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# Blue Ecology: A New Attitude

*Embrace a water-first approach to planning human interventions in the environment.*

## Gitxsan: People of the River of Mist



"The blood that runs through the veins, are the rivers that run through Mother Earth. People need to understand that, without that life giving water, there will be nothing."  
*(Chief Gwininitxw, Yvonne Lattie, Gitxsan Nation)*

# Outline



Acknowledging Musqueam Hosts and Elders



What is water?



Blue Ecology's Vision



Path One: Summer of 2017



Path Two: Blue Ecology's Attitude Switch



Blue Ecology's Three Calls to Action



# Acknowledging Elders



# What is Water?

A Deceptively Simple Question...

**Water is a chemical compound consisting of two hydrogen atoms and one oxygen. The name water typically refers to the liquid state of the compound**  
(Chemistry @About.com).

## Ethnographic Research

- Seven Elders from Seven Nations
- Seventeen Years of *Independent* Research
  - Ethical and consent based
  - Peer reviewed
  - First Nations reviewed

**Water is the essential lifeblood of our planet, with the power to generate, sustain, receive and ultimately unify life**  
(UNESCO-IHP Expert Advisory Group on Water and Cultural Diversity).

# Annie "Paingut" Peterloosie

## Water and Icebergs

Our Inuit ancestors

Told us not to break them

The icebergs are very big.

They are good drinking water

They are not to be played with.

They are not to be shot at.

And they were told not to urinate

Because it would soil them and are vulnerable. It does not want to get dirty

*Because it is believed that there are people in it.*

**It is true.**



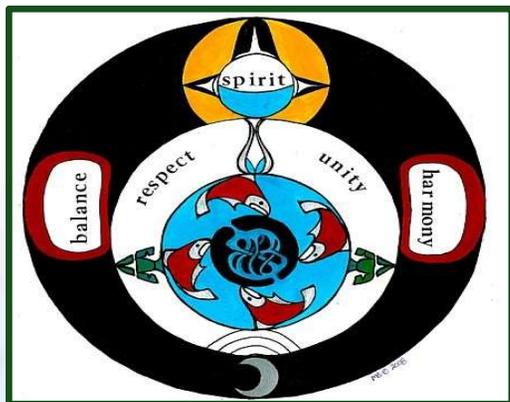
Mark Mallory

# Living Entity or Sentient Being?

A characteristic of a sentient being is its ability to form relationships with other beings.

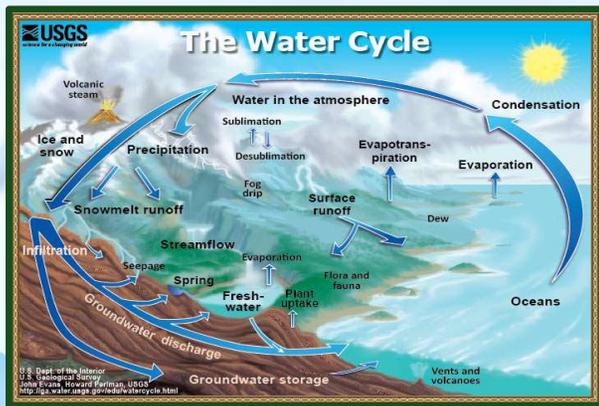


# Two Water Worlds



## Blue Ecology Water Cycle

- Companion to Western Science's model



## Western Science's Water Cycle

- A Companion to Blue Ecology Water Cycle (USGS version)

# Comparison of water views

## INDIGENOUS

- Integrative
- water has a spirit (biotic)
- water is the heart of an ecosystem pumping the life blood
- Groundwater is very important: can offer spiritual power

## WESTERN SCIENCE

- Taxonomic
- water is abiotic
- water is a physical material that assists the living organisms in an ecosystem
- Dichotomies
  - mind/matter
  - biotic/abiotic

