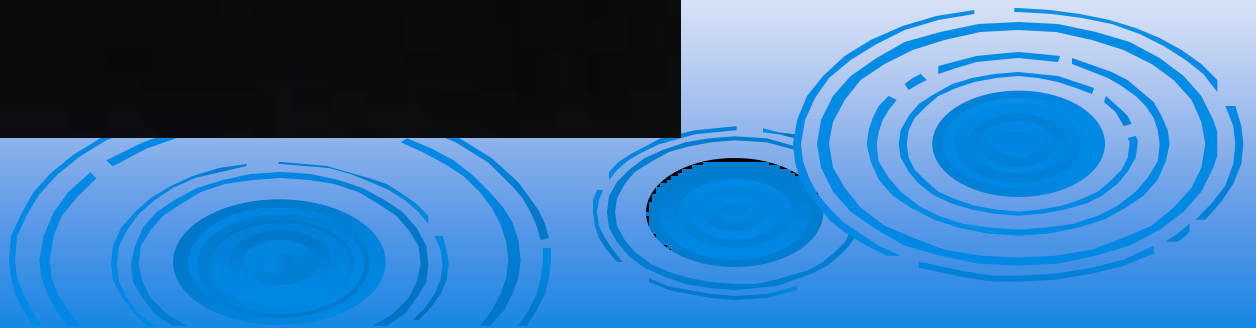
## - Water Cycle



# The Water Story



**Earth's  
Water  
originally  
came  
from  
space.**



# The Water Story

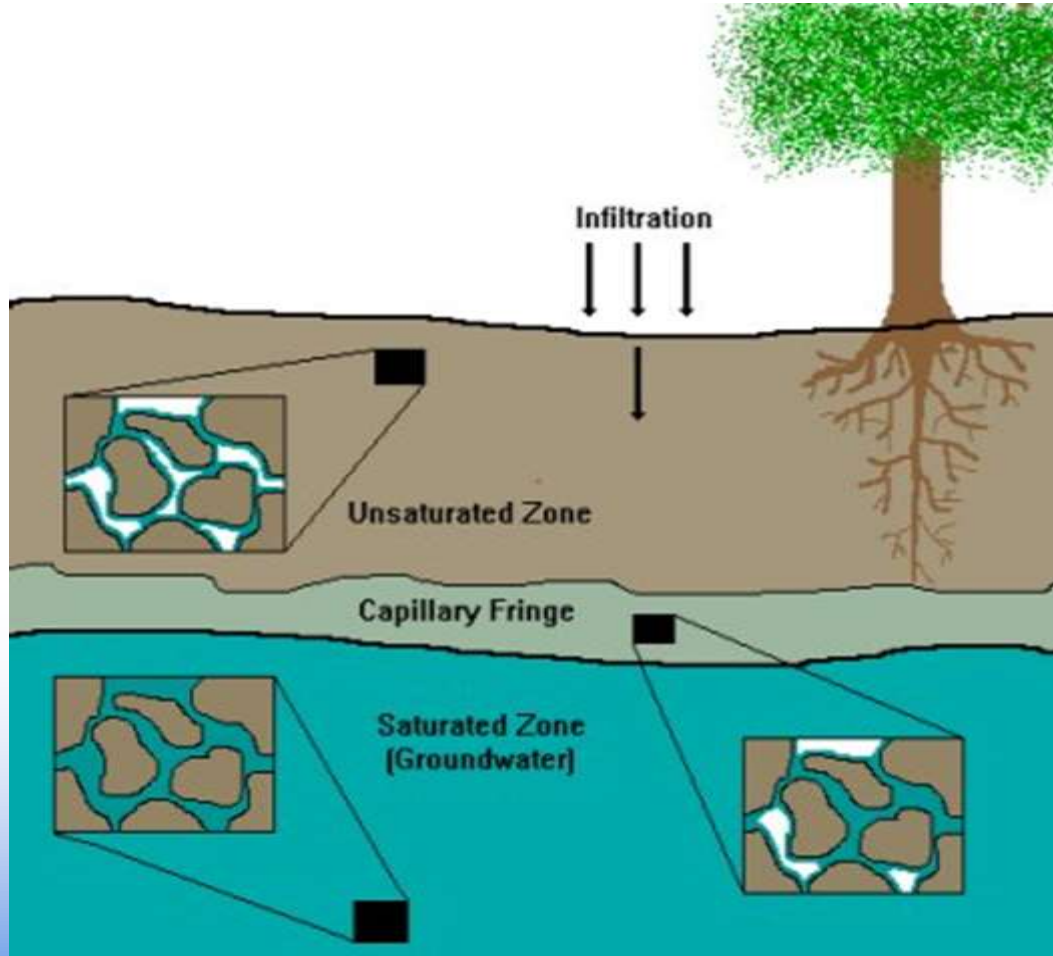


**Would  
you drink  
Dinosaur  
pee?**





