

METRO VANCOUVER REGIONAL DISTRICT REGIONAL PLANNING COMMITTEE

MEETING

Friday, May 10, 2024

9:00 am

28th Floor Committee room, 4515 Central Boulevard, Burnaby, British Columbia

Webstream available at <https://www.metrovancover.org>

A G E N D A¹

A. ADOPTION OF THE AGENDA

1. May 10, 2024 Meeting Agenda

That the Regional Planning Committee adopt the agenda for its meeting scheduled for May 10, 2024 as circulated.

B. ADOPTION OF THE MINUTES

1. April 5, 2024 Meeting Minutes

That the Regional Planning Committee adopt the minutes of its meeting held April 5, 2024 as circulated.

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C. DELEGATIONS

D. INVITED PRESENTATIONS

E. REPORTS FROM COMMITTEE OR CHIEF ADMINISTRATIVE OFFICER

1. Metro 2050 Climate Policy Enhancement Study - Recommendations

That the MVRD Board direct staff to prepare a bylaw to amend *Metro 2050* for consideration based on the following recommendations and as described in Table 2 of the report dated March 13, 2024, titled "*Metro 2050 Climate Policy Enhancement Study – Recommendations*" to:

- a) develop a revised definition for the regional Rural land use designation;
- b) encourage the protection and restoration of trees and other ecosystems on lands with a non-urban regional land use designations and lands outside the Urban Containment Boundary;

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¹ Note: Recommendation is shown under each item, where applicable.

- c) require environmental and climate change-related analyses as part of all *Metro 2050* amendment applications;
- d) encourage the development of local hazard and risk data that meets key requirements;
- e) add new climate-related performance monitoring metrics; and
- f) increase intersection density and permeability of the urban street grid.

2. 2024 Agriculture Awareness Grant Recommendations

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That the MVRD Board award the annual Agriculture Awareness Grants in the total amount of \$55,000, as presented in the report dated April 25, 2024, titled “2024 Agriculture Awareness Grant Recommendations”, to the following 16 non-profit organizations:

- 1. BC Agriculture in the Classroom, for “Take a Bite of BC” in the amount of \$4,725;
- 2. BC Agriculture Council, for “Speak Up Training” in the amount of \$3,000;
- 3. Delta Farmland and Wildlife Trust, for “Day at the Farm” in the amount of \$2,000;
- 4. Earthwise Society, for “Tomato Festival” in the amount of \$2,500;
- 5. Environmental Youth Alliance, for “Plant Gifts for Community Project” in the amount of \$4,725;
- 6. Farm Folk / City Folk, for “Days on the Farm” in the amount of \$4,725;
- 7. Fraser North Farmers Market Society, for “The Farmers Who Feed You” in the amount of \$3,400;
- 8. Growing Chef’s Society, for “Classroom Gardening & Cooking Program” in the amount of \$3,000;
- 9. Hives for Humanity, for “Knowing Our Soils” in the amount of \$5,500;
- 10. KPU Foundation, for “Productive Agroforestry Demonstrations Serving Metro Vancouver” in the amount of \$2,500;
- 11. Langley Environmental Partners Society, for “Langley Eats Local” in the amount of \$3,000;
- 12. BC Chicken Growers, for “Poultry in Motion School and PNE Attendance” in the amount of \$3,500;
- 13. Public Health Association of BC, for “Farm to School BC Celebration Farm Field Trips” in the amount of \$1,375;
- 14. The Sharing Farm, for “14th Annual Garlic Fest” in the amount of \$3,000;
- 15. Trinity Grace, for “Farm-to-Plate Marketplace” in the amount of \$5,050; and
- 16. UBC Centre for Sustainable Food Systems, for “Agriculture, Food Systems and Food Justice: A Leadership Program for Youth” in the amount of \$3,000.

3. Metro 2050 Implementation Guideline – Regional Liquid Waste Services Planning

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That the MVRD Board endorse the *Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning as presented in the report dated April 22, 2024, titled “*Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning”.

4. Manager’s Report

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That the Regional Planning Committee receive for information the report dated April 19, 2024, titled “Manager’s Report”.

F. INFORMATION ITEMS

G. OTHER BUSINESS

H. RESOLUTION TO CLOSE MEETING

Note: The Committee must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.

I. ADJOURNMENT

That the Regional Planning Committee adjourn its meeting of May 10, 2024.

