

DAWSON CLIMATE CHANGE ADAPTATION PLAN GAP ANALYSIS

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Yukon University

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Who are we?

Sruthee Govindaraj is an Environmental Scientist in Whitehorse focusing on contaminated sites, remediation, and human health. Born in India, Sruthee has lived in the Yukon since 2009 and has a BSc from University of Ottawa. She is part of the Yukon Youth Panel for Climate Change bringing youth voice on climate action into the Government of Yukon. She resides in Whitehorse on the traditional territories of Kwanlin Dün First Nation and Ta'an Kwäch'än Council.



Kirsten Scott is a designated Environmental Professional, with a dozen years' experience in water policy, mineral development, environmental assessment, and First Nation land management. Previously, Kirsten worked in agricultural and equestrian industries in eastern Canada and Australia. She has a BSc in Environmental Science. Kirsten has lived in the Yukon since 2012, the last 5 years in West Dawson on the traditional territory of Tr'ondëk Hwëch'in.

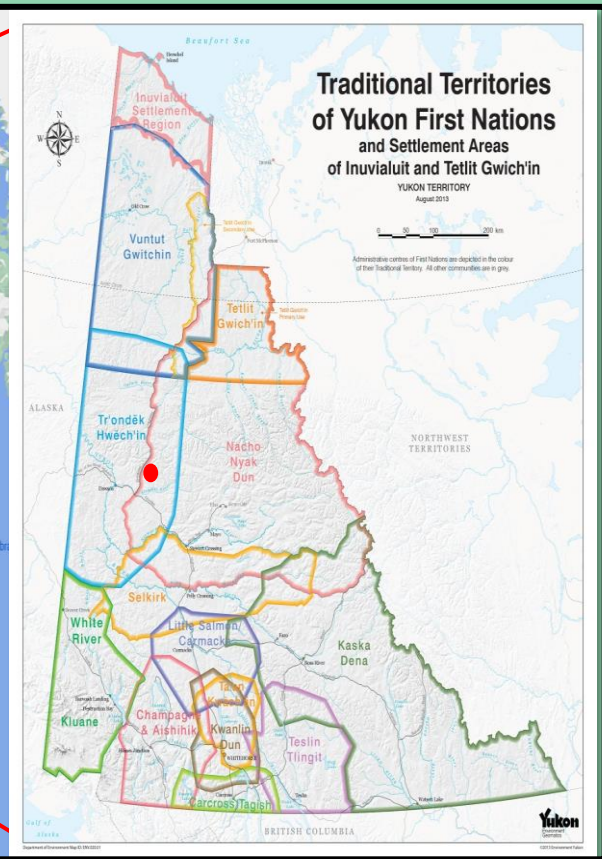
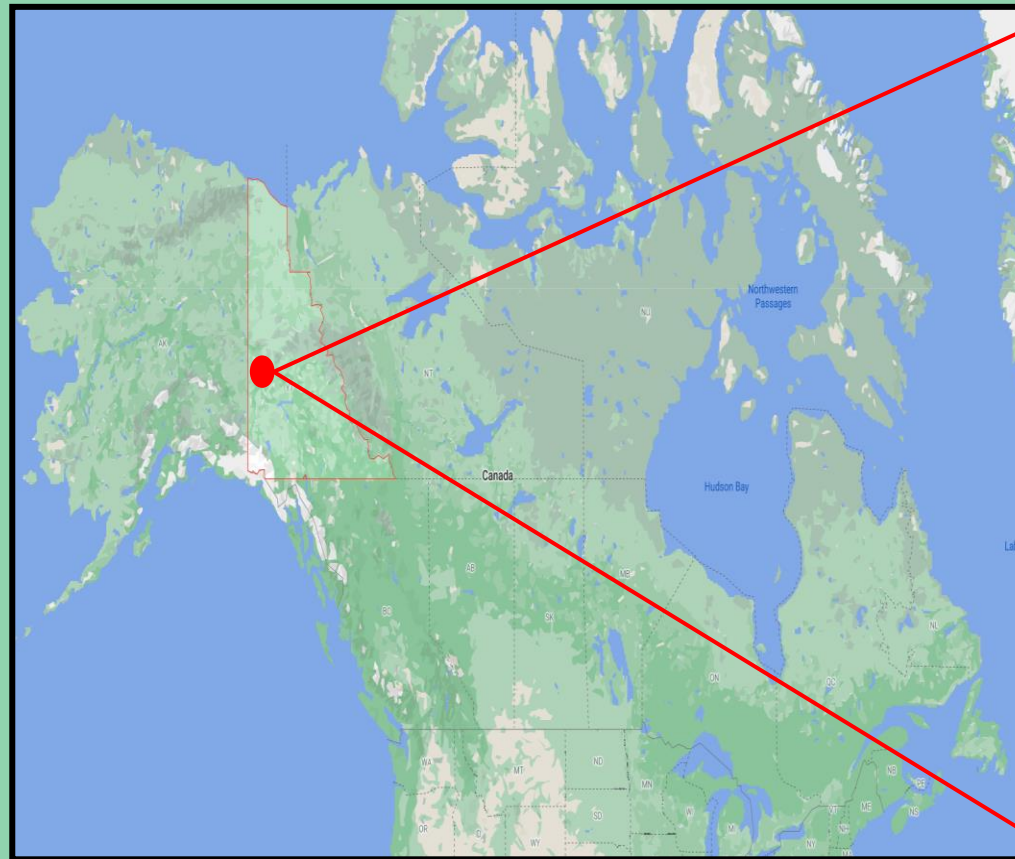