# The Water Story



**The earth  
purifies  
our water.**

**Or tries  
to...**



# The Water Story



**How far  
does your  
well water  
travel?**

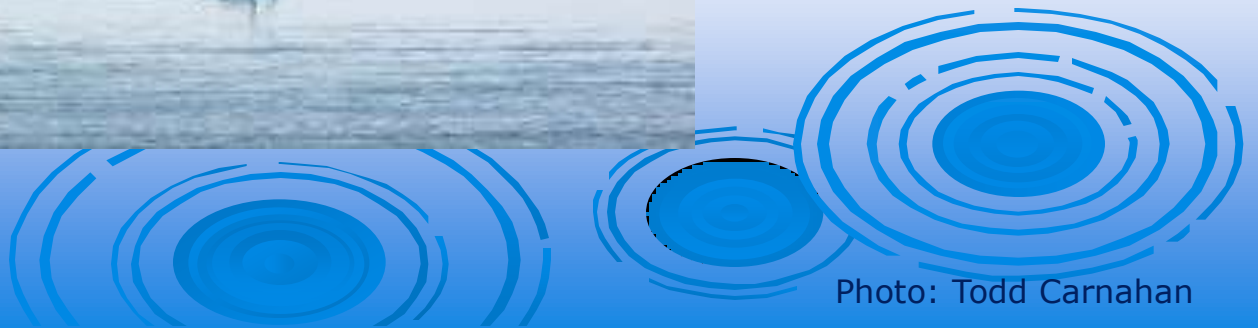
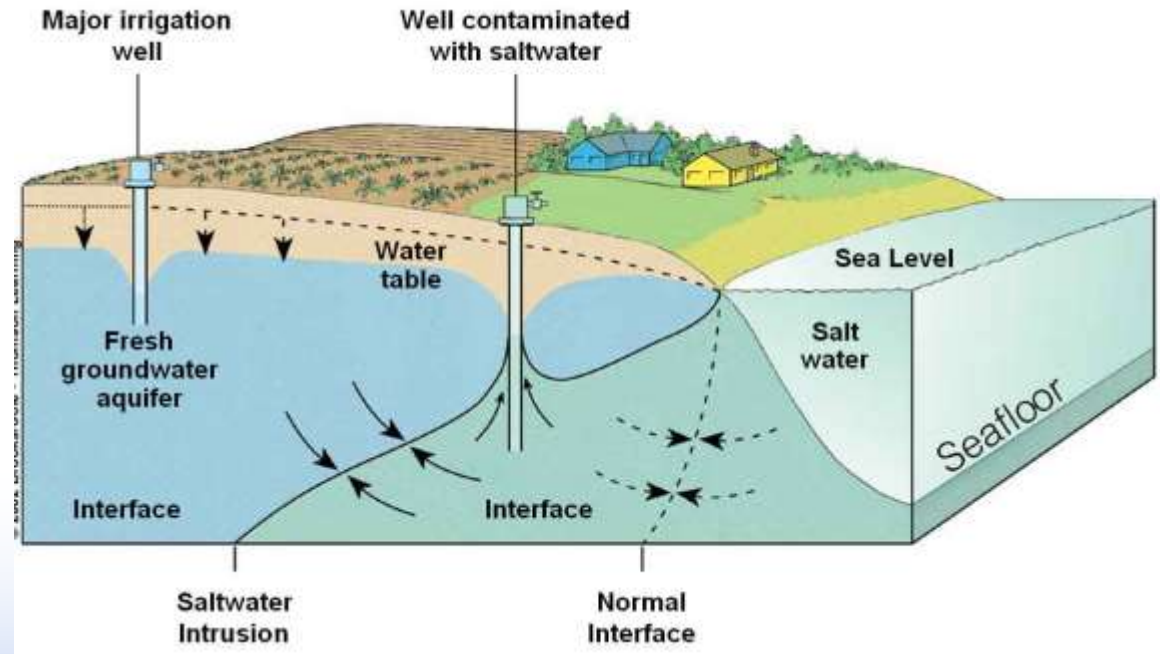