Membership:

Woodward, Eric (C) – Langley Township
Kruger, Dylan (VC) – Delta
Bligh, Rebecca – Vancouver
Carreras, Korleen – Maple Ridge
Girard, Angela – North Vancouver City

Hodge, Craig – Coquitlam
Hurley, Mike – Burnaby
Johnstone, Patrick – New Westminster
Knight, Megan – White Rock
Lahti, Meghan – Port Moody

Lambur, Peter – West Vancouver
Locke, Brenda - Surrey
McEwen, John – Anmore
West, Brad – Port Coquitlam

**METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PLANNING COMMITTEE**

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Regional Planning Committee held at 1:01 pm on Friday, April 5, 2024 in the 28th Floor Committee Room, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:

- Chair, Director Eric Woodward, Langley Township
- Vice Chair, Director Dylan Kruger, Delta
- Director Rebecca Bligh, Vancouver* (arrived at 1:34 pm)
- Councillor Korleen Carreras, Maple Ridge
- Councillor Angela Girard, North Vancouver City*
- Director Craig Hodge, Coquitlam
- Director Mike Hurley, Burnaby* (arrived at 1:02 pm)
- Director Patrick Johnstone, New Westminster
- Director Megan Knight, White Rock*
- Director Meghan Lahti, Port Moody
- Councillor Peter Lambur, West Vancouver*
- Director Brenda Locke, Surrey*
- Director John McEwen, Anmore (departed at 1:31 pm; re-joined at 1:42 pm)
- Director Brad West, Port Coquitlam

OTHERS PRESENT:

- Dr. Lawrence Frank, Urban Design 4 Health

STAFF PRESENT:

- Jonathan Cote, Deputy General Manager, Regional Planning and Housing Development
- Rapinder Khaira, Legislative Services Coordinator, Board and Information Services
- Laurie Bates-Frymel, Senior Planner, Regional Planning and Housing Services
- Agatha Czekajlo, Senior Policy and Planning Analyst, Regional Planning and Housing Services
- Heather McNell, Deputy Chief Administrative Officer, Policy and Planning
- Edward Nichol, Senior Planner, Regional Planning and Housing Services

*denotes electronic meeting participation as authorized by the *Procedure Bylaw*

A. ADOPTION OF THE AGENDA

1. April 5, 2024 Meeting Agenda

It was MOVED and SECONDED

That the Regional Planning Committee adopt the agenda for its meeting scheduled for April 5, 2024 as circulated.

CARRIED

B. ADOPTION OF THE MINUTES

1. March 8, 2024 Meeting Minutes

It was MOVED and SECONDED

That the Regional Planning Committee adopt the minutes of its meeting held March 8, 2024 as circulated.

CARRIED

C. DELEGATIONS

No items presented.

1:02 pm Mayor Hurley arrived at the meeting.

D. INVITED PRESENTATIONS

1. Dr. Lawrence Frank, Urban Design 4 Health

Dr. Lawrence Frank, Urban Design 4 Health, provided a presentation titled "Where Matters II", with an overview of the *Where Matters II* blueprint for communities to track impacts of changes in transportation infrastructure, land use, pedestrian environment, and greenspace on public health and the climate.

E. REPORTS FROM COMMITTEE OR CHIEF ADMINISTRATIVE OFFICER

1. Where Matters II – Final Report

Report dated March 13, 2024, from James Stiver, Division Manager, Regional Land Use Policy, Regional Planning and Housing Services, providing the MVRD Board with the final *Where Matters II – Final Report: Walkability and Greenspace Relationships with Health and Climate Change* project report and a summary of findings for information.

Main Motion

It was MOVED and SECONDED

That the MVRD Board:

- a) receive for information the report dated March 13, 2024, titled "Where Matters II – Final Report"; and
- b) forward the "Where Matters II – Final Report: Walkability and Greenspace Relationships with Health and Climate Change" report to member jurisdictions for information with an offer of presenting the report findings to councils.

Amendment to the Main Motion

It was MOVED and SECONDED

That the Regional Planning Committee amend the Main Motion by adding the following clause c:

“c) direct staff to forward the “Where Matters II – Final Report: Walkability and Greenspace Relationships with Health and Climate Change” report to staff at the Ministry of Health including local Health Authorities, Ministry of Housing, Ministry of Municipal Affairs, and Ministry of Transportation and Infrastructure for information.”

CARRIED

Main Motion as Amended

The Main Motion as amended now reads as follows:

That the MVRD Board:

- a) *receive for information the report dated March 13, 2024, titled “Where Matters II – Final Report”;*
- b) *forward the “Where Matters II – Final Report: Walkability and Greenspace Relationships with Health and Climate Change” report to member jurisdictions for information with an offer of presenting the report findings to councils; and*
- c) *direct staff to forward the “Where Matters II – Final Report: Walkability and Greenspace Relationships with Health and Climate Change” report to staff at the Ministry of Health including local Health Authorities, Ministry of Housing, Ministry of Municipal Affairs, and Ministry of Transportation and Infrastructure for information.*

CARRIED

2. Metro 2050 Climate Policy Enhancement Study – Recommendations

Report dated March 13, 2024, from Edward Nichol, Senior Planner, Regional Planning and Housing Services, providing the MVRD Board with recommendations to strengthen climate change policies in *Metro 2050*.

