



Stop messing with my assets

A Full Circle View of Asset Management

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Workshop Outline

Who are we?

What is going on?

How are communities across Canada advancing their asset management planning?

How is this different to what you are currently doing?

Defining a broader range of assets.

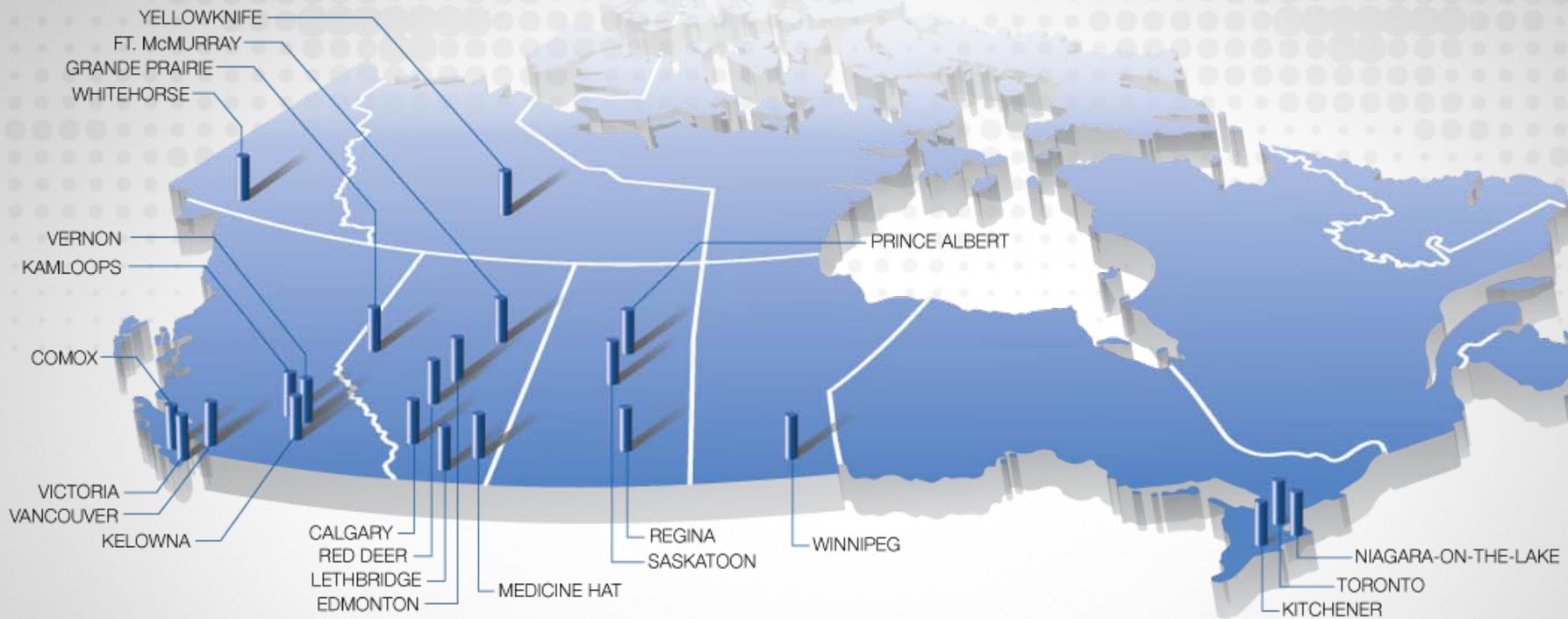
Including infrastructure, natural assets and other assets your community values?

Reflecting a changing world

How does the AMP reflect your changing world and create a more resilient community?

What does this all mean?

Who are we . . . ?



Founded in the mid 1940's, Associated has around 1,000 staff in 22 offices across the country. Our head office is in Edmonton, Alberta.

What do we do?