Photo: Todd Carnahan

# What is the problem?

**Over 1.4 billion people live where use of water exceeds minimum recharge levels**



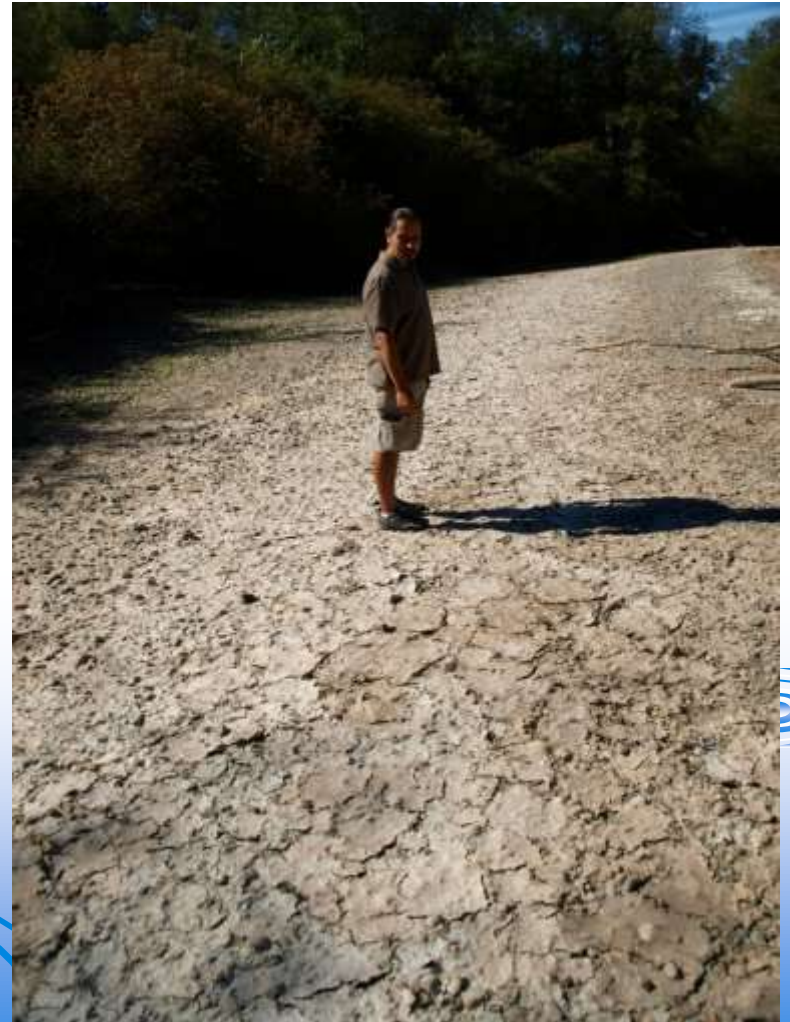
# What is the problem?