Eoin Sheridan is a Project Innovation Officer at Yukon University's Innovation & Entrepreneurship department. Eoin has been living in Yukon since 2014, working for YukonU and interfacing with private business. He has a B Eng (Mechatronics) and a MSc (Environmental Sustainability). Eoin has a decade of experience in automation, manufacturing, and industrial process improvement. He resides in Whitehorse on the traditional territories of Kwanlin Dün First Nation and Ta'an Kwäch'än Council.



Where we are?

- We are Yukoners!
 - Yukon Territory borders Alaska to the west & the Arctic ocean to the north
- + North of 60°



Dawson City (●)

- + Population: 2,297 in 2021
- + 2nd largest city in Yukon
- + Traditional territory of Tr'ondëk Hwëch'in
- + Heart of the Klondike Gold Rush



Agenda

 Dawson City Climate Adaptation Plan

 Our Topic

 Methodology

 Findings

 Recommendations

 Question Period



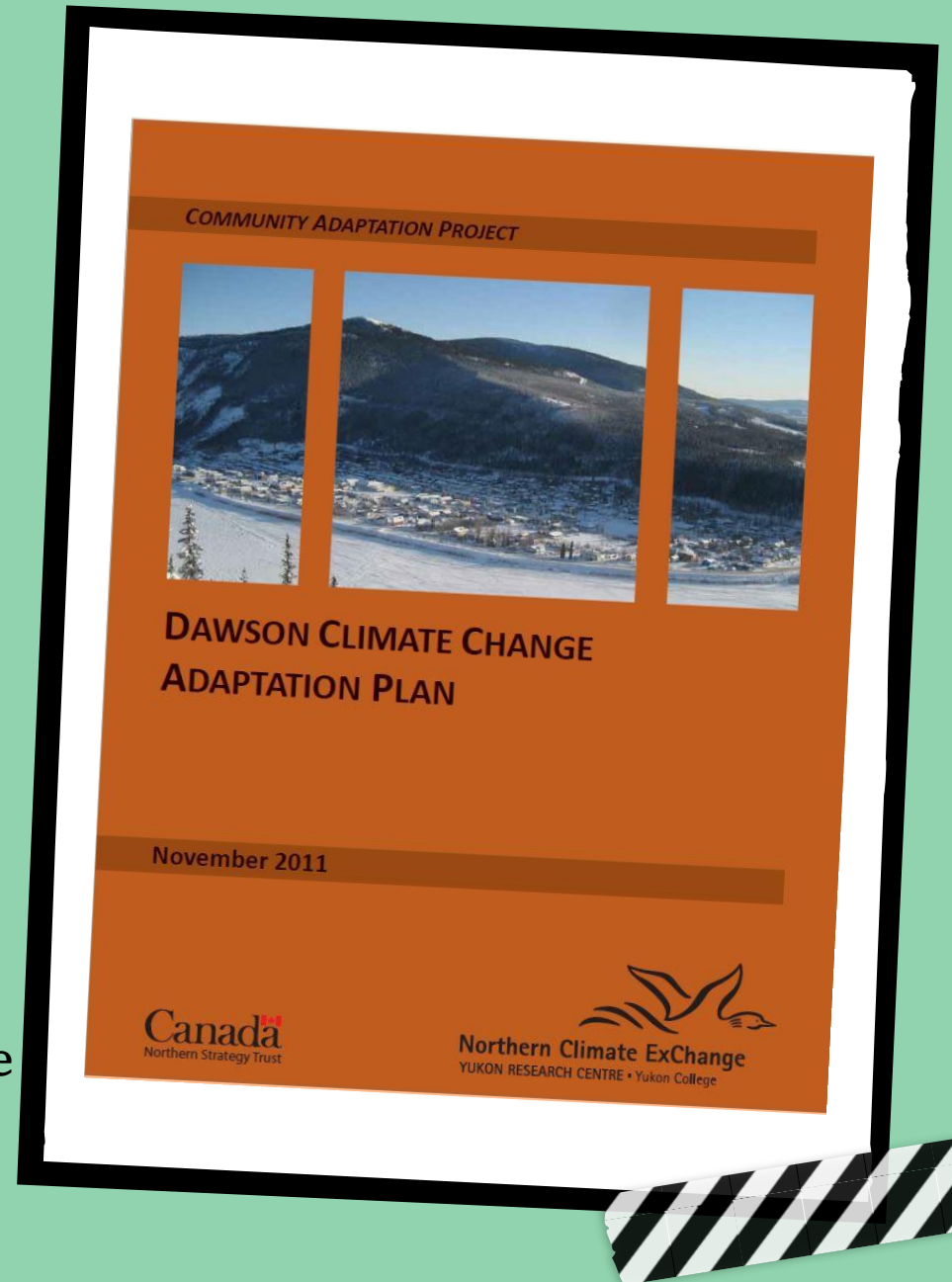
Dawson Climate Change Adaptation Plan

- Collaborative community process
- Sub-regional scale



Development:

- **Step 1:** Community vulnerability scenario
- **Step 2:** Climate change consequences evaluated against 3 components of resilience:
 - ① community's ability to respond
 - ② severity &
 - ③ likelihood
- Recommended adaptation proposed for each consequence
- Relative priority ranking: high, med, low



Our Topic



Photo: K. Scott, 2021

1. Current state of all recommended adaptations.
2. Considering end goal of DCCAP to build community resilience & reduce greenhouse gas (GHG) emissions, investigate:
 - a) Qualitative information to identify & understand land-use adaptation gaps; and
 - b) Trackable & measurable indicators to recommended land-use adaptation actions.
3. Evaluate existing gaps while examining new actions or projects, or those identified in DCCAP still requiring implementation, identifying:
 - a) Contribution to building community resilience; and
 - b) Plans of action to close identified gaps.



Methodology

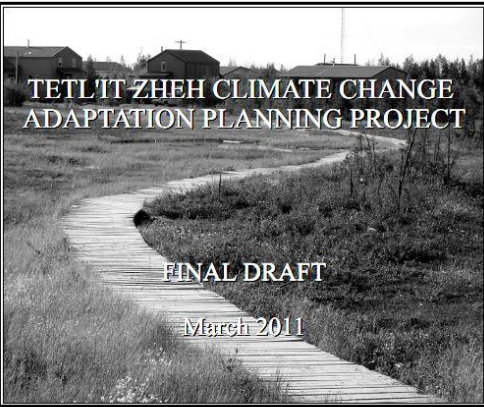
Gap Analysis

- 1: Review status of all 38 high-priority recommendations
- 2: Review status of 25 land use recommendations
 - + Consider indicators & qualitative information to understand implementation gaps for recommended land use adaptations, especially as related to community resilience & reducing GHG emissions.