- Design and Build - water, infrastructure, transportation buildings, energy
- **Asset Management**
 - Asset management plans / master plans / . . .
 - Assessments & studies – risk, service, condition, vulnerability, resilience, climate change
 - Frameworks – service, risk, business process, . . .
- Environmental Planning and Assessment (permitting, bio-engineering)
- **Operations & Maintenance Support**



First Nations Clients

- We have been working with First Nations communities across Canada for over 60 years.
- We have worked with over 115 First Nations/Metis/Inuit communities across Canada.
- We recognize the importance of the forming lasting relationships with our First Nations clients and know the key to success is collaboration.

What is going on?

How are communities across Canada advancing their asset management planning?



The local, national and international context

WE CANNOT AFFORD TO KEEP DOING WHAT WE HAVE ALWAYS DONE.



Aging
Infrastructure



Community
Growth



Changing Climate
& Community
Resilience



Service &
Affordability

WE LIVE IN A VERY COMPLEX WORLD & FACE MANY CHALLENGES

Municipal response . . .



2000

**DATA/GIS/
INVENTORY**

2005

INVENTORY

CONDITION ASSESSMENT

STRATEGY & PLANS

CAPABILITY ASSESSMENTS

FRAMEWORK DEVELOPMENT – RISK & LOS

PSAB 3150 REQUIREMENT (2009)

AMBC FRAMEWORK (2011)

2010

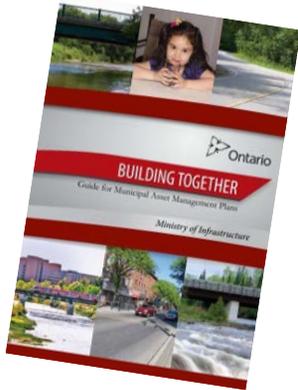
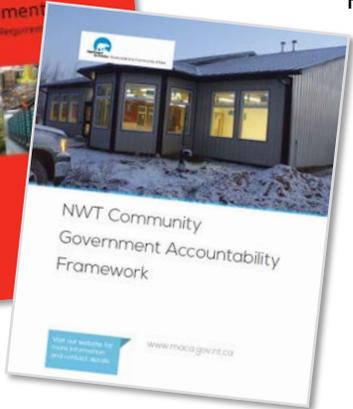
**CONDITION &
PLANNING**

2015

**BUSINESS
PROCESS**

2020

**DATA ANALYTICS
MAINTENANCE MANAGEMENT
SPEND & SERVICE OPTIMISATION**

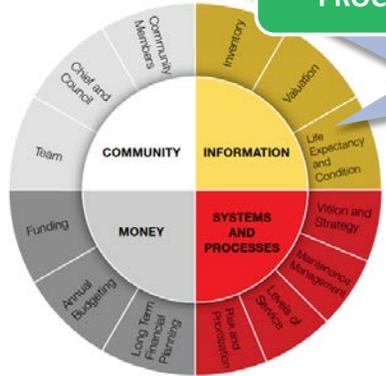
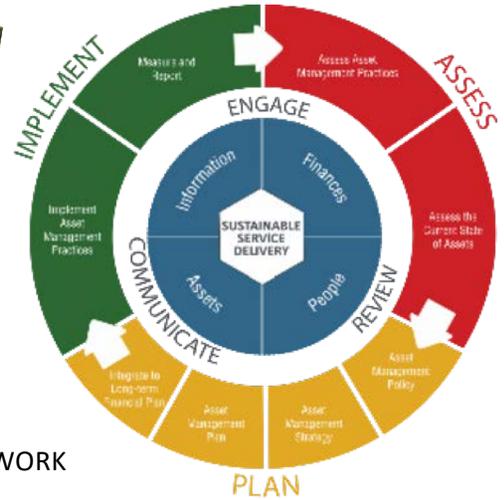


ONTARIO BUILDING TOGETHER (2014)

NWT ACCOUNTABILITY FRAMEWORK

ISO 55000 (2014)