# What is the problem?

## - Climate Change



# What is the problem?

## - Dry summers



➤ **Salmon can't get up river in fall.**

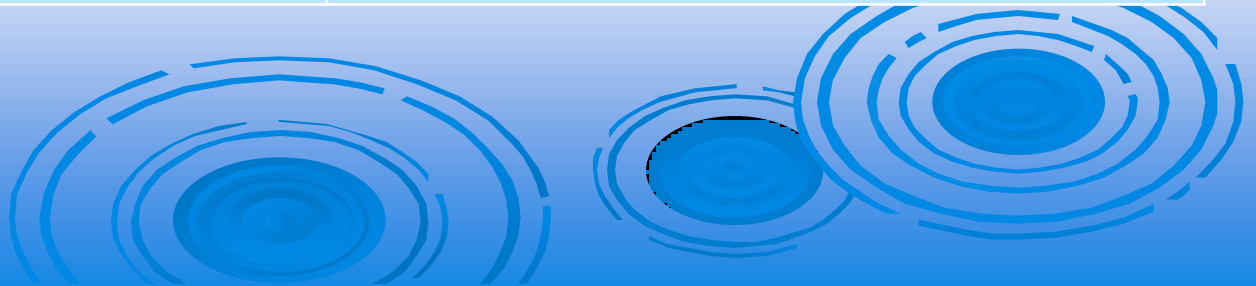
➤ **Ground water depletion**

➤ **Beaches and swimming holes close as pollution is concentrated.**

# What is the problem?

## - Water Quality

Bad News	Good News
Shellfish harvest closed since 1973	Stewardship Roundtable – cares and mobilized people addressing problems
Koksilah and Cowichan Bay tributaries – fecal coliform	Stoltz Bluff project a major success
Major aquifer at risk	Cowichan River Aquifer in good shape  Duncan has some of the best water in Canada.





# Why Conserve?



**The low  
period for  
ground  
water  
recharge is  
when  
water  
demand is  
greatest**





# Why Conserve?



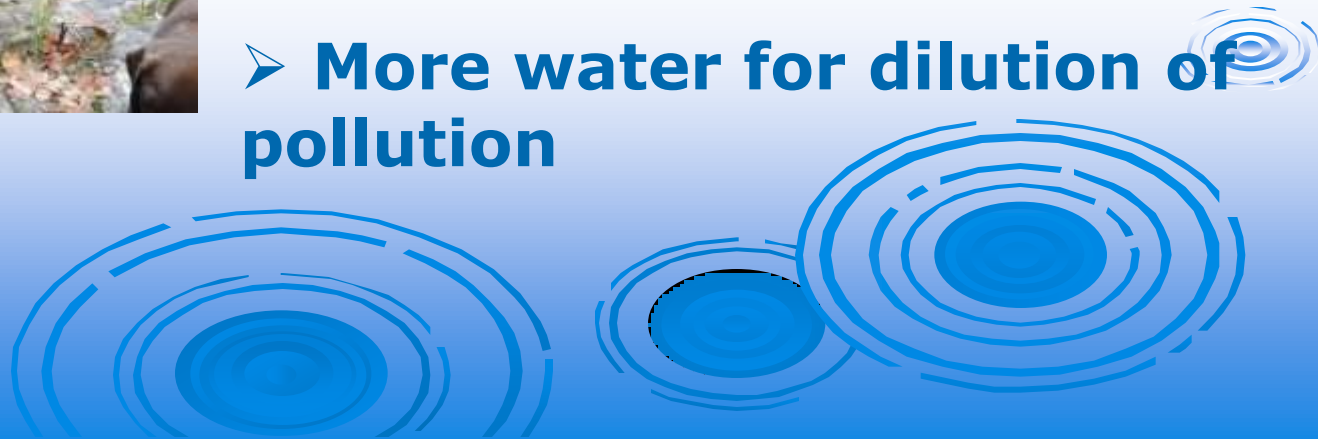
**The  
same is  
true for  
surface  
water**



# Why Conserve?

## - Ecological Benefits

- **Help preserve our aquifer**
- **Supports critical summer river flows**
- **More water for fish biodiversity**
- **More water for dilution of pollution**

