



## Nova Scotia's Water Sector: Adapting to Climate Change

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## Speakers

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Senior Water Resources Engineer Nova Scotia Department of Environment and Climate Change

John Lam

Manager of Engineering Atlantic First Nations Water Authority





### By the end of this presentation...



... you'll know:

- about the Climate Adaptation Leadership Program
- the main climate change challenges we face in Nova Scotia
- why we are creating a multi-stakeholder strategy to adapt the water sector to climate change
- which organizations are participating in strategy creation and the process they have followed
- the main areas the strategy will cover and the next steps to implementation



The Climate Adaptation<br/>Leadership ProgramClimate change and<br/>waterThe multi-<br/>stakeholder teamsAdaptation strategy<br/>creationNext steps



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The Climate Adaptation Leadership Program (CALP)





Awareness



#### A journey....

learning-by-doing process undertaken by the multi-stakeholder water sector team, building their capacity, skills and knowledge

Action

#### ...and a destination

collaborative creation of a climate change adaptation strategy for the water sector

Sectors and departments currently creating or implementing strategies





Dept. of Communities, Culture, Tourism and Heritage

#### Dept. of Agriculture

Dept. of Natural Resources and Renewables

Dept. of Environment and Climate Change Our focus: climate change adaptation



Climate change adaptation preparing for the current and future impacts of climate change



Climate change mitigation

reducing greenhouse gas emissions or enhancing sinks



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### Climate change projections for NS



- Temperatures continue to rise
- Precipitation patterns are changing
- Storms will be more frequent and more intense
- Sea levels are rising
- Ocean conditions are changing

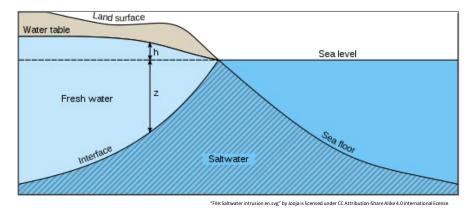






### Climate change and water







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"Sewage treatment plant" by Chesapeake Bay Program is licensed under CC Attribution 2.0 Generic (CC BY 2.0)



"Bridgewater5" D Pittman

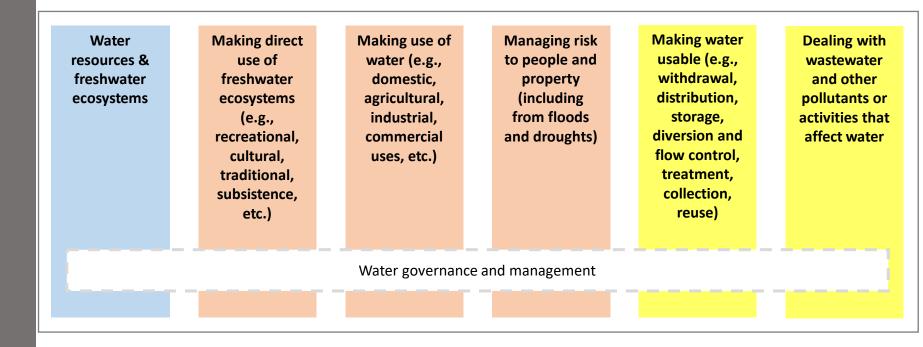


"File: Drinking Water Protection Zone Sign.jpg" by Conservation Keith is licensed under CC Attribution-Share Alike 4.0 International license



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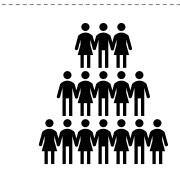
What do we mean when we talk about the 'water sector'?



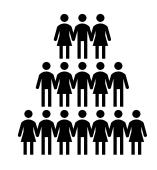


## Water sector team





A sector team leads on the process and delivery



A governance team provides strategic support Organizations currently represented on the sector team





And until recently...



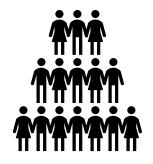




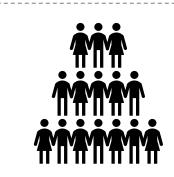
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#### Governance team





A sector team leads on the process and delivery



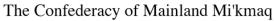
A governance team provides strategic support

Organizations currently represented on the governance team



















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**Fisheries and Oceans** Canada

