

Adaptation Platform Webinar *July 21 2020*

Supporting Long-term Climate Resilience in Canada through Planned Retreat



Photo Credit: Pete Zuzek

Canada's Climate Change Adaptation Platform Coastal Management Working Group (CMWG)



- **Canada's Climate Change Adaptation Platform is a national forum that brings together key groups in Canada to collaborate on climate change adaptation priorities**
- **CMWG works to advance adaptation and increase resilience to climate change along Canada's coasts**
- **Members consists of representatives from federal, provincial and territorial governments, professional associations, academia, non-government organizations and private sector representatives.**
 - **Co-chaired by Natural Resources Canada and the Government of Prince Edward Island**

- ❑ **CMWG identified retreat as an effective climate change adaptation option**
- ❑ **Need to increase knowledge of barriers to retreat and what actions can be taken to overcome those barriers**
- ❑ **To address this gap, Natural Resources Canada contracted Gevity Consulting to conduct a scan and produce an Analysis Report of Canadian and global good practices**
- ❑ **The report was developed in collaboration with climate change adaptation experts**
- ❑ **The report titled: “Planned Retreat Approaches to Support Building Long-Term Climate Resilience in Canada” will be available fall 2020 on Canada's Climate Change Adaptation Platform webpage, adaptation.nrcan.gc.ca**



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Webinar Presenters

Primary Presenter:
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Support:
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Michael Barnard, Gevity





Supporting Long-term Climate Resilience in Canada Through Planned Retreat

Prepared for Natural Resources Canada Presented by Dr. Brent Doberstein



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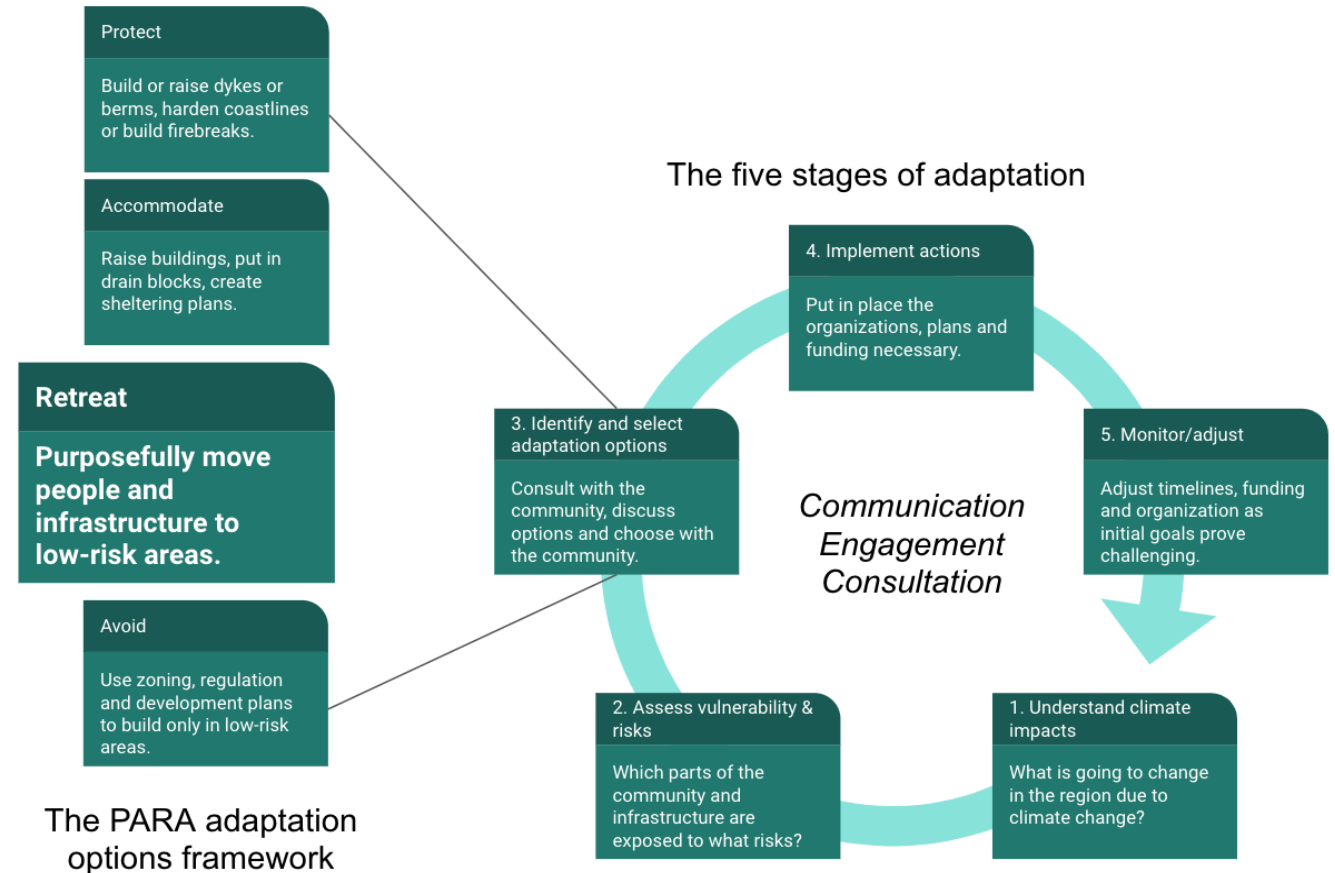