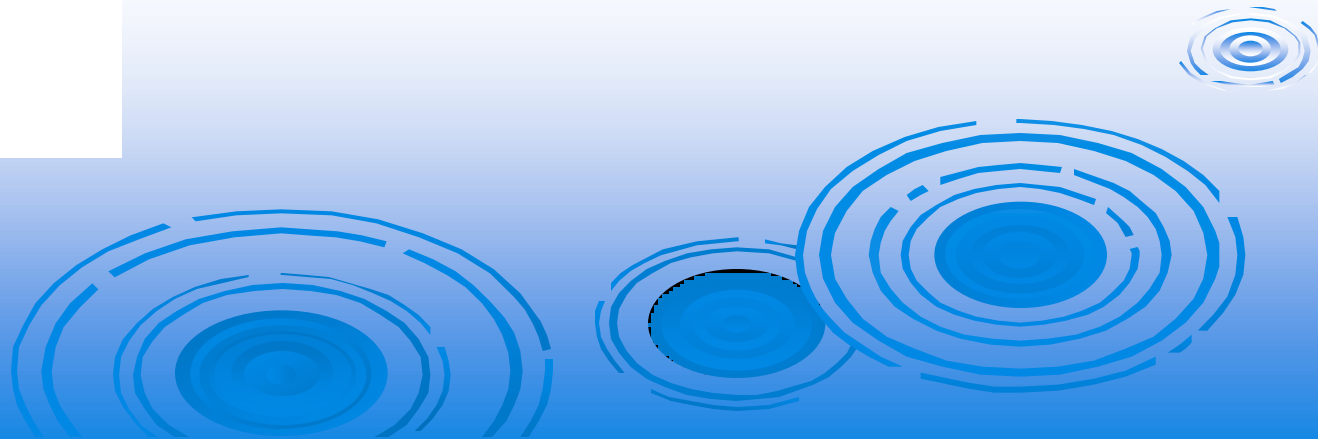


# Why Conserve?

## - Economic Benefits



- **Infrastructure savings – pumping, piping, treatment, disposal**
- **Saving energy costs**
- **Recreation and Tourism**

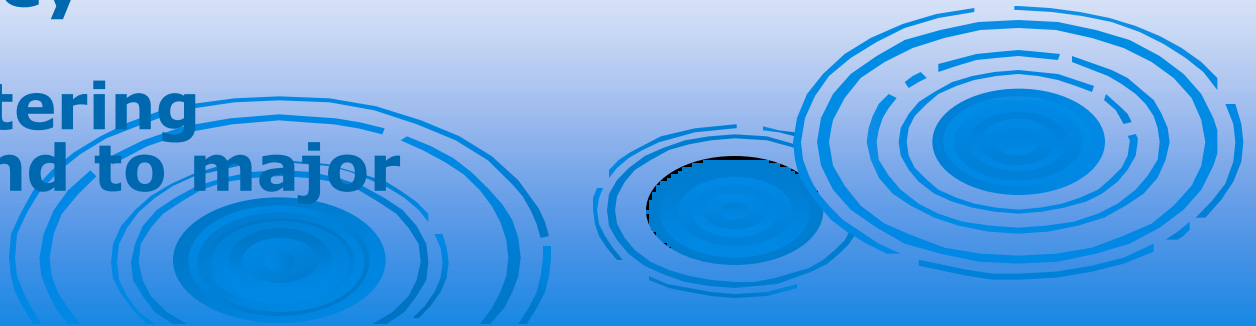




# Why Conserve?

## - Barriers Lack of Knowledge

- People disconnected to where their water comes from
- Cheap water breeds disrespect
- Unclear billing – users don't see link between wasting water and wasting money
- Lack of metering leaves us blind to major leaks