1:31 pm Mayor McEwen left the meeting.

1:34 pm Councillor Bligh arrived at the meeting.

The Committee noted that clarification is required on how the proposed amendments to *Metro 2050* can be expected to affect municipal planning. The committee requested more information on items a), c), and e) in the report recommendation. It was suggested that staff provide the requested information at the May 10, 2024 Regional Planning Committee meeting for further consideration.

It was MOVED and SECONDED

That the Regional Planning Committee postpone consideration of the report dated March 13, 2024, titled “Metro 2050 Climate Policy Enhancement Study - Recommendations” to the May 10, 2024 Regional Planning Committee meeting.

CARRIED

3. Tree Canopy Cover and Impervious Surface – 2020 Update

Report dated March 15, 2024, from Laurie Bates-Frymel, Senior Planner, and Agatha Czekajlo, Senior Policy and Planning Analyst, Regional Planning and Housing Services, providing the MVRD Board with an update on the status of tree canopy cover and impervious surface across the urban part of the region.

Laurie Bates-Frymel, Agatha Czekajlo, and Edward Nichol, Senior Planner, Regional Planning and Housing Services, provided a presentation titled “Tree Canopy Cover, Impervious Surface, and Tree Regulations”, with an overview of the impact of impervious surfaces on climate change and public health, changes to and future projections for tree canopy cover in the region, and an update on the Tree Regulations Toolkit. This presentation provides information for Items E3 and E4 of the agenda.

1:42 pm Mayor McEwen re-joined the meeting.

The Committee discussed challenges that Provincial housing legislation for higher density development may pose on achieving tree canopy cover targets.

It was MOVED and SECONDED

That the MVRD Board:

- a) receive for information the report dated March 15, 2024 titled “Tree Canopy Cover and Impervious Surface – 2020 Update”; and
- b) share the findings and datasets with member jurisdictions with an offer of a staff presentation to Council upon request.

CARRIED

4. Metro Vancouver Tree Regulations Toolkit Update

Report dated March 8, 2024, from Edward Nichol, Senior Planner, Regional Planning and Housing Services, providing the MVRD Board with the updated Metro Vancouver Tree Regulations Toolkit.

It was MOVED and SECONDED

That the MVRD Board:

- a) receive for information the report dated March 8, 2024, titled “Metro Vancouver Tree Regulations Toolkit Update”; and
- b) forward the “Metro Vancouver Tree Regulations Toolkit Update” to member jurisdictions for information with an offer of a presentation to Councils upon request.

CARRIED

5. **2023 Survey of Licensed Child Care Spaces and Policies in Metro Vancouver**
Report dated March 15, 2024, from Stefanie Ekeli, Regional Planner, Regional Planning and Housing Services, providing the MVRD Board with the results of the 2023 Survey of Licensed Child Care Spaces in Metro Vancouver to support local government planning for child care.

It was MOVED and SECONDED

That the MVRD Board:

- a) receive for information the report dated March 15, 2024, titled, “2023 Survey of Licensed Child Care Spaces and Policies in Metro Vancouver”; and,
- b) forward the “2023 Survey of Licensed Child Care Spaces and Policies in Metro Vancouver” and its attachment to member jurisdictions for information with an offer for Council presentations upon request.

CARRIED

6. **Regional Affordable Housing Strategy Update (Housing 2050: A Roadmap to Implement Metro 2050’s Housing Goal) – Scope of Work**

Report dated March 18, 2024, from Jessica Hayes, Acting Program Manager, Housing Policy and Planning, Regional Planning and Housing Services, providing the Regional Planning Committee with the scope of work for the update to the *Regional Affordable Housing Strategy*.

It was MOVED and SECONDED

That the Regional Planning Committee receive for information the report dated March 18, 2024, titled “Regional Affordable Housing Strategy Update (Housing 2050: A Roadmap to Implement *Metro 2050’s* Housing Goal) – Scope of Work”.

CARRIED

7. **Regional Hazard, Risk, and Vulnerability Analysis Options Assessment – Scope of Work**

Report dated March 15, 2024, from Edward Nichol, Senior Planner, Regional Planning and Housing Services, providing the Regional Planning Committee with the scope of work for a project to explore options for a regional-scale Hazard, Risk, and Vulnerability Analysis, or a similar type of assessment.

It was MOVED and SECONDED

That the Regional Planning Committee receive for information the report dated March 15, 2024, titled “Regional Hazard, Risk, and Vulnerability Analysis Options Assessment – Scope of Work”.

CARRIED

8. **Economic Value of Industrial Lands Study Update – Scope of Work**

Report dated March 15, 2024, from Eric Aderneck, Senior Planner, Regional Planning and Housing Services, providing the Regional Planning Committee with a scope of work for the *Economic Value of Industrial Lands Study* update.