The views expressed herein are those of the Gevity project team and do not necessarily reflect those of Natural Resources Canada or the Government of Canada

Introduction



Planned retreat is the purposeful movement of people, infrastructure or land uses from areas at high risk of flooding, slope destabilization, storm surge, sea level rise and other risks made worse by climate change to areas that are at lower risk or that are more resilient.



Webinar Overview



- Approach and Current State
- Case Studies
 - Surrey, BC
 - Lake Erie, ON
 - Gatineau, PQ
- Good Practices
 - Communication
 - Governance
 - Process
- Discussion

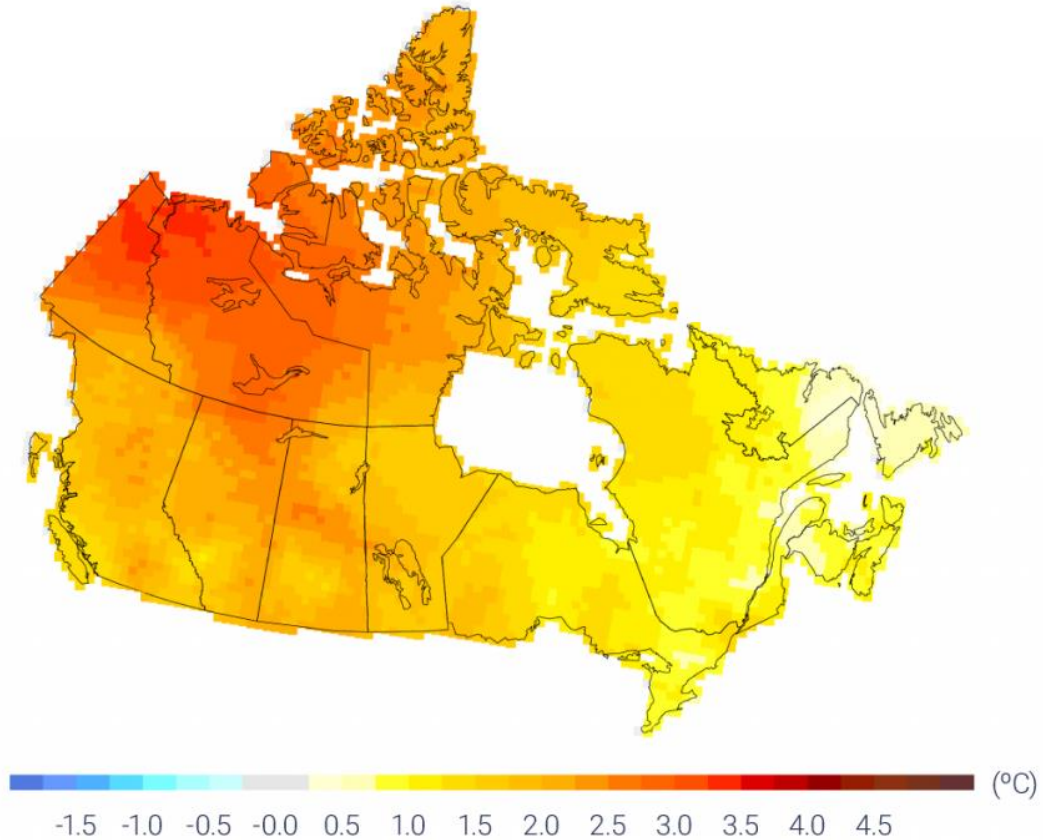
APPROACH

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Current State of Planned Retreat in Canada