# How do we get there?

## - The Challenge



**Can we meet or beat Ladysmith's  
246 L/person/day  
for domestic water use?**



# How do we get there?

- Collaboration

**The CWB is  
built on  
partnerships.**



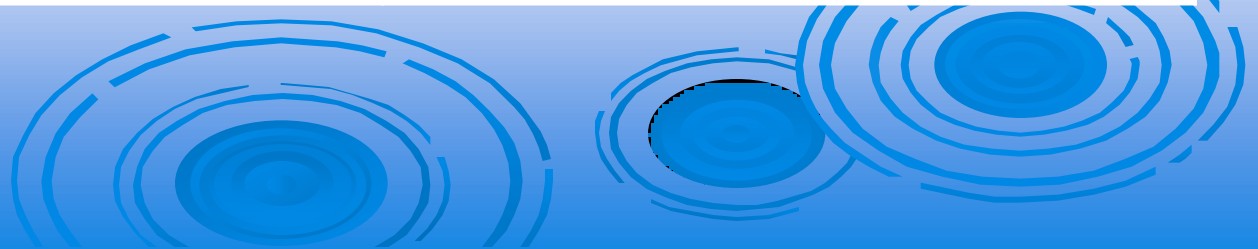
Photos: Fletcherfoto.ca

# How do we get there?

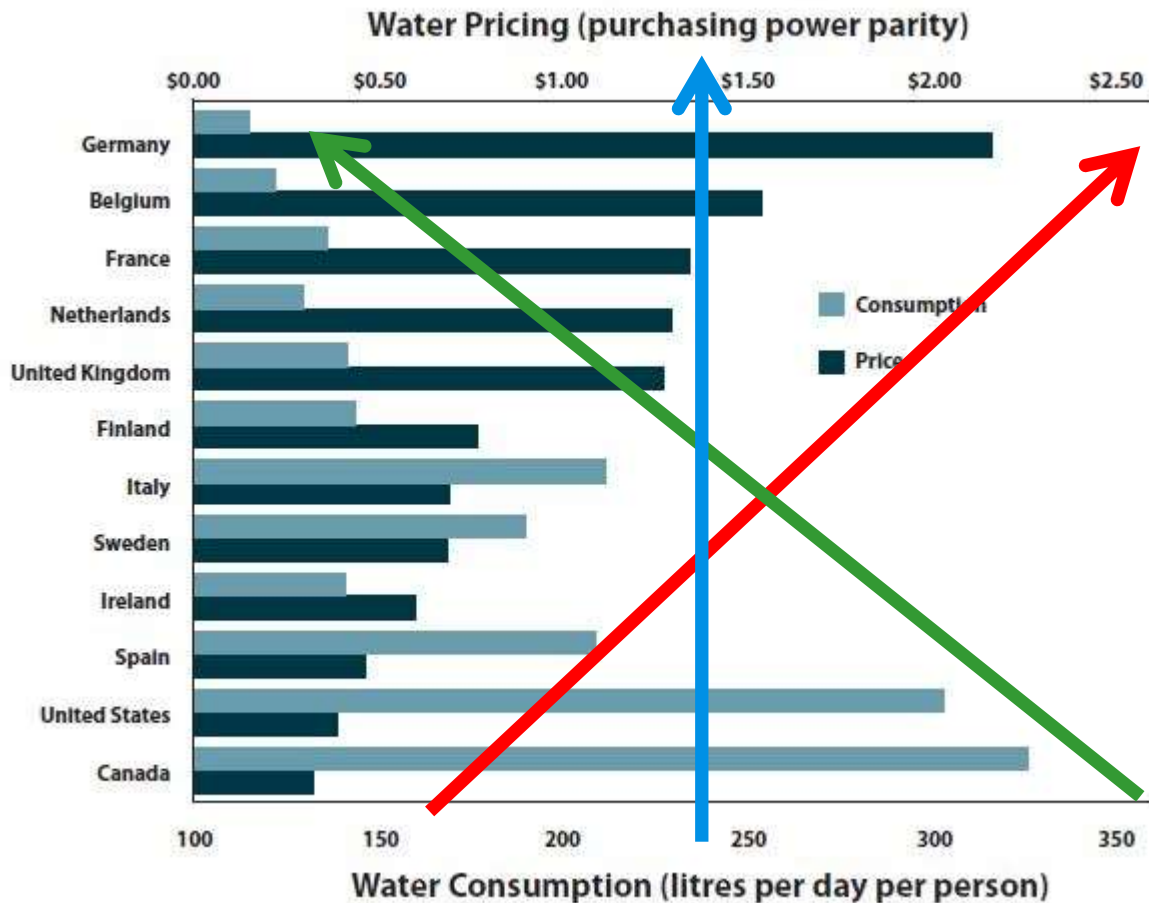
## - Collaboration

Cowichan Stewardship Roundtable - a monthly forum where many groups gather to work together toward watershed health.

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>- Cowichan Estuary</li><li>- Somenos Marsh</li><li>- Quamichan Stewards</li><li>- Cowichan Lake and River Stewards</li><li>- Cowichan Community Land Trust</li><li>- Cowichan Valley Naturalists</li><li>- Cowichan Watershed Board</li><li>- Cowichan Tribes</li><li>- One Cowichan</li></ul> | <ul style="list-style-type: none"><li>- BC Conservation Foundation</li><li>- BC Wildlife Federation</li><li>- Island Health</li><li>- local municipalities</li><li>- Catalyst and other industry partners</li><li>- DFO</li><li>- BC Ministries of Agriculture, Environment, Health and Transportation</li></ul> |
|--|--|