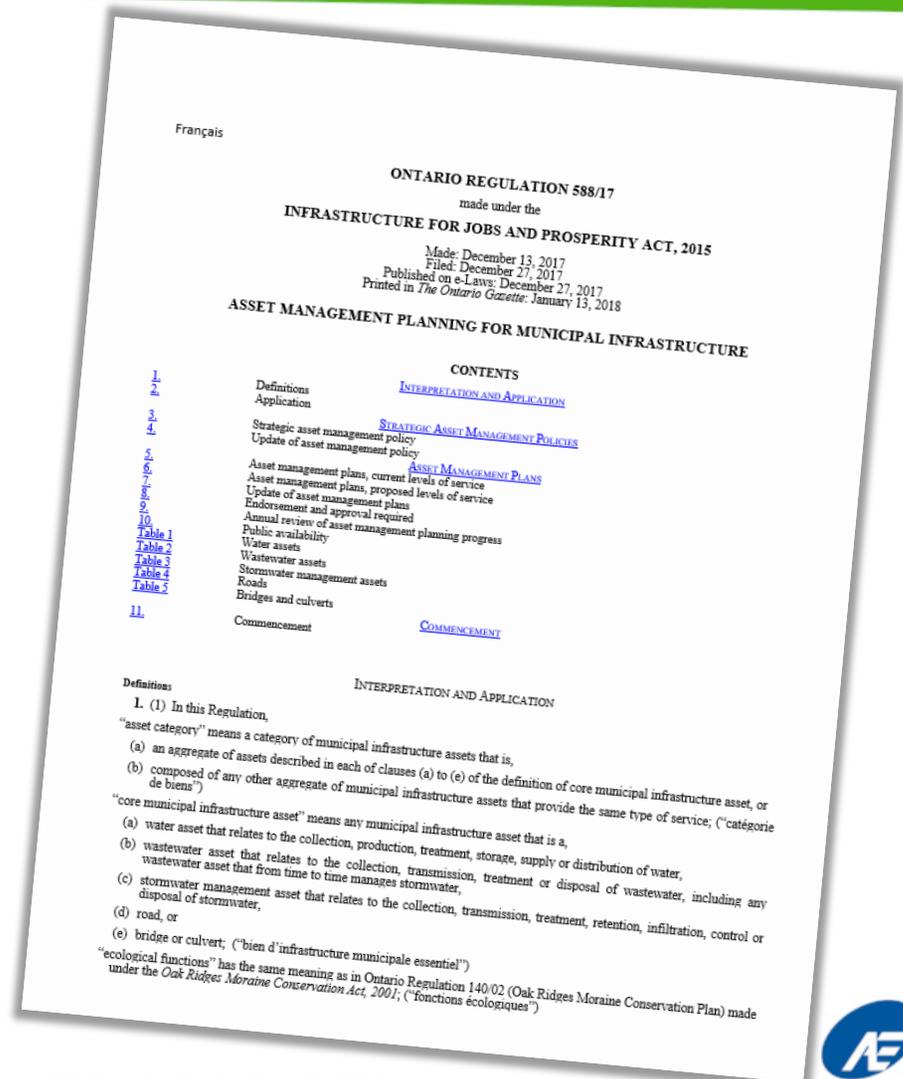
O-Reg 588/17



O.Reg in Ontario

Requirements:

- Strategic AM Policy
- AM planning alignment with financial plans
- AM Plans – Core infra (2021) / other infra (2023)
- Publicly available
- Levels of service and risk



