

Calgary Metropolitan Region Board
Agenda - Land Use & Servicing Committee Meeting

February 3, 2022, 9:00 AM, Go-To Meeting/Call-In

MEETINGS ARE RECORDED & LIVE-STREAMED

The purpose of this meeting is to convene, discuss and make decisions regarding recommendations to the Calgary Metropolitan Region Board

- | | | | | |
|----|---|--------------|---------|-----------|
| 1. | Call to Order & Opening Remarks | | Clark | |
| 2. | Adoption of Agenda | | All | |
| | <i>For Decision:</i> Motion to adopt and/or revise the agenda | | | |
| 3. | Review and Approve Minutes | (Attachment) | All | 3 |
| | <i>For Decision:</i> Motion that the Committee review and approve the Minutes of the April 15, 2021 meeting | | | |
| 4. | Alberta Environment Bow River Phosphorus Management Plan Presentation | (Attachment) | AEP | 8 |
| | <i>For Information:</i> Motion that the Committee receive for information a presentation regarding the Bow River Phosphorus Management Plan | | | |
| 5. | Alberta Environment Bow River Reservoir Options Feasibility Study | (Attachment) | AEP | 32 |
| | <i>For Information:</i> Motion that the Committee receive for information a presentation regarding the Bow River Reservoir Options Feasibility Study | | | |
| 6. | Committee Terms of Reference Overview | (Attachment) | Graves | 78 |
| | <i>For Information:</i> Motion that the Committee receive for information the Board approved Land Use and Servicing Committee Terms of Reference | | | |
| 7. | Vice Chair Selection Process | (Attachment) | Copping | 83 |
| | <i>For Information:</i> Motion that the Committee receive for information the Vice Chair Selection Process Policy | | | |
| 8. | Classifying DEAL Data as Open Data | (Attachment) | Leclair | 86 |
| | <i>For Decision:</i> Motion that the Committee recommend to the Board that the Output Data for the latest DEAL dataset be classified as Open Data | | | |

9. Joint Planning Area Context Studies (Attachment) Graves **89**
For Decision: Motion that the Committee recommend to the Board that the Joint Planning Area Context Study TOR committed to in the Growth Plan be due to the Board for approval 6 months from the Minister's approval of the Growth Plan.
10. Placetype Monitoring and Implementation (Attachment) Tipman **100**
For Information: Motion that the Committee receive for information an update Placetype Monitoring and Implementation
11. Next Meeting: Thursday March 3, 2022 @ 9:00 AM
12. Adjournment Clark

Committee Members:

Mayor Peter Brown (Airdrie)	Mayor Craig Snodgrass (High River)
Councillor Gian-Carlo Carra (Calgary)	Councillor Rachel Swendseid (Okotoks)
Mayor Jeff Colvin (Chestermere)	Councillor Kevin Hanson (Rocky View)
Mayor Jeff Genung (Cochrane)	Reeve Delilah Miller (Foothills)
Councillor Jason Montgomery (Strathmore)	Councillor Suzanne Oel (Foothills)
Deputy Reeve Scott Klassen (Wheatland)	

Greg Clark, Committee Chair
 Shawn Ewasiuk, GOA Representative

Upcoming Meetings:

Land Use & Servicing Committee	Thurs Mar 3	9:00 AM	GoTo Meeting
Board Strategic Session	Friday Mar 11	9:00 AM	TBD
Governance Committee	Friday Feb 25	9:00 AM	GoTo Meeting

Minutes of the Meeting of the
Land Use and Servicing Committee
of the Calgary Metropolitan Region Board
on Thursday April 15, 2021 by Go-To Meeting

Delegates in Attendance:

Mayor Peter Brown – City of Airdrie
Councillor Gian-Carlo Carra – City of Calgary
Mayor Marshall Chalmers – City of Chestermere
Mayor Jeff Genung – Town of Cochrane
Reeve Suzanne Oel – Foothills County (Vice Chair)
Councillor Delilah Miller – Foothills County
Mayor Craig Snodgrass – Town of High River
Mayor Bill Robertson – Town of Okotoks (Vice Chair)
Reeve Dan Henn – Rocky View County
Councillor Bob Sobol – Town of Strathmore
Deputy Reeve Scott Klassen – Wheatland County

CMRB Administration:

Greg Clark, Chair
Jordon Copping, Chief Officer
Liisa Tipman, Project Manager–Land Use
Jaime Graves, Project Manager-Intermunicipal Servicing
JP Leclair, GIS Analyst
Shelley Armeneau, Office Manager

1. Call to Order

Chair Greg Clark called the meeting to order at 9:30 AM.

2. Approval of Agenda

Moved by Mayor Brown, **Seconded by** Mayor Genung, accepted by Chair.

Motion: That the Committee approve the agenda.

Motion carried unanimously.

3. Review Minutes

Moved by Councillor Carra, **Seconded by** Mayor Robertson, accepted by Chair.

Motion: That the Committee approve the Minutes of the April 1, 2021 meeting.

Motion carried unanimously.

4. Phase 3 of Public Engagement

Anne Harding provided a presentation on current engagement statistics and answered questions about the results. Of note, and what is different from the previous engagement phases, is the results did not represent geographic

distribution across the region. Themes (more than 15 responses) fell into 3 main categories relating to the governance of the Board. Further, Anne noted her disappointment there was a media campaign that gave messages to citizens relating to the Plan, and that came out in the open-ended responses where the exact same wording was used multiple times. This may indicate that people did not take the time register their own thoughts and words but were responding to what they had been asked to do. From her perspective, that skewed the results. One of the members felt this was not necessarily an assumption to be made and that their comments should be considered meaningful. Anne noted that the What We Heard Report would be coming to the May 6 Board meeting.

Moved by Mayor Genung, **Seconded by** Councillor Sobol, accepted by Chair.

Motion: That the Committee receive for information an update on Phase 3 of public Engagement for the Draft Growth Plan.

Motion carried unanimously.

Mayor Chalmers arrived at 1:30 PM.

5. Draft Servicing Plan

Jaime Graves introduced this agenda item and noted that discussion would resume from where they left off at the April 1 Committee meeting. The following comments were made:

3. Three Pillars

- o A suggestion was made to add to (b) Working Groups to read “Working Groups have a mandate to find cost-effective and collaborative ways to advance servicing matters...” and (c) Evidence Based Decision-Making includes defining problems, collective data, monitoring/reporting and developing cost effective strategies and collaborative...”

4a Preferred Growth Areas Relationship to Servicing

- o One member felt this creates a disadvantage to the rural communities because all of the preferred growth areas are in the urban areas. Jaime noted that Foothills has a number of hamlet growth areas and those would be supported in the Servicing Plan.
- o Another member noted that while servicing should focus on the preferred growth areas, priority should also be given to approved and existing ASPs. Jaime advised this was discussed at TAG and there was general support for consideration of those plans in place. Further, that additional language to say these may be of interest will be added to the growth plan.
- o Like to see more emphasis on Transportation and utilities corridors, and identifying those corridors as key. Steve Power advised this would be a conversation for TAG.

4b Agreed Level of Commitment

- Starting with a group approach makes sense, then evaluating throughout the process to determine who needs to be at the decision-making table.
- Consider an “expression of interest” to evaluate further, and the Board would decide which is the best approach.
- Should be voluntary.
- While criteria makes sense, consider capacity and impact on ability to undertake own projects.
- Agree if an opportunity for shared servicing is cost effective and minimizes environmental impacts it should be considered. Members should be obligated to come to the table for good faith discussions on potential shared servicing and shared information, but ultimately the decision to proceed should be in hands of service provider. If there is reluctance to share servicing, the reasons need to be clearly identified and supported by data.
- In an ideal setting, as many members as possible should be at the table, but need to be realistic about capacity. Where it’s not possible to participate, the member would have to be confident in their regional partners to look at what’s best for the region as a whole.
- If agreement, then anyone potentially able to provide servicing to achieve the growth should be at the table to determine the best way to do that.
- General support for 4b was demonstrated.

4c Equal in Priority.

- Recommend joint planning areas take an investment-based approach.
- Important to respect municipal autonomy. Focus on market demand. Context studies should inform growth but not dictate it.
- Jaime clarified that when a need comes up in a joint planning area, the Board looks to all of the needs and not just one in a joint planning area or hamlet growth area, but understand needs as they arise and as the market demands.
- A member asked “how would this be determined, who decides, and would efficiency be considered?”. Jaime responded that the iteration and plan to plan shows we need to get together with experts to identify what priorities are and foresee the demands that will come with time. The purpose of the Servicing Plan is to anticipate and gather the right people to make decisions about when the Board takes action on investigating the next servicing need that arises.

Next steps from Jaime - the Servicing Plan is out for commentary by TAG. Updates to the document will be made following feedback today and in days ahead. It is anticipated the next version will be released for the next Board meeting agenda package circulation on April 29.

Two additional comments were provided in relation to capacity:

- i. Recreation: note that municipal members have differing capacity levels and that working groups should be mindful of that; and

- ii. Data Collection: capacity and cost benefit should be top of mind and that data collection should have a demonstrated purpose.

Moved by Mayor Robertson, **Seconded by** Councillor Klassen, accepted by Chair.

Motion: That the Committee provide feedback on and receive for information the draft Servicing Plan.

Motion carried unanimously.

Councillor Sobol left the meeting at 2:25 PM.

6. Growth Plan – Areas for Further Consideration

Liisa Tipman presented this item and collected feedback on the areas for further consideration table set out in the brief. She noted that TAG will be discussing #7 hamlet growth areas on April 16, to clarify the wording around the 3 growth areas for Foothills County.

Issue #7: New/Additional Hamlet Growth Areas

- o There was general agreement that there should be Board approval of new Hamlet Growth Areas.
- o Some members felt a size restriction (640 acres) is not necessary.
- o Liisa indicated the purpose for having a specific number is to show that there is demand for a development and that it will build out in a timely way. The number itself will be discussed at the next TAG meeting. Peter Calthorpe agreed with Liisa and noted that 640 acres would translate to approximately 7000 population. He further noted that the size restriction is essentially an effort to make the early phases of a Hamlet compact and efficient, but not to limit the ultimate growth. A member requested that wording around expansion of a hamlet growth area should be identified in the Plan.

Issue #8 Hamlet Growth Areas - Densities

- o Most members supported Administration's recommendations on this item.
- o A preference was noted to continue conversations on achieving densities over time.

Issue #9: Rural and Country Cluster

- o No clear locational criteria for this placetype. Not clear why would restrict the benefits of modest density increases in existing country residential areas but encourage density in more remote locations outside these areas. These densities create more unsustainable cluster developments.
- o Above a certain density country residential should become a hamlet.

Issue #10 Employment Areas

- o Restriction of development is unfair to rural municipalities. Definitions need refinement so do not create unforeseen difficulties.
- o Limiting employment in viable areas is not wise in a time when economic development is critically important.
- o Developments in rural areas count on urbans to support by providing infrastructure, workplaces, shopping.

Mayor Brown left the meeting at 3:10 PM.

Issue #11 Expand the Harmony Hamlet Growth Area in RVC

- o There was general discussion about expanding this growth area. Further discussion will be had at the TAG meeting.

Issue #12 Local Employment Areas

- o Feedback has been received that the 20 acres for local employment areas is too small. Liisa noted this item would be discussed at TAG on April 16, and specifically:
 - Proposing to remove requirement for statutory plans for these areas;
 - Discuss what might be a better metric for defining local employment areas;
 - Discussion on how employment areas relate to each other and the lines between them.

Moved by Reeve Henn, **Seconded by** Councillor Klassen, accepted by Chair.

Motion: That the Committee provide feedback on and receive for information the Growth Plan Areas for Further Consideration.

Motion carried unanimously.

7. Next Meeting: Thursday June 3 @ 9:00 AM.

8. Adjourned @ 12:30 PM.

CMRB Chair, Greg Clark

Agenda Item	4
Submitted to	Land Use and Servicing Committee
Purpose	For Information
Subject	Bow River Phosphorus Management Plan
Meeting Date	February 3, 2022
<i>That the Committee receive for information a presentation on the Alberta Environment and Parks Bow River Phosphorus Management Plan</i>	
<p>Summary</p> <ul style="list-style-type: none"> • The Bow River Phosphorus Management Plan (PMP) is a strategic plan to address phosphorus sources in the middle reach of the Bow River between the Bearspaw and Bassano Dams. The primary objective of the PMP is to help manage Bow River water quality conditions through control of phosphorus inputs. • The plan was developed by participants from government and non-government organizations, urban and rural sectors and subject matter experts. The PMP was officially endorsed by participating agencies in February 2015. The implementation phase is underway. A voluntary implementation committee meets approximately quarterly. Staff from many CMRB member municipalities participate in the committee, including from CMRB Administration. • This presentation is part of AEP's initiative of ongoing education and outreach to build awareness of the BR PMP. 	
<p>Attachments</p> <ul style="list-style-type: none"> • More information on the PMP is available on the Government of Alberta website here and YouTube video. • Slide Deck: Bow River Phosphorus Management Plan Overview 	

Recommendation

That the Committee receive for information a presentation on the Alberta Environment and Parks Bow River Phosphorus Management Plan.

Bow River Phosphorus Management Plan Overview



Presentation to the Calgary Metropolitan Region Board Land Use and Servicing Committee

Rob Wolfe, Integrated Land Management and Coordination Specialist

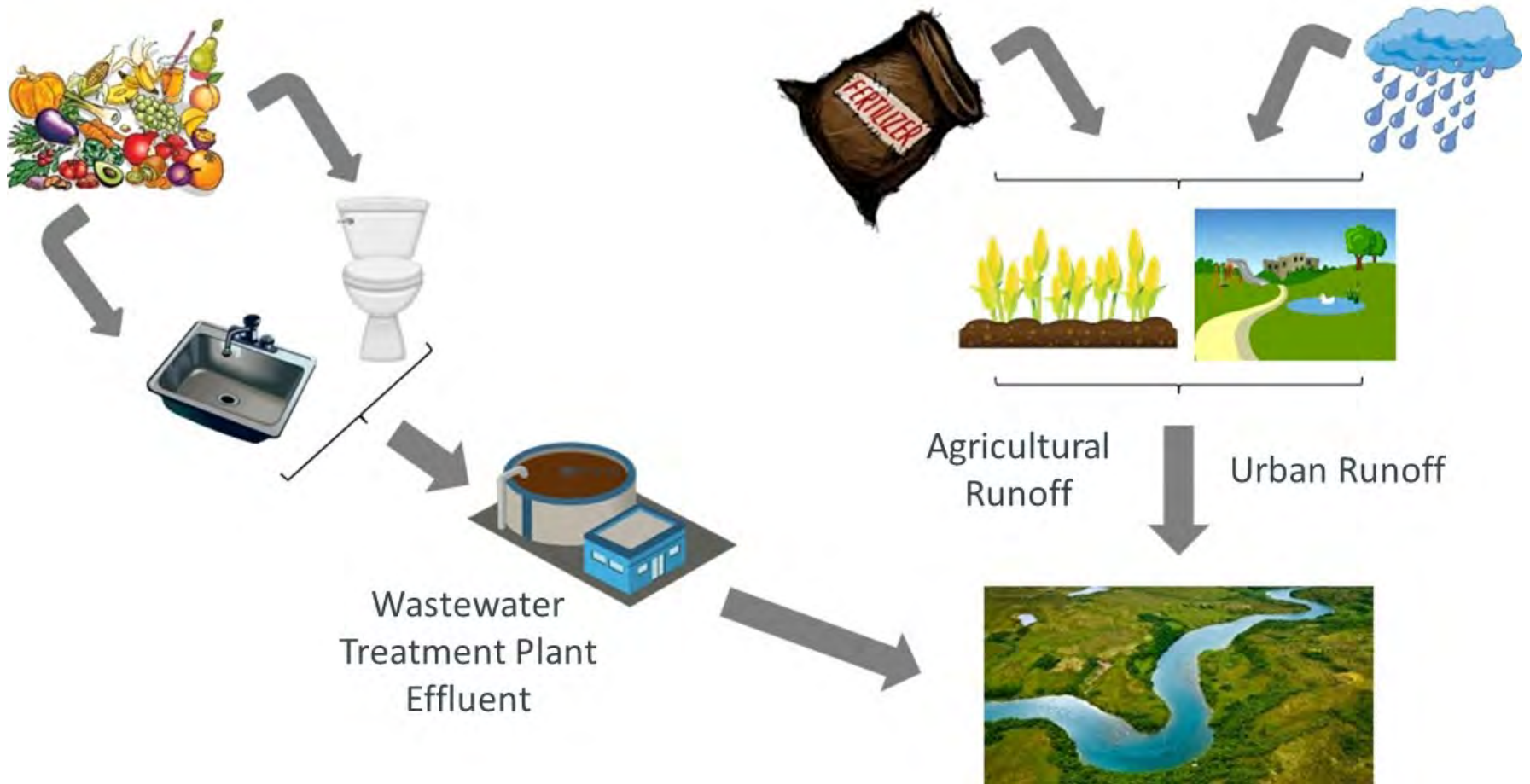
Feb. 3, 2022

Agenda Item 4i

What Are Common Sources of Phosphorus?