- Reactive
- Non-standardized approaches
- Governments not aligned
- Long timeframes
- Terminology challenges
- Good practices scattered



- Increased citizen awareness and support
- Often inequitable
- Driven by economics
- Second disaster from bureaucracy
- Health challenges

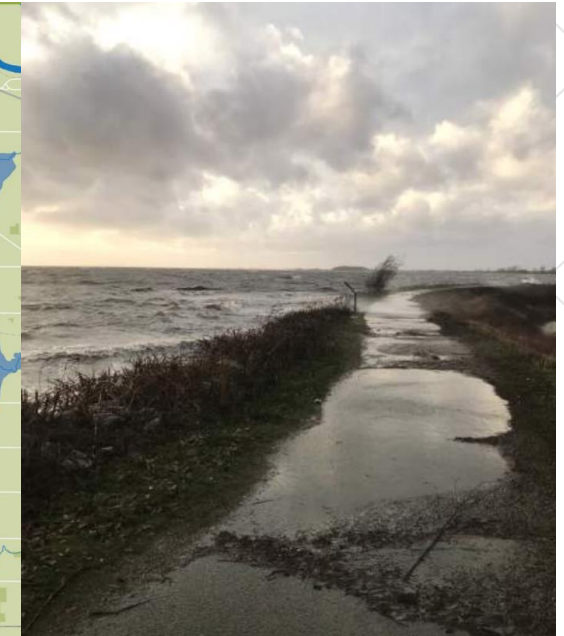
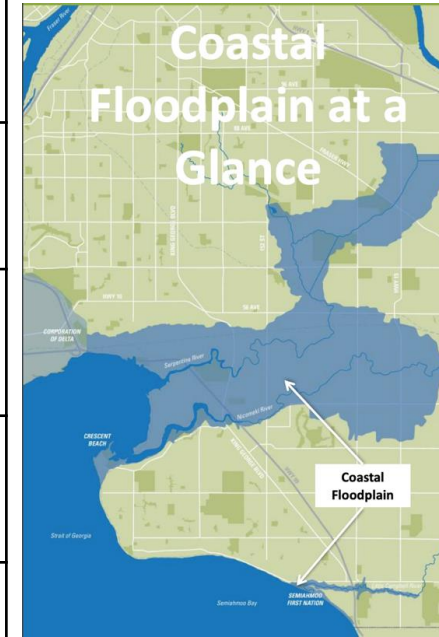
CASE STUDIES

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Surrey, BC



Geography	Coastal British Columbia. 20% of city in floodplain. 3 main risk zones
Physical triggers	Recurrent coastal flooding/erosion enhanced by future sea-level rise
Timelines	CFAS 2016-2019 Implementation 2020 → 2100
Degree of choice	High. Survey of all city residents in consultative process.
Reactive vs Proactive	Proactive
Assets involved	Households, neighbourhoods, infrastructure
Community types	English, Semiahmoo First Nation