It was MOVED and SECONDED

That the Regional Planning Committee receive for information the report dated March 15, 2024, titled “Economic Value of Industrial Lands Study Update – Scope of Work”.

CARRIED

9. Manager’s Report

Report dated March 15, 2024, from Jonathan Cote, Deputy General Manager, Regional Planning and Housing Development, Regional Planning and Housing Services, providing the Regional Planning Committee with an update on the Regional Planning Committee Work Plan, drought preparation for agriculture and local governments, Amsterdam’s support for a shift to a plant-based diet, the 2024 Sustainability Innovation Fund application for the *Rental Housing Blueprint* project and the 2023 Board-approved *Extended Reality Modelling Platform* project.

It was MOVED and SECONDED

That the Regional Planning Committee receive for information the report dated March 15, 2024, titled “Manager’s Report”.

CARRIED

F. INFORMATION ITEMS

1. Provincial Housing Legislation Provincial Advocacy and Supportive Roles

It was MOVED and SECONDED

That the Regional Planning Committee receive for information item F1 titled “Provincial Housing Legislation Provincial Advocacy and Supportive Roles”.

CARRIED

G. OTHER BUSINESS

No items presented.

H. RESOLUTION TO CLOSE MEETING

No items presented.

I. ADJOURNMENT

It was MOVED and SECONDED

That the Regional Planning Committee adjourn its meeting of April 5, 2024.

CARRIED

(Time: 2:05 pm)

Rapinder Khaira,
Legislative Services Coordinator
67092005

Eric Woodward,
Chair

To: Regional Planning Committee

From: Edward Nichol, Senior Planner, Regional Planning and Housing Services

Date: March 13, 2024

Meeting Date: May 10, 2024

Subject: **Metro 2050 Climate Policy Enhancement Study - Recommendations**

RECOMMENDATION

That the MVRD Board direct staff to prepare a bylaw to amend *Metro 2050* for consideration based on the following recommendations and as described in Table 2 of the report dated March 13, 2024, titled “*Metro 2050 Climate Policy Enhancement Study – Recommendations*” to:

- a) develop a revised definition for the regional Rural land use designation;
 - b) encourage the protection and restoration of trees and other ecosystems on lands with a non-urban regional land use designations and lands outside the Urban Containment Boundary;
 - c) require environmental and climate change-related analyses as part of all *Metro 2050* amendment applications;
 - d) encourage the development of local hazard and risk data that meets key requirements;
 - e) add new climate-related performance monitoring metrics; and
 - f) increase intersection density and permeability of the urban street grid.
-

EXECUTIVE SUMMARY

In response to MVRD Board direction, new and enhanced climate-related policy actions have been developed for *Metro 2050*. An initial list of policy ideas was presented at two workshops with subject matter experts in early 2023, and the feedback received was used to inform six draft recommendations. These draft recommendations were presented at a joint workshop with the Climate Action Committee and Regional Planning Committee in November 2023, and the feedback received was considered and applied to staff’s recommendations. The six recommendations represent potential policy changes that are actionable, effective, important for climate action, and closely connected to the intent and scope of *Metro 2050*.

PURPOSE

To provide the Regional Planning Committee and MVRD Board with recommendations to strengthen climate change policies in *Metro 2050*.

BACKGROUND

At its meeting on January 29, 2021, the MVRD Board endorsed the recommendations of the *Metro 2040 Climate Change and Natural Hazards Policy Review* (Reference 1) as the basis for updating the climate change and natural hazard-related policies in the regional growth strategy. As a result, *Metro 2050* contains stronger climate change policies as compared to *Metro 2040* (Reference 2). Notwithstanding these stronger climate-related policies, at its meeting on March 25, 2022, while

considering first and second readings of the *Metro 2050* bylaw (Reference 3), the MVRD Board passed the following resolution:

Given the urgent need to respond to climate change and prepare for extreme weather events, direct staff to undertake work and engagement with an aim to proposing an early amendment to Metro 2050 post-adoption to strengthen climate action language and policy including the intent to improve integration of climate action into other Metro 2050 priorities.

At its May 27, 2022 meeting, the MVRD Board received a report titled “Process to Consider Stronger Climate Action Language and Policy for Metro 2050” (Reference 4). That report set out a high-level process for how staff would respond to the March 25, 2022 Board direction.

At its February 10, 2023 meeting, the Regional Planning Committee received a report titled “Metro 2050 Climate Policy Enhancement Study – Project Initiation” (Reference 5); the same report was provided to the Climate Action Committee for information at its meeting on March 9, 2023. That report provided greater detail on the proposed scope of work and the engagement process for the study. *Metro 2050* was adopted as bylaw by the MVRD Board on February 24, 2023.