Pêches et Océans Canada





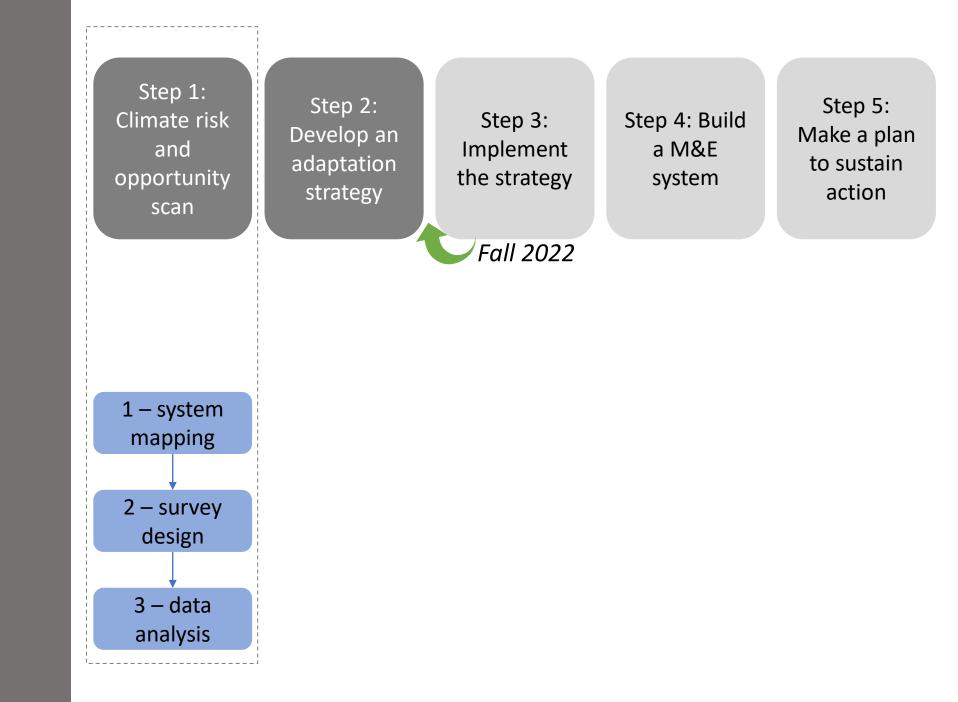
The Climate Adaptation Leadership Program Climate change and water

The multistakeholder teams Adaptation strategy creation

Next steps

## A five-step learning-bydoing process

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The climate change adaptation strategy

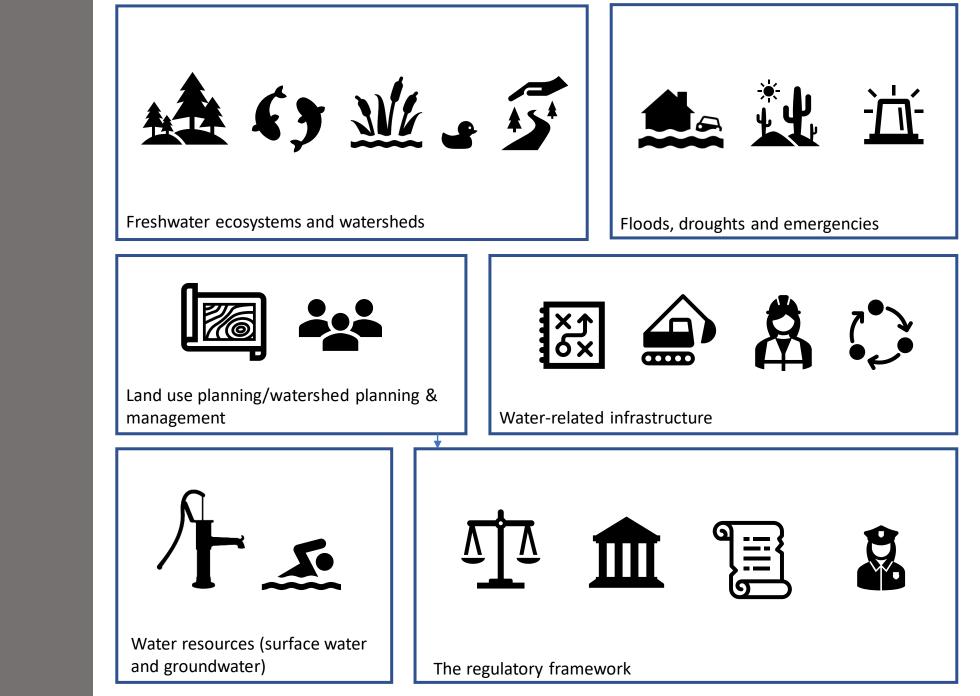


- Strategic direction
- Starting point
- Flexibility on how to get there
- Outcome-oriented





#### Focus areas







The Climate AdaptationClimate change andLeadership Programwater

The multistakeholder teams Adaptation strategy creation

Next steps

Once the strategy has been finalized

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Step 1: Climate risk and opportunity scan	Step 2: Develop an adaptation strategy	Step 3: Implement the strategy	Step 4: Build a M&E system	Step 5: Make a plan to sustain action
		Forming the teams		
		Training the teams		
		Detailed workplans		
		Resourcing		
		l		

# Key take away points



- Climate change is already creating challenges for the Nova Scotia water sector, and will continue to do so
- Adapting to climate change is imperative, and cannot effectively be done by one organization alone
- A multi-stakeholder group from across the Nova Scotia water sector has come together to create a climate change adaptation strategy
- Strategy implementation will involve more people, groups and organizations

Thank you for your attention!

We look forward to further engagement with the CWWA community on climate change adaptation

The 'Otters' team



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Callie Andrews, Mining Association of NS



Jennifer McDonald, ECC



John Lam, Atlantic **First Nations Water** Authority



Graham Fisher, NS Dept. of Municipal

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#### **Questions?**

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