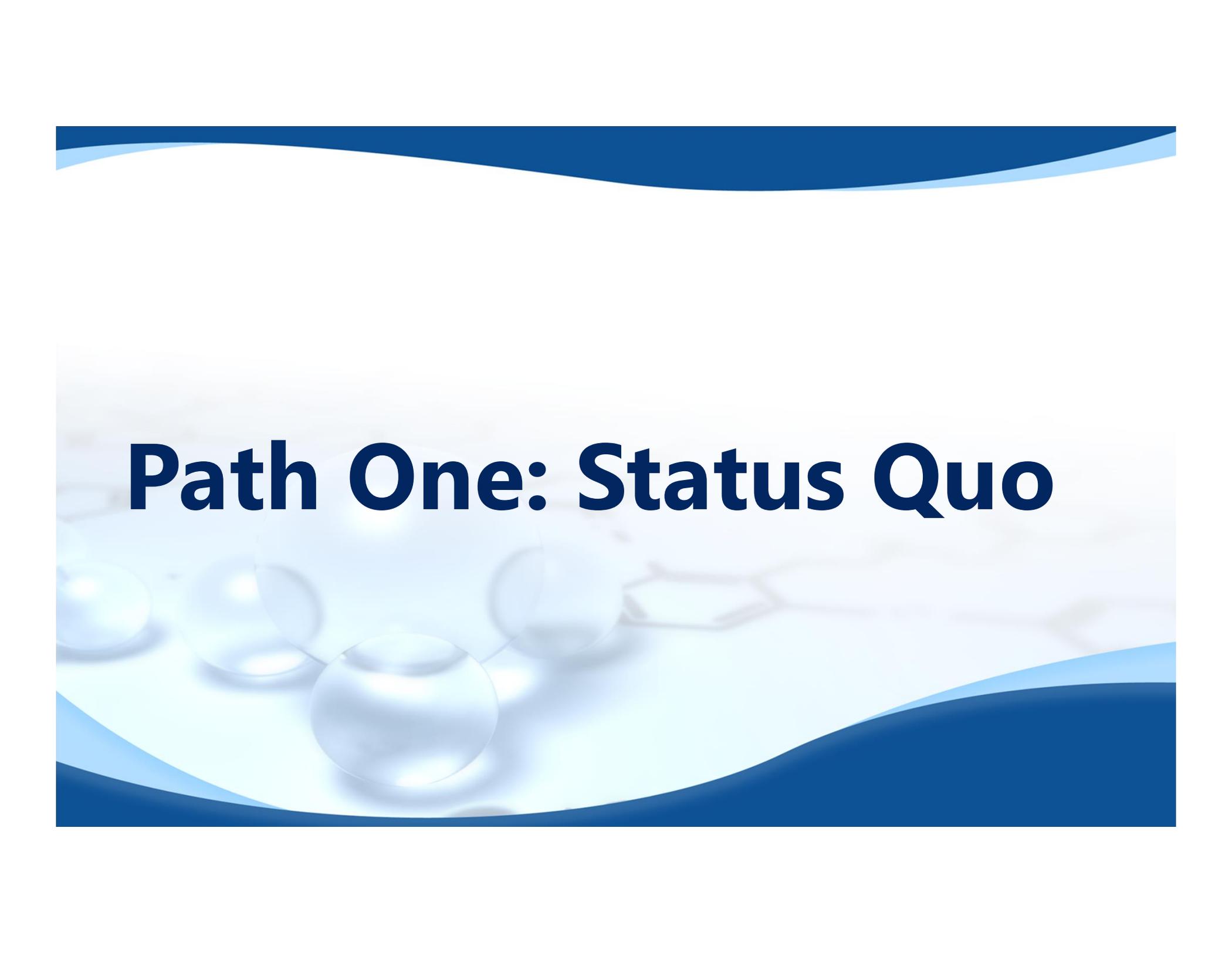
# Blue Ecology Vision

Sustainable Survival: *survival with dignity*



**Vision:** An ecological philosophy, which emerged from interweaving Indigenous and Western thought, that acknowledges water's (i.e. fresh and salt) essential rhythmical life-spirit and central functional role in generating, sustaining, receiving and ultimately unifying life on Earth Mother.

