



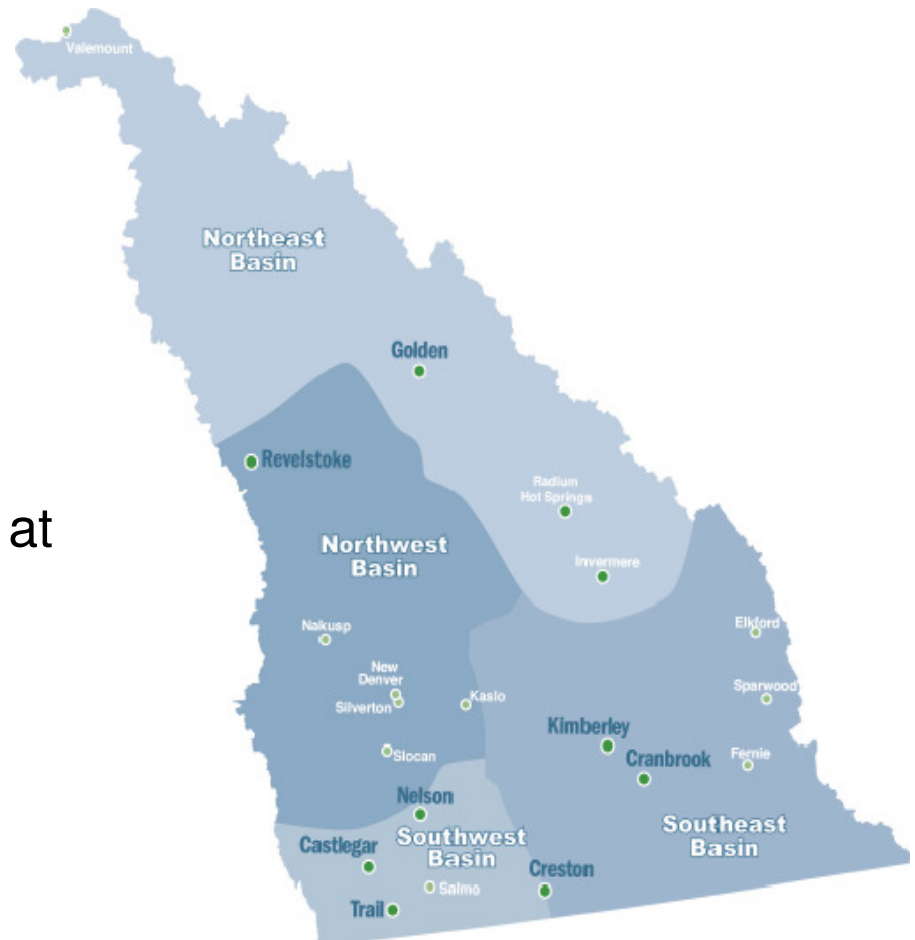
# Communities Adapting to Climate Change