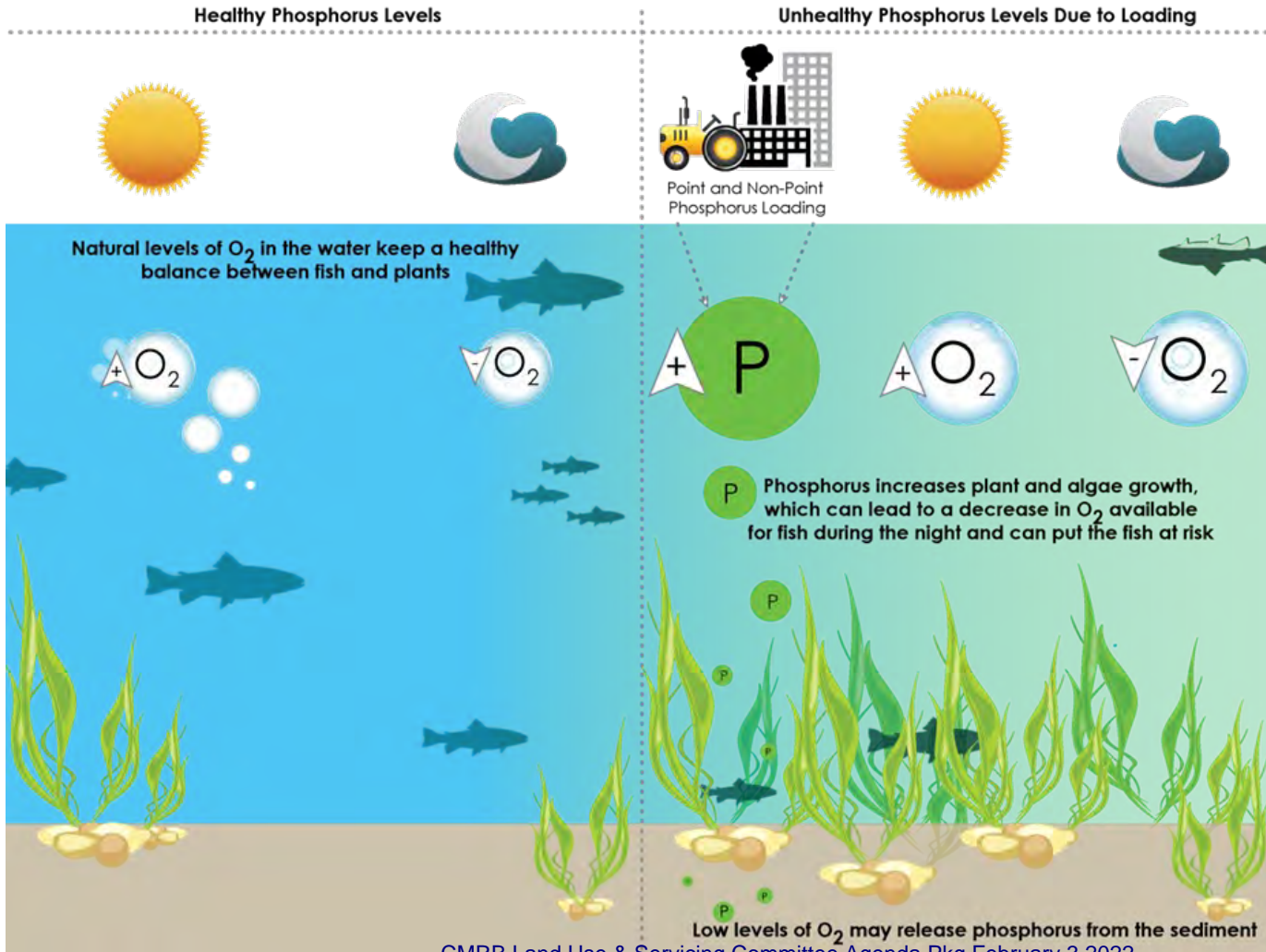
- Common sources of phosphorus in the Bow River basin include:
 - sediment
 - plant material
 - animal waste
 - treated wastewater effluent
 - fertilizer in runoff water
 - dust fall (atmospheric deposition).

How does Phosphorus Get to our Rivers?



How Does Phosphorus Impact Waterbodies?

What Does Phosphorus Do to Our Rivers?



Impacts to aquatic life



Blockages of water withdrawal systems and intakes



Impacts to water use (e.g. crop irrigation, livestock watering)

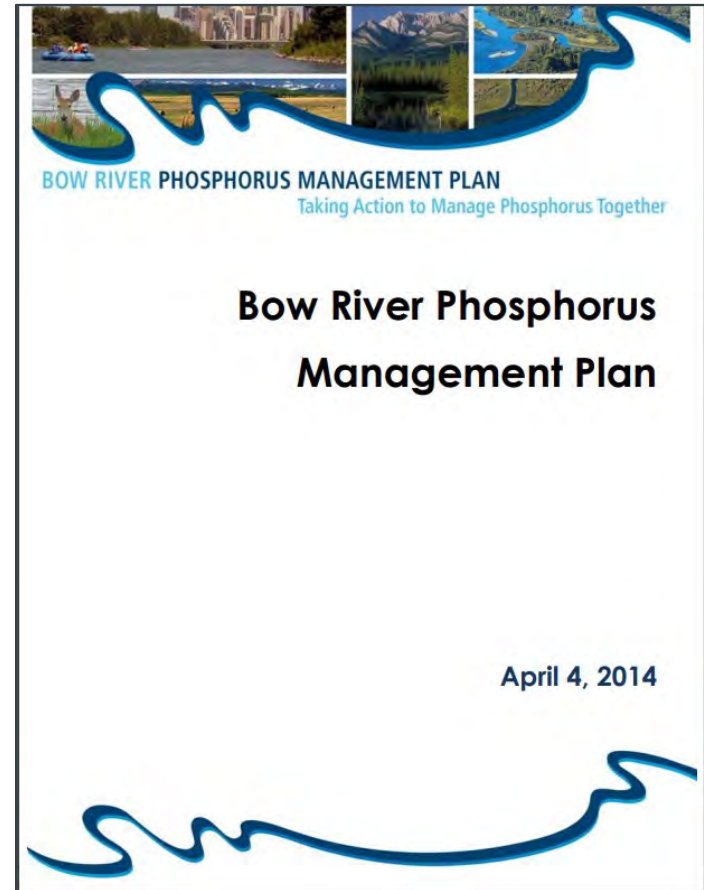


Impact to river aesthetics and recreation

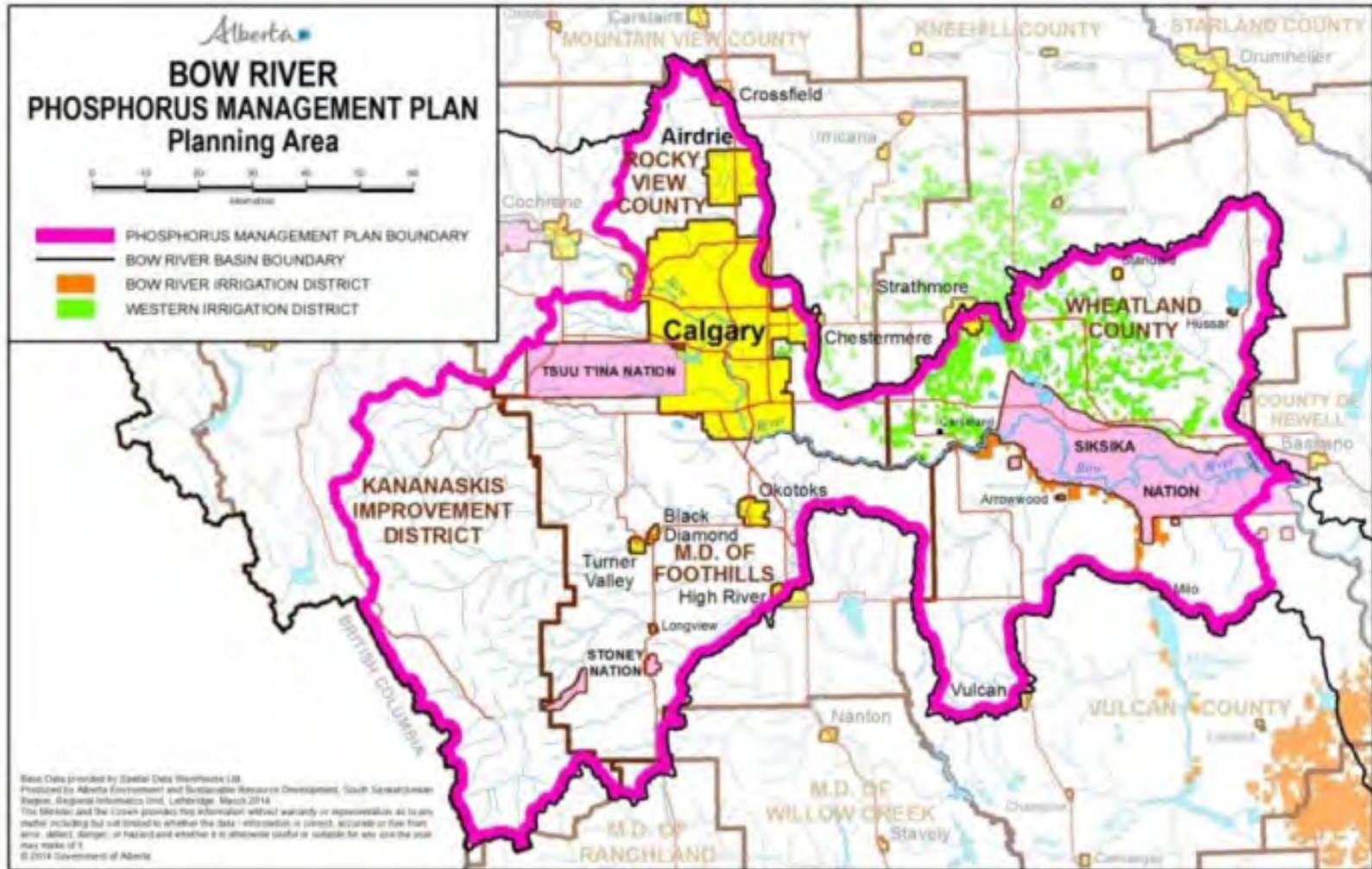


What is the Bow River Phosphorus Management Plan (PMP)?

- A strategic plan to address sources of phosphorus in the middle reach of the Bow River between Bearspaw and Bassano Dams.
- Developed by a multi-stakeholder committee including a broad spectrum of governmental and non-governmental participants.
- Voluntary initiative.



The PMP Study Area

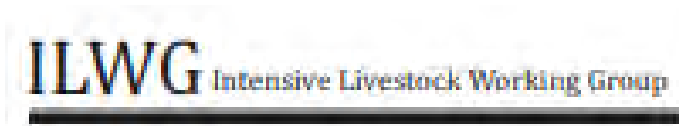


Implementation Committee Member Organizations



Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada



What is the desired outcome?

- The desired outcome of the Phosphorus Management Plan is to ensure that:

Outcome

- Phosphorus inputs to the Bow River are managed to provide a healthy aquatic ecosystem while meeting the needs of those who rely on clean water.



Healthy aquatic environments ensure aquatic life is not at risk of being exposed to lowered dissolved oxygen levels;



Water withdrawal systems and intakes are free from blockages by plant materials;



Water quality will remain appropriate for recreation, irrigation of crops and livestock watering; and



Aesthetics of the river will be maintained.

History of the Bow River Phosphorus Management Plan

- In 2011, Alberta Environment & Parks invited contributing parties in the affected reach to join together in a collaborative process to address phosphorus loadings.
- A steering committee was formed made up of representatives from three sectors (urban point source, urban non-point source, rural non-point source).



Objectives, Strategies and Actions

- The PMP outlines 5 Objectives, 19 Strategies and 51 Actions to achieve the overall outcome.

BOW RIVER PHOSPHORUS MANAGEMENT PLAN
Talking Action to Manage Phosphorus Together

Plan

Outcome, Objectives, Strategies and Priority Actions to Manage Phosphorus Loading to the Bow River:

Outcome:

- Phosphorus inputs to the Bow River are managed to provide a healthy aquatic ecosystem while meeting the needs of those who rely on clean water.

Primary Objective:

- To help manage current water quality conditions in the Bow River through control of phosphorus inputs.

Supporting Objectives:

- Supporting Objectives and Strategies

Improve understanding and change behavior to reduce phosphorus entering the Bow River.

1.0 Strategy: Provide accessible public education programs to all jurisdictions.

- 1.1 Create education sub-team of BRPMP Implementation Committee to coordinate education activities and develop common messaging for various audiences.
- 1.2 By jurisdiction, determine the status and content of good housekeeping/pollution prevention programs and bylaws.
- 1.3 Educate the public about household phosphorus contributions and provide alternatives to current practices.
- 1.4 Coordinate rural education programs.
- 1.5 Develop and coordinate urban public education programs.
- 1.6 Support stormwater practitioners and associated disciplines with education, tools and training to plan, design, implement, operate and maintain storm drainage systems.
- 1.7 Share innovative solutions and best practices among wastewater treatment personnel.

Increase knowledge about phosphorus sources, the planning area, and phosphorus management practices.

2.0 Strategy: Explore opportunities to address the cumulative effects of phosphorus in the long term.

- 2.1 Develop policy to distribute load allocations among contributing parties and develop policy tools to address cumulative effects issues.
- 2.2 Ensure use of best practices among wastewater treatment facilities.

Bow River Phosphorus Management Plan 27 | Page
 2014

BOW RIVER PHOSPHORUS MANAGEMENT PLAN
Talking Action to Manage Phosphorus Together

Plan

1.0 Outcome, Objectives, Strategies and Priority Actions to Manage Phosphorus Loading to the Bow River:

1.1 Outcome:

- Phosphorus inputs to the Bow River are managed to provide a healthy aquatic ecosystem while meeting the needs of those who rely on clean water.

1.2 Primary Objective:

- To help manage current water quality conditions in the Bow River through control of phosphorus inputs.

1.3 Supporting Objectives:

- Supporting Objectives and Strategies

1.4 Strategy: Provide accessible public education programs to all jurisdictions.

- 1.4.1 Create education sub-team of BRPMP Implementation Committee to coordinate education activities and develop common messaging for various audiences.
- 1.4.2 By jurisdiction, determine the status and content of good housekeeping/pollution prevention programs and bylaws.
- 1.4.3 Educate the public about household phosphorus contributions and provide alternatives to current practices.
- 1.4.4 Coordinate rural education programs.
- 1.4.5 Develop and coordinate urban public education programs.
- 1.4.6 Support stormwater practitioners and associated disciplines with education, tools and training to plan, design, implement, operate and maintain storm drainage systems.
- 1.4.7 Share innovative solutions and best practices among wastewater treatment personnel.

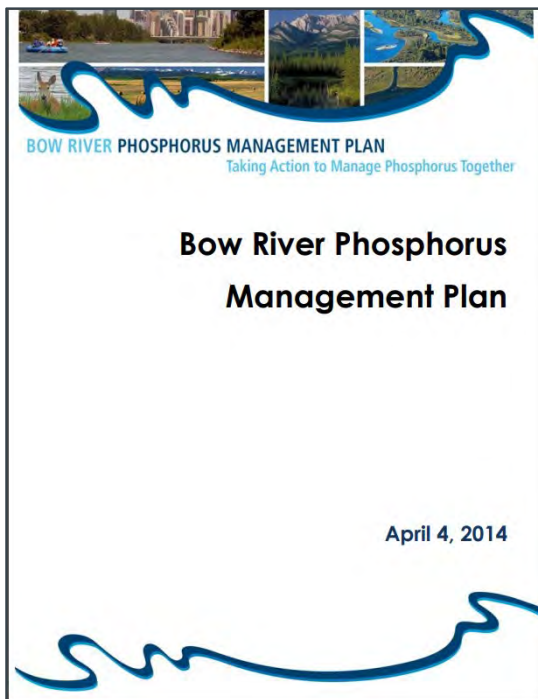
1.5 Strategy: Explore opportunities to address the cumulative effects of phosphorus in the long term.

- 1.5.1 Develop policy to distribute load allocations among contributing parties and develop policy tools to address cumulative effects issues.
- 1.5.2 Ensure use of best practices among wastewater treatment facilities.

Bow River Phosphorus Management Plan 28 | Page
 2014

Plan Completion and Endorsement

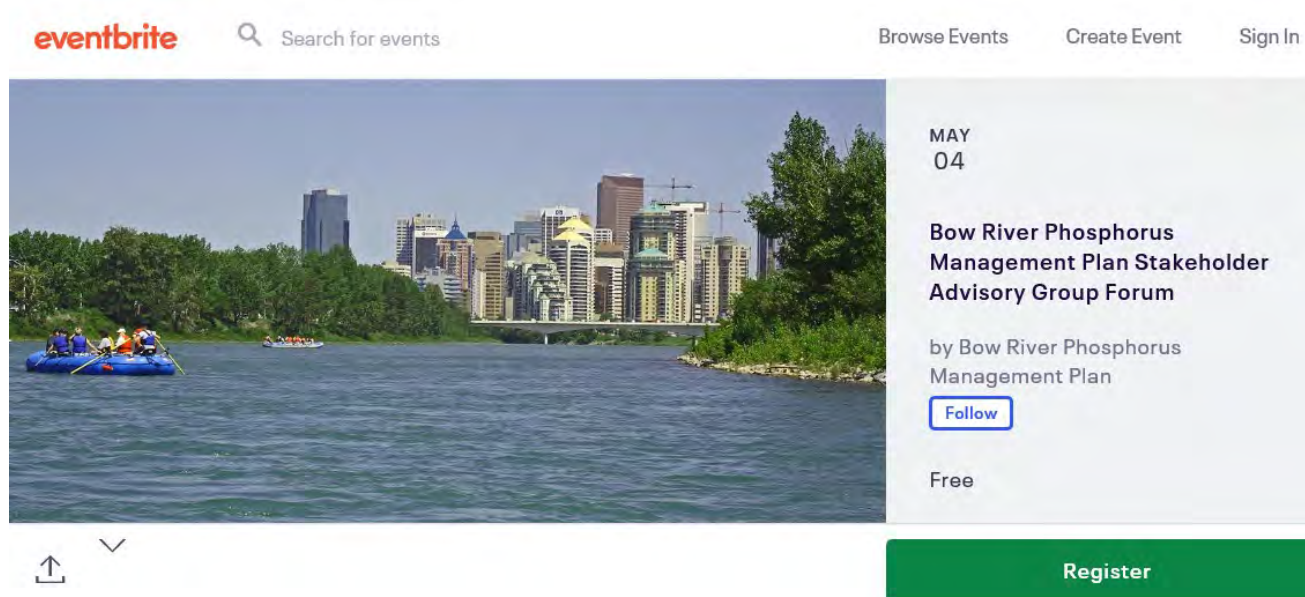
- The Bow River PMP was completed in 2014 and endorsed by all participating organizations in April 2015.



