



SUSTAINABILITY INITIATIVES

June 20th, 2023

COMMUNITY SUSTAINABILITY

Program Areas

- Alternative Land Use Services
- Environmental Regulatory Compliance
- Sustainability Planning and Policy
- Limited Extension and Outreach
- Natural Asset Management
- Biophysical Assessment Program
- Hazard Trees, Hay and Grazing Permits
- Horticulture



LONG-TERM SUSTAINABILITY OBJECTIVES



5 YEAR PLAN



2017	2018	2019-2022
 Develop a Tourism Action Plan. 	 Create a Social Development Plan. 	 Implement the Social Development Plan. 
 Explore a joint municipally run organic waste processing facility. 	 Implement the Parks, Recreation and Culture Master Plan. 	 Explore the use of Transfer of Development Credits. 
 Develop a decision support tool. 	 Develop a Hamlet Reinvestment Strategy. 	 Develop strategies and guidelines to support resource extraction. 
 Develop the One Parkland Customer Service Strategy. 	 Develop and implement a Value-added Agriculture Action Plan. 	 Collaborate in the development of a regional transit network. 
	 Implement and monitor a Tourism Action Plan. 	 Develop an Economic Diversification Strategy. 
	 Update the Land Use Bylaw. 	 Assess critical habitat and wildlife corridors, and protect their integrity. 
	 Quantify ecosystem services. 	 Work to develop and implement a Wetland Management Plan. 
	 Explore a joint municipally run organic waste processing facility. 	 Develop a Climate Resilience Plan. 
	 Implement the One Parkland Customer Service Strategy. 	 Identify, map and improve internal processes. 
	 Establish an Integrated Community Sustainability Plan monitoring and reporting framework. 	 Develop a policy framework to support Plan implementation. 

 In progress

 Completed

PARTNERSHIPS & FUNDING



Government of Canada

Gouvernement du Canada



SUSTAINABILITY POLICIES



TRANSITION 2019

- No Climate Change planning, policy or programs
- Limited in-house provided extension/education programs
- Shift from use of internal staff to consultants for environmental assessments and capital projects
- Ecosystem restoration/natural asset retention focused on improving municipal servicing delivery



CURRENT INITIATIVE: ENVIRONMENTALLY SIGNIFICANT AREAS POLICY FRAMEWORK

PARKLAND COUNTY STRATEGIC PLAN

2022-2025



PILLAR C

Respected Environment and Agriculture

We respect the natural environment, recognizing Parkland County's biodiversity and unique natural beauty, the land's value for agricultural purposes, and ensuring our commitment to sustainable agricultural and environmental practices.



GOALS

1

To develop a policy framework that ensures the protection of environmentally significant areas



Process will include:

- ECMP overview/current policy background
- Environmental Law Centre Presentation
- Facilitated Workshop with Corvus Centre for Conservation Policy
- Policy Recommendations

ECMP OVERVIEW



Objective: identify priority areas for conservation based on their inherent significance & sensitivity



ESA Definition: places that are vital to the long-term maintenance of biological diversity, soil, water and other natural processes at multiple scales, that can be used as a strategic conservation tool for land use planning and policy