Sharing Experiences from Elkford and Kimberley

Michelle Laurie, Columbia Basin Trust, Initiative Coordinator

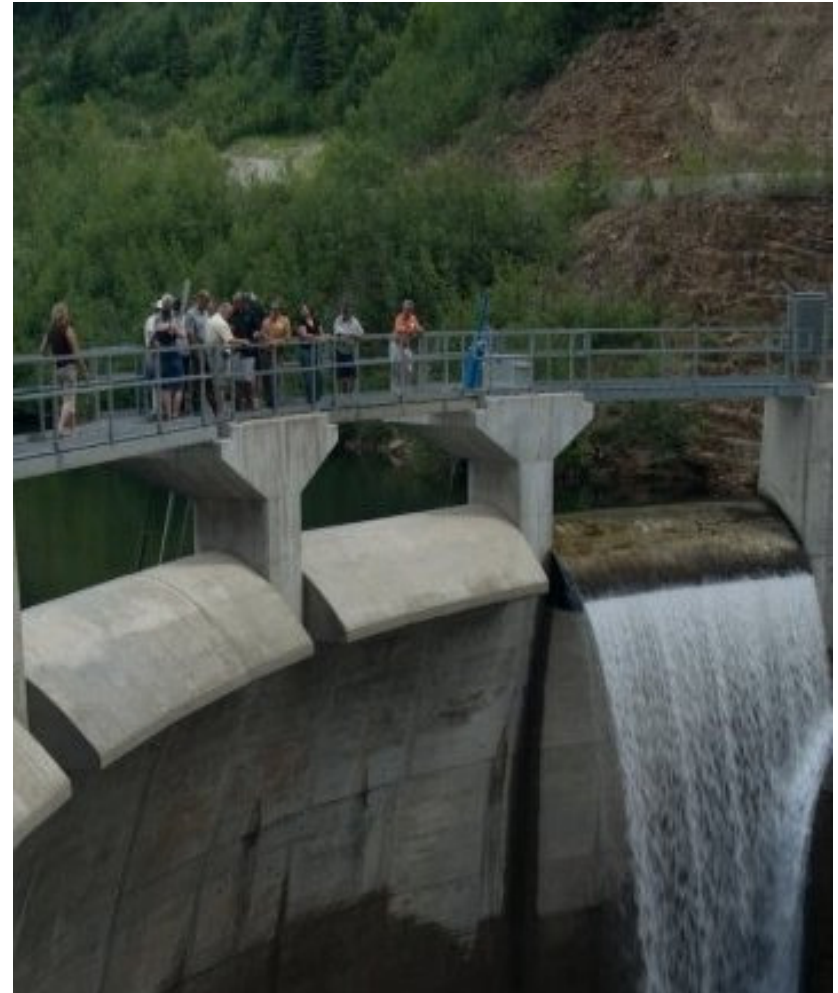
## Goal:

- To support the residents and communities of the Canadian Columbia Basin to increase their adaptive capacity and resiliency related to climate change impacts at a local community level.



## Key Points about the Initiative

- Rossland, Castlegar and Kaslo/Area D climate change adaptation processes
- Kimberley and Elkford completed projects in July 2009.
- Basin local governments, diverse technical expertise and practitioners learning together
- Documenting and sharing knowledge throughout
- CBT supported with many partnerships





# Summary of Process with Communities

1. Get Started
2. Learn About Climate Change
3. Identify Priorities in Your Community
4. Assess Vulnerability, Risk & Opportunities
5. Develop Adaptation Strategies and Actions
6. Implementation & Monitoring of Plan



## Learn About Climate Change...i.e. today's session

1. What changes are you observing in your community that may be related to climate change?
2. What are the historical and projected temperature and precipitation changes for the region?



Photo: Flood in Nelson B.C. 2006



## How will changes in temperature and precipitation impact different parts of your community?

Changes to temperature & precipitation can impact communities in a variety of ways:

What are your risks?