Organization	Name and Title	Signature(s)
Agriculture and Agri-Food Canada	Francois Eudes, Acting Research, Development and Technology Transfer Director	
Alberta Agriculture and Rural Development	Sean Royer, Executive Director Environmental Stewardship Division	Via Email on Jan. 29, 2015
Alberta Environment and Sustainable Resource Development	Robert Stokes, Executive Director, Resource Integration Planning Branch & Martin Foy, Executive Director, South Saskatchewan Region	
Bow River Basin Council	Mike Kelly, Chair of the BRBC Board of Directors	
Calgary Regional Partnership	Colleen Shepherd, Executive Director	
City of Airdrie	Paul Schulz, City Manager	
City of Calgary	Rob Spackman, Director, Water Resources	
Corix Wastewater Treatment Operators (Heritage Pointe)	Todd Faith, Operations Supervisor	
Crop Sector Working Group	Sharon McKinnon	Via Email on Jan. 4, 2015
Irrigation Districts	Erwin Braun, General Manager, Western Irrigation District	
Municipal District of Foothills	Harry-Riva Cambrin - Chief Administrative Officer	
Rocky View County	Nona Housenga, Manager Legislative Services	
Rural Non-Government Organizations - represented by Ducks Unlimited Canada	Milana Simlikian, Provincial Policy Specialist	Via Email on Jan. 12, 2015
Town of Okotoks	Rick Quail, Municipal Manager	
Town of Strathmore	Michael Eli, Mayor	
Urban Non-Government Organizations - represented by Alberta Low Impact Development Partnership	Leta van Duin, Executive Director	
Watershed Stewardship Groups - represented by Highwood Public Advisory Committee	Shirley Pickering, Chair, Bow River Basin Council Watershed Stewardship Coordinating Committee	
Wheatland County	Glenn Koester, Reeve	

Stakeholder Advisory Group

- Interested individuals not currently represented on the PMP IC.
- Provides an opportunity for interested stakeholders to be kept informed and provide input as the implementation moves forward.



Implementation Committee

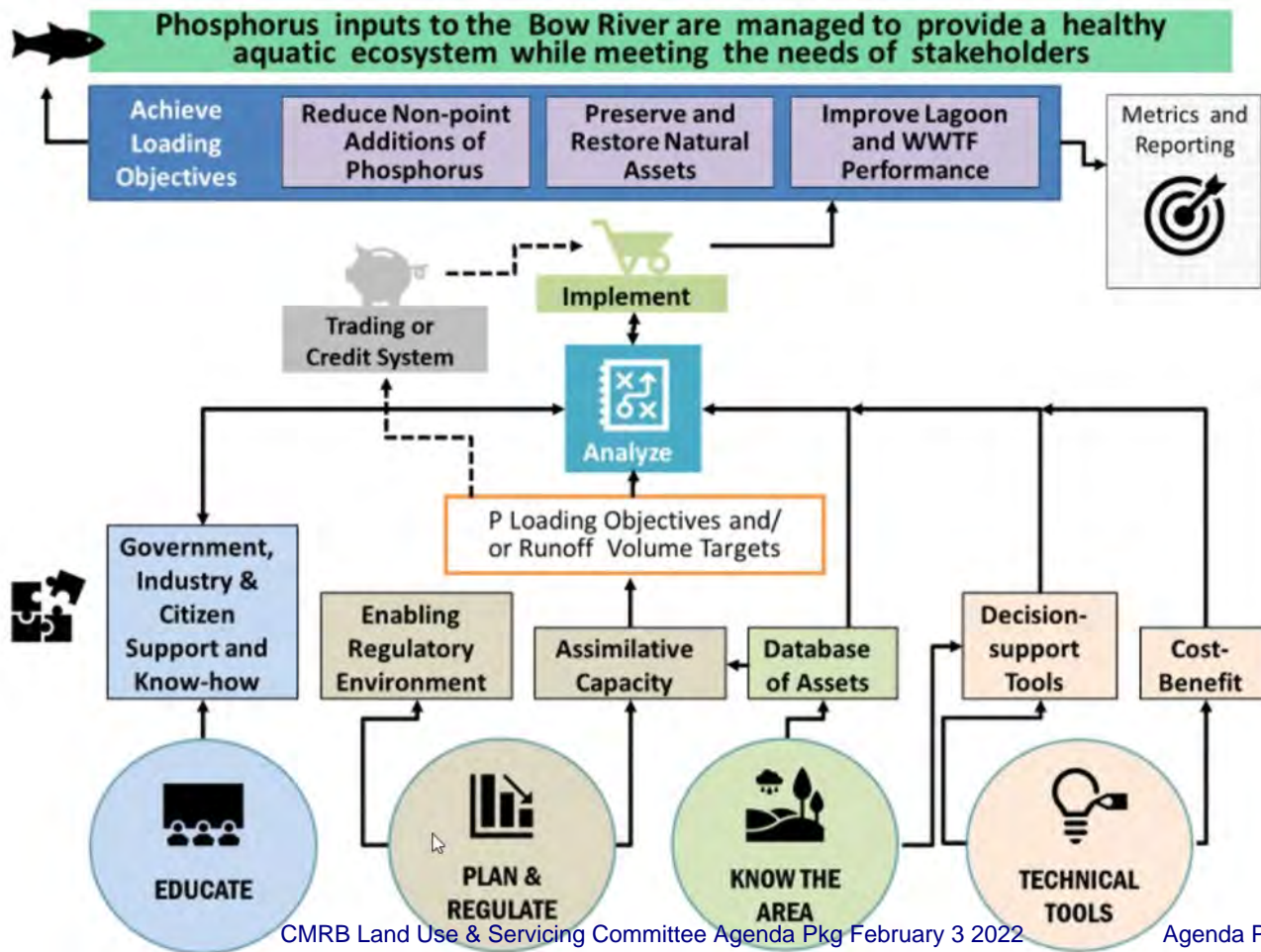
- Following completion of the plan, an Implementation Committee was formed to ensure the delivery of the actions in the plan.
- Key responsibilities include:
 - Preparing an annual workplan.
 - Tracking progress and preparing an annual progress report.
 - Keeping interested members of the public informed on progress.
 - Sharing information and providing input on projects of common interest.
 - Summarizing current activities and analyzing gaps.
 - Implementing strategies and actions directly through the PMP IC.
 - Promoting the implementation of strategies and actions contained in the plan by participating members.
 - Establishing special committees and/or working groups as required.
 - Updating the PMP as required.



CMRB Land Use & Servicing Committee Agenda Pkg February 3 2022

Implementation Roadmap

- The Implementation Committee developed a strategic roadmap to guide implementation of the plan.



Achievements Over Last Five Years

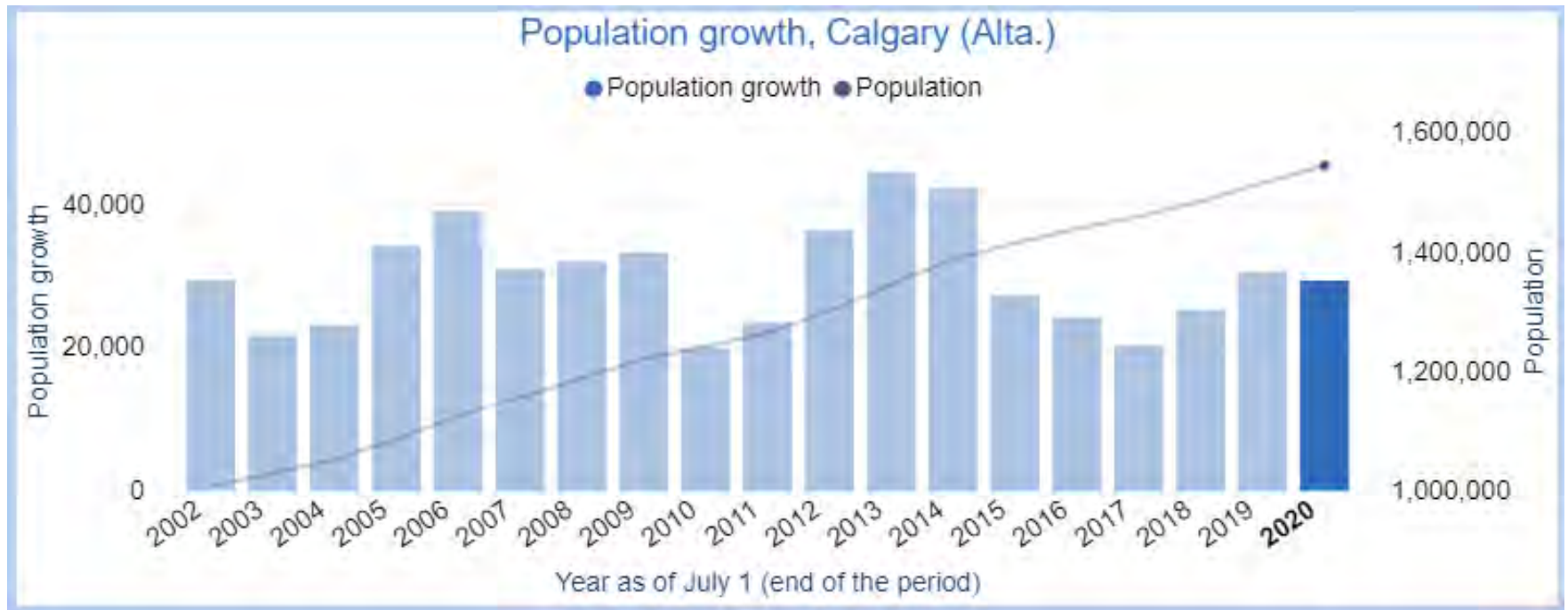
- Bow River Source Water Assessment and Maximum Allowable Load Projects
- Annual Progress Reports
- Development of the PMP Website
- Alberta Phosphorus Management Tool
- Six Municipal Workshops (2016 & 2018)
- Six Stakeholder Advisory Group Forums (2015 – 2020)
- Development of a PMP Inventory and PMP Implementation Roadmap
- Eight Bow River Phosphorus Management Plan Videos



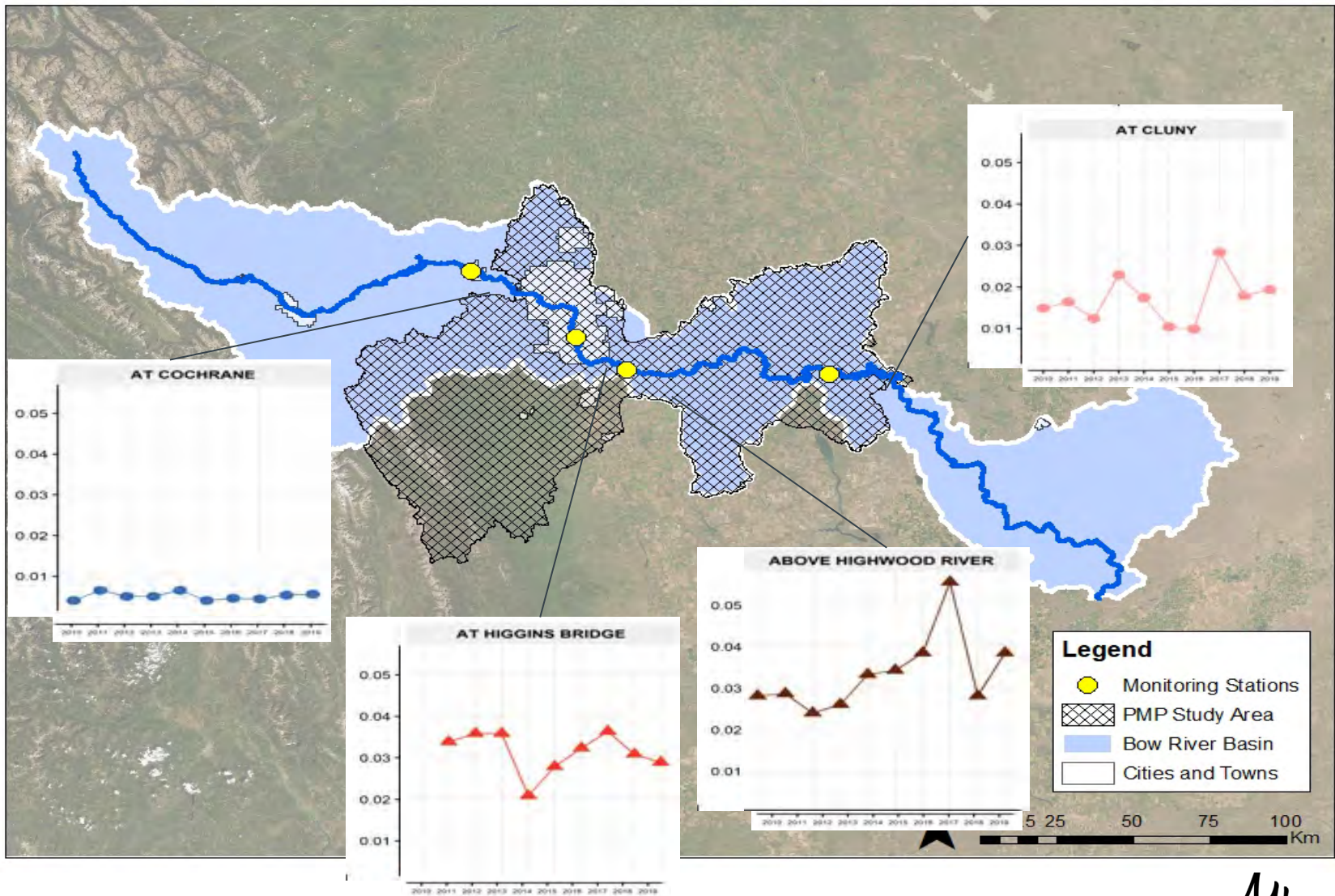
Bow River Phosphorus Management Plan: Water Quality Monitoring and Management



The Challenge of Population Growth



Phosphorus Levels Since 2010



What Can Municipal Governments Do?



Ensure new and existing plans that address growth consider phosphorus management



Think upstream – collaborate with other municipalities on source water protection planning



Establish or maintain bylaws that manage stormwater



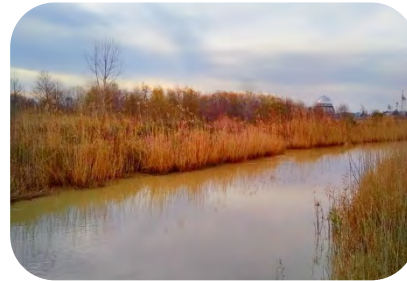
Ensure wastewater treatment plants minimize phosphorus inputs as much as possible



Undertake education and extension efforts to promote beneficial agricultural and urban land-use practices



Research, fund and implement beneficial management practices and control measures



Maintain wetlands and keep riparian areas healthy



Eliminate phosphorus from fertilizers used on public lands.

What Can Planners and Developers Do?



Maintain wetlands, riparian areas and other natural features as much as possible



Minimize and disconnect impervious areas



Implement stormwater management controls throughout the development site

What Can Individuals Do?



Eliminate the use of phosphorus-containing fertilizers



Wash cars in car washes



Use green-roofs, rain barrels, rain gardens, etc.



Pick up after pets



Ensure septic systems are working properly



Clean up leaves in the fall



Before washing dishes, scrape food into the compost



If your property is on a river or lake, leave shorelines natural

Find out more!

If you are interested in learning more about the PMP:

Subscribe to PMP IC Correspondence



Read the Plan



<https://open.alberta.ca/publications/6804006>

Check out the PMP Website and Videos Series

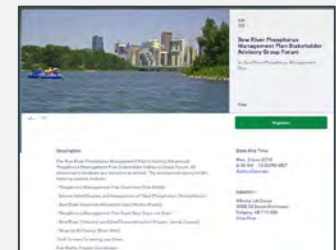


Google. Bow River Phosphorus Management Plan

Read the Annual Progress Report



Join the Mailing List to Learn About Future Events



PMP Video Series Online

- [Overview](#)
- [Water Quality Management](#)
- [Urban Stormwater Management](#)
- [Managing Phosphorus Through Wastewater Treatment](#)
- [Phosphorus and Irrigation Management](#)
- [The Role of Stewardship in Phosphorus Management](#)
- [Livestock Management to Address Phosphorus](#)
- [A Municipal Approach to Phosphorus Management](#)

Questions?



Agenda Item	5
Submitted to	Land Use and Servicing Committee
Purpose	For Information
Subject	Bow River Reservoir Options Feasibility Study
Meeting Date	February 3, 2022
<p><i>That the Committee receive for information a presentation on the Alberta Environment and Parks Bow River Reservoir Options Feasibility Study</i></p>	
<p>Summary</p> <ul style="list-style-type: none"> • Alberta Environment and Parks continues to explore options to build additional flood and drought storage capacity on the Bow River to reduce the impacts of severe weather events on Albertans and the economy. The Bow River Working Group had previously recommended a complete conceptual assessment of 3 major reservoir options on the Bow River, upstream of Calgary. Environment and Parks' Bow River Reservoir Options initiative builds on those recommendations, beginning with the conceptual assessment (Phase 1) that concluded in Spring 2020, and with the initiative of the Phase 2 feasibility study (ongoing). • In fall 2021, Environment and Parks began engagement and field studies for Phase 2 of the feasibility study. More information about public engagement on the study can be found here. • This presentation is part of AEP's outreach to build awareness of the feasibility study. This provincial initiative also relates to the Growth Plan chapter on watershed stewardship and Policy 3.4.1.2 which states: <i>'The CMRB will support the continued assessment of upstream reservoirs on the Region's rivers to provide water storage capacity and flood mitigation, where applicable.'</i> 	
<p>Attachments</p> <ul style="list-style-type: none"> • More information on the Bow River Reservoir Options Feasibility Study is available on the Government of Alberta website here. • Slide Deck: Bow River Reservoir Options (BRRO) Initiative Phase 2: Feasibility Study Update 	

Recommendation

That the Committee receive for information a presentation on the Alberta Environment and Parks Bow River Reservoir Options Feasibility Study.

Bow River Reservoir Options (BRR0) Initiative Phase 2: Feasibility Study Update

Presented to the Calgary Metropolitan Region Board
Land Use and Servicing Committee

Presented by Denise Auriat, Alberta Environment and Parks

Presented on February 03, 2022

Agenda Item 5i



What's coming in this Presentation?