At its November 2, 2023 meeting, the Climate Action Committee hosted a Joint Discussion with the Regional Planning Committee. Participants of this session received a Backgrounder on the *Metro 2050* Climate Policy Enhancement Study (Reference 6) and provided feedback that has been considered in the development of the final recommendations presented in this report.

POLICY APPROACHES OF METRO 2050 AND CLIMATE 2050

Land Use Planning is Climate Action

Land use planning decisions can significantly influence the spatial arrangements of communities, transportation systems, building typologies, and protect natural areas which, in turn, affect the amount of energy consumed, greenhouse gases (GHGs) emitted, and carbon stored. Land use planning can also be a powerful catalyst for enhancing resilience by ensuring that residents, property, infrastructure, and ecosystems are safeguarded from the impacts of climate change and natural hazards. Land use planning and decision making is foundational to advancing climate action and sustainability in the region over the long term.

Starting with a Strong Foundation

Metro 2050 contains regional GHG emission reduction targets that align with the global targets set by the Intergovernmental Panel on Climate Change and those of *Climate 2050*, as well as strategies and actions to help meet those targets. *Metro 2050* contains climate policies across all five goal areas and supports Metro Vancouver and its member jurisdictions in focusing projected growth in a network of transit-oriented urban centres, and building compact, complete communities that offer amenities close to home. This approach to focusing growth has three key GHG emission reduction benefits:

- 1) reduces development pressures in areas that naturally store carbon (such as the region’s agricultural and natural areas);

- 2) reduces emissions by supporting more sustainable, low carbon transportation options such as walking, cycling, and public transit and by reducing the distances people typically have to drive for essential trips; and
- 3) encourages multi-unit development forms which are generally more energy-efficient than single-detached homes.

Where and how the region accommodates growth also determines the degree to which residents, businesses, and infrastructure are exposed to the risks associated with climate change and natural hazards. To improve resilience, *Metro 2050* includes policy actions that:

- protect natural areas and other important lands that are essential to buffering communities from climate change impacts and natural hazards;
- establish a role for Metro Vancouver to develop and share information related to hazard, risk, and vulnerability; and
- encourage the protection of existing communities and discourage new growth in at-risk areas.

Mutually Supportive Plans

Metro 2050 was developed in accordance with the provisions of the *Local Government Act* and sets out actions and directions for Metro Vancouver, member jurisdictions, and TransLink. The process to develop and approve a regional growth strategy necessitates a high degree of consensus and acceptance across the regional federation. Member jurisdictions demonstrate alignment between their local Official Community Plans and *Metro 2050* through the completion of Regional Context Statements.

Climate 2050, the regional climate action strategy, is intended to guide climate change policy and action for all stakeholders in the region over the next 30 years. It is implemented through a series of ten “Roadmaps” (organized by topic area) that are ultimately endorsed by the MVRD Board. The *Climate 2050 Land Use and Urban Form Roadmap* (LUUF), which is currently being developed, includes content related to land use planning, urban form, and growth management that is consistent and supportive of *Metro 2050*. Table 1 below outlines the rationale for land use-related policy ideas to be included in either: a) the Metro 2050 Climate Policy Enhancement Study recommendations, or b) the *Climate 2050 Land Use and Urban Form Roadmap*.

Table 1. Rationale Used to Direct Policy Ideas

Metro 2050 Climate Policy Enhancement Study	Climate 2050 LUUF Roadmap
<ul style="list-style-type: none"> • Policies that do not require additional studies or research • Policies that could be implemented in the short-term as a result of a <i>Metro 2050</i> amendment 	<ul style="list-style-type: none"> • Policies that are exploratory and study-focused, which could inform future amendments to <i>Metro 2050</i>
<ul style="list-style-type: none"> • Policies that would be most effectively implemented in <i>Metro 2050</i> (e.g., by signatories) 	<ul style="list-style-type: none"> • Policies that could be effectively implemented regardless of <i>Metro 2050</i>

<ul style="list-style-type: none"> • New policies that strengthen the overall suite of climate change policies in <i>Metro 2050</i> 	<ul style="list-style-type: none"> • Includes context (non-policy) sections that communicate the climate change benefits of existing policies in <i>Metro 2050</i> • Policies that are informed by, supportive of, and supplemental to the principles and actions of <i>Metro 2050</i> • New policy directions, including a series of ‘Big Moves’
<ul style="list-style-type: none"> • Policy changes within scope of a Type 2 or Type 3 amendment to <i>Metro 2050</i> 	<ul style="list-style-type: none"> • Policies and concepts that are exploratory, politically-sensitive, or less well-established • Policies that would not be appropriate for <i>Metro 2050</i> due to legislative or regulatory constraints

METRO 2050 CLIMATE POLICY ENHANCEMENT STUDY

The *Metro 2050* Climate Policy Enhancement Study addresses the MVRD Board’s direction to bring forward stronger climate change policy options for consideration.