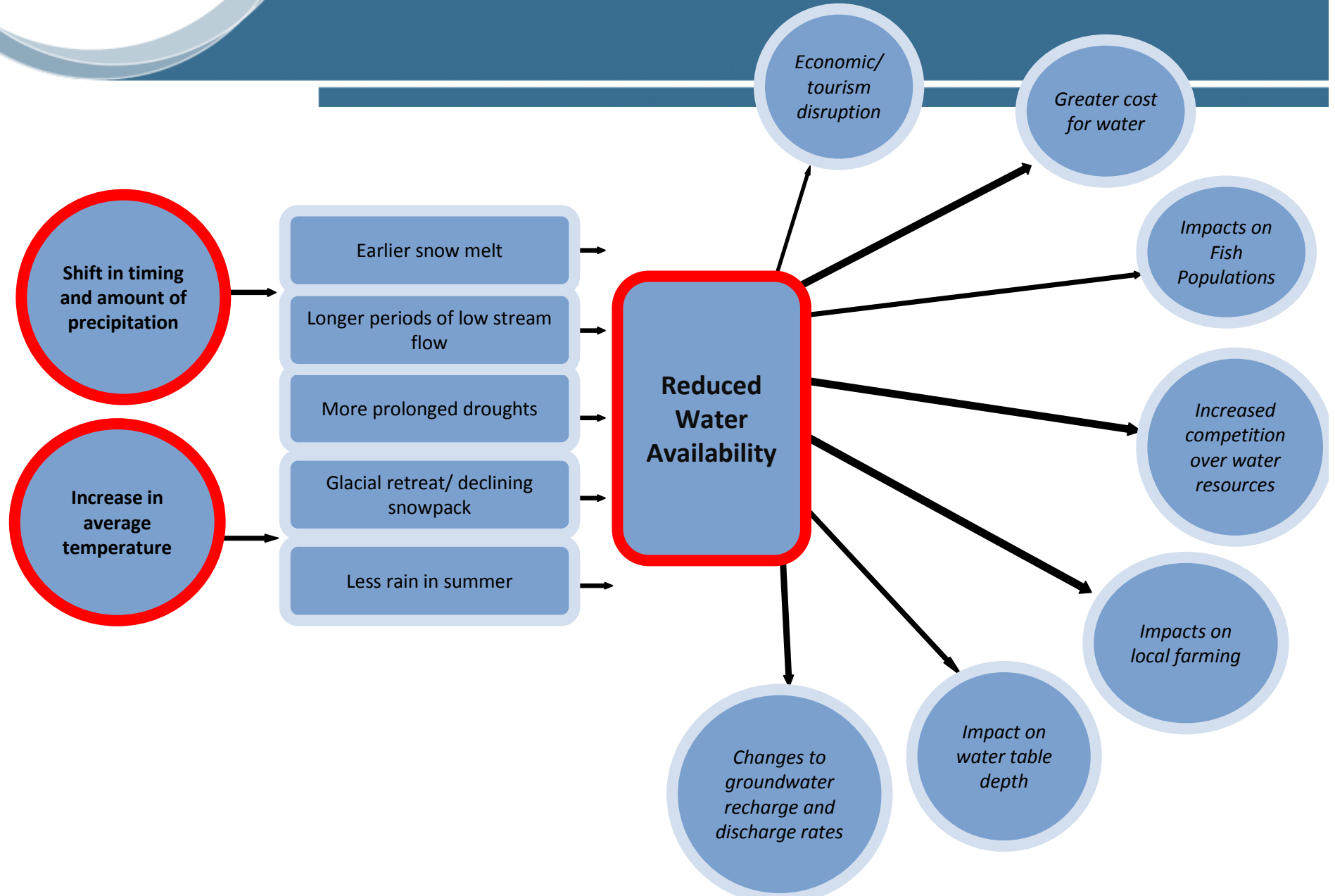
- Infrastructure
- Local Economy
- Health and Safety
- Others

What are your opportunities?

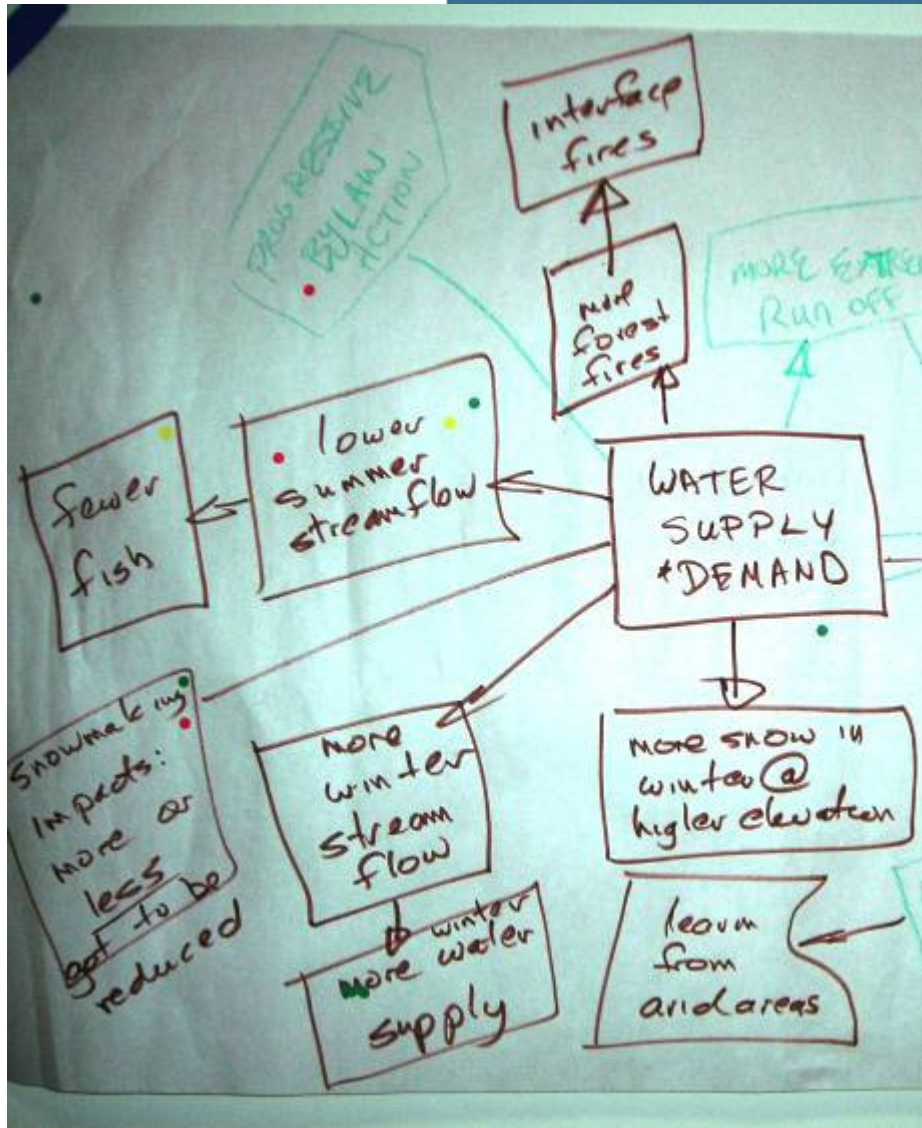
- Agriculture
- Recreation
- Climate refugees
- Others