5 mins – The Bow River Basin

25 mins – The Bow River Reservoir Options (BRRO) Initiative

- 5 mins - The BRRO Background and Objective
- 5 mins - The BRRO Work Process
- 10 mins - Phase 1: Conceptual Assessment (Completed Spring 2020)
- 5 mins - Phase 2: Feasibility Study (Ongoing)

15 to 20 mins – Questions

Previous Related GoA Meetings with CMRB

- June 07, 2019 Flood Response Meeting which included discussion regarding the proposed Bow River reservoir options investigations (then called the Bow Basin Water Management Options Project)
- September 15, 2019 Reservoir Options meeting which summarized the process for selecting three Bow River reservoir option dam sites for further study; namely the **Morley, Relocated Ghost Dam and Glenbow East** options

The Bow River Basin

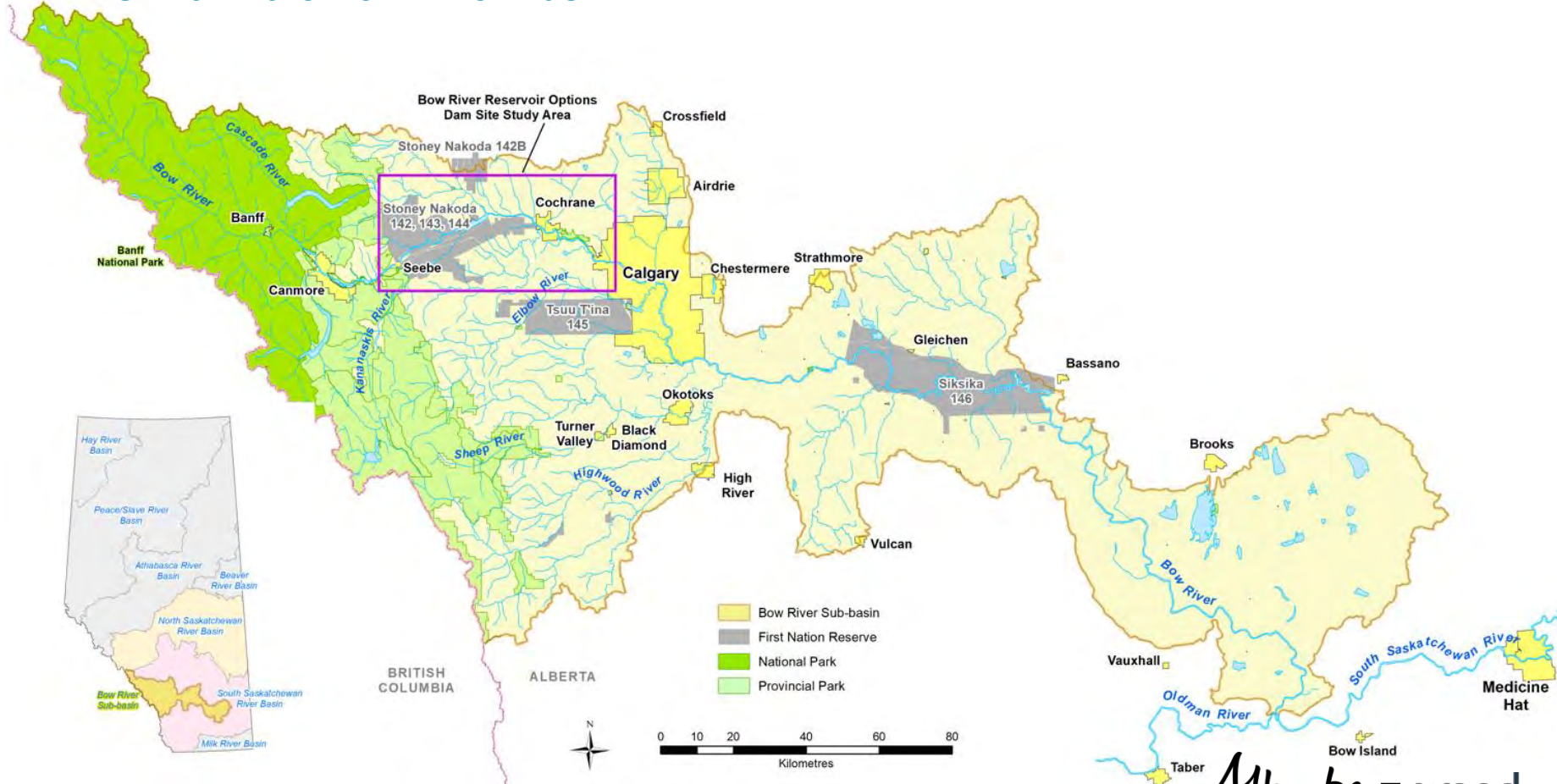
Bow River Basin within the Saskatchewan River Basin



Bow River Basin Facts

- Snowmelt dominated water source watershed originating in the Rocky Mountains with dramatic annual variation in maximum flow peaks and generated water volume.
- Home to 22 urban municipalities including the City of Calgary, 12 regional municipalities, and reserve lands for 3 First Nations, making it the most populous river basin in Alberta.

BRRO within the Bow River Basin



2013 Flood Event

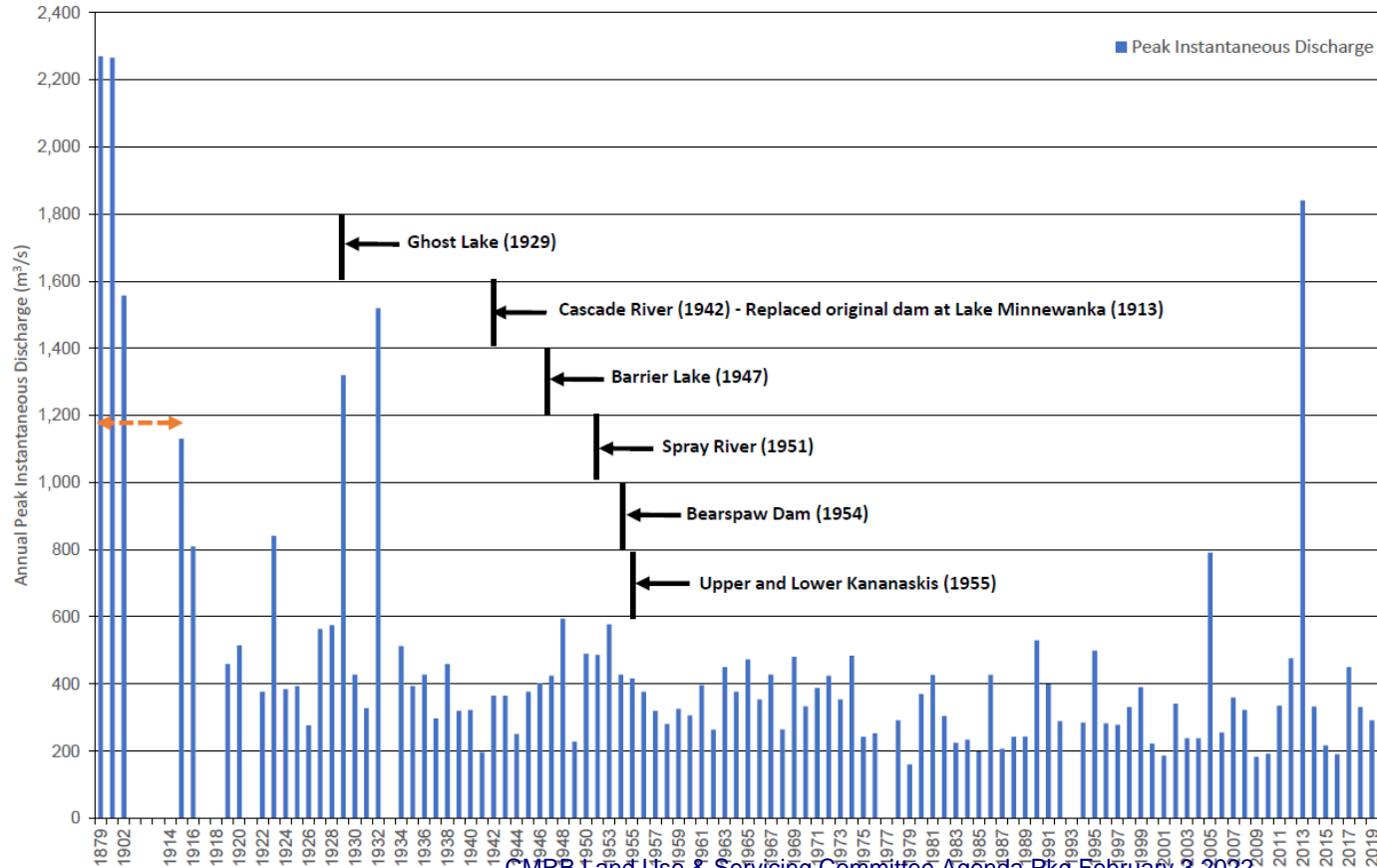


3rd highest flood peak observed in Calgary since settlement



2013 Flood Impacts on the Province of Alberta exceeded \$5 billion

Bow River Flood Peak History at Calgary, and Historic Upstream Dam Construction



The Bow River Reservoir Options (BRRO) Initiative

Bow River Reservoir Options (BRRO) Initiative Objectives & Schedule

Through a process of phased engineering, environmental, and socio-economic studies, and regulatory processes:

1. Determine if it is in the interest of the Province of Alberta to develop a new dam and reservoir project on the Bow River upstream of Calgary for the purpose of flood and drought mitigation; and, if so,
2. Proceed with selection and development of a preferred site.



Bow River Working Group (BRWG)

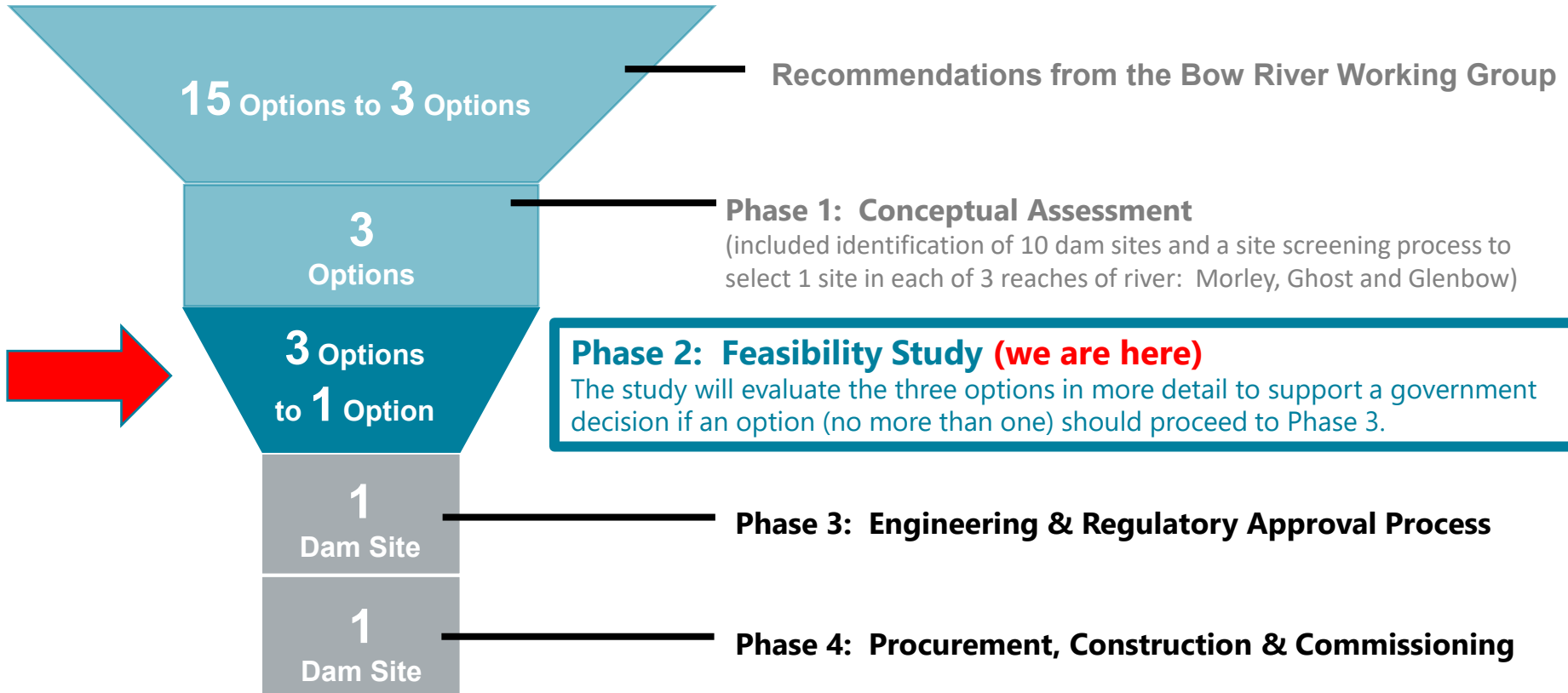
- The BRWG is a multi-stakeholder group of about 35 water manager and user organizations, including:
 - Local/regional governments (municipalities and counties)
 - First Nations
 - Irrigation districts
 - Industry (e.g., TransAlta)
 - Watershed Planning and Advisory Councils (WPACs)
 - ENGOs with a specific interest in the Basin (TU, DU)
 - Provincial government, generally as sponsors or observers

Indigenous Groups and Key Stakeholders

- **Indigenous Groups** (12 groups)
- **Community-Based Organizations** (6 organizations)
- **Provincial Government** (2 organizations)
- **Environmental Non-Governmental Organizations** (10 organizations)
- **Non-Governmental Organizations** (4 organizations)
- **Industry (Land & Resource Use)** (4 groups)
- **Infrastructure (Utility) Providers** (11 providers)
- **Private Property Owners** (approx. 1100 parcels)

The BRRO Work Process

Option Assessment Process



Integrated Flood and Drought Mitigation Approach

Complementary approaches to achieve flood and drought mitigation:

- **Provincial-level** (i.e., reservoirs, operating agreements; e.g., attenuate 100 year flood to maximum 1200 m³/s at Calgary);

and

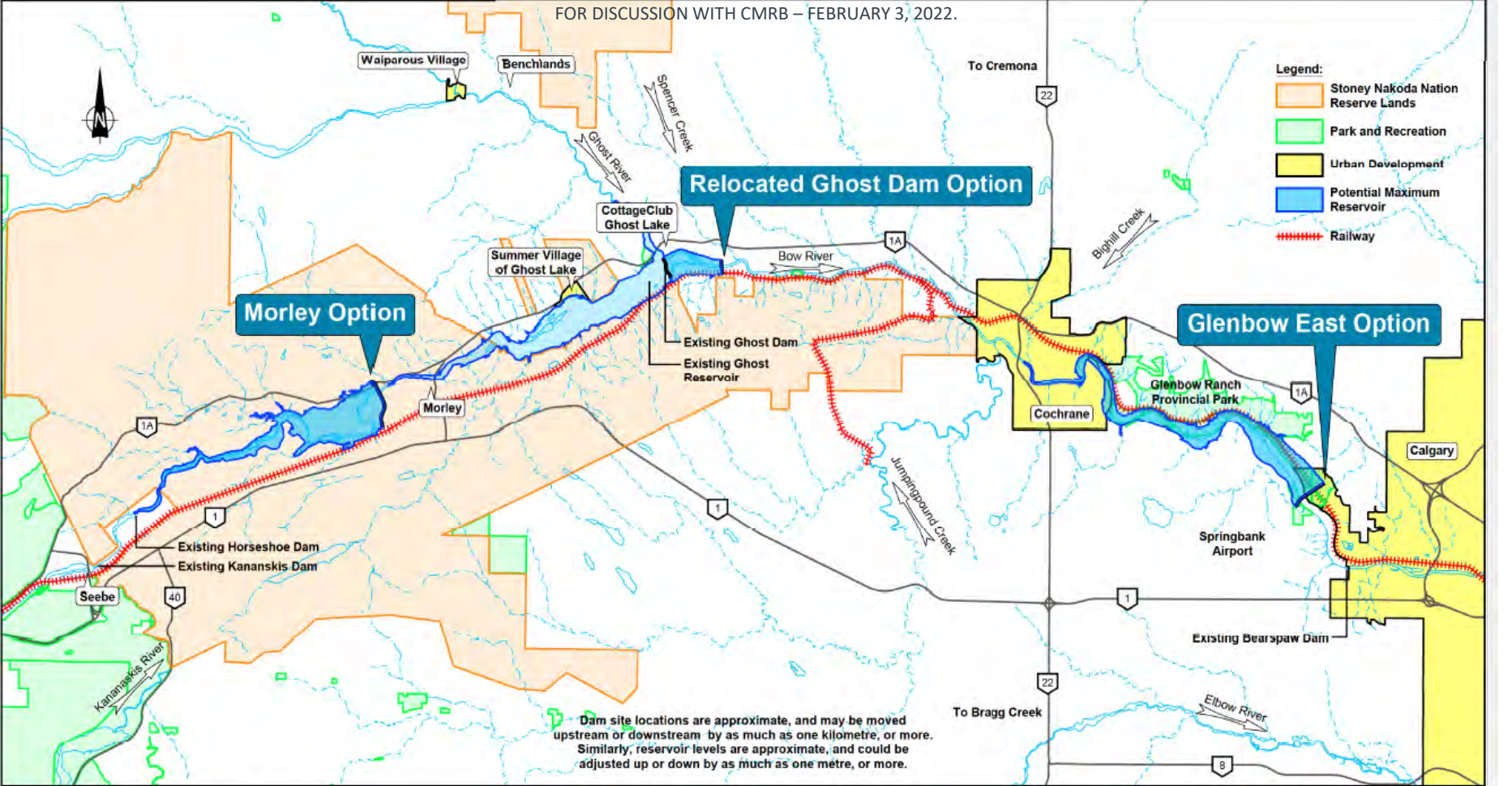
- **Municipal-level** (i.e., berms, by-laws, building codes) to protect up to e.g., 1200 m³/s.