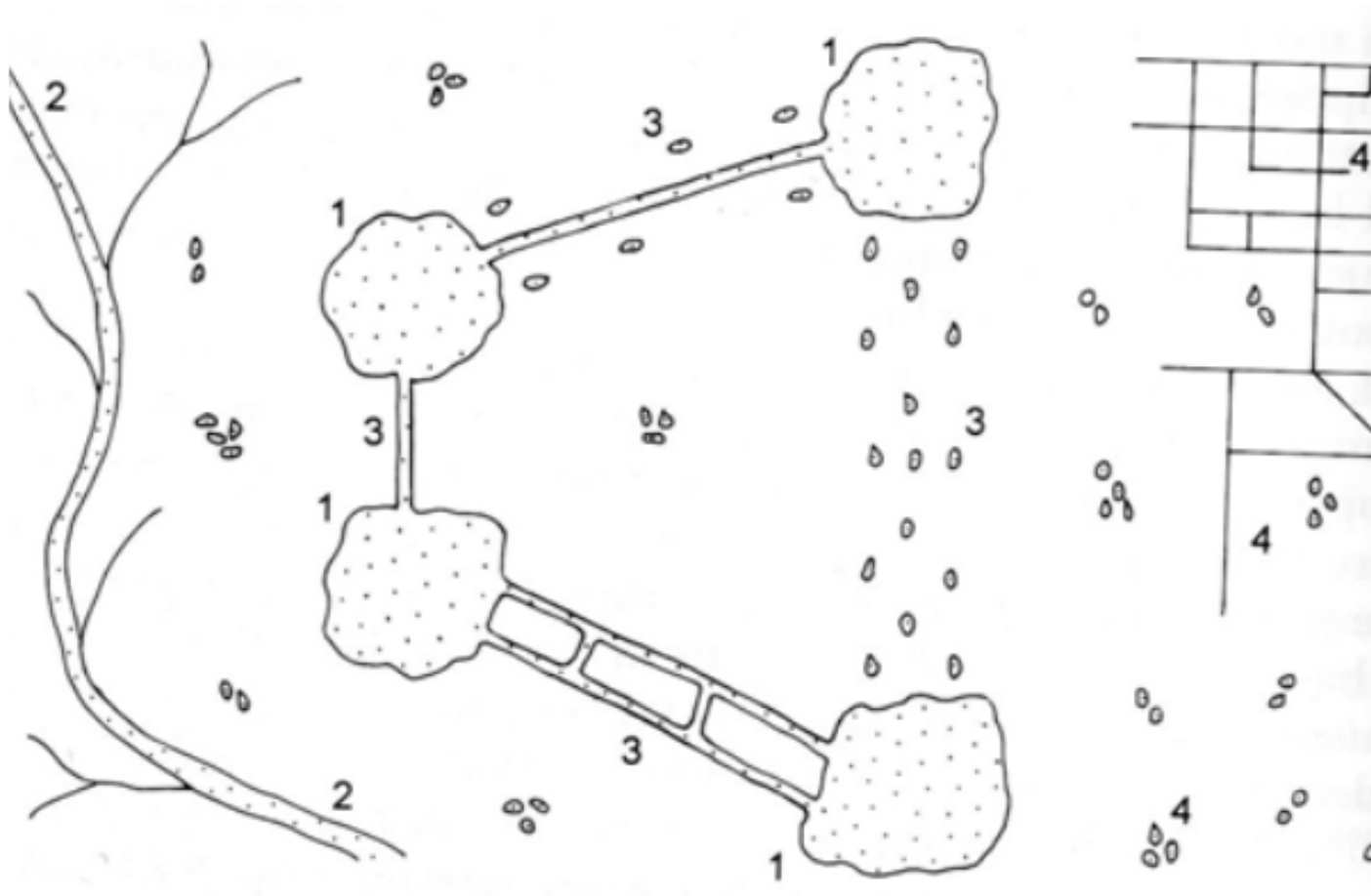
Process: Identify areas of significance, delineate boundaries, prioritize, recommend policies and BMPs



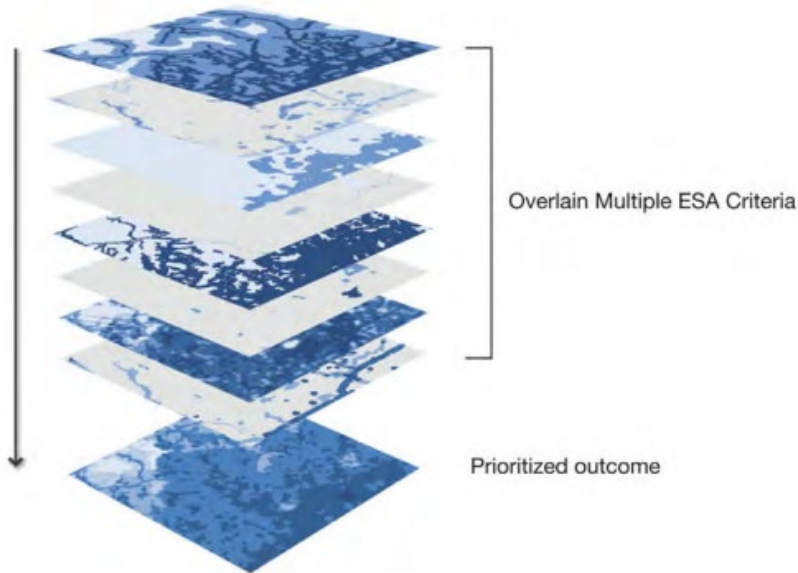
Preserve landscape features that account for ecological function and produce ecosystem services like water quality & biodiversity.