# Water Availability

## Elkford Impacts and Opportunities



# Impacts Mapping in Kimberley



# Priorities for Investigation: Research, Assessments and Action Planning

## Kimberley

- water and forests
- municipal infrastructure
- tourism

## Elkford

- wildfire
- water availability
- flooding





# Vulnerability and Risk Assessment

<b>Process Step</b>	<b>Summary Description</b>	<b>Purpose</b>
<b>Vulnerability assessment</b>	Identifying the “weak” spots	Figure out which risks can be adapted to more easily, and which will require substantial resources or other changes.
<b>Risk assessment</b>	What to pay attention to first	Figure out the biggest risks requiring action

## Process was important: Included range of expertise in assessment



## Stormwater management in Elkford

### Concern:

- Increasing rain events during winter as temperatures warm

### Some Considerations:

- No existing policy to encourage reduction of runoff on properties
- Will climate change make it better or worse?
- Can we easily undertake adaptive actions?



## Two Examples of Strategies from Elkford

### Flooding

- Identify no-development zones where runoff water may be temporarily stored during a flood event
- Build flood protection infrastructure / dyke systems
- Require developments to use pervious materials in driveways and parking lots, and build roads without curbs and gutters

### Wildfire

- Create defensible space adjacent to existing structures – reduce forest
- Require new developments to have defensible space – example: no construction within 300 metres of the dense forest, and the forest adjacent to new development thinned



## Continued Climate Change Work: Kimberley and Elkford

- Both communities completed their climate change adaptation projects in Summer of 2009.
- Both communities undertook greenhouse gas inventories and reduction assessments completed in Summer/Fall 2009.
- Elkford currently incorporating mitigation and adaptation into the OCP
- Operationally, Elkford has drafted an action list based on policies for strategic 5 year plan
- Kimberley staff in the process of developing priority actions from the report tabled in Fall 2009



## Elkford's Draft OCP

- Aiming for adoption in April 2010
- Unique Guiding Principle
  - Climate Change is Considered in all Decision-Making.
- Example Objectives:
  - Council and citizens identify and act on opportunities to adapt to the impacts of climate change.
  - The requirements of the adaptation strategy are considered for all new development and are implemented on a scaled basis.



## Example policy and operational action

### **Policy:**

- Council shall refer to, and utilize in decision making the climate change projections produced by academic, government and not for profit institutions, including, but not limited to, Pacific Climate Impacts Consortium.

### **Operational Action 2010:**

- Update request for decision reports to include climate change projections



## Example policy and operational action

### **Policy**

- Council shall act on opportunities to adapt to the impacts of climate change. Bids, tenders and contracts for planning and development in the District shall make reference to climate change and utilize as a resource the Climate Change Adaptation Strategy.

### **Operational Action 2010:**

- Update development forms and information to include climate change adaptation requirements



# A Summary of Challenges and Lessons

- Education
- Culture
- Staff turnover
- Learning and sharing
- Commitment, champions, community



# Communities Adapting to CC Initiative

## Contact Information:

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