Phase 1: Conceptual Assessment

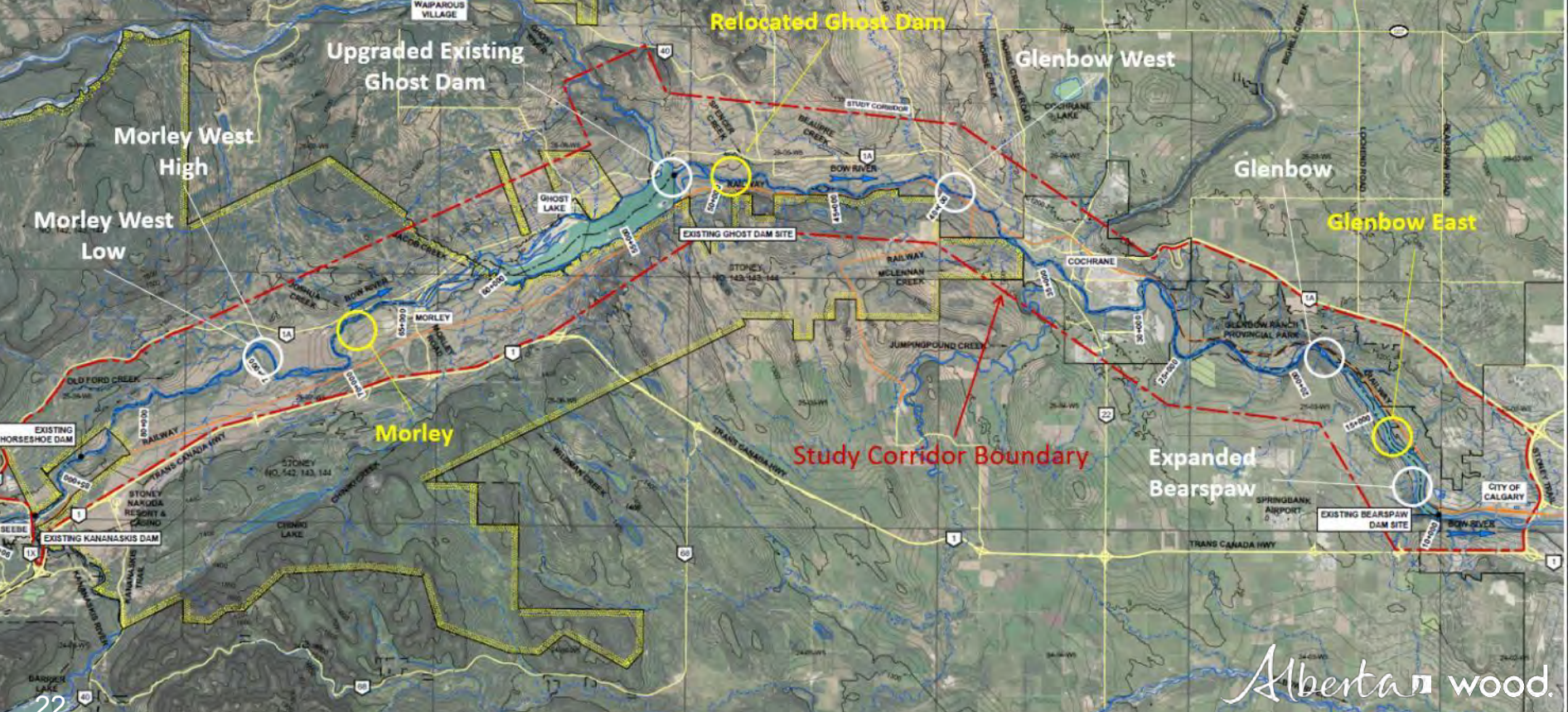
BRRO Phase 1 Conceptual Assessment - Objective & Work Scope

Develop conceptual engineering designs for three reservoir storage options on the Bow River upstream of Calgary and, at a high level (**Desktop Only**), identify potential engineering, environmental, social, economic, cultural and traditional land use factors; but not yet in sufficient detail to compare options or recommend a preferred option.





Conceptual Assessment Site Screening (10 Sites)



THIS DRAWING MAY HAVE BEEN REDUCED. ALL SCALE NOTATIONS INDICATED (e.g. 1:1000) ARE BASED ON 22" x 34" PLOT SIZE DRAWINGS.



Classification: Public

DRAFT

FOR DISCUSSION ONLY

The Conceptual Assessment Three Options

Morley Option

Considers a dam and reservoir located almost entirely on Stoney Nakoda Nations reserve lands

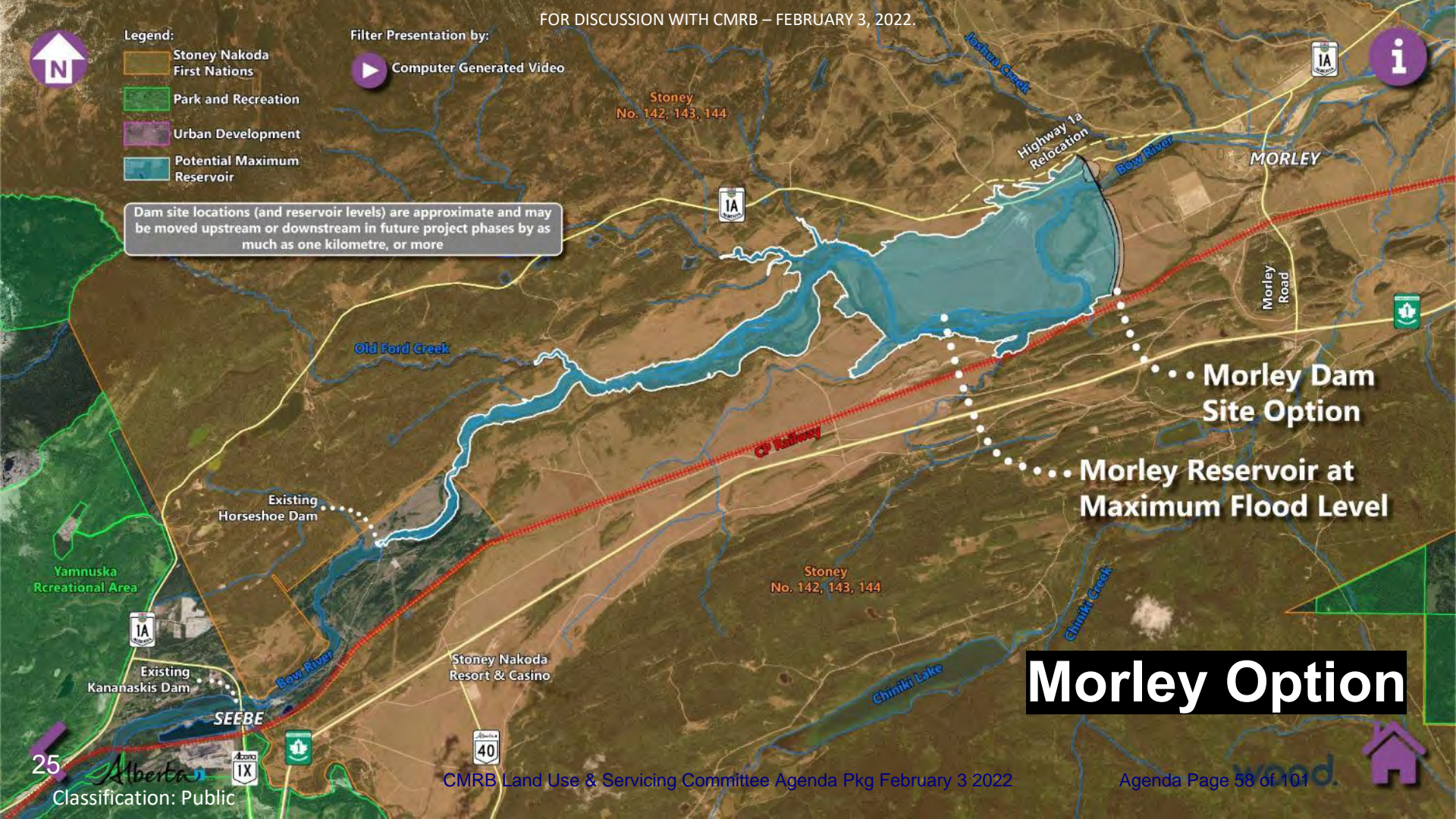


- Legend:
- Stoney Nakoda First Nations
 - Park and Recreation
 - Urban Development
 - Potential Maximum Reservoir

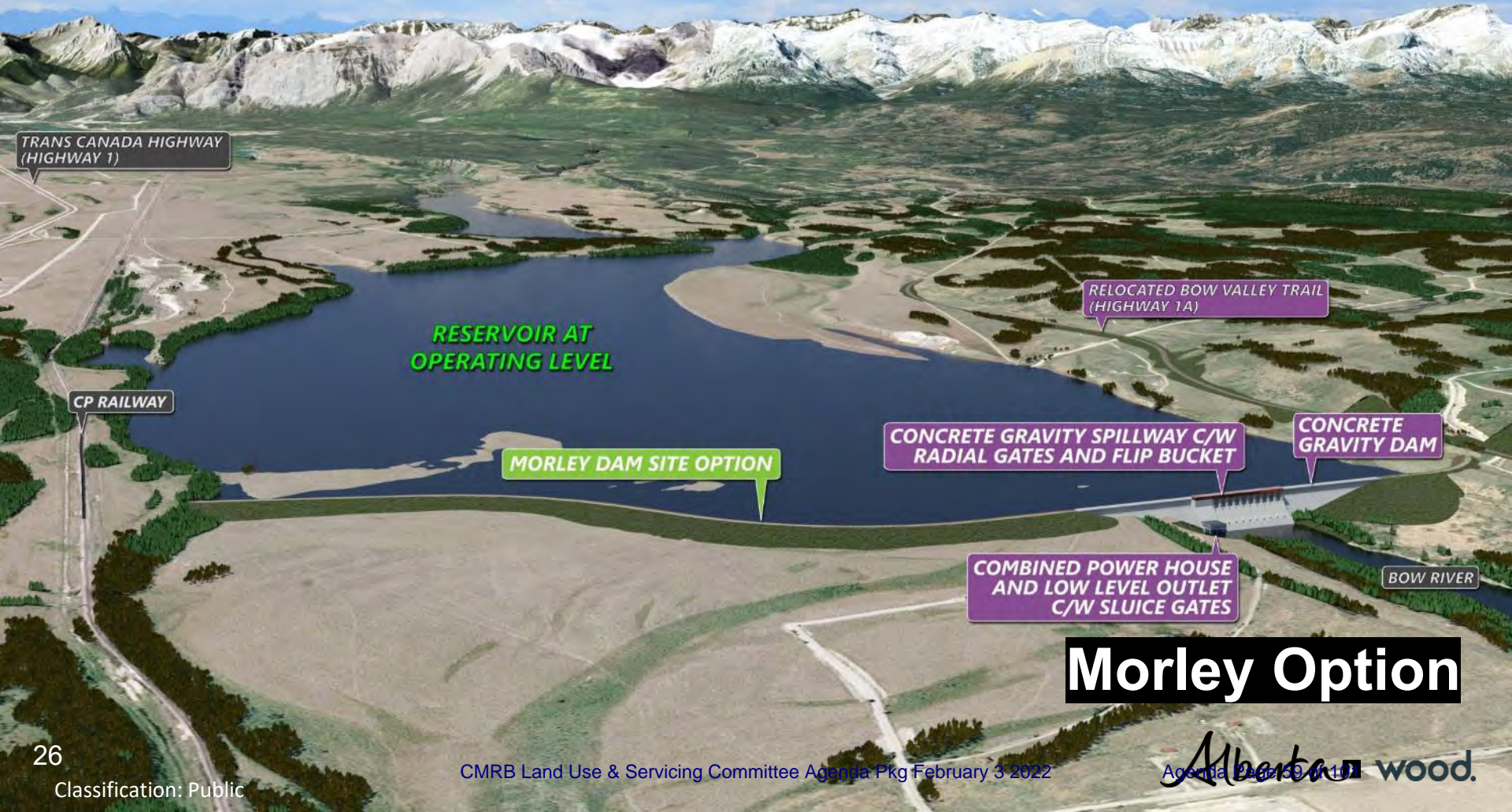
Filter Presentation by:

- Computer Generated Video

Dam site locations (and reservoir levels) are approximate and may be moved upstream or downstream in future project phases by as much as one kilometre, or more



Morley Option



TRANS CANADA HIGHWAY
(HIGHWAY 1)

RESERVOIR AT
OPERATING LEVEL

CP RAILWAY

MORLEY DAM SITE OPTION

CONCRETE GRAVITY SPILLWAY C/W
RADIAL GATES AND FLIP BUCKET

RELOCATED BOW VALLEY TRAIL
(HIGHWAY 1A)

CONCRETE
GRAVITY DAM

COMBINED POWER HOUSE
AND LOW LEVEL OUTLET
C/W SLUICE GATES

BOW RIVER

Morley Option

Morley Option – Some Items for Consideration

ENGINEERING

- Upstream constraint of the existing Horseshoe Dam and Kananaskis Dam

ENVIRONMENT

- Respecting the traditional lands of the Stoney Nakoda First Nations

ENGAGEMENT

- Dam site would be located about 1 km upstream of the Stoney Nakoda First Nations community of Morley
- Reservoir would inundate some existing homes

Relocated Ghost Dam Option

Considers increasing the capacity of the existing Ghost Reservoir by decommissioning the existing Ghost Dam after building a new downstream Ghost Dam thereby expanding the reservoir size



- Legend:
- Stoney Nakoda First Nations
 - Park and Recreation
 - Urban Development
 - Potential Maximum Reservoir

- Filter Presentation by:
- Computer Generated Video
 - Drone Captured Video
 - Drone Captured Image
 - Clear Filter



Dam site locations are approximate and may be moved upstream or downstream by as much as one kilometre, or more. Similarly, reservoir levels are approximate, and could be adjusted up or down by as much as one metre, or more.

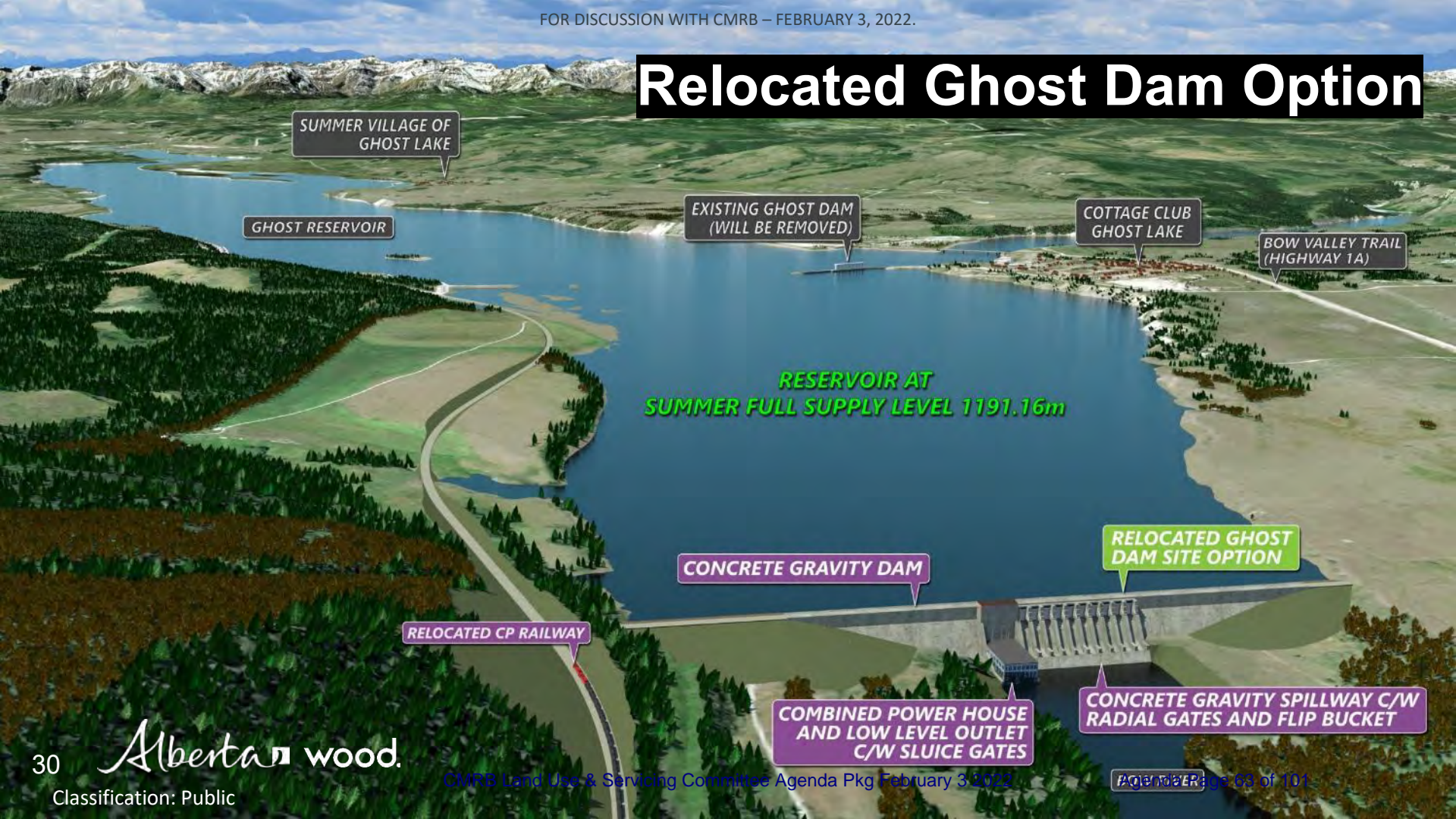
Expanded Ghost Reservoir at Maximum Flood Level

Relocated Ghost Dam Site Option for Expanded Ghost Reservoir

Relocated Ghost Dam Option



Relocated Ghost Dam Option



SUMMER VILLAGE OF GHOST LAKE

GHOST RESERVOIR

EXISTING GHOST DAM (WILL BE REMOVED)

COTTAGE CLUB GHOST LAKE

BOW VALLEY TRAIL (HIGHWAY 1A)

RESERVOIR AT SUMMER FULL SUPPLY LEVEL 1191.16m

CONCRETE GRAVITY DAM

RELOCATED GHOST DAM SITE OPTION

RELOCATED CP RAILWAY

COMBINED POWER HOUSE AND LOW LEVEL OUTLET C/W SLUICE GATES

CONCRETE GRAVITY SPILLWAY C/W RADIAL GATES AND FLIP BUCKET

Relocated Ghost Dam Option – Some Items for Consideration

ENGINEERING

- Requires relocation of the CP railway
- Requires decommissioning of existing Ghost Dam
- Requires slope stability assessment along CottageClub Ghost Lake development

ENVIRONMENT

- Potential Ghost Reservoir impacts

ENGAGEMENT

- May require relocation of home(s)
- Potential direct impacts to two communities:
 - Summer Village of Ghost Lake
 - CottageClub Ghost Lakeand recreational use of the existing Ghost Reservoir

Glenbow East Option

This option would construct a new dam within the smaller existing Bearspaw Dam storage reservoir

Legend:

Filter Presentation by:

-  Stoney Nakoda First Nations
-  Park and Recreation
-  Urban Development
-  Potential Maximum Reservoir

-  Computer Generated Video
-  Drone Captured Video
-  Drone Captured Image
-  Clear Filter

Dam site locations are approximate and may be moved upstream or downstream by as much as one kilometre, or more. Similarly, reservoir levels are approximate, and could be adjusted up or down by as much as one metre, or more.