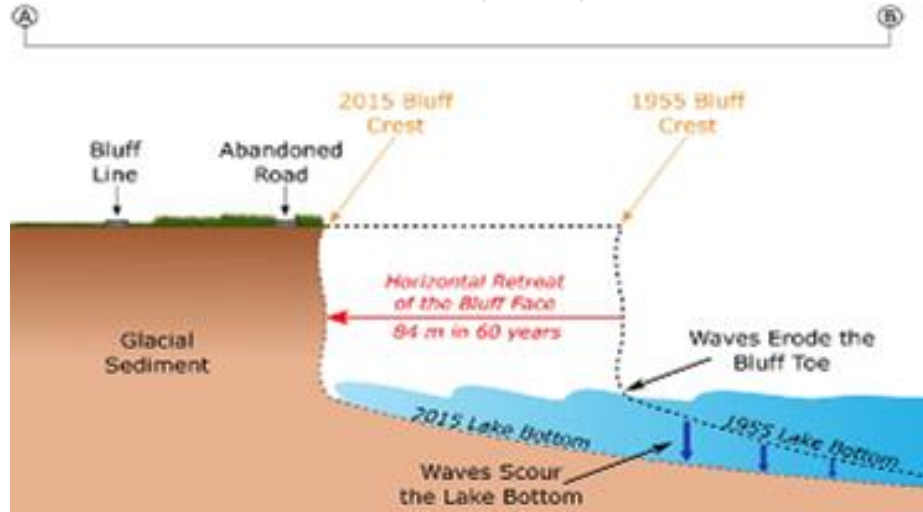


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Lake Erie, ON



Geography	Interior lakes. 70 km Rondeau Provincial Park to Point Pelee National Park
Physical triggers	Recurrent flooding and erosion
Timelines	High water since 2013. Zuzek/ Mortsch Report 2020. Implementation tbd.
Degree of choice	Low ← → High (multiple sites)
Reactive vs Proactive	Reactive & Proactive (multiple sites)
Assets involved	> 400 buildings, neighbourhoods, roads, farmland
Community types	Predominantly English & Caldwell First Nations



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Gatineau, PQ

Geography	Interior rivers and lakes
Physical triggers	Recurrent riverine flooding
Timelines	Many flood instances. 2017 & 2019 major floods. PQ buyouts 2017 → 2019
Degree of choice	Low → medium. Banned reconstruction (1:20yr floodplain) + Voluntary buyouts.
Reactive vs Proactive	Reactive
Assets involved	1800 homes, neighbourhoods
Community types	French