Engagement Summary

To avoid engagement fatigue and maximize efficiency, the *Metro 2050* Climate Policy Enhancement Study and the LUUF Roadmap project teams prepared a joint engagement plan. A policy idea shortlist developed by Metro Vancouver staff was presented at two workshops held in early 2023 to gather feedback about how to advance climate action through land use and growth management planning. Attendees of the workshops included staff from government agencies, other regional and non-governmental organizations, and youth. Local First Nations were also invited to participate in the two workshops, to meet directly with project staff separately, and to provide written input on the draft lists of actions and policies; funding was made available to support the involvement of First Nations. To date, Squamish Nation staff have met with project staff directly to provide feedback.

On November 2, 2023, staff presented the draft recommendations at a joint Climate Action and Regional Planning Committee meeting. Attendees expressed general support for the recommendations, and provided additional feedback for staff consideration.

Recommendations

During the engagement phase, many policy amendment options were considered and explored. Following engagement, staff refined the list of climate change policy option recommendations for *Metro 2050* into two categories. Table 2 below outlines the core (staff) recommendations, and Table 3 below outlines additional policy options for consideration to amend *Metro 2050* that could also advance climate action, but do not have as strong a connection with the goals and strategies of *Metro 2050*. Additional context and rationale related to the recommendations is included in each table.

Table 2. Climate Policy Enhancement Study Recommendations

<p>a)</p>	<p>That Metro Vancouver work collaboratively with member jurisdictions to develop an updated <i>Metro 2050</i> definition, intent and appropriate uses for the Rural regional land use designation, to provide needed clarity and consistency, and articulate the importance of Rural lands for:</p> <ul style="list-style-type: none"> • Supporting regional urban containment objectives; • Protecting the region’s ecosystems and agricultural lands; • Sequestering and storing carbon; and • Buffering the impacts of climate change and natural hazards. <p>The intent of this recommendation is not to amend policy action 1.4.3 or 6.9.1.</p> <p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>While other regional land use designations are more clearly defined by specific criteria, Rural designated lands are ambiguously defined in Metro 2050;</i> • <i>Rural designated lands are not intended for urban expansion, which is made clear in the policy directions of Metro 2050 that limit extension of regional sewer servicing outside the Urban Containment Boundary;</i> • <i>The current ambiguity related to the definition and intent of Rural lands complicates the review of Metro 2050 amendment applications for lands with a Rural regional land use designation, confuses the assumption of their long-term purpose, and may work counter to the urban containment objectives and Guiding Principles of Metro 2050;</i> • <i>A significant portion of the region’s Rural designated lands are within or adjacent to floodplains and steep slopes, support agricultural production, contain Sensitive Ecosystems with high carbon storage value, and have areas with high water tables and sensitive groundwater aquifers. Because of these characteristics, much of the region’s designated Rural lands are also unsuitable for urban forms of development, and protecting existing Rural lands for their current use is a cost-effective climate action given the ecosystem services they already provide and the implicit climate change benefits (reducing GHGs and enhancing resilience) associated with urban containment;</i> • <i>Revising the definition of Rural designated lands and providing additional information in an Implementation Guideline would clarify the role and servicing intent of Rural lands, and will serve to reduce speculation and development pressures faced by member jurisdictions. The need for this clarity is critical, given that servicing needs and requirements are interrelated with development intensity; and</i> • <i>Revising the definition of Rural designated lands will provide consistent messaging for member jurisdictions, landowners / developers, First Nations, agency partners, and the public, and will improve transparency.</i>
<p>b)</p>	<p>Add new policies to Strategies 1.4, 2.3, and 3.1 of <i>Metro 2050</i> for Metro Vancouver to work with key partners to encourage the protection and restoration of trees and other natural ecosystems on lands with a non-urban regional land use designation (i.e., Rural, Agricultural, Conservation and Recreation), and on lands outside the Urban Containment Boundary.</p> <p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>Trees and other ecosystems provide important climate-related ecosystem services by storing carbon, providing shading and cooling, and absorbing stormwater runoff;</i>