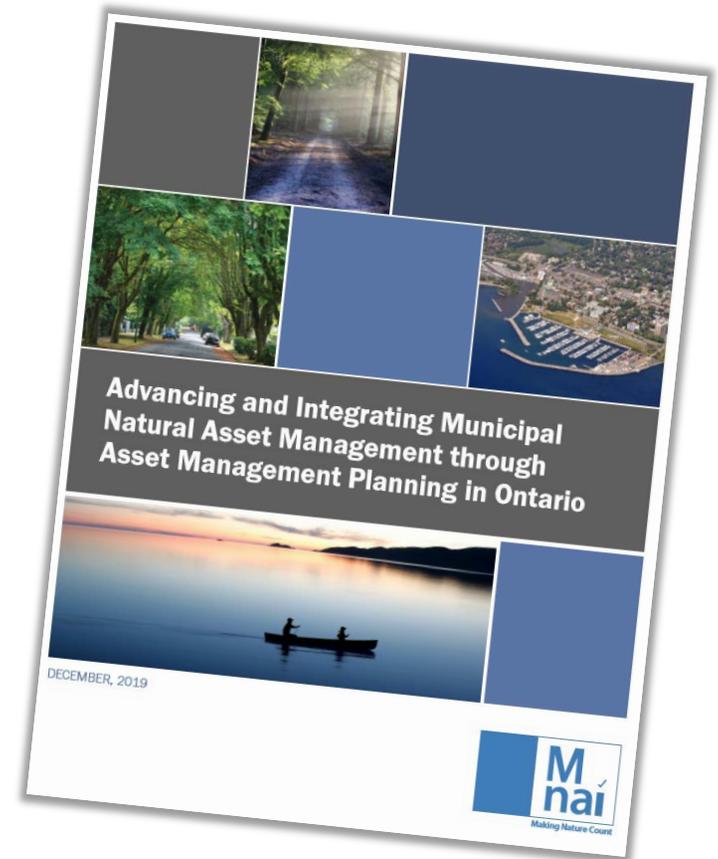
Framework for Sustainable Service Delivery



- It's about **Service Delivery**
- It is a long-term game – **Sustainability**
- Links to **long-term financial planning**
- **Whole of organization**