Gatineau, PQ



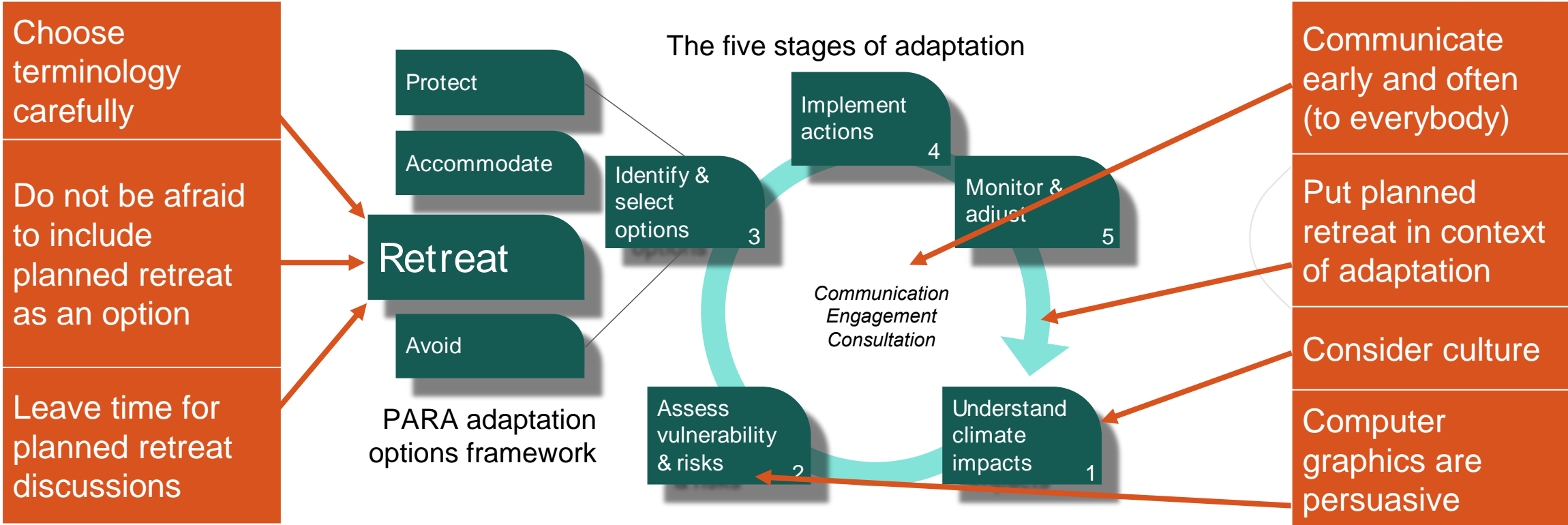
Individual homes → Community Plan



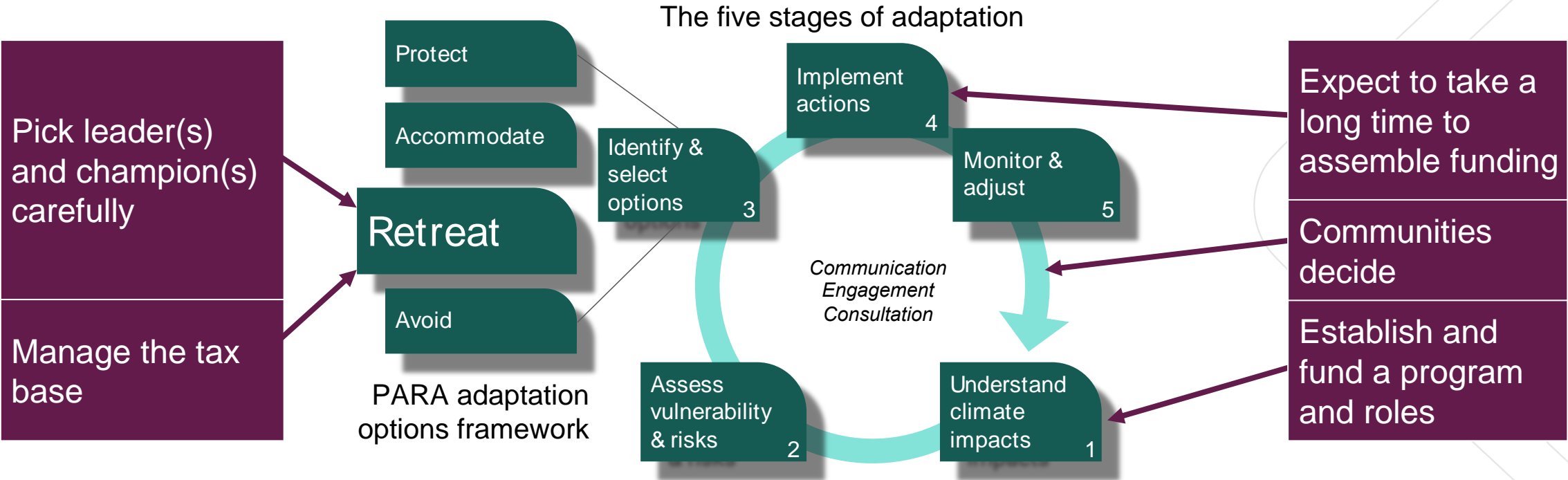
Good Practices

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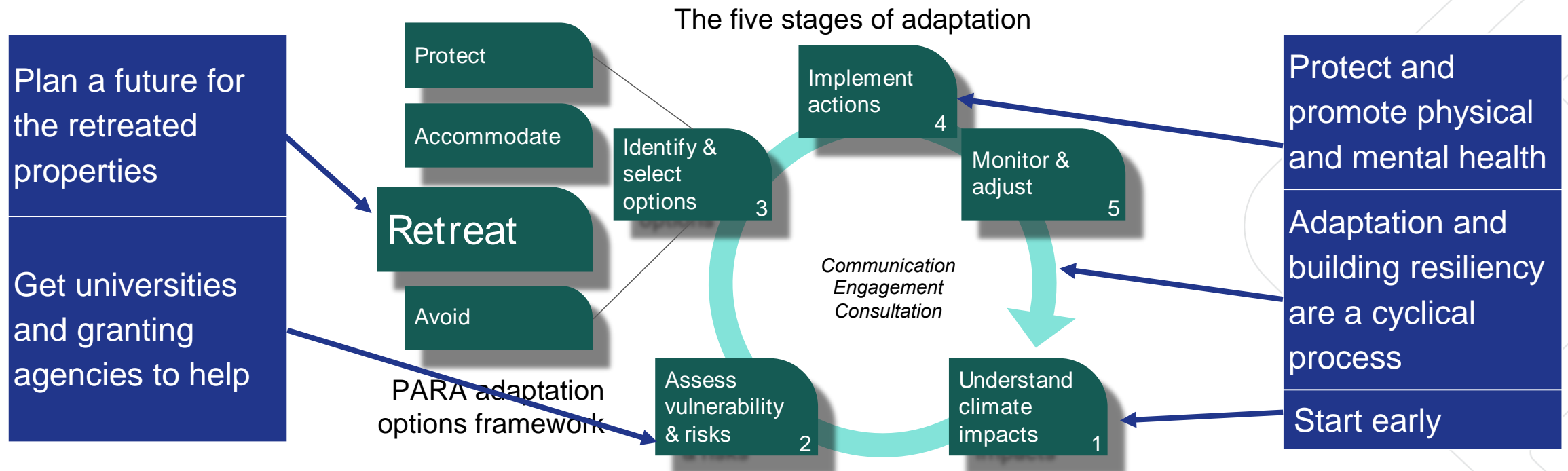
Good Practices: Communication