	<ul style="list-style-type: none"> • <i>Metro 2050 contains a target for tree canopy cover within the Urban Containment Boundary but not for lands outside the UCB;</i> • <i>Metro 2050 includes an ecosystem protection target for 50% of the region’s total land base;</i> • <i>Agricultural, Rural, and Conservation and Recreation designated lands provide opportunities to protect natural ecosystems and increase tree canopy cover - this will be essential to supporting Metro 2050’s 50% protected areas target;</i> • <i>70% of Sensitive and Modified Ecosystem loss between 2014 and 2020 occurred within the Agricultural, Conservation and Recreation, and Rural regional land use designations; and</i> • <i>71% of Sensitive and Modified Ecosystem loss between 2014 and 2020 occurred on lands outside the Urban Containment Boundary.</i>
<p>c)</p>	<p>Add a new policy to Section F of Metro 2050 requiring Metro Vancouver and member jurisdictions to include additional climate-focused analysis in Metro 2050 amendment applications. This would be implemented by a) requiring Metro Vancouver to work with member jurisdictions to provide relevant environmental and climate change data and analysis and b) requiring member jurisdictions to demonstrate that the proposed amendment does not conflict with applicable commitments in OCPs / accepted Regional Context Statements pertaining to the following topic areas:</p> <ul style="list-style-type: none"> • Carbon storage levels in natural areas; • Tree canopy cover; • Impervious surfaces; • Ecosystem protection, including Sensitive and Modified Ecosystems; • Agricultural land; and • Green infrastructure and ecosystem connectivity. <p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>Policy action 3.2.2 a) of Metro 2050 establishes Metro Vancouver’s role to collect and report on the gains and losses for relevant environmental data;</i> • <i>Policy action 3.2.7 of Metro 2050 requires member jurisdictions to report on tree canopy cover, protected areas, and sensitive ecosystems in Regional Context Statements;</i> • <i>Implementing this recommendation will provide consistent messaging for member jurisdictions, landowners / developers, First Nations, agency partners, the public, etc., improve transparency on all Regional Growth Strategy amendment requests, and reinforce the connection between local planning and regional environment and climate change targets (and shared objectives) of Metro 2050;</i> • <i>Implementing this recommendation would contribute towards Action 3.3 of the MVRD Board-endorsed Climate 2050 Nature and Ecosystems Roadmap and Action 1.7 of the MVRD Board-endorsed Climate 2050 Agriculture Roadmap;</i> • <i>Implementing this recommendation would contribute towards Strategy 2.2 of the MVRD Board-adopted Ecological Health Framework; and</i> • <i>Implementing this recommendation would support Metro 2050 performance monitoring.</i>
<p>d)</p>	<p>Update policy action 3.4.5 of Metro 2050 to encourage member jurisdictions to develop local-scale hazard and risk datasets and, where they already exist, endeavour to:</p> <ul style="list-style-type: none"> • keep them up-to-date;

	<ul style="list-style-type: none"> • include future climate change scenarios; • include both probable and severe scenarios; and • incorporate them into Official Community Plans, zoning, and other land use regulations, as appropriate. <p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>While policy action 3.4.5 of Metro 2050 requires member jurisdictions to adopt Regional Context Statements that: a) minimize risks to existing communities and, b) discourage new development in at-risk areas, those decisions might not be made with current hazard and risk information;</i> • <i>Based on results from surveyed municipalities, it is estimated that less than 50% of local hazard datasets in the Metro Vancouver region were developed in the last 10 years;</i> • <i>International guidance – such as the Sendai Framework for Disaster Risk Reduction and the United Nations Disaster Resilience Scorecard for Cities – emphasize developing and periodically updating risk-based information (including risk maps), and incorporating risk scenarios that are regularly updated;</i> • <i>International guidance materials – such as the United Nations Disaster Resilience Scorecard for Cities – note that risk scenarios should identify hazards, exposures and vulnerabilities in at least the “most probable” and “most severe” (i.e., “worst-case”) scenarios; and</i> • <i>This recommendation aligns with the new Emergency and Disaster Management Act requirement to incorporate climate change information into local risk assessments.</i>
<p>e)</p>	<p>Add new climate-related performance monitoring metrics to Section G of Metro 2050 for:</p> <p>i. The percentage of new growth (dwelling units and employment) in known and unmitigated hazard areas</p> <p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>Introducing this new metric will improve performance monitoring for Goal 3 - Metro Vancouver currently has no performance monitoring metrics to track progress on Strategy 3.4 of Metro 2050 (to Advance land use, infrastructure, and human settlement patterns that improve resilience to climate change impacts and natural hazards);</i> • <i>Table 4 of Metro 2050 stipulates that new or reclassified Urban Centres and FTDA's must not be located in known, unmitigated hazard areas, and policy action 3.4.5 of Metro 2050 discourages member jurisdictions from developing in current and future hazardous areas;</i> • <i>Tracking this metric is a critical first step to setting a regional baseline of data, and to inform future Regional Growth Strategy policy changes pertaining to growth and development in hazardous areas;</i> • <i>Tracking this metric will utilize Metro Vancouver’s regional multi-hazard mapping data; and</i> • <i>Tracking this data will involve developing a shared definition of “known and unmitigated hazard areas”.</i> <p>ii. Percentage of lands within the Urban Containment Boundary that contain impervious surfaces</p>