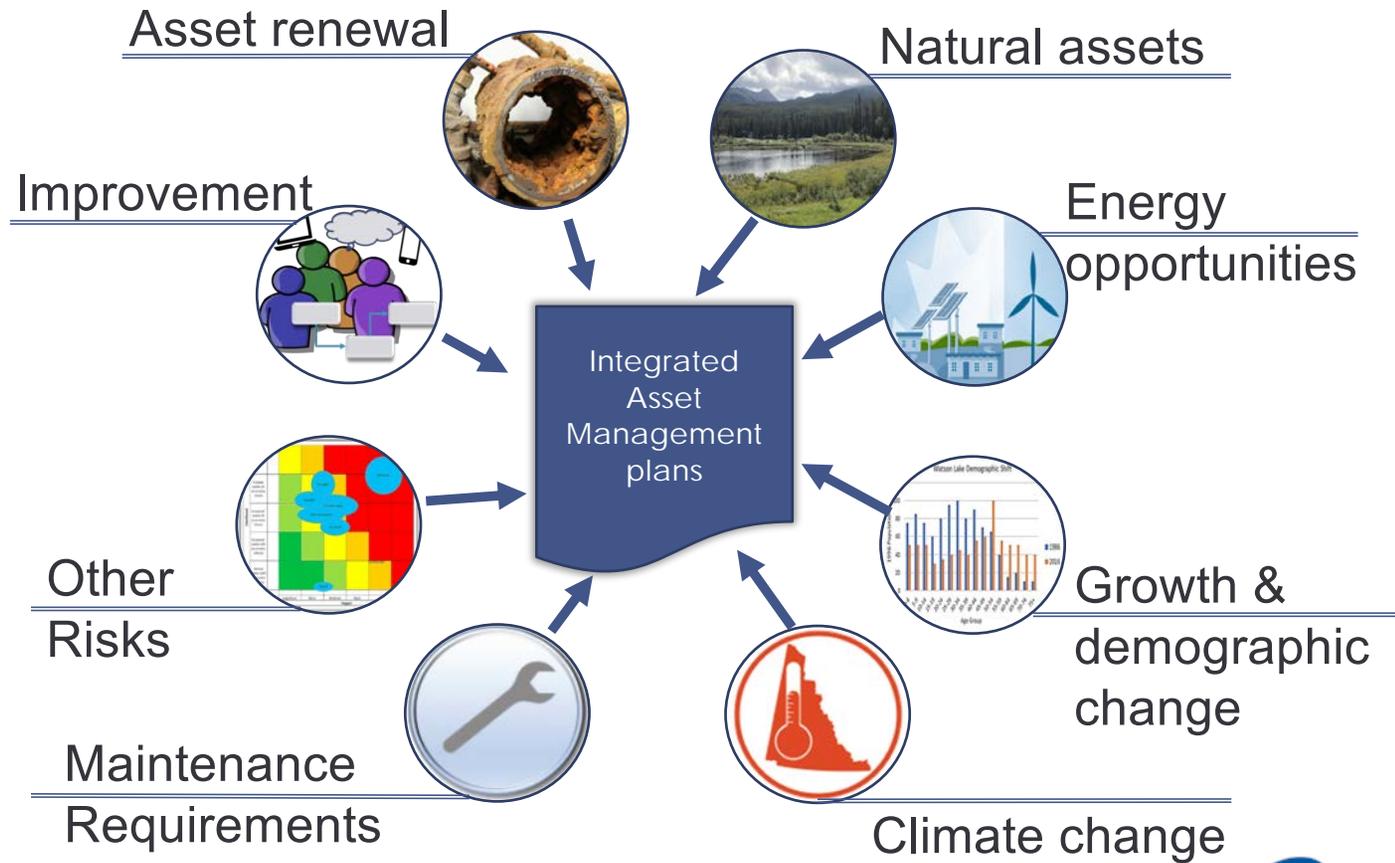
Natural Assets

- **PSAB** recognizes built assets only
- Intuitively we recognize **natural assets are important**
- Natural assets **support** important **municipal services**
- MNAI developed wealth of material to support **systematic consideration of natural assets**



Integrated Asset Management Plans

- Introduction
- State of Assets
- Objectives
- Strategies
- Financial
- Improvement



Asset Management Tool Kits

- International, national, provincial/territorial tool kits exist
- Some municipalities develop their **own toolkits**
- They provide guidance on **language, process, approach, and tools**



Summary of Key Features



Service

It is not about the assets!
It is about the services provided



Natural Assets

Using and safeguarding
our environment



Organization
Wide

This is a team activity



Lifecycle
Management

Creation, operation &
maintenance, renewal, disposal



Alignment

Driven by Identity, Vision,
Policy and Plans

A photograph of a residential street. On the left, there are several houses, including a prominent two-story wooden house and a white house. A dark SUV is parked in front of the wooden house. The street is paved and leads into the distance. On the right, there are large green trees and a wooden fence. A person is walking on the right side of the street. A green banner is overlaid on the bottom half of the image, containing white text.

How is this different to what you are currently doing?

How is the asset management planning different to what communities are already doing?

In groups on your table . . .

- a. What parts of asset management you currently doing?
- b. What parts are you not doing?
- c. What are the key differences?



On your table,
write some
notes on the
flipchart paper





Defining a broader range of assets

Infrastructure, natural assets and other assets your community values?

Defining a broader range of assets . . .

Something that has potential or actual value to an organization . . .



- Fleet**
 - Vehicles (53)
- Facilities**
 - Building Types (112)
 - Facility Buildings (112)
 - Facilities Equipment (54)
 - Furnishings (18)
 - Facility Assessments (8)
- Equipment**
 - Equipment by Owner & Condition (54)
 - Quick Lookup
- Water, Sewer, Storm**
 - Sewer Pipes (4)
 - Water Structures (2)
 - Storm Storage (2)
 - Storm Mains (2)
- Roads**
 - Roads (10)
 - Bridges (2)
- Playgrounds**
 - Playgrounds (12)



Building ID	Building Name	Building Type	Area (S.F.)	Year Constructed
10-01	Public Works Building	Administration	543	1970
10-01	Morris William Mem. Pre-	School	213	1901
	Fire Hall	Fire Hall	112	1995
	Pumphouse	Water Treatment	12	1995
	Community School	School	1361	



What are assets?