INDISPENSABLE LANDSCAPE PATTERNS

- Large Patches
- Wide Corridors for Connectivity
- Vegetation Along Waterways
- Small Vegetated Stepping Stones



HOW DO WE DESIGNATE AN ESA?



- Identify what landscape values are important
 - Public, Council and Expert engagement
- Assign criteria/indicators that support these values
 - Use scientific data/research for weighting
- Spatial modeling and mapping to identify where these indicators are on the landscape
- Overlay mapped area to determine significance/sensitivity ratings and prioritize
- Recommend policies and BMPs

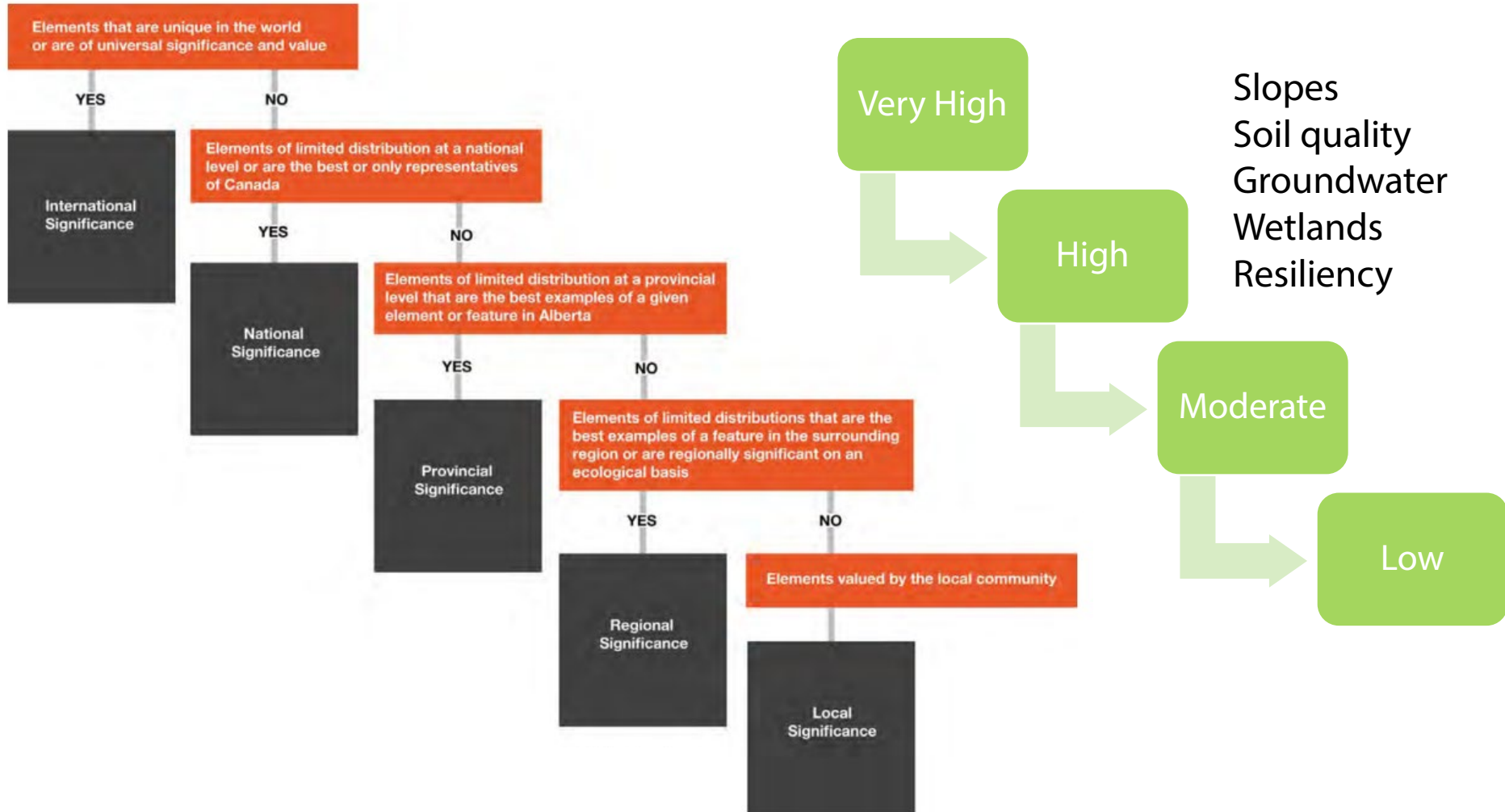
ESA Criteria Theme	GIS Layers	Landscape Values			
		Biodiversity	Connectivity	Water Quality	Water Quantity
Species and habitats of conservation concern	Rare plant species	x			
	Important fish habitat	x		x	x
	Important wildlife habitat	x	x		
	Important bird habitat	x	x		
	Riparian habitat	x	x	x	
Landscape Ecology Measures	Patch size	x	x	x	x
	Patch complexes	x	x	x	x
	Circuit connectivity	x	x	x	
	Major rivers valleys systems	x		x	x
Landforms and Steep Slopes	Rare or unique landforms	x			
	Steep slopes			x	x
Wetlands	Wetland ecosystems	x	x	x	x
	Peatland ecosystems	x	x	x	x
Surface water resources	Amount of water flowing into rivers (water yield)			x	x
	Surface water licenses volume per unit area			x	x
	Lake and river water quality			x	x
	Water erosion potential			x	x
	Rivers, lakes, and streams			x	x
	Lakeshore environments			x	x
Groundwater resources	Water wells per unit area			x	x
	Licensed groundwater volume per unit area			x	x
	Groundwater recharge areas			x	x
	Natural springs			x	x
	Buried valley aquifers			x	x
	Surficial sand and gravel aquifers			x	x
	Risk of groundwater contamination			x	x
Protected Areas and Research Areas	Provincial protected areas	x	x	x	x
	Municipal conservation areas	x	x	x	
	NGO owned and managed areas	x	x	x	x
	Areas of significant on-going ecological research	x		x	x