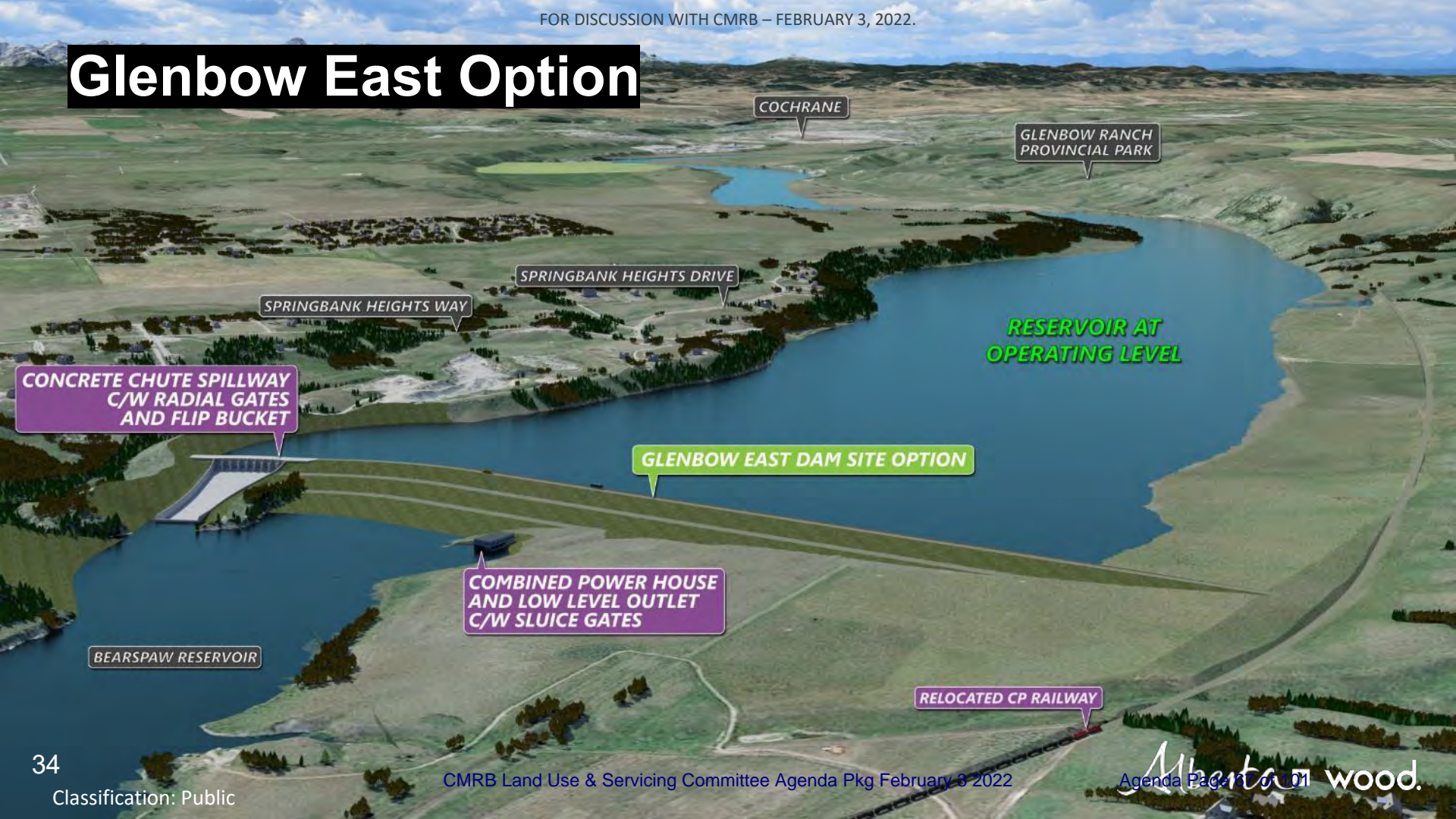
Glenbow East Reservoir at
Maximum Flood Level

Glenbow East Option

Glenbow East
Dam Site Option



Glenbow East Option



Glenbow East Option – Some Items for Consideration

ENGINEERING

- Requires relocation of the CP railway
- Within footprint of existing Bearspaw Dam reservoir
- City of Calgary water intakes are located within the existing Bearspaw Reservoir

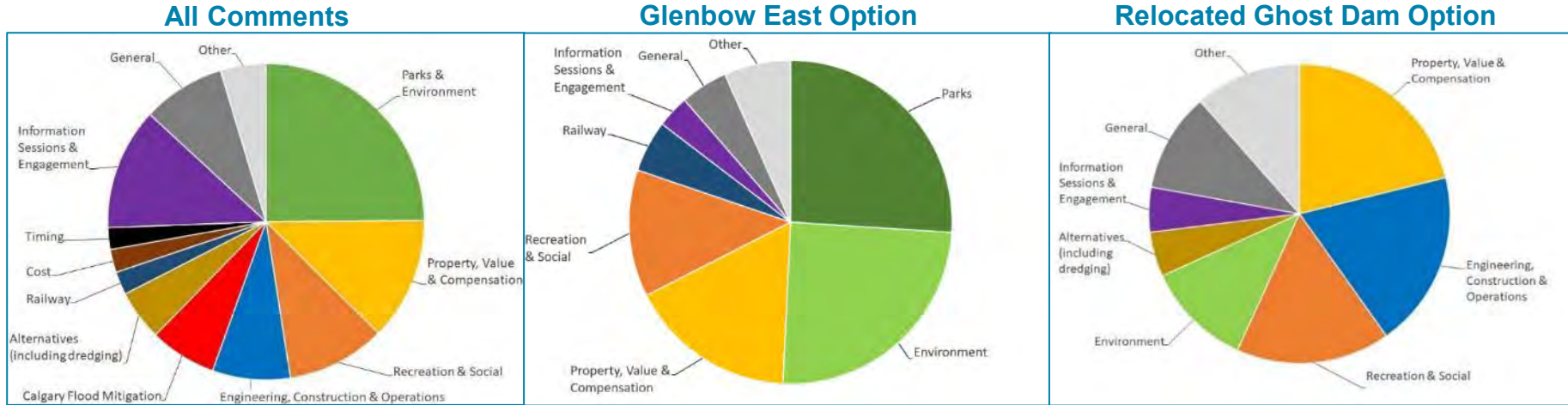
ENVIRONMENT

- Impacts existing Glenbow Ranch Provincial Park, the City of Calgary's Bearspaw Legacy Park and Haskayne Park (under development), and the Trans Canada Trail

ENGAGEMENT

- Existing Cochrane development is constraint on reservoir size
- Results in inundation of several homes in Springbank Heights community

Phase 1 Feedback Summary (~1400 comments)

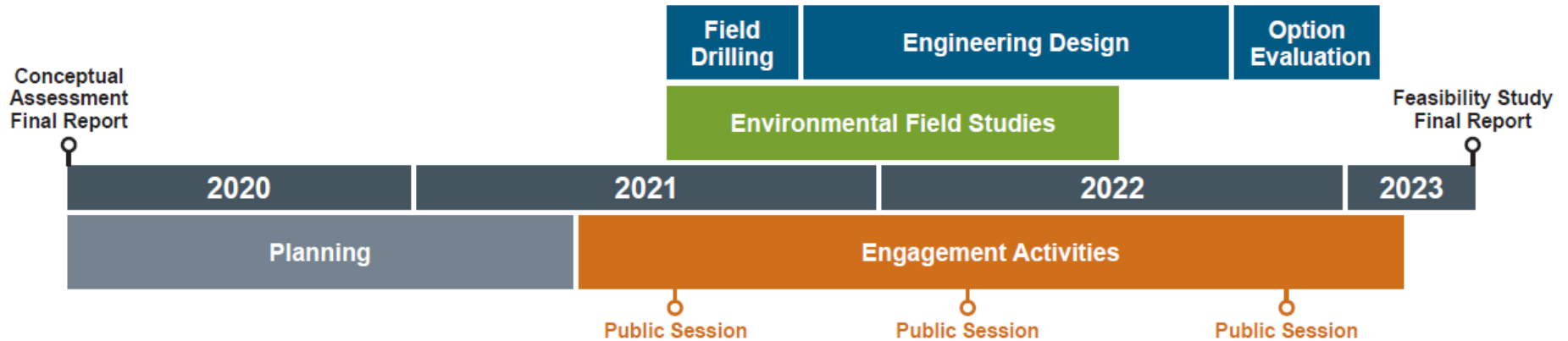


Phase 2: Feasibility Study

BRRO Phase 2: Feasibility Study Objectives

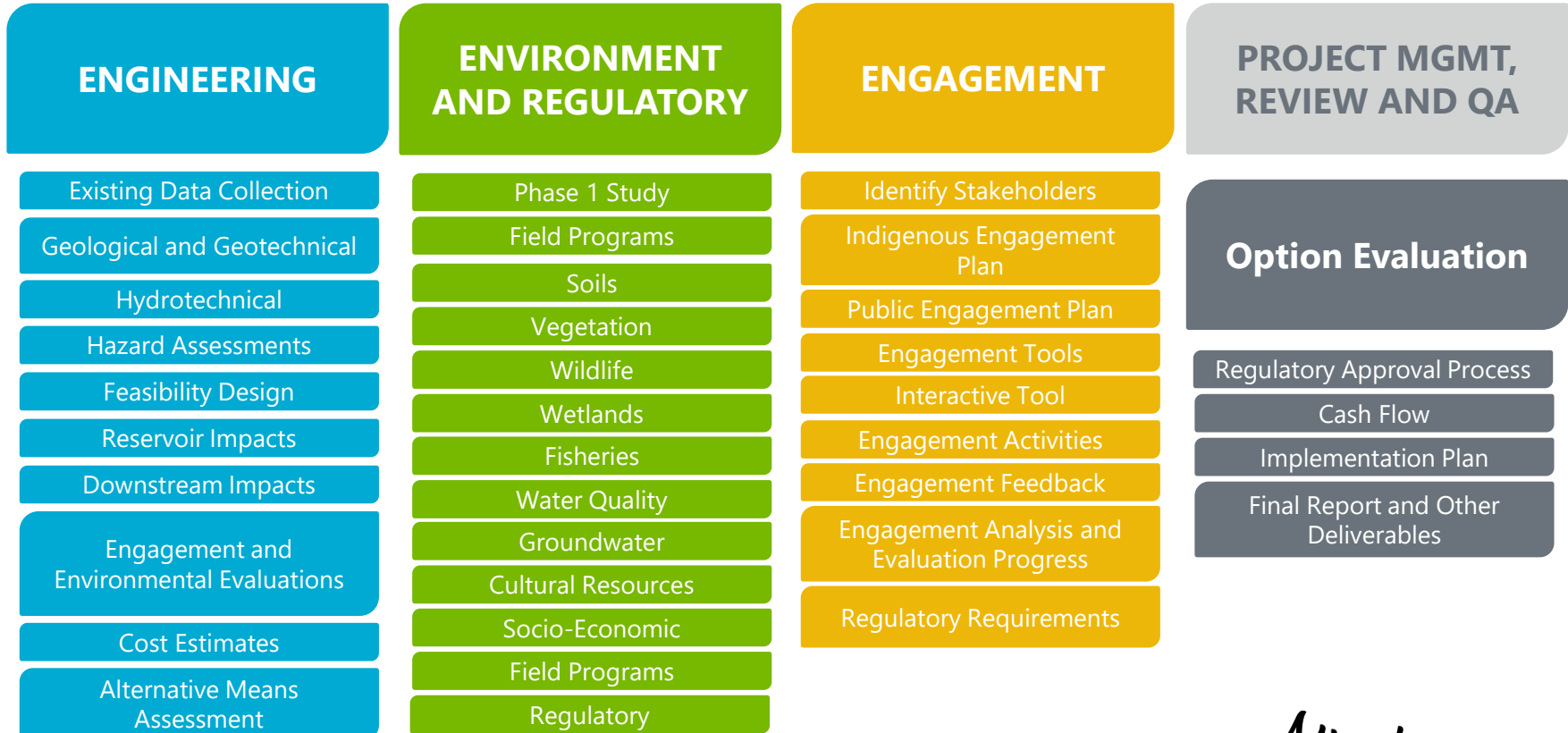
- Confirm technical viability of the three previously identified options:
 - **Morley** option – *AEP discussions are evolving with Stoney Nakoda Nations;*
 - **Relocated Ghost Dam** option; and
 - **Glenbow East** option.
- Assess **environmental** and **socio-economic** impacts and evaluate the options to support a government decision if one of the options should proceed to Phase 3, the Engineering & Regulatory Approval Process.

BRRO Phase 2 Schedule



BRR0 Phase 2 Scope of Work

(Unlike Phase 1 which was desktop only assessment, Phase 2 includes field investigations)



Feasibility Study Field Activities

Drone	Drone Surveys for Glenbow East and Relocated Ghost Options were completed in Phase 1. No additional Drone Surveys are planned for these Options in Phase 2.
Survey	Bathymetric survey of Ghost Reservoir (to generate a topographic surface of the ground surface beneath the reservoir and assess the current storage volume)
Enviro.	Environmental Field Activities: scientists and field technicians will study birds, wildlife, wetlands, soils, etc. in dam site and reservoir areas
Drilling	Geotechnical/Geological/Geophysical Investigations: visual geological mapping, geophysical surveys, and drilling small diameter geotechnical boreholes to establish dam site foundation conditions and search for earthfill construction materials in surrounding areas
Indigenous	Feasibility Level Traditional Knowledge and Land Use Studies for each Option
Provide	Activity sheets that further describe field activities are available on BRRO initiative website

Current Status of Feasibility Study

- Round 1 of Engagement is almost completed; 3 Rounds planned
- Collecting field data
 - Completed geotechnical drilling for Glenbow East option
 - Geotechnical drilling for Relocated Ghost Dam option in progress
 - Initiated Environmental field studies
 - Fieldwork includes bathymetric survey of existing Ghost Reservoir
- Completing PMF and Climate Change studies; near done
- Initiating feasibility level design and evaluation
- Planned Feasibility Study completion in 2023

Thank You



Project website (interactive tool, Phase 1 final report, etc.):

<https://www.alberta.ca/bow-river-reservoir-options.aspx>



Engagement opportunities:

<https://www.alberta.ca/bow-river-reservoir-options-engagement.aspx>



Telephone: 310-3773 (toll free)



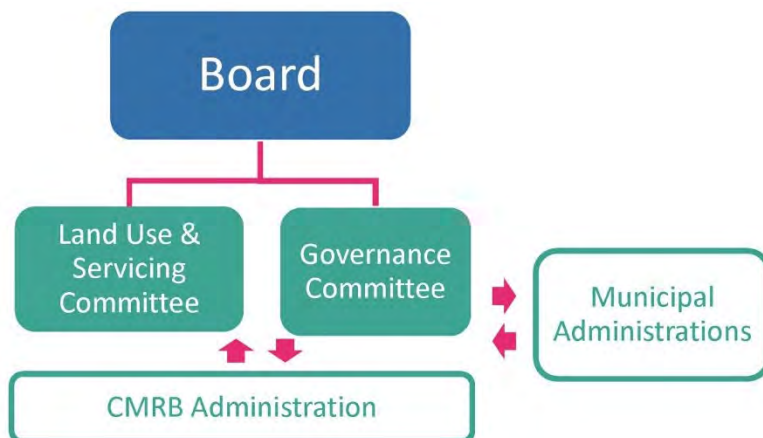
E-mail: aep.bowbasin@gov.ab.ca

Questions?

Agenda Item	6
Submitted to	Land Use and Servicing Committee
Purpose	For Information
Subject	Committee Terms of Reference Overview
Meeting Date	February 3, 2022
<i>Motion that the Committee receive for information the Board approved Land Use and Servicing Committee Terms of Reference</i>	
<p>Background</p> <ul style="list-style-type: none"> The CMRB Regulation grants the Board the authority to create internal governance policies and processes. The Board has the authority to strike committees and determine their mandate. 	
<p>Attachments</p> <ul style="list-style-type: none"> Approved Terms of Reference – Land Use and Servicing Committee here 	

1. Introduction

As part of onboarding new Committee members following the 2021 municipal elections, the Committee purpose, authority and responsibilities are documented in the Terms of Reference. The following graphic is useful in illustrating the relationship between Board, Committees of the Board and administrations.



Recommendation

That the Committee receive for information the Board approved Land Use and Servicing Committee Terms of Reference.

Terms of Reference Land Use and Servicing Committee Updated September 17, 2021

Authority

The Land Use and Servicing Committee is established by the Calgary Metropolitan Region Board (“the Board”) and reports to the Board through the Committee Chair. The Committee Chair shall provide leadership to the Committee members in fulfilling the mandate set out in these Terms of Reference.

Purpose

The purpose of the Land Use and Servicing Committee (“the Committee”) is to support the implementation of the Growth and Servicing Plans, and matters related to the Regional Evaluation Framework, once approved by the Minister. The Board may direct the Committee to undertake related additional work or studies. Overall, the Committee is a working committee which makes recommendations to the Board for ultimate approval.