Research, Literature Review, Jurisdictional Scan

- Discussions with local experts: has action occurred?
- Review peer-reviewed & grey literature: on northern climate change adaptation & land use planning
- Jurisdictional scan: adaptation plans for northern Canadian, circumpolar & island jurisdictions, communities pop. <10K
- Apply results to create recommendations & plans of action to address gaps





CHANGE ADAPTATI
ACTION PLAN
E RIVER, NUNAVUT



Northeast Climate Risk Network

Vuln
Final S
North

Jurisdictional Scan

Northern Climate ExChange
Independent information, shared understanding, action on climate change

COMMUNITY ADAPTATION PROJECT

ATLIN CLIMATE CHANGE ADAPTATION PLAN

MARCH, 2011

Written by: John Lewis, MCIP, M.E.Des.
Kate Miller, M.Sc., MCIP, LEED AP

MAYO REGION CLIMATE CHANGE ADAPTATION PLAN

April 2012

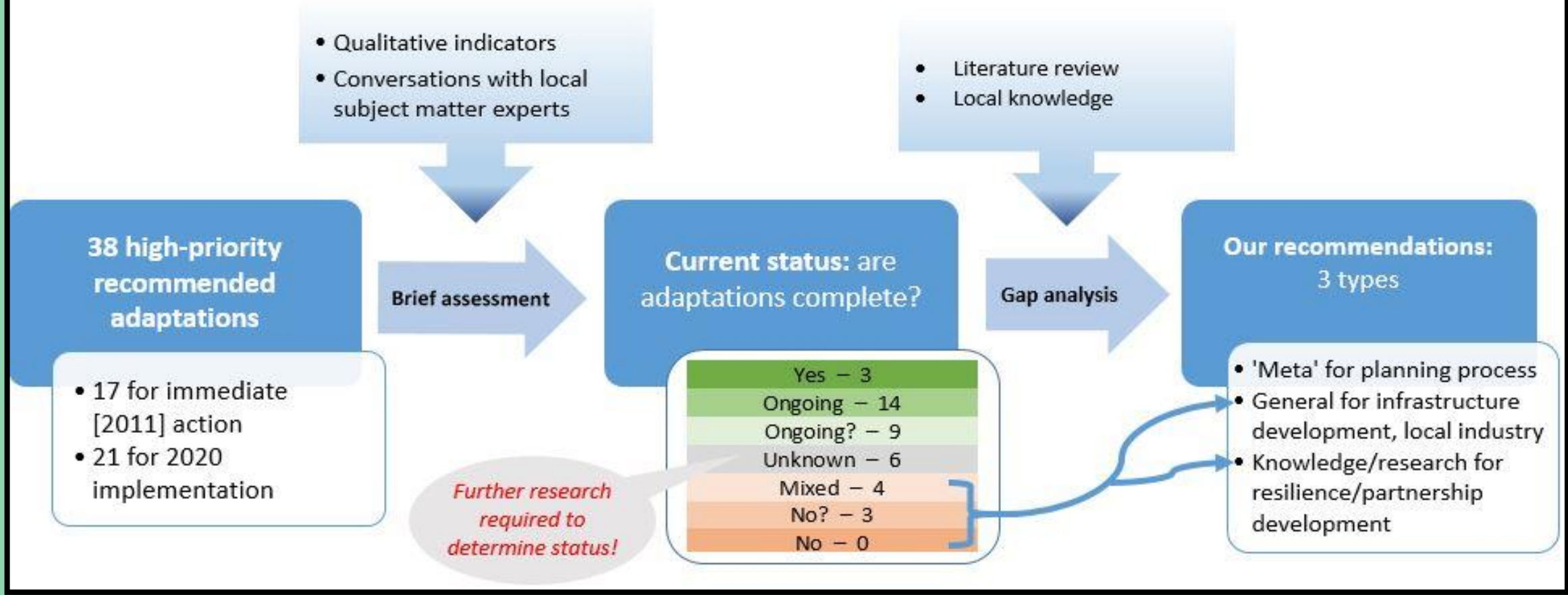
COMMUNITY ADAPTATION PROJECT

WHITEHORSE CLIMATE CHANGE ADAPTATION PLAN

June 2011

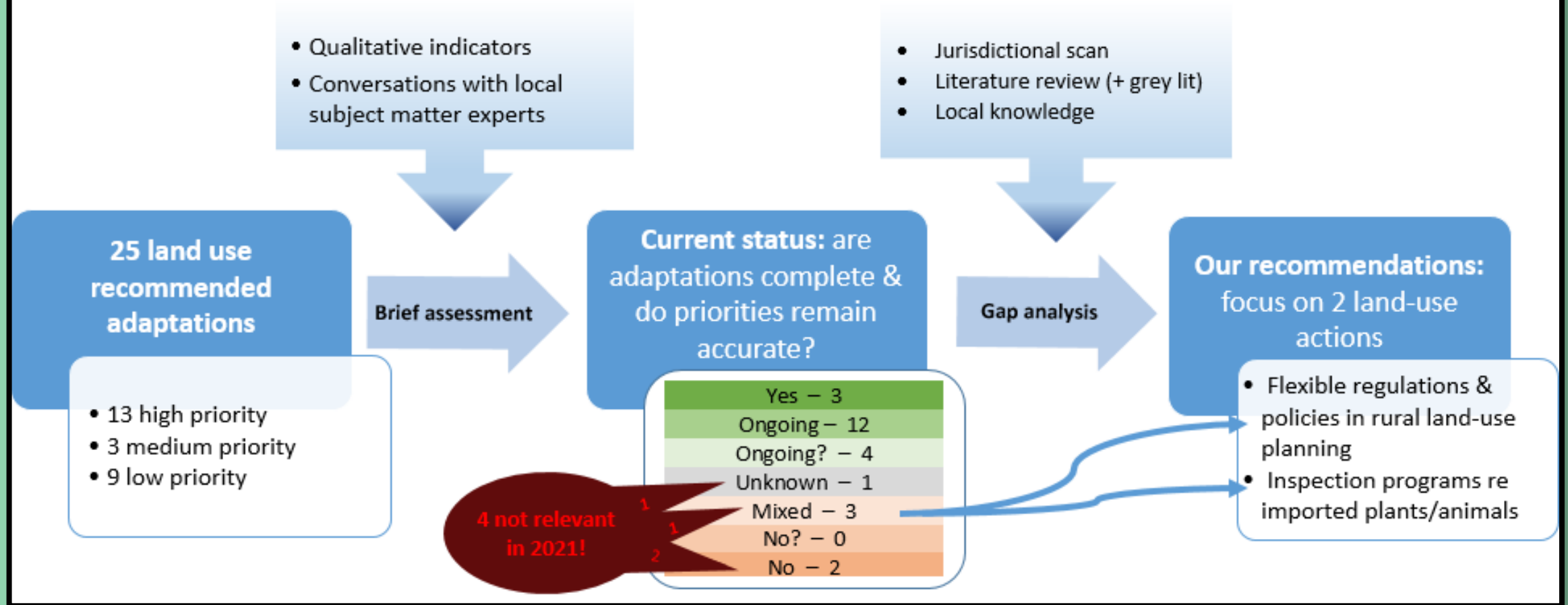
Findings

1. Current status of 38 high-priority recommendations: process & outcomes