If assets are *something that have potential or actual value to an organisation . . .*



What assets do you recognize in your community?

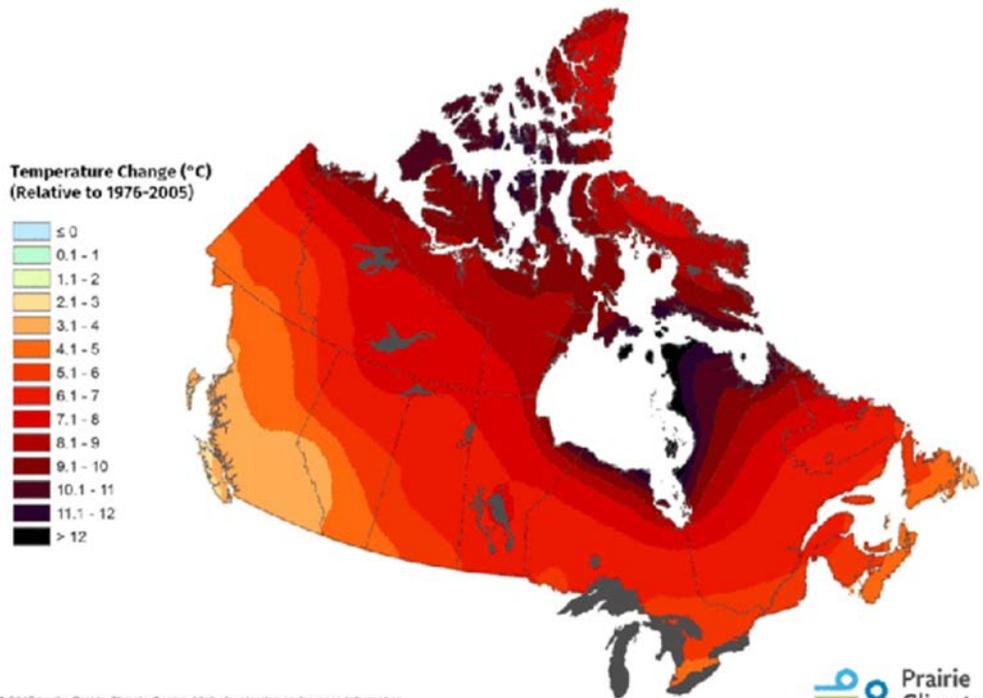
On your table, write some notes on the flipchart paper



How does the AMP reflect a changing world and create a more resilient community?