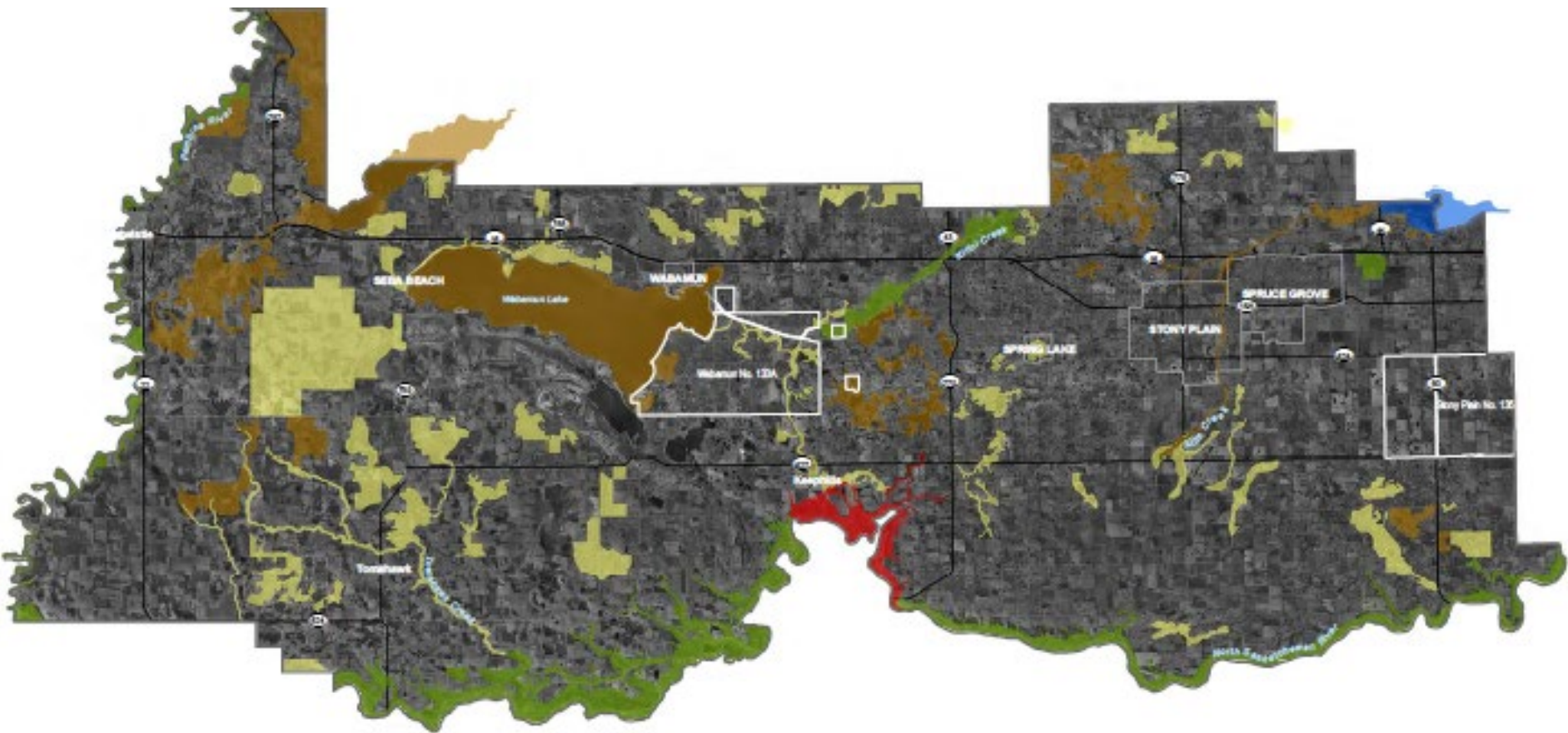
RANKING AND PRIORITIZATION

Environmental Significance






vs

Environmental Sensitivity





-  County Boundary
-  Municipal Boundary
- First Nations Reserve
-  Highway

- Significance**
-  International
 -  National
 -  Provincial
 -  Regional
 -  Local

CURRENT PARKLAND COUNTY POLICY

Municipal Development Plan:

- Encourages the conservation of ESAs and high values wetlands using reserve dedication and other mechanisms
- Conservation By Design approach required
- Biophysical impact assessment required
- Road networks may be required to be as far away as possible
- Designated OHV trails and parks located a sufficient distance away

Biophysical Assessment Policy:

- May require development to avoid and setback from ESAs and high value wetlands

Dedication and Use of Municipal Reserve, Environmental Reserve, and Environment Reserve Easement Policy:

- Requires the dedication of ER and ERE for environmentally sensitive lands as per the MGA unless land is required for stormwater management

THE BIOPHYSICAL ASSESSMENT PROCESS

Landscape Level



- High priority landscapes
- Environmentally significant areas
- High value wetlands

Ground Level



- Sensitive terrain/soils
- Listed plant/wildlife species
- Weed species/Vegetation clearing
- Surface or groundwater hydrology/water quality
- Wetlands/water bodies/watercourses

Interpretation and Evaluation

Management Toolbox

- Plan or design modifications
- Application of setbacks (buffers) including use of RSMM
- Designation of ER/MR
- Mitigation plans
- Monitoring plans/on-going monitoring
- Additional field surveys

NEXT STEPS



Presentation from the Environmental Law Centre (July 4th)