1. Responsibilities of the Land Use and Servicing Committee

The Land Use and Servicing Committee shall oversee, provide advice and recommendations to the Board and CMRB Administration in the areas of:

- a. Implementation of the Growth Plan or Interim Growth Plan
- b. Implementation of the Servicing Plan
- c. Administration of the Regional Evaluation Framework or Interim Regional Evaluation Framework
- d. Other matters, as may be assigned from time to time.

The above responsibilities may require support or study from the administrative working groups, external stakeholders or consultants, from time to time. CMRB Administration will recommend the rationale, objectives, and outcomes of the work as well as recommendations regarding external stakeholder involvement. The Committee will consider the recommendations, refine where required, and provide CMRB Administration approval to proceed with developing the detailed scopes of work, with support from municipal administrations or working groups, where appropriate.

2. Chair

The Committee Chair shall be the Board Chair, unless otherwise directed by the Board.

3. Vice Chair

The Committee shall appoint a Vice Chair from amongst themselves in alignment with the Board and Committee Vice Chair Selection Process Policy.

4. Committee Membership

Each member municipality must have one (1) elected member participating and may have up to two (2) elected members participating on the Committee. Alternate members may attend provided they are a member of a participating municipality's council and are well briefed on the current status of the Committee initiatives and agenda. The Chair will be an "ex officio" member of the Committee. The term of membership shall be for the duration of their appointment or office.

Committee members, and their alternate, must review and commit to abide by the provisions of the Code of Conduct Policy.

5. Quorum

Quorum is defined as a simple majority (50% plus one) of the membership of the Committee.

6. Governance

Decisions of the Committee will be determined by a simple majority with each municipality holding a single vote. Decisions of the Committee will form the basis for recommendations to the Board, which will make the final decision on all matters forwarded by the Committee.

7. Reporting

Periodically, the Chief Officer, Chair, Vice Chair or CMRB Administration may report to the Board on matters within the Committee's responsibilities. The Committee shall work and liaise with other committees of the Board, as necessary.

Draft work products undertaken with the Committee's approval will be reviewed by the Committee. If deemed acceptable by the Committee, the Committee will recommend the draft work product for review and decision by the Board.

8. Meeting Process

The Committee is required to conduct its meetings in public (either virtually or in-person) unless a matter to be discussed is within one of the exceptions to disclosure in Division 2 of Part 1 of the Freedom of Information and Protection of Privacy Act, pursuant to s 708.04 of the Municipal Government Act. In the event

that a portion of a meeting is closed to the public, the Closed Session Policy will apply to Committee members and all other individuals present during the closed portion of the meeting.

Proposed meeting dates will be set every two months, or according to Committee needs. CMRB Administration will circulate a schedule of meeting dates late in the calendar year for the upcoming year. Every effort will be made to circulate changes to those dates at least three weeks in advance. Committee meetings will be made public on the CMRB website, where possible. Meeting minutes will be kept by CMRB Administration and reviewed by the Committee at the following Committee meeting. Following approval, the minutes will be posted to the CMRB website. The meetings may be viewed by members of the public.

The Chair will determine who may speak during the meeting at their discretion.

9. Support and Resources

The Committee will be supported by the Chief Officer and CMRB Administration, member municipality administrations, external consultants, and professionals, as necessary and as directed by the Chief Officer. The Committee will make available to new members of the Committee a suitable onboarding process. The Member Per Diem Policy applies to Committee members.

10. Amendments to the Terms of Reference

The Committee may, from time to time, consider changes to its Terms of Reference and recommend changes to the Governance Committee for consideration, and for final approval by the Board.

Agenda Item	7
Submitted to	Land Use & Servicing Committee
Purpose	For Information
Subject	Vice Chair Selection Process
Meeting Date	February 3, 2022
<i>Motion that the Committee receive for information the Vice Chair Selection Process Policy</i>	
<p>Summary</p> <ul style="list-style-type: none"> • The Committee must select a Vice Chair of the Land Use & Servicing Committee. • The approved Vice Chair Selection Process Policy is attached. The policy includes a description of the eligibility, term, role, nomination and voting process. • The Committee will vote on the Vice Chair at the next meeting if more than one individual is nominated for the role. CMRB Administration will receive nominations from Committee members by noon on February 22, 2022. As previously done, Board members will be notified of nominations as they are received. • Members may nominate or self nominate a Vice Chair during the February 3 meeting or via email to the Chief Officer. 	
<p>Attachments</p> <ul style="list-style-type: none"> • CMRB Vice Chair Selection Process Policy here 	

1. Introduction

A Vice Chair is to be selected by the Committee. Nominations for the Vice Chair will be received by February 22, 2022, in advance of the next Committee meeting. Per the approved policy attached, the selection of the Vice Chair requires the support of a simple majority; one member one vote.

2. Recommendation

That the Committee receive for information the Vice Chair Selection Process Policy.

Agenda Item 7

Governance Policy G-07

Board and Committee Vice Chair Selection Process Policy

Policy Purpose

To create a mechanism by which the Board and Committees of the Board can select a Vice Chair of the Board and of Committees of the Board.

Scope

This policy applies to the Board and all Committees of the Board.

Policy

Eligibility

Members in good standing of the Board or Committee are eligible to seek a Vice Chair position. Only a Mayor or Reeve is eligible to be a Vice Chair of the Board. Any member of a Committee, but not an alternate, is eligible to be Vice Chair.

Term

Vice Chair terms shall not exceed one year from the date of their selection, either through acclamation or winning a vote. There is no limit on how many terms a Vice Chair may serve.

Role

Vice Chairs will be required to participate in briefings given by CMRB Administration in advance of meetings and may be required to assume Chair duties at Board or Committee meetings. Vice Chairs are eligible to participate fully in any vote of the Board or Committee.

Nomination

Eligible members may volunteer for the Vice Chair role or be nominated for the role by another member of the Board or Committee. If a member is nominated by another member of the Board or Committee the nominated member must confirm they are able and interested to seek the position.

If more than one eligible member of the Board or Committee is nominated for the role of Vice Chair then the Chief Officer will conduct a selection process by secret ballot.

Agenda Item 7i

Voting

Members in good standing of the Board or Committee or their alternate are eligible to vote.

Each municipality is only eligible to cast one ballot and there is no weighting to the ballots, one member one vote. The selection of a Vice Chair requires the support of a simple majority of the Board or Committee.

In the event that no candidate achieves a majority on the first ballot, there will be a second round of voting with only the candidates who received the two highest number of votes in the first round on the ballot.

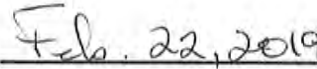
In the event of a tie after the second ballot, the names of both candidates will be written on a slip of paper and placed in a hat. The Chief Officer will draw one name and that candidate will become the Vice Chair.

POLICY

The CMRB Board voted unanimously to adopt the Board and Committee Vice Chair Selection Process Policy, attached hereto.



Christopher Sheard
Chair



Date

Agenda Item	8
Submitted to	Land Use & Servicing Committee
Purpose	For Decision
Subject	Output Data from Digitization of Existing and Approved Land use
Meeting Date	February 3, 2022
<i>Motion that the Committee recommend to the Board that the Output Data for the latest DEAL dataset be classified as Open Data.</i>	
<p>Summary</p> <ul style="list-style-type: none"> • The Digitization of Existing and Approved Land use (DEAL) dataset was created to provide information about planned and existing land uses for the development of the Growth Plan. • The first and only DEAL dataset was delivered to CMRB in December 2019. It is based on data from 2018. • The Data Sharing Framework was approved by the Board November 20th, 2020. The Framework provides a guide for the sharing of data generated by a study, process, report, or similar that is produced by or for the Calgary Metropolitan Region Board (CMRB) as part of its work. • CMRB Administration is recommending that the latest DEAL data be classified as Open Data as per the Data Sharing Framework. This recommendation was reviewed by the Land Use Technical Advisory Group and the Data and Analytics Subcommittee for the original DEAL data; no significant concerns were identified. • The DEAL dataset does not and will not include any assumptions or conclusions about available or unavailable land. 	

1. Introduction

The Digitization of Existing and Approved Land use (DEAL) dataset was created to provide land use information for the development of the Growth Plan. It was a key dataset for starting and developing the Growth Plan. The DEAL dataset provides a map of existing and approved (planned) land use from CMRB municipalities' land use bylaws and approved Area Structure Plans and consolidates those categories into broader regional categories.

CMRB Admin is updating this dataset with more current information as the original DEAL dataset used 2018 information. Having a regional land use dataset will be essential in developing a Placetype database for the Region as per the Growth Plan and can be a very useful dataset for various future studies commissioned by the CMRB. Most regional boards have some sort of land use map for their region for this reason.

The Data Sharing Framework, approved by the Board November 20th, 2020, guides sharing of data generated by a study, process, report, or similar that is produced by or for the CMRB. It provides an overview on the process of data sharing and the roles of the Board and administrations in data sharing. The Framework states that the Committee will be briefed on what the Output Data of a study will be and how it will be classified once the study is complete.

2. Output Data Classification

Output Data is defined as data that is generated from a CMRB study, process, report, or similar (i.e. Tables, Figures, GIS data). It may be classified as Open, Member, Stakeholder Organization, Confidential.

The Output Data of the DEAL dataset update will be a data map that covers the CMR and classifies land use into regional categories for both existing and planned land use. Currently the original DEAL dataset is classified as Open Data. Classifying the DEAL data as Open Data was discussed with the Land Use Technical Advisory Group (LU TAG) September 24th, 2021, and with the Data and Analytics Subcommittee on October 21st, 2021. No significant concerns were identified to CMRB Administration at either meeting.

Open Data as defined by the Data Sharing Framework is structured data that is machine-readable, freely shared, used and built on without restrictions (open.canada.ca, 2019). That is, open for anyone (public, organization, etc.) to use.

CMRB Admin recommends that the Output Data for this second iteration of the DEAL dataset be classified as Open Data. The dataset would then fall under the CMRB Open Data Licence Agreement.

If approved by the Committee, the DEAL dataset update would be available to anyone in GIS form as a data map that covers the CMR that classifies land use into regional categories for both existing and planned land use. It would not contain any personal information. Open Data can be seen as an easy way to help drive economic

development by providing easy-to-access, accurate, and formatted data for stakeholders and businesses in the Region to readily use.

The following verbiage will accompany the dataset: "This dataset is intended to be used on a regional scale and provides a general overview of land use. For landowners, please refer to your municipal Land Use Bylaw as this data is for reference purposes only. The CMRB provides no warranty, nor accepts any liability arising from any incorrect, incomplete, or misleading information."

3. Recommendation

That the Committee recommend to the Board that the Output Data for the latest DEAL dataset be classified as Open Data.

Agenda Item	9
Submitted to	Land Use and Servicing Committee
Purpose	For Decision
Subject	Joint Planning Area Context Study Terms of Reference
Meeting Date	February 3, 2022
<p><i>Motion that the Committee recommend to the Board that the Joint Planning Area Context Study TOR committed to in the Growth Plan be due to the Board for approval 6 months from the Minister's approval of the Growth Plan.</i></p>	
<p>Summary</p> <ul style="list-style-type: none"> • The Growth Plan and the Servicing Plan ("the Plans") were delivered to the Minister on June 1, 2021. Section 3.1.8 of the Board-approved Growth Plan (May 21, 2021 version) includes direction on Joint Planning Areas (JPAs). • JPAs are a core component of the Growth Plan and an important aspect of the Servicing Plan. JPAs identify places for neighbouring municipalities to collaborate in areas where growth impacts municipalities and where a high-level of municipally provided services will be necessary to support growth. • Policy 3.1.8.5 states that within one year of the approval of the Growth Plan by the Board, participating municipalities shall adopt a Terms of Reference (TOR) to guide development of Context Studies. Context studies will provide a high-level planning and servicing plan framework for JPAs. • Policy 3.1.8.6 states that within three years of the approval of the Growth Plan by the Minister, participating municipalities shall complete a context study for each Joint Planning Area. • At the January 14, 2022 meeting of the Land Use Technical Advisory Group (TAG), TAG representatives identified a need to extend the TOR completion date identified in the Board-approved Growth Plan. • Delays in the Context Study Terms of Reference may affect future work of the Board. The information that will be created through JPA Context Studies are intended to inform other studies and reports. Delays in completion of JPA Context Studies may affect these timelines, especially those related to the Servicing Plan. • CMRB Administration has outlined some potential options for Committee review. • The future work of the Board is to be the subject of a closed session workshop to be held on March 11, 2022. • CMRB will pursue a formal change to the Growth Plan with Municipal Affairs as the document is not yet finalized through Ministerial Order. 	
<p>Attachments:</p> <ul style="list-style-type: none"> • Schedule 1 of Board Approved Growth Plan 	

- Joint Planning Area – Context Study Considerations Summary

Introduction

With the completion of the regulatory-mandated Growth Plan and Servicing Plan, the focus of the Board and Administration is shifting. The three focus areas for the future include:

1. Stewards of the Regional Evaluation Framework.
2. Conducting further work identified in the Growth Plan and Servicing Plan.
3. New areas of focus not contained in the Growth Plan and Servicing Plan.

Conducting further work identified in the Plans

One of the key cornerstones of the Growth Plan, as approved by the Board, are Preferred Growth Areas and Joint Planning Areas. These two tools are a means to focus regional growth and collaborative efforts. Preferred Growth Areas include Hamlet Growth Areas, Urban Municipalities and Joint Planning Areas (JPAs). Four JPAs, as shown in the attachment, are identified in the Growth Plan and each require the completion of a Context Study. In addition, Context Studies are meant to inform other work identified in the Growth Plan and Servicing Plan.

Further details on Context Studies can be found in the attachment. The policies of the Board-approved Growth Plan commit municipalities that have land within a JPA to adopt a Terms of Reference (TOR) for a Context Study within one year of the Board's approval of the proposed Growth Plan (May 21, 2022). TORs, in general, define the purpose and structure of a project. It includes a high-level summary of the objectives of the project and defines what the project deliverable(s) will include.

Some JPA member municipalities have begun the work of developing the TOR for Context Studies at the staff level, while others have not. Member municipality administrations have requested to delay the deadline of TOR for Context Studies. Municipalities and the CMRB have not received a Ministerial Order for the Growth Plan, so the Minister may make revisions that affect aspects of the JPAs or Context Study requirements. In addition, Rocky View County, City of Calgary, Foothills County, and Town of Okotoks are committed to more than one JPA.

It is the responsibility of CMRB Administration to support municipalities and ensure that the policies of the Growth Plan are being met.

Benefits and Drawbacks of Delaying TOR for Context Studies

The following table summarizes some benefits and drawbacks to a delay of TOR completion for Context Studies located in Joint Planning Areas.

Agenda Item 9

Table 1: Benefits and Drawbacks

Benefits to Delay Context Study TOR	Drawbacks to Delay Context Study TOR
Allows time for administrations to onboard new member municipality council and familiarize with CMRB, and its mandate, following the municipal election	Delays timelines for future work (studies and reports) that rely on Context Studies for input (e.g. Regional Transportation and Transit Master Plan)
Considered good governance not to undertake collaborative work without certainty regarding what the work must achieve	Uncertainty whether statutory plans can proceed in a Joint Planning Area without Context Study TOR (GP Policy 3.1.8.11 requires this information to be outlined in the TOR process)
Allows member municipality resources to focus on other priorities	May create compressed timeline for further work identified in the Plans
No rework would be required once ministerial approval is received	Other
Other	

DISCUSSION: Should the TOR for Context Studies be delayed?

Timeline Options

CMRB Administration recommends the following options for consideration by the Committee. TORs for Context Studies in JPAs will be adopted by:

1. Current deadline as stated in the Board approved Growth Plan (May 21, 2022).
2. November 21, 2022 (6 months delay from current timeline).
3. 6 months from Ministerial approval of the Growth Plan.
4. May 21, 2023 (one year delay from current timeline).
5. Other as determined by the Committee.

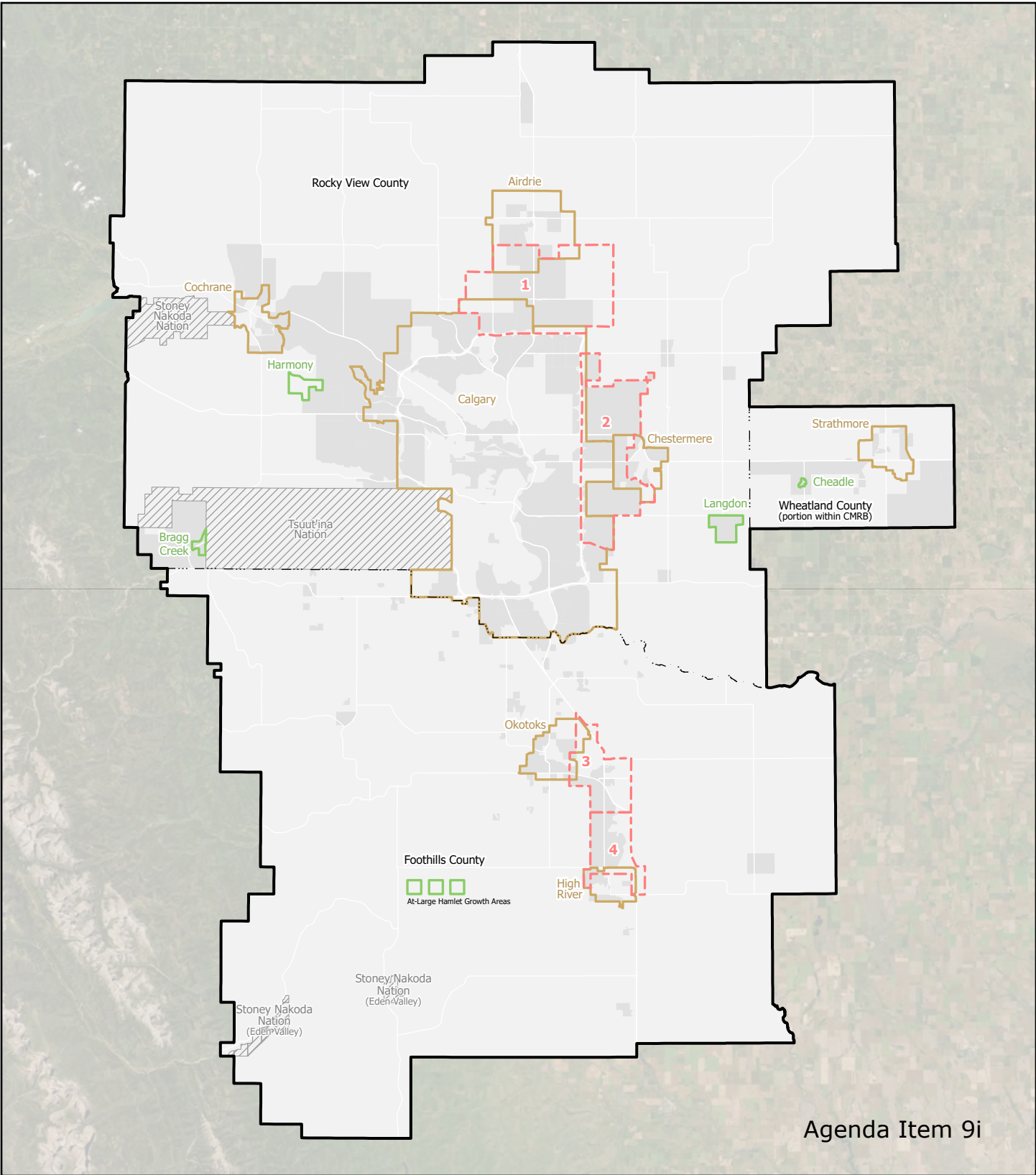
In discussions with TAG members, one municipality identified that they could likely meet a deadline of December 2022 with support from CMRB Administration, otherwise a year-long extension may be required. CMRB Administration are happy to support TOR development for any JPA.