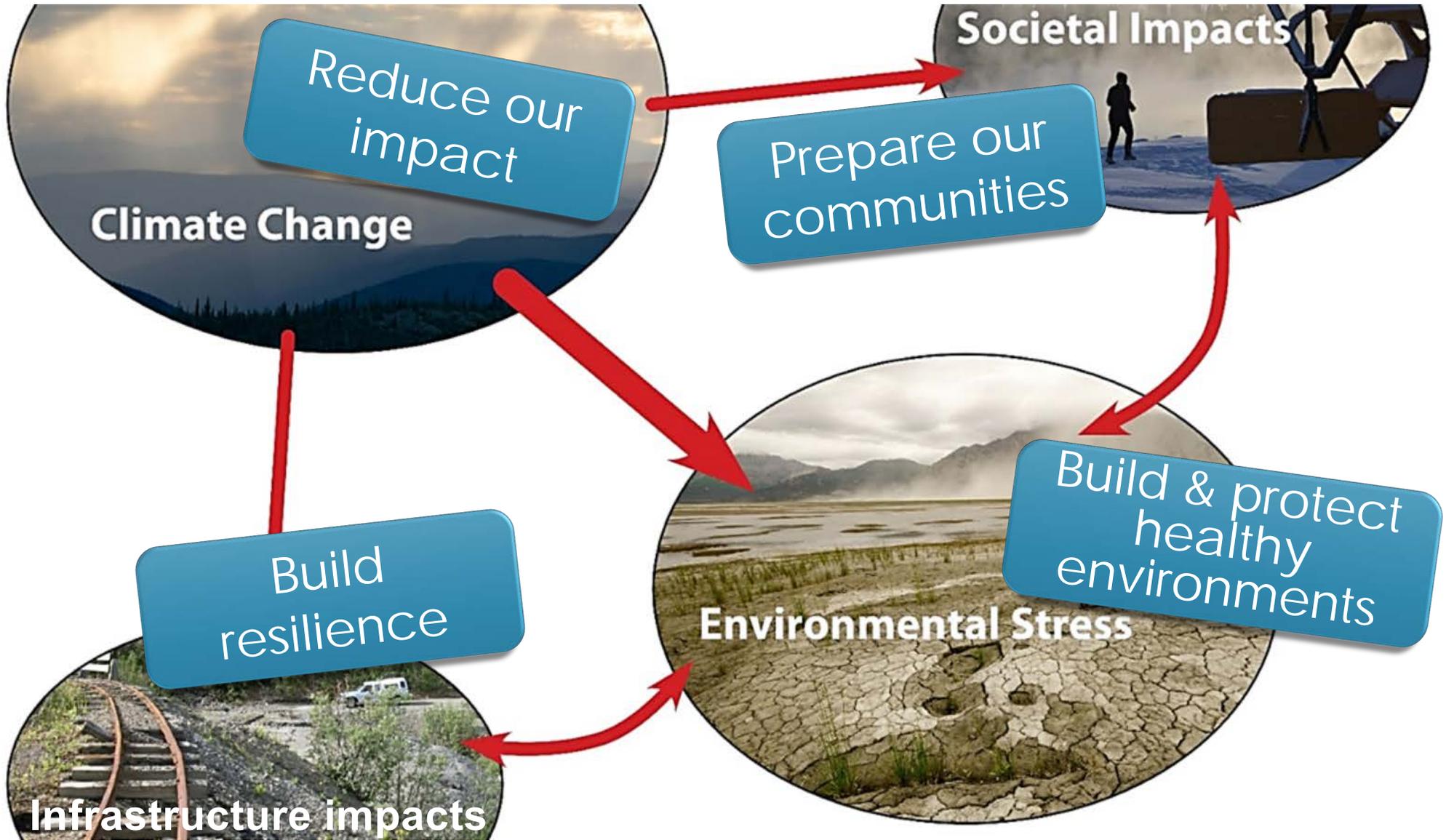
What climate change looks like in the coming years

2051-2080 Projected Change in Mean Temperature: January
Under the RCP8.5 scenario, relative to a baseline of 1976-2005



© 2017 by the Prairie Climate Centre. Visit climateaction.ca for more information.
Map Data: Ensemble of 12 CMIP5 models (IS92a Statistically Downscaled Climate Scenario) provided by the Pacific Climate Impacts Consortium, University of Victoria (pacificclimate.org).

-  winter snowpack + earlier snowmelt
-  summer soil moisture
-  flood risks in spring
-  stress on animal and plant species, and shifts in geographical range of vegetation
-  river temperatures
-  frequency and/or intensity weather events (i.e. heavy precipitation, drought, flooding, landslides)
-  Reduced summer water supply
-  Forest fire risk; crop yields
-  Property damage; service disruption
-  Shifts in geographical range; new pests; diseases
-  Stress on fish & aquatic animals
-  More disasters and need for response



Maintenance and preparedness are equally important

MAINTENANCE TASK SHEET

Winter	DOCUMENT REFERENCE	MTS-01	VERSION	1.0
Spring	LEVEL OF SERVICE	Level 1	ISSUED DATE	October 2017
Summer	MAINTENANCE CLASS	Preventative/Corrective	PREPARED BY	Jeff Matthews
Fall	MAINTENANCE AREA	Soft Systems	AUTHORIZED BY	Page 1 of 2
Year Round	TASK	JANITORIAL DUTIES	PAGE	

PRINCIPAL REQUIREMENTS?
WHEN SHOULD IT BE DONE?
WHAT IS EXPECTED?