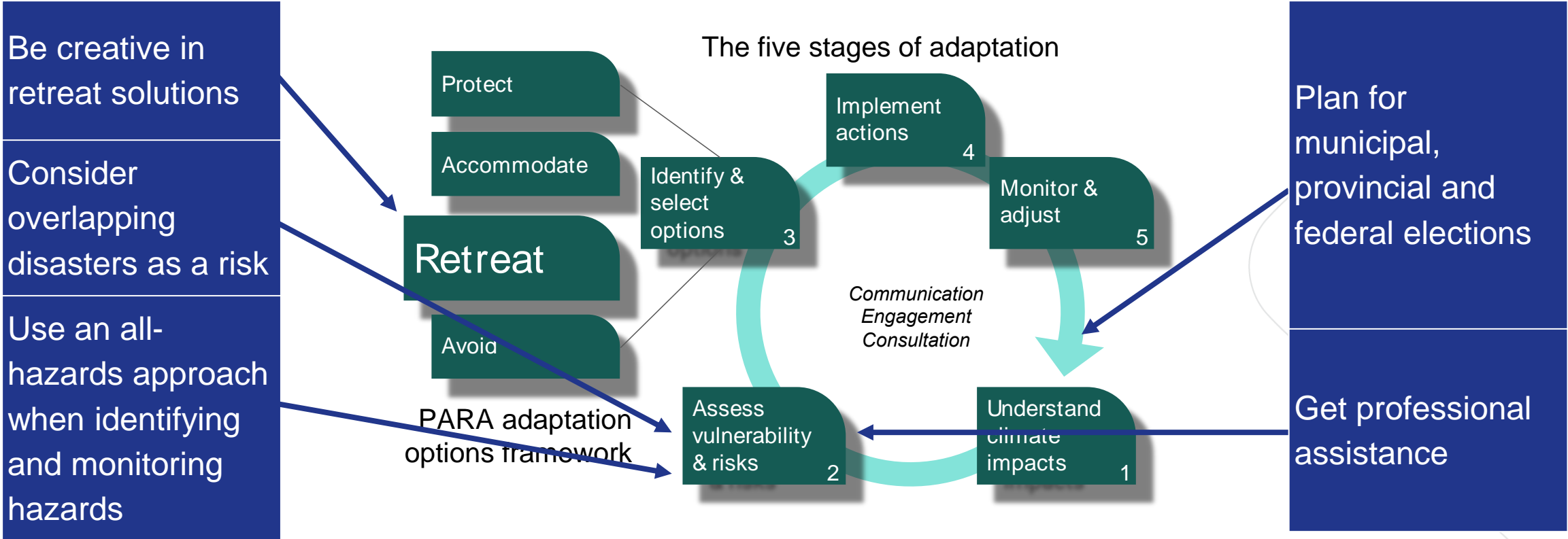
Good Practices: Governance



Good Practices: Process (part 1)



Good Practices: Process (part 2)





Discussion



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Thank you!

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Access Canada's Climate Change Adaptation Platform web pages for information on Platform, Working Groups and Products at,

adaptation.nrcan.gc.ca

adaptation.nrcan.gc.ca

For questions on the Adaptation Platform, Working Groups or Products, please email:

nrcan.adaptation.nrcan@Canada.ca

For information on upcoming and past recorded webinars, please visit Canada's Climate Change Adaptation Platform Webinars page at:

<https://climateriskinstitute.ca/platform-webinars/>