Next Steps

- CMRB Administration will work with member municipalities to conduct the work identified in the Growth Plan once a Ministerial Order has been received. CMRB administrative support may include organization/facilitation of meetings, or other support as required.
- CMRB Administration is developing high level conceptual schedules to the work proposed in the Growth Plan and Servicing Plan to help the Board identify priorities, schedule and budgeting.

Recommendation

That the Committee recommend to the Board that the Joint Planning Area Context Study TOR committed to in the Growth Plan be due to the Board for approval 6 months from the Minister's approval of the Growth Plan.



Agenda Item 9i

Preferred Growth Areas

- Urban Municipality
- Joint Planning Area
- Hamlet Growth Area†

†Foothills County to identify locations for up to three Hamlet Growth Areas in the future.
‡Includes all plans approved prior to May 2020

Statutory Plans

- Existing Area Structure Plan‡



**Schedule 1: Regional Growth Structure
(Regional Growth Plan)
HDR|Calthorpe, May 21, 2021 version**

0 5 10 20 km
Data Sources: CMRB Municipalities, AltaLIS
Map Created: 2021-10-25

This map is for reference purposes only. The CMRB provides no warranty, nor accepts any liability arising from any incorrect, incomplete, or misleading information.

Joint Planning Area – Context Study Considerations Summary

GP Policy / SP Chapter	Verbatim from May 21, 2021 version of Board-approved document	High Level Summary
Regional Growth Plan		
GP: 3.1.8.4	3.1.8.4 The municipalities which are party to the Joint Planning Area shall prepare a background report, called a Context Study which will inform new Area Structure Plans and development in the Joint Planning Area, the Growth and Servicing Plans, as well as Municipal Development Plans	ID parties to the Context Study
GP: 3.1.8.5	3.1.8.5 Within one year of the approval of the Growth Plan by the Board, the participating municipalities shall adopt a Terms of Reference to govern the development of the Context Study, including: a) a process for dispute resolution; (b) details pertaining to how new Area Structure Plans will be considered by the member municipalities prior to completion of the Context Study; and (c) a project schedule for completion of the Context Study	TOR to be adopted by municipalities within one year of the approval of the Growth Plan by the Board
GP: 3.1.8.6	3.1.8.6 Within three years of approval of the Growth Plan by the Minister of Municipal Affairs, participating municipalities shall complete a Context Study for each Joint Planning Area.	Context Study shall be complete within three years of approval of GP by the Minister
GP: 3.1.8.7	3.1.8.7 A Context Study should include the following: (a) a vision for the area; (b) a servicing strategy for water, wastewater, and Stormwater; (c) a transportation and mobility plan identifying the designation of key future transportation corridors, including major roads with regional connections, regional transit corridors and Transit Ready Corridors for Transit Oriented Development, and pathways and active transportation networks; (d) strategies to address intermunicipal environmental issues; (e) strategies to equitably share costs and benefits associated with the development of the Joint Planning Area and its services such as fire, police, recreation, transportation and utilities; (f) strategies to provide efficient and logical servicing, incorporating shared servicing to the greatest extent possible; (g) a general land use plan that aligns the servicing strategy with future development areas. The general land use plan shall identify the location of Placetypes as defined and regulated in the Growth Plan and may identify non-development areas that are	List of items a Context Study should include

Joint Planning Area – Context Study Considerations Summary

GP Policy / SP Chapter	Verbatim from May 21, 2021 version of Board-approved document	High Level Summary
	<p>reserved for long-term growth, Agriculture, and/or environmental protection;</p> <p>(h) a land use statistics table based on the land use plan identifying the amount of land, and required densities allocated to various Placetypes as defined in the Growth Plan; and</p> <p>(i) sequencing of developments, including strategies to ensure that development occurs in an orderly manner, maximizing the efficiency of servicing.</p>	
GP: 3.1.8.8	3.1.8.8 A Context Study may propose amendments to the boundaries of a Joint Planning Area to the Board, which would be updated in the next periodic review of the Growth Plan.	Any amendments to JPA boundaries are proposed to Board for approval
GP: 3.1.8.10	3.1.8.10 Statutory plan amendments in Joint Planning Areas may continue to be approved prior to completion of Context Studies, subject to the policies of the Growth Plan.	Stat plan amendments in JPA may be approved prior to Context Study completion
GP: 3.1.8.11	3.1.8.11 New Area Structure Plans or new Area Redevelopment Plans may be approved prior to completion of a Context Study unless a Terms of Reference adopted by all municipalities within the Joint Planning Area does not allow for new Area Structure Plans or new Area Redevelopment Plans to be approved prior to completion of the Context Study.	Context Study TORs will determine if new ASPs can be approved prior to Context Study completion
GP: 3.1.10.2	<p>3.1.10.2 Updated Municipal Development Plans shall also:</p> <p>(a) create an alignment table between the regional Placetypes defined in the Growth Plan and land uses or typologies in the Municipal Development Plan; or</p> <p>(b) develop an overlay map showing the locations of Preferred Placetypes and Employment Areas within the municipality; and, if relevant</p> <p>(c) undertake other revisions which incorporate the findings and agreements arrived at in the Context Study process.</p>	MDPs shall incorporate findings and agreements arrived at in Context Study process
GP: 3.5.3.1	3.5.3.1 Municipalities should collaborate on planning for Regional Infrastructure corridors through future studies and initiatives including, but not limited to, Context Studies for JPAs, transportation and transit studies or plans, as appropriate	Munis should collaborate on Regional infrastructure corridors as part of Context Study
GP: 3.5.3.3	3.5.3.3 Municipalities should plan for multi-use corridors through future studies and initiatives including, but not limited to, Context Studies for	Municipalities should plan for multi-use corridors as part of Context Study

Joint Planning Area – Context Study Considerations Summary

GP Policy / SP Chapter	Verbatim from May 21, 2021 version of Board-approved document	High Level Summary
	JPAs, transportation and transit studies or plans, Working Groups, as appropriate.	
GP: 4.1.1.2	4.1.1.2 The outcomes of Context Studies and other future studies and initiatives approved by the Board shall be incorporated through amendments to the Growth Plan.	Outcomes of Context Studies shall be approved by Board and amended into the RGP
GP: 4.1.1.3	4.1.1.3 Prior to the incorporation of the outcomes of Context Studies within amendments to the Growth Plan, the Board must consider approved Context Studies in its decision-making.	The Board must consider Context Study outcomes in decision-making
GP: 4.1.2.2	4.1.2.2 An update of the Growth Plan shall be undertaken within five years of the approval of the Growth Plan by the Minister of Municipal Affairs and every five years thereafter to: (a) review and adjust the population and employment forecasts, and extend the forecasts by five years; (b) review the proportions of new residential population by Placetype approved since the last periodic review, by municipality and Placetype; (c) adjust the population and employment projections as needed to achieve the vision, objectives, and policies of the Regional Growth Plan; and (d) incorporate the findings and direction of Joint Planning Area Context Studies, as appropriate.	5 year updates to Growth Plan shall incorporate findings and direction of Context Studies, as appropriate
Regional Servicing Plan		
SP: 3.2.2 Transportation and Transit	3.2.2.1 JOINT PLANNING AREA CONTEXT STUDIES • Use Context Studies, local transportation master plans, Transit Background Report and the North, and South and East Calgary Regional Transportation Studies (and Integration Memorandum) to build a better understanding of regional corridors, demand, servicing systems and other key considerations in Joint Planning Areas. Given the importance of Context Studies, and the requirement to complete them within the Growth Plan, Context Studies will occur in advance of the RTTMP, with the outcomes of the Context Studies informing the RTTMP on Preferred Growth Areas and transportation.	<ul style="list-style-type: none"> Context studies and RTTMP may need to be completed concurrently Context Study outputs become inputs for RTTMP 2022 Board priorities may inform timing/emphasis
SP 3.3 Transportation and Transit	3.3 Working Groups Working Groups will be required to support the development of the RTTMP, the Context Studies and the transportation components of a future regional economic development strategy.	Transportation working group will support development of RTTMP and Context Studies

Joint Planning Area – Context Study Considerations Summary

GP Policy / SP Chapter	Verbatim from May 21, 2021 version of Board-approved document	High Level Summary
SP: 3.4 Regional Transportation Model	Regional Transportation Model – The land use elements of the regional model should be updated as part of the RTTMP, to reflect the Growth Plan and details established in Context Studies.	Context Study should integrate land use, transpo planning and sequencing – this info to be included in RTTMP
SP 3.5 Transportation and Transit	3.5 Actions The CMRB will: <ul style="list-style-type: none"> • work with the appropriate member municipalities to support completion of Context Studies for the Joint Planning Areas in a way that provides information and data to the broader regional planning initiatives; ...	CMRB will work with members to support the completion of Context Studies
SP: 4.2.2 Long Term Water Strategy	4.2.2.1 OPPORTUNITY FOR LEARNING <ul style="list-style-type: none"> • Incorporate lessons learned through planning in the Joint Planning Areas into the Region’s long-term water strategy. Preferred Growth Areas may have water management plans for consideration in the long-term water strategy, as appropriate. The findings from the Context Studies in Joint Planning Areas may provide additional information and considerations for the regional long-term strategy, as appropriate. 	Context studies may provide learnings for long term water strategy
SP: 4.5 Long Term Water Strategy	4.5 Actions The CMRB will: <ul style="list-style-type: none"> • facilitate the completion of Context Studies for the Joint Planning Areas in a manner that considers Stormwater Management and conservation of Environmentally Sensitive Areas, to support a greater long term water strategy, and to provide information and data for broader regional planning initiatives 	CMRB will facilitate completion of Context Studies
SP: 5.2.1 Water and Wastewater Servicing	5.2.1.1 REGIONAL UTILITY SYSTEM <ul style="list-style-type: none"> • Assess opportunities for shared servicing at the regional level based on findings and lessons learned through Context Studies and at the sub-regional level 	Context studies may provide learnings for water and wastewater servicing
SP: 5.3 Water and Wastewater Servicing	5.3 Working Groups Strategies for sub-regional servicing will be identified in the Context Studies for the Joint Planning Areas. The Context Studies will be led by the Calgary Metropolitan Region and developed by members. The Working Group, or a sub-committee of the Working Group will act as an advisor to the process, providing consistency between the different Joint Planning Areas. Municipalities are required to	‘Context Studies will be led by the Calgary Metropolitan Region and developed by members’ whereas most other SP working group sections note ‘CMRB will facilitate completion’ or ‘support completion’

Joint Planning Area – Context Study Considerations Summary

GP Policy / SP Chapter	Verbatim from May 21, 2021 version of Board-approved document	High Level Summary
	collaborate on the Context Studies in Joint Planning Areas and associated discussions on water servicing. Similarly, where there is a need for water or wastewater servicing in other Preferred Growth Areas (Hamlet Growth Areas and Urban Municipalities), municipalities with capacity to provide services to these Preferred Growth Areas are required to jointly review potential servicing strategies with the municipality requiring servicing.	
SP: 5.5 Water and Wastewater Servicing	The CMRB will: <ul style="list-style-type: none"> • facilitate completion of Context Studies for the Joint Planning Areas in a manner which considers servicing optimization and cost-effectiveness for all parties involved; 	CMRB Admin will facilitate/support completion of Context Studies
SP: 6.2.2 Stormwater Management	6.2.2.1 CONTEXT STUDIES FOR JOINT PLANNING AREAS <ul style="list-style-type: none"> • Initiate Stormwater Management collaboration in Preferred Growth Areas. The Preferred Growth Areas will be the priority locations for collaboration on Stormwater Management. Context Studies for the Joint Planning Areas will provide an opportunity to determine if there are sub-regional gaps in conveyance or drainage, or concerns regarding the quality and capacity of receiving water bodies. The need for collaborative solutions can be determined through the Context Studies. 	JPAs should include collaboration on stormwater management
SP: 7.5 Recreation	The CMRB will: <ul style="list-style-type: none"> • facilitate completion of Context Studies in the Joint Planning Areas in a way that considers recreation servicing. 	CMRB Admin will facilitate/support completion of Context Studies
SP: Appendix B	2. Context Studies for Joint Planning Areas ... Context Studies should consolidate the relevant components of: <ul style="list-style-type: none"> • integration with growth areas; • individual municipal transportation plans; • provincial plans; • any applicable Regional Transportation Studies (e.g... North Calgary, South and East Calgary, and Integration Memorandum); and • Transit Background Reports. Context Studies should also identify additional regional needs to support intended growth patterns within the Joint Planning Area, including:	GP lists Context Study components

Joint Planning Area – Context Study Considerations Summary

GP Policy / SP Chapter	Verbatim from May 21, 2021 version of Board-approved document	High Level Summary
	<ul style="list-style-type: none">• planning for regional multi-use corridors including, but not limited to, transportation, utility, communications, and active transportation• designation of key future transportation corridors, including major roads with regional connections;• regional transit corridors and Transit Ready Corridors for Transit Oriented Development; and• pathways and active transportation networks.	

Agenda Item	10
Submitted to	Land Use & Servicing Committee
Purpose	For Information
Subject	Placetype Monitoring and Implementation
Meeting Date	February 3, 2022

Motion that the Committee receive for information an update on Placetype monitoring and implementation.

Summary

- The vision and objectives of the Growth Plan focus on promoting greater proportions of growth and development to occur within Preferred Placetypes. A Placetype defines, at a regional scale, expectations for land uses, development density, destinations, and connectivity in a general area.
- The Growth Plan contains policies about Placetypes and Placetype monitoring throughout the document. The Growth Plan requires that the CMRB monitor the implementation of Placetype policies, including monitoring the proportion of dwelling units and population by Placetype.
- The Board has previously underscored using a data-driven approach in the work of the CMRB to inform decision making.
- CMRB Administration is investigating various approaches to Placetype monitoring with a range of levels of effort, data requirements, reporting timelines, and other considerations. This work will provide the TAG and the Land Use and Servicing Committee with options for monitoring.
- CMRB Administration had an initial discussion with TAG at the January 14th, 2022 TAG meeting to discuss possible approaches to monitoring Placetypes and to hear any concerns or considerations TAG representatives had related to Placetype monitoring.
- This purpose of this agenda item is to update the Committee on discussions with TAG and its current next steps. Further updates will be provided in the future once potential options have been identified.

1. Introduction

The Board has emphasized the importance of a data-driven approach to measuring and monitoring the Growth Plan. There was particular emphasis on measuring the stated benefits of the Plan as presented by HDR|Calthorpe to confirm they are being realized. The benefits, as stated in the Growth Plan, include reduction in water use, increase in density and intensity of the built environment, reductions in infrastructure costs, reduction of vehicle kilometres travelled, and others.

The Growth Plan uses Placetypes as the key mechanism for improving the sustainability of the built environment within the CMR. The benefits of the Growth Plan's policies are accrued when Preferred Placetypes are emphasized over other Placetypes. Emphasizing Preferred Placetypes increases the density, intensity and mix of land uses in key locations that can be efficiently serviced with infrastructure.

The information collected through the monitoring program would be used to provide metrics and information to the Board on the degree to which the Growth Plan policies are being implemented, provide metrics on regional benefits, and inform future policy updates, if required. Section 2.5 Scenarios for Growth of the Board-Approved Growth Plan (May 21, 2021 version) describes the scenarios that informed the development of the Growth Plan. The final "synthesis scenario" can be found as Figure 1: Regional Growth Structure, page 61. The Growth Plan also describes the Placetypes and the anticipated benefits from moving towards Preferred Placetypes (see Sections 2.5.1. Regional Placetypes and 2.5.2 Scenario Analysis and Comparison).

2. Project Update

CMRB Administration must provide the Board with updates on the implementation of the Growth Plan. CMRB Administration is investigating various approaches to monitoring that have a range of levels of effort, data requirements, reporting timelines, and other considerations. This work will provide the TAG and the Land Use and Servicing Committee with options for monitoring.

Currently CMRB Administration has engaged with TAG as part of one meeting, held on January 14th, 2022, to discuss possible approaches to monitoring Placetypes that meet the requirements established in the Growth Plan. These talks were preliminary and high level in nature.

Following from the meeting with TAG, CMRB Administration will begin to refine various approaches to monitoring that consider feedback from TAG and previous direction from the Board around reporting on the implementation of the Growth Plan. At that time, confirming the Region is realizing benefits from the Growth Plan was of key importance.

3. Recommendation

That the Committee receive for information an update on Placetype monitoring and implementation.