THE EFFECTIVE CLEANING AND SERVICING OF THE ADMINISTRATION BUILDING:
DAILY SERVICE DURING OFFICE HOURS - 5 DAYS PER WEEK.
ALL EQUIPMENT SHALL BE OPERATED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR CLEANING SERVICES. BIPM WILL SUPPLY ALL OF THE FOLLOWING:
• TOILET TISSUE & HAND TOWELS.
• LIQUID HAND SOAP,
• URINAL PLUGS,
• SANITARY NAPKINS & DISPOSAL BAGS,
• AIR FRESHENERS, AND
• LARGE & SMALL GARBAGE BAGS.
CLEANING STAFF WILL:
• MONITOR AND FILL, AS REQUIRED, ALL THE DISPENSERS FOR THE ABOVE- MENTIONED PRODUCTS,
• EMPTY TRASH CANS, AND DUMP INTO GARBAGE DUMPSTERS, AND
• CLEAN WINDOWS WEEKLY, OR ASWHEN DIRECTED.

Services	WINTER					SPRING							
	Jan	Feb	Mar	Apr	May	Jan	Feb	Mar	Apr	May			
Janitorial	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200			
Generator Fuel	\$ 264	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Hydro	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500			
Heat Pump Maintenance & Repair	\$ -	\$ 275	\$ -	\$ -	\$ 275	\$ -	\$ -	\$ -	\$ -	\$ 275			
Filters	\$ 300	\$ -	\$ -	\$ -	\$ 300	\$ -	\$ -	\$ -	\$ -	\$ -			
Repairs	\$ 3,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Yard work	\$ -	\$ -	\$ -	\$ -	\$ 500	\$ -	\$ -	\$ -	\$ -	\$ -			
Snow Removal	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ -	\$ -	\$ -	\$ -	\$ -			
Grading	\$ -	\$ -	\$ -	\$ -	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200			
Service lighting	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100			
Kitchen Repairs	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000			
Septic Tank	\$ 1,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500	\$ -	\$ -	\$ -			
Supplies	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 2,400			
Propane	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,000			
Pest Control	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 2,400			
Misc Repairs	\$ 1,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500			
TOTAL	\$ 11,664	\$ 4,375	\$ 4,100	\$ 4,400	\$ 4,675	\$ 4,400	\$ 6,464	\$ 4,675	\$ 4,400	\$ 4,400	\$ 4,375	\$ 4,100	\$ 62,028

EMERGENCY PREPAREDNESS, RESPONSE AND RECOVERY PLAN

Small Town

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- Develop maintenance plans
- Use standard procedures
- Track O&M costs
- What will you do when it all goes wrong



Challenges Planning

Challenge / Issue

Impact (asset/service)

Mitigation / Action

River flooding

Property flooding,
evacuation

Flood risk study,
emergency plan,
berms & protection



What could you include to reflect the changing world?

- What challenges do you see?
- What are your community resilience implications?
- What could you do about them?



On your table, use the template handout to document vulnerabilities, implications, and potential actions



What does this all mean?



So what . . .

- Engage your colleagues and seek help
 - Get organized
 - Build on your community vision and goals
 - Collect data
 - Develop a plan
- Communicate with your community
 - Start somewhere
 - Keep it simple
 - Keep it relevant

What actions can you take away?

Individually or in groups:

- a. What will you do when you get back to your desk?
- b. What actions can you see for your community?
- c. Who will you talk to first?



Asset management is more of a journey than a destination

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Come visit our booth in the tradeshow

