

# Thinking Like a Watershed

## Ecological governance concepts, trends and applications

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# The challenge ahead

***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*



# Presentation overview

- Ecological governance
- Setting a new course in British Columbia-governance options
- Comparison of MoE and POLIS discussion papers
- Education and engagement
- Conclusions and next steps





# Foundations

## ***Governance***

....guide, steer, control, manage to  
achieve desired outcomes

***WHO*** - *decision makers  
and accountabilities*

***WHAT*** - *bases for  
decisions*

***HOW*** - *decision  
making process*



# Ecological governance - principles

- Economy is a subset of the ecosystem
- Ecological resilience is a priority
- Manages watersheds as whole systems
- Manages for risk and uncertainty
- Includes all interests—civil society, resource sector, all levels of government
- Reconnects humans (and communities) to the natural world



# Key Watershed Governance Factors

- Changing climate will significantly affect watershed function
- Carbon reduction is all about ***Mitigation***
- Ecological governance is about ***resilience***
- International best practices in watershed governance are addressing these challenges
- Lengthy delays in decision making
- Governments have constrained resources
- Lack of involvement by affected parties



# Key Watershed Governance Trends

## Watersheds, catchments and basins

- Integrators of the landscape and the source of key ***ecological goods and services***
- valuing ecosystems strengthens the ***business case*** for ecosystem resiliency
- Watersheds have long been recognized as the appropriate scale for ***management*** and increasingly for ***governance***





# 'Thinking like a Watershed'

## **Examples of integrated decentralized collaborative watershed-based governance:**

- France's Water Agencies and "Water Parliaments" (European Union)
- Murray-Darling Basin Initiative (Australia)
- Conservation Authorities (Ontario)





# Collaborative Governance

- Watershed governance involves all levels of government
  - Federal fisheries, CEAA
  - Provincial resources, water allocation and quality
  - Local zoning, flood control
  - First Nations traditional rights and obligations
- Governments don't function as whole systems



# Governance Options

## **POLIS proposals**

- Status Quo
- Enhanced Provincial
- Regional District
- Watershed Agency

## **MoE proposals**

- Centralized
- Centralized
- Shared
- Decentralized



# Evaluation Criteria for Comparing Models

- Achievement of ecological governance principles
- Accountability for achieving roles and responsibilities
- Funding and fiscal capacity
- Assessing strengths, weaknesses and realistic governance changes





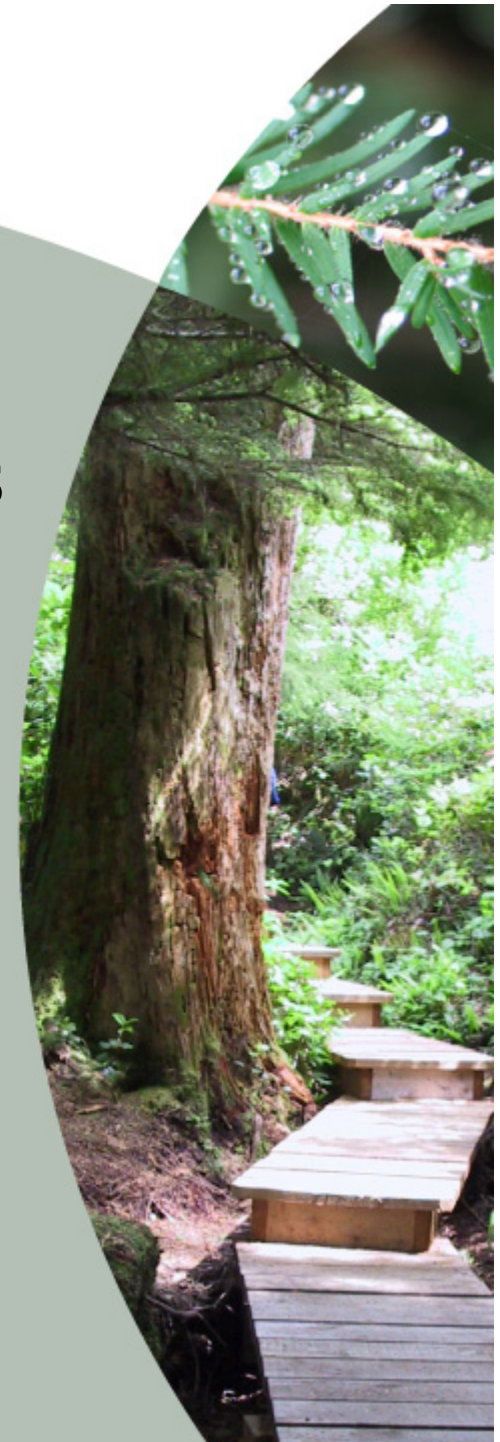
# Key Outcomes for Good Governance

- Establish and monitor key indicators for functioning, healthy watersheds
- Protect community drinking water sources
- Require legally enforceable instream flow requirements
- Establish groundwater control regulations



# Education

- Engagement of all interested parties
- Evaluate international best practices in watershed governance
- Improved education in ecological governance in schools and universities
- Undertaking pilots to demonstrate new approaches



# Attributes of Effective Governance

- Monitor indicators for key outcomes
- Shift from current sector focused resource management to whole systems approach
- Evaluate cumulative effects
- Coordinate and integrate individual decisions across governments
- Provide independent oversight and reporting
- Include and engage those affected by decisions





# Conclusions

- Status quo option does not meet effective governance attributes
- Watershed agency model represents best practice
- Need transformative change in governance to meet future challenges
- Polis to undertake thoughtful analysis of ecological governance options
- Report by the end of 2010