Facilitated workshop with Corvus Centre for Conservation Policy

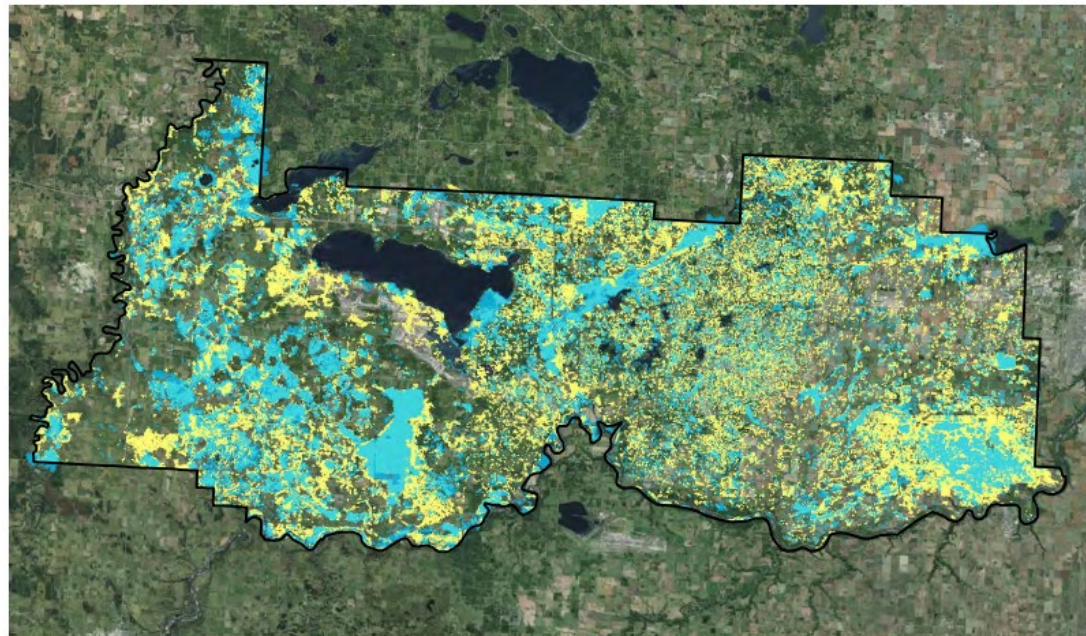


Draft policy/bylaw recommendation

CURRENT INITIATIVE-NATURAL ASSET INVENTORY & ENGINEERING STANDARDS

Outcomes:

- Assets added to management system software
- MDP & LUB recommendations
- Prepare for future accounting standards
- Engineering standards enable natural infrastructure



Comparison of Historic & Current Wetland Extent

■ Current (2013) Wetland Extent

■ Historic (circa 1950) Wetland Extent

NEW PROJECTS-BIOENGINEERING ROAD/TRAIL ISSUES



CURRENT PROJECTS-WETLAND REPLACEMENT

- Rolling Meadows
(Unproductive Ag Lease)
- SE Drainage System
(Flooding Issues)
- Private Land (Ag and
Acreages)