# How do we get there?



**Higher  
water prices  
=  
Lower  
water use**

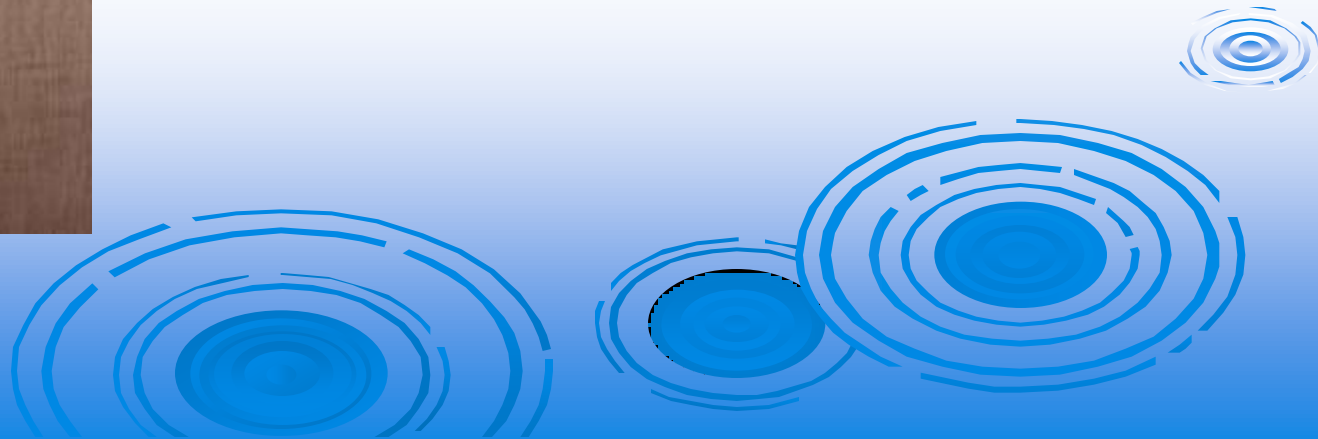


# How do we get there?

- Work with water purveyors



**Water pricing and billing practices are effective tools for water conservation.**



# How do we get there?

- Work with water purveyors

**15-70% of  
municipal  
water use  
is wasted  
through  
leaks**

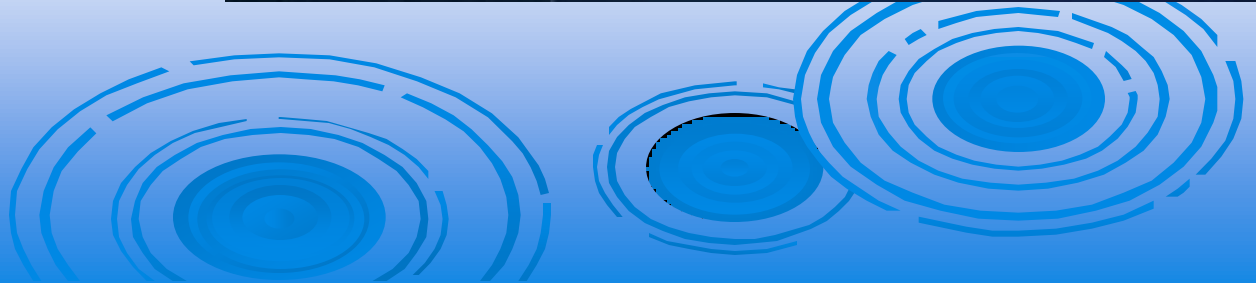


# How do we get there?

- **Support water users**



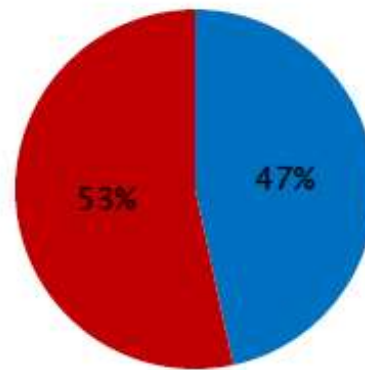
Photo: [catalystpaper.com](http://catalystpaper.com)



# How do we get there?

- Gather information and report back

## Water Knowledge – Source



Total surveyed  
n = 532

■ Yes  
■ No

Some areas within the watershed knew more than others but overall more than half of water users do not know where their water comes from.





# How do we get there?

- **Follow the Leader!**



# How did we get here?



# How do we get there?



# Thank you





# Are You In?