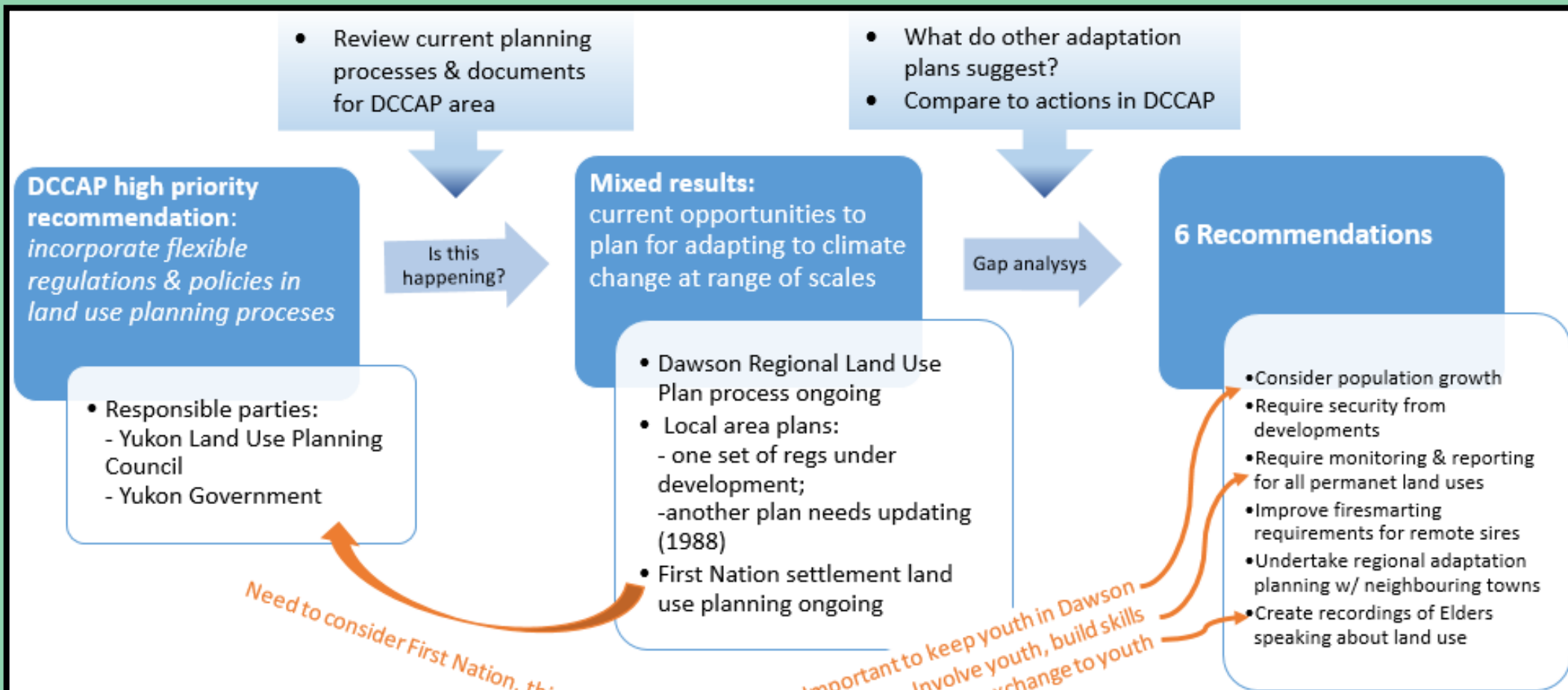


Findings

2. Current status of 25 land-use recommendations: process & outcomes



Findings: example of flexible land use regulations



- Responsible parties:
 - Yukon Land Use Planning Council
 - Yukon Government

- Dawson Regional Land Use Plan process ongoing
- Local area plans:
 - one set of regs under development;
 - another plan needs updating (1988)
- First Nation settlement land use planning ongoing

6 Recommendations

- Consider population growth
- Require security from developments
- Require monitoring & reporting for all permanent land uses
- Improve fire smarting requirements for remote sites
- Undertake regional adaptation planning w/ neighbouring towns
- Create recordings of Elders speaking about land use

Need to consider First Nation, this is missing

Important to keep youth in Dawson, Involve youth, build skills, Knowledge exchange to youth

- This adaptation is relevant to:
- Implementation of **2019 Peel Watershed Regional Land Use Plan**
 - Continuation of **Dawson Regional Land Use Plan** process
 - Ongoing regulation development for **2013 West Dawson Sunnydale Local Area Plan**
 - Revision of **1988 Klondike Valley District Land Use Plan**
 - Development of **First Nation settlement land**
 - Consideration of cumulative effects in environmental & socio-economic **impact assessment**



Recommendations

All Adaptations

- 'Meta:' to guide future planning or adaptations
- General: applicable to local industries & developments
- Research & knowledge: to understand baselines & build resilience from there

Land Use Adaptations

- Consider climate change in all levels of land use planning
- Consider population growth
- Consider shifting cliomes

Plan of Action

- Parties develop a vision for a well-adapted community
- Detailed review: a new S.M.A.R.T. plan or focus on sector adaptations?
- Keep climate change adapation at forefront of political agenda
- Share information & develop relationships with similar or nearby communities



Thank you!

Questions?
Comments?
Concerns?

Contact us at:

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