**Water-First** The highest sustainability test is water-first: planned development (e.g. real estate, urban planning, forestry, agriculture, mining, oil and gas extraction) cannot impede the functional delivery of quality water to ecosystems in a healthy rhythm.



# **Path One: Status Quo**

# May 16, 2017: Sheraton Hotel, Van



# Start of My Summer of 2017



# Signs of Climate Change *all around me*



Kelowna's Marshall Street is still flooded on Sunday despite the fact that floodwaters receded along nearby Mill leaving dozens of property owners with the task of drying out their homes, cars, and yards.

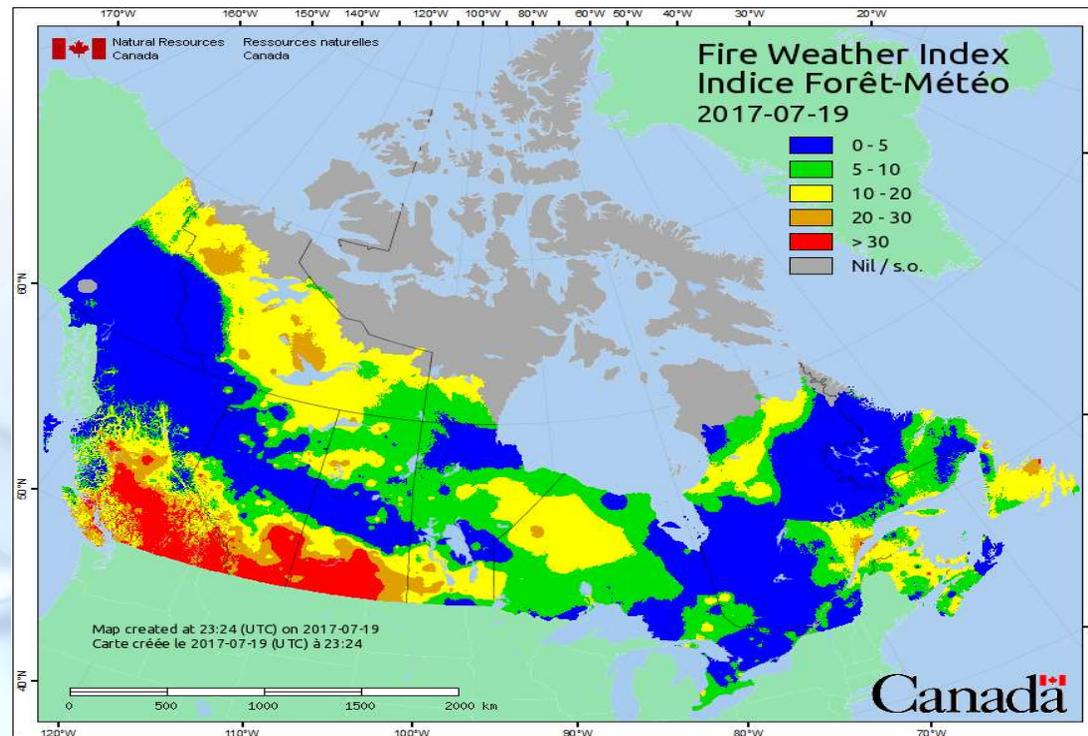
GARY NYLANDER/The Daily Courier

# Signs of Climate Change



# Emergency Management BC

## July 19<sup>th</sup>, 2017



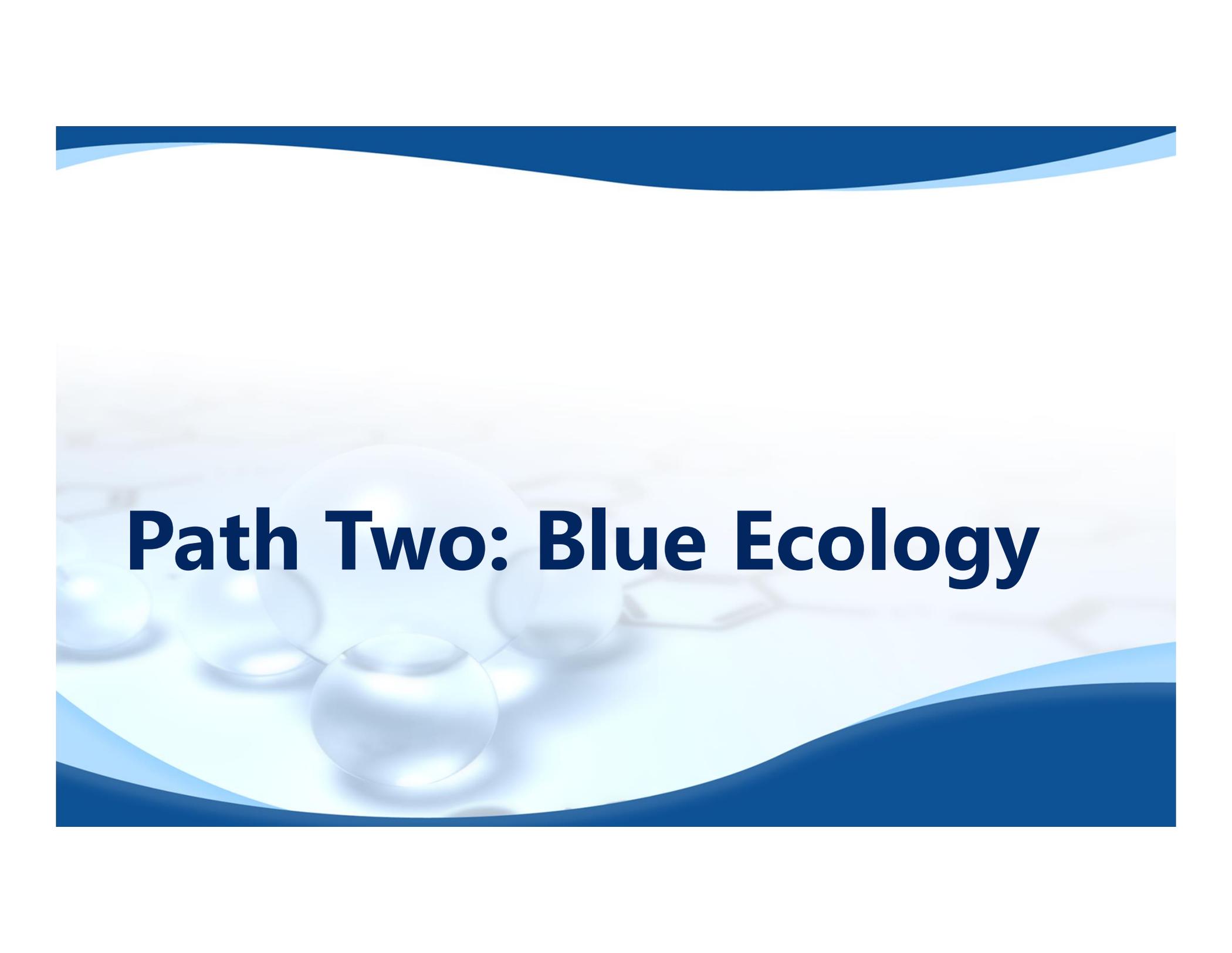
# Cariboo Summer 2017



# Drought: The 2017 Back Story

## Provincial Overview



The background features a light blue molecular structure with several spheres and connecting lines, overlaid on a white background. The top and bottom edges of the image are framed by dark blue wavy borders.