	<p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>Imperviousness is a key indicator to measure progress related to green infrastructure implementation and flood resilience;</i> • <i>Metro Vancouver currently gathers this data and it is made available on the Metro Vancouver open data portal, but it is not monitored and reported out as a performance indicator for any Metro 2050 policies;</i> • <i>Policy action 3.2.2 a) of Metro 2050 identifies Metro Vancouver’s role to collect and maintain data related to imperviousness, and this data will be collected and updated every 5- 6 years; and</i> • <i>Tracking this metric is a critical first step to setting a regional baseline of data, and to inform future policy changes to the Regional Growth Strategy.</i> <p>iii. New performance metrics within Urban Centres, Frequent Transit Development Areas, and Major Transit Growth Corridors including:</p> <ul style="list-style-type: none"> • Tree canopy cover; • Impervious surfaces; • Sensitive and Modified ecosystems; • Walkability; and • Cooling and clean air centres. <p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>The proposed metrics could be utilized as indicators for successful climate action within Urban Centres and FTDas and considered when identifying a new (or reclassifying an existing) Urban Centre or FTDA; and</i> • <i>The data could inform future policies related to new requirements for Urban Centres, FTDAs, and MTGCs.</i>
<p>f)</p>	<p>Add a new policy action to Strategy 5.1 of Metro 2050 for member jurisdictions to develop strategies and policies that increase intersection density and permeability of their urban street grid.</p> <p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>Implementing this policy during neighbourhood planning and redevelopment projects will shorten trip distances, facilitate better bike and pedestrian connections, improve walkability, and reduce average block length.</i>

During the engagement phase many policy amendment options were considered and explored. Two additional policy options to amend *Metro 2050* received significant support. These are shown in Table 3 below. These action would also advance climate action, but they do not have as strong a connection with the goals and strategies of *Metro 2050*. If supported by the Regional Planning Committee and MVRD Board, these additional policy actions can be combined with the recommendations in Table 2 via Alternative 2 below.

Table 3 – Additional Climate Policy Enhancement Study Recommendations for Consideration

g)	<p>i. Amend Table 3 of <i>Metro 2050 (Guidelines for Urban Centres and Frequent Transit Development Areas)</i> to include cooling and clean air centres within the list of “General Expectations/Attributes” for all Urban Centres and FTDA’s; and</p> <p>ii. Add a new policy to Strategy 1.3 of <i>Metro 2050</i> requiring member jurisdictions to adopt Regional Context Statements that support cooling and clean air centres in appropriate locations that are accessible to more vulnerable populations.</p> <p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>Metro Vancouver’s Climate Projections indicate that the region will face considerably warmer temperatures year-round and an increase in wildfire risk by the year 2050;</i> • <i>The 2021 heat dome event resulted in 619 heat-related deaths in British Columbia, the majority of which occurred inside people’s homes that lacked air conditioning and adequate ventilation or alternative place to go to cool down;</i> • <i>68% of the region’s residential growth and 77% of the region’s employment growth is targeted to Urban Centres and FTDA’s by the year 2041, which will be in primarily multi-unit buildings;</i> • <i>This direction supports Action 6.3 of the Climate 2050 Buildings Roadmap (Expand the Network of Public Buildings that can serve as Cool, Clean Air Centres) and supports the implementation of policy actions 3.4.2 c) and 3.4.7 of Metro 2050; and</i> • <i>The Metro Vancouver Sustainable Innovation Fund Project AirCnC – Cooler ‘n’ Cleaner Air Centres, which will assist member jurisdictions in identifying and implementing cooling and clean air centres, can support implementation of this policy idea.</i>
h)	<p>Add a new policy action to Strategy 5.1 of <i>Metro 2050</i> for:</p> <p>i. Metro Vancouver to advocate to other levels of government for targeted funding to support zero-emission bus depot infrastructure;</p> <p>ii. TransLink to work with member jurisdictions to identify locations for zero-emission bus depots; and</p> <p>iii. Member jurisdictions to facilitate construction of these facilities with streamlined municipal approvals.</p> <p><u>Rationale/Anticipated Outcomes:</u></p> <ul style="list-style-type: none"> • <i>The lack of zero-emission bus infrastructure and the length of time required for approvals and permitting is bottlenecking the region’s ability to expand and replace the fossil fuel bus fleet and meet our collective short and long-range GHG emission reduction targets.</i>

ALTERNATIVES

1. That the MVRD Board direct staff to prepare a bylaw to amend Metro 2050 for consideration based on the following recommendations and as described in Table 2 of the report dated March 13, 2024, titled “Metro 2050 Climate Policy Enhancement Study – Recommendations” to:
 - a) develop a revised definition for the regional Rural land use designation;

-
- