

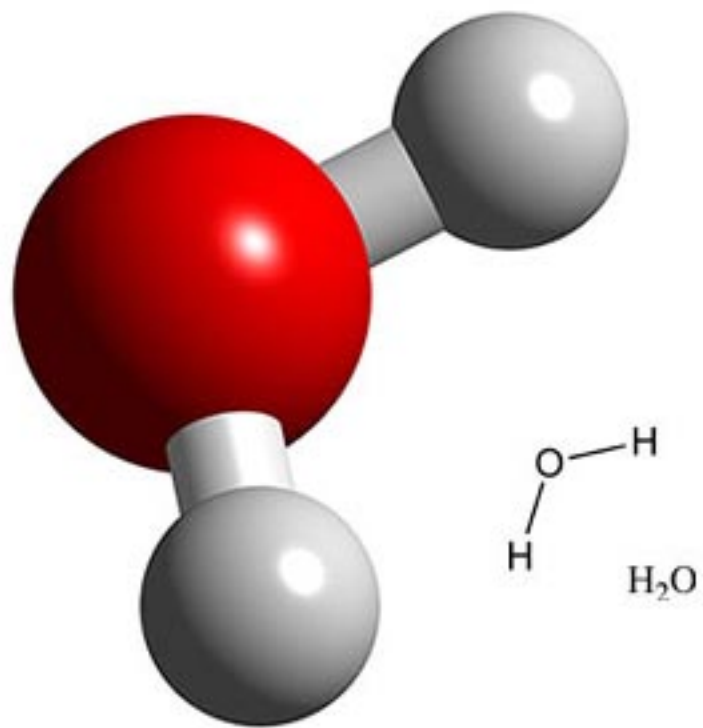
A BOLD PREDICTION:
...the future *is* shared decision making at the
watershed level
- not *IF* but *WHEN!* -



Fresh water: Looming Crisis or has the Crisis Loomed?

- Growing, concentrated demands
 - urban, energy, agriculture
- Persistent pollution
 - untreated sewage
 - emerging pollutants
- Drinking water crises
 - FN, small communities
- Over-allocation
 - fish in the mud ... increasing conflict
- Disruption of natural flows –loss of natural capital
- Invasive species
- Fear of bulk water removals



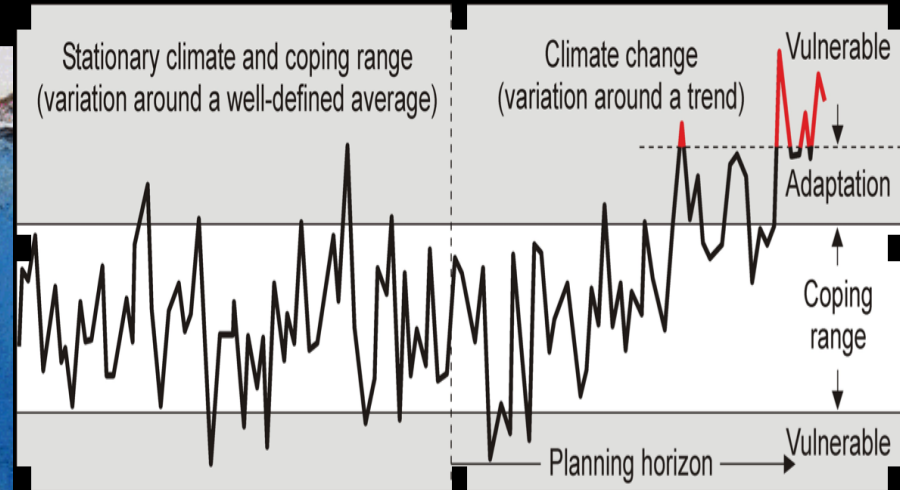


Canadian Experiences with Water Governance

- History of top-down, state-driven regulatory approaches
- Recent emphasis on collaborative approaches and partnerships
- Trend towards increased sharing of responsibility and authority
- Some experimentation with markets (primarily in the west)
- Strong commitments to new approaches and formal move to new modes of shared or collaborative governance by Provinces
- Watersheds long accepted as the scale for *MANAGEMENT* – increasingly acknowledged as critical for *GOVERNANCE*

Climate Change

If climate
change is
the
shark...



...water
will be
its
teeth!



Discussing Water Rights, A Western Pastime



DISTANCES IN AUSTRALIA

NMCINCT



Uncertainty

Risk

Resilience



Paradigms of Water Management



New Conception of Infrastructure





Water Law Reform: Lessons from Around the Globe

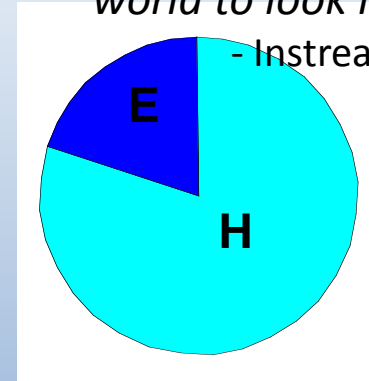
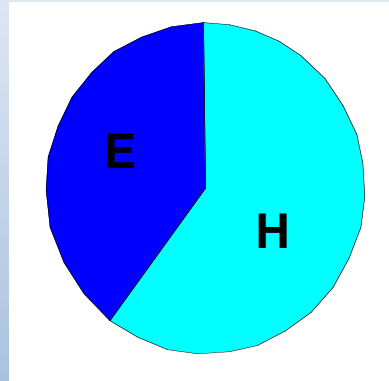
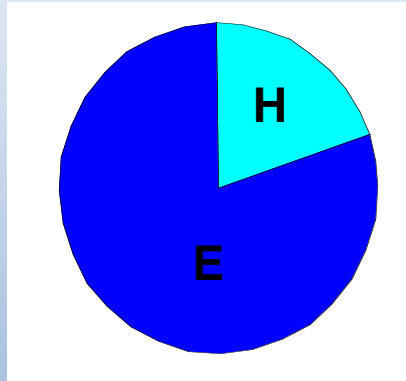
- Senior government direction and engagement
 - *enablers of local solutions not “top down” managers*
- Decentralized power including clear accountability and responsibility
 - *Emphasize collaborative engagement with a variety of stakeholders and communities*
- Attention to cumulative impacts and ecological function
 - *Rights for Rivers?*
- Embeds conflict avoidance and dispute resolution
- Those impacted have a say in decisions
 - *Respecting First Nation and Aboriginal Rights*

Allocating water in the 21st Century

"It actually boils down to a value judgment of what we want our world to look like."

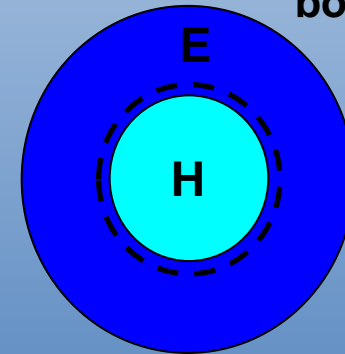
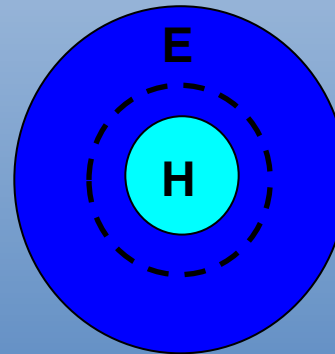
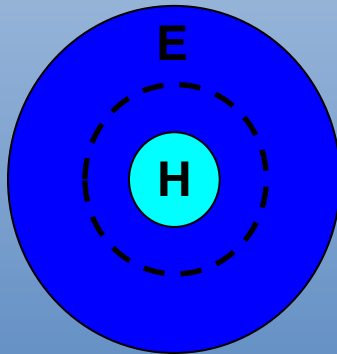
- Instream Flow Council

**Traditional
Water
Management**



Time

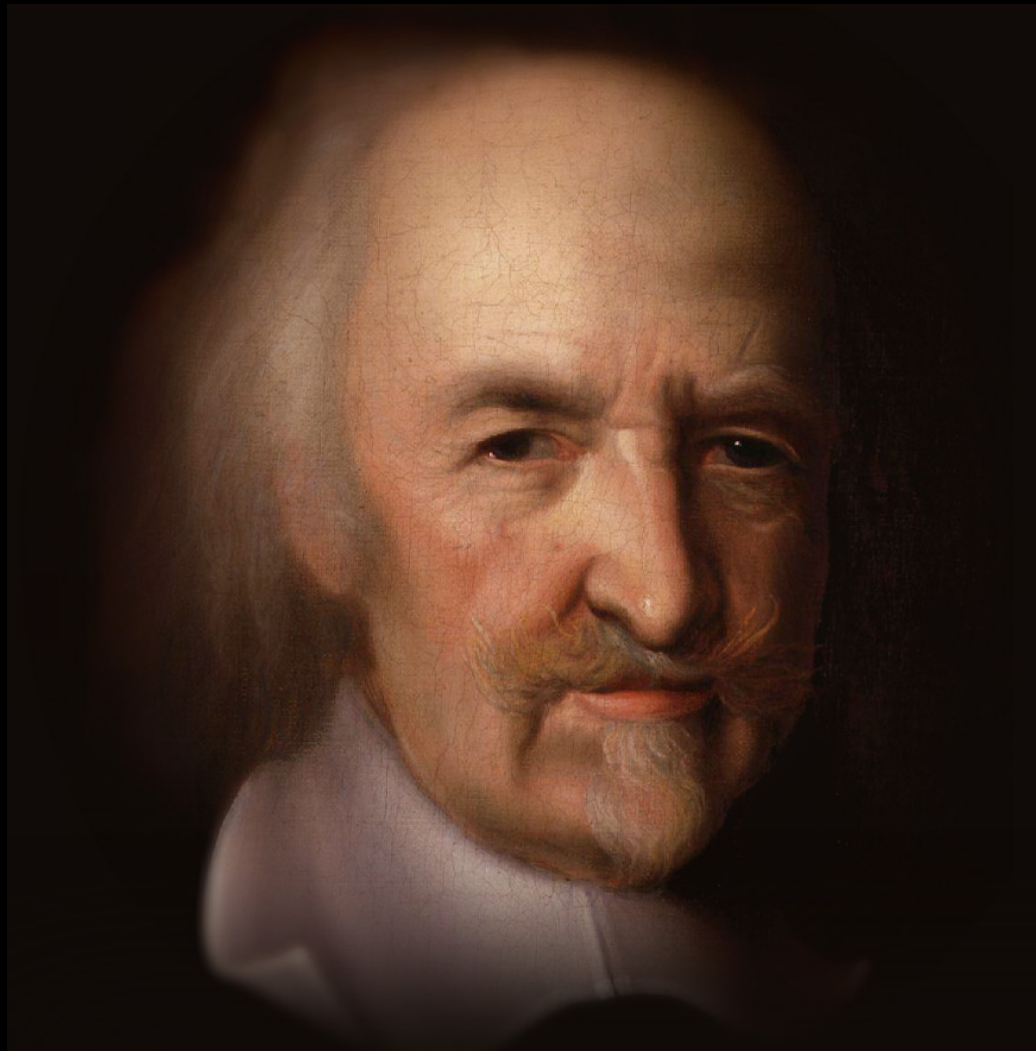
**A 21st
Century
Approach**



----- Sustainability
boundary

Time

Adapted from: Postel & Richter, 2003



"The beatings will continue
until morale improves."

- Thomas Hobbes of Malmesbury (1588-1679)

Leviathan

Govern ment



Govern ance



Watersheds as a critical scale for
Management, Policy *AND* Governance

Re-Thinking Watershed Governance

Government is critical to governance, BUT governance is broader than government

- Engage both government and other key actors – civil society, first nations, business and industry, community

Both formal and informal structures

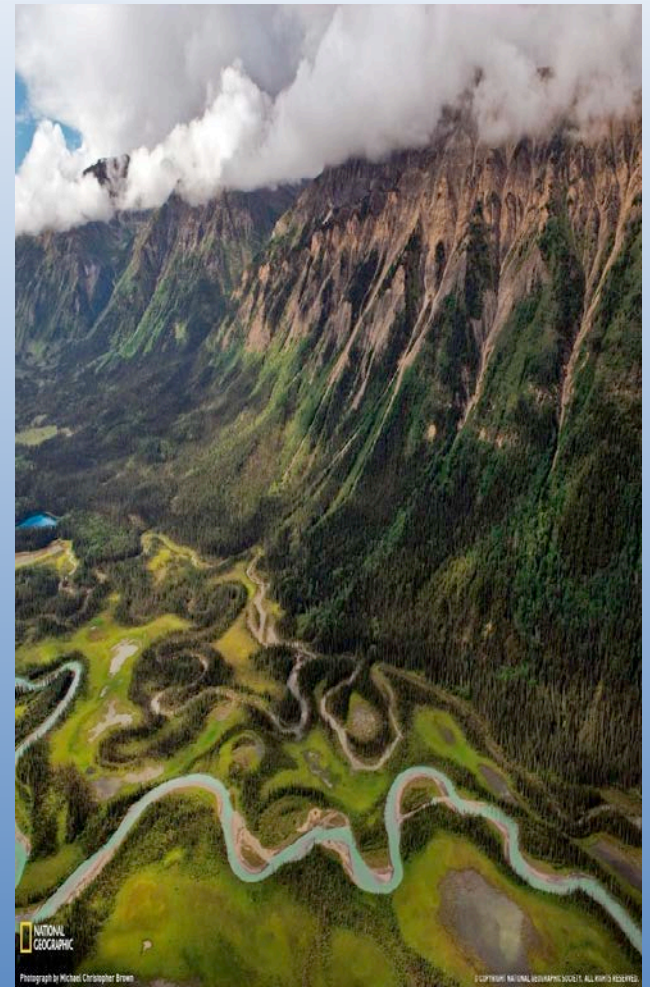
- Legislative (regulatory) and persuasive (influence)

Shift from managing watersheds to managing people in watersheds

- Social problem not a technical problem and emphasizes SOCIAL and ECOLOGICAL RESILIENCE

Achieve long-term sustainability of watershed resources

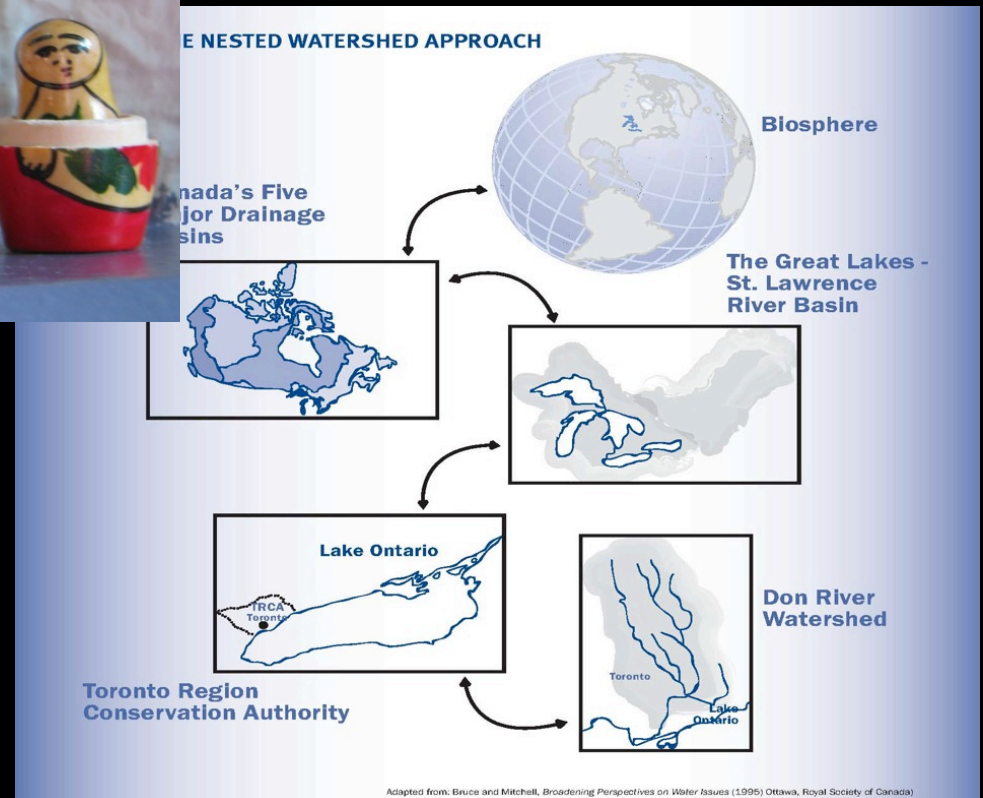
- Formally Integrate natural ecosystem processes within decision-making



“Nested” Systems



Thinking Like a Watershed





Prosaically Simple

- use less
- use what we take more productively
- learn to share and resolve conflicts
- leave enough water in the system to ensure to ensure healthy watersheds and proper function



The Challenge for Us All...

*“In a healthy society, economy
always follows ecology,
and education precedes them both.”*

- Ken Carey

Starseed

The Third Millennium, Living in the Posthistoric World

Harper, San Francisco, 1991