# **Path Two: Blue Ecology**

# Switch our Attitude



# What is Attitude?

*A collection of values, theories, philosophies, beliefs and principles that motivates and influences*

# Water Attitude

**Living entity,  
biotic**



**Non-living,  
abiotic**

# Examples of Attitude Change

[New Zealand river granted same legal rights as human being | World news | The Guardian](#)

[Ganges and Yamuna rivers granted same legal rights as human beings | World news | The Guardian](#)

# Collaboration Attitude

**Interweaving  
Cultural  
Knowledge**



**Western  
Science Only**

# Interweaving

“Interweaving, at the microscopic level, of two different materials in order to get something harder, tougher, yet more elastic than either component alone.

Nature has employed composites in all sorts of biological structures.”

**Oliver Sacks (2002, pg 108)**

# Interweaving

- *Collaborative process* where apparently contradictory ways of knowing water, such as Western Science and Indigenous Knowledge, are brought together as *coexisting threads* to produce a new cooperative theory called Blue Ecology.
- Working in *tandem*

# Climate Change Attitude

**Water's  
Rhythm and  
Movement**



**Shock and  
Yawn**

# Future Outlook Attitude:

*Path Two:* **Hope Blue Ecology**



*Path One:* **Fear**

## Switch to Blue Ecology

- Blue Ecology is a new water-based ecological *theory*, which interweaves cultural *philosophies, beliefs and principles* to elevate, into a central role, the value that society places on water.
- Blue Ecology promotes a new *water-first attitude* towards water, climate change and environmental planning.

# Water Leadership: **Prévoyance**

**A leadership ability: to prepare for the unexpected, in a world of uncertainty and danger, while maintaining your principles. A mindset of learning to make sound judgements over the long run on the basis of imperfect knowledge.**

(David Hackett Fischer's Champlain's Dream)

- *Operational Principle* approach rather than prescriptive

# Guiding Principles of Blue Ecology

- a) Spirit:** water, fresh and salt, is a living spirit.
- b) Harmony:** harmonious sustainability in a functional rhythm that engenders healthy bodies and ecosystems.
- c) Respect:** water through ceremony, education and giving back, else Earth Mother will retaliate by taking water away.
- d) Unity:** water has the ability to connect and unify humans because of our common reliance on this basic unit of existence. It is a proto-interest.
- e) Balance:** restrained and measured water withdrawals in combination with and giving back (i.e. restoration, monitoring, or ceremony) to watersheds and water.

# Operational Principles

1. Recognize that access to water is a universal and basic human right;
2. Communicate and prominently display the Blue Ecology vision and principles;
3. Develop and monitor measurable indicators to audit the implementation of Blue Ecology principles; and practices. Invest in real time water quality and quantity measurement systems;
4. Embrace the principle of subsidiarity: local people, especially the Elders and youth, have a strong; interest, as caretakers, in the water that flows through their lives, and so they should be involved in water management at the smallest effective watershed management unit;
5. Mentor and train local caretakers in the Blue Ecology approach to work hopefully & collaboratively;
6. Celebrate water in architectural design, urban planning, artistic installations, community and nature parks, and forest visual landscapes; and,
7. Water cannot be owned

## **Elder's Question:**

***What are you going to do about it?***

**Hope is active leadership**

# Action 1: Blue Ecology Education

Create elementary science curriculum that teaches reverence for water



*Where does my water come from?*

by Judy Wyers, Grade 9,

## Action 2: Blue Ecology Architecture

Bring water out from behind the walls of our cities to instill reverence – glass water pipes



Zaragoza World  
Water Expo  
2008

# Action 3: Blue Ecology City

Metro-Vancouver, Kelowna ,Kamloops?

Water-First Environmental Planning Leadership

Water Architecture and Landscape



# Attitude

Creativity

Collaboration

Change

Climate

Prevoyance

Interweaving

Switch

People-care

Sacred-springs

Blue-Ecology

# Hope

# Water