CURRENT PROJECTS- RR63 TREE PLANTING



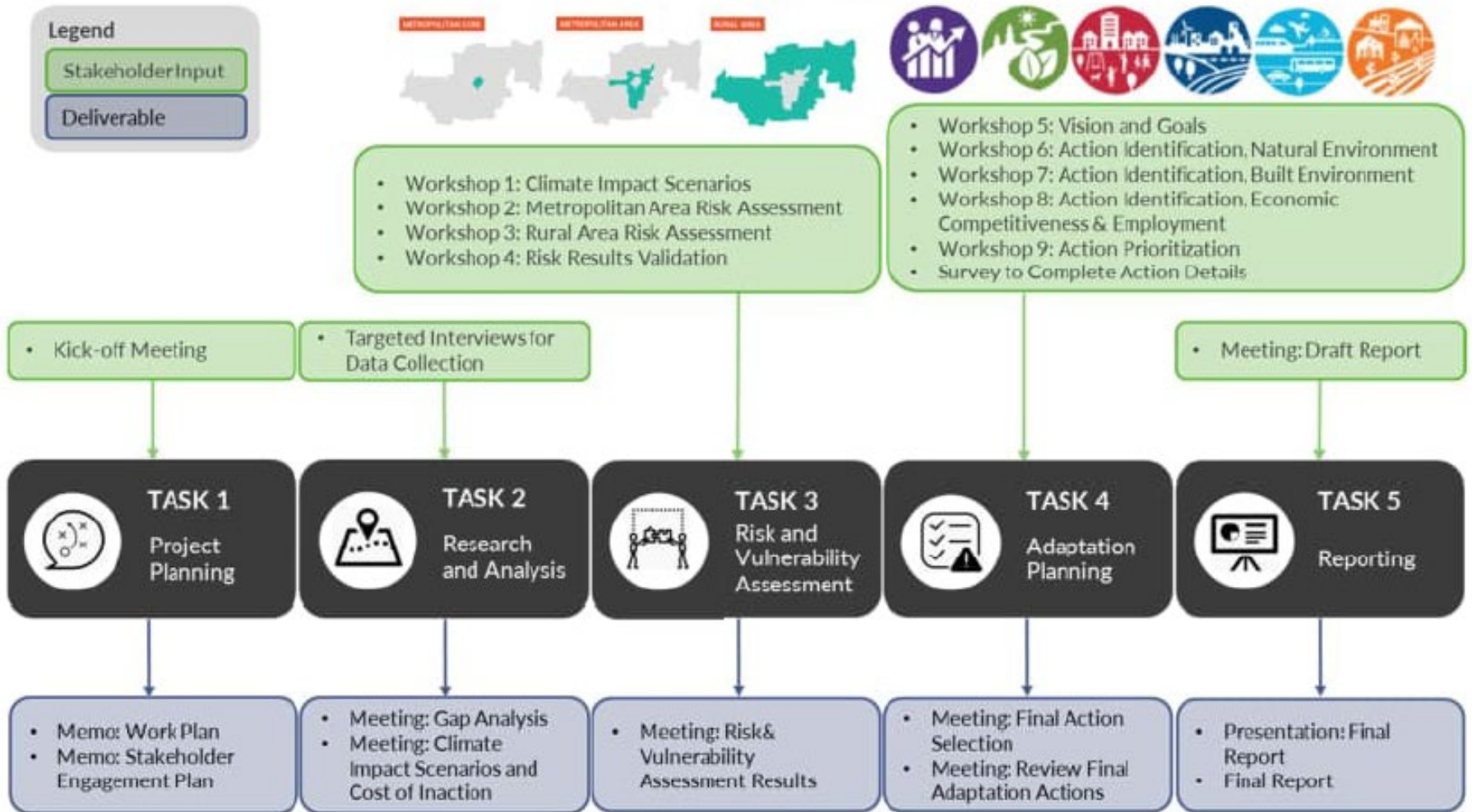
2B Trees Western Coalition

Growing capacity for a sustainable future



EMRB-CLIMATE RISKS AND VULNERABILITY ASSESSMENT

Figure 3-1 Overall Workflow



CURRENT PROJECTS- ALUS

- Rotational grazing
- Soil carbon monitoring
- Standards for pollinator projects
- Ramping up extension
- Innovation



OTHER INITIATIVES

- Policy and procedures review
- ARO environmental assessments and risk management
- Ag Building Risk Management Plan
- Contaminated sites assessment
 - Wabamun
 - Old Landfills
 - Former General Store
 - Henry Singer Property
- Inter-departmental support (electric vehicle, fertilizer bylaw)
- External projects
 - NSWA Regional Wetland Strategy
 - NSWA Setback Calculator
 - Riparian Bylaw Alignment

NATIONAL DIRECTION

- Reaching Net-Zero by 2050
- National Climate Adaptation Strategy
- Indigenous Reconciliation



POTENTIAL OPPORTUNITIES

Initiatives:

- Alberta's Clean Energy Improvement Program (CEIP)
- Incorporating climate change into asset management
- Local climate adaptation implementation
- FCM's PCP Program
- ICSP KPI Reporting
- Wetland Management Plan/Policy
- Wildlife corridor mapping
- Land conservation plan/program
- Urban agriculture (Wabamun)
- Community engagement
- Brownfield redevelopment

Available Funding:

- Disaster Mitigation and Adaptation Fund
- FCM's Green Municipal Fund
- Federal Gas Tax Funding
- WRRP
- WRP
- MCCAC

Would require more capacity



DISCUSSION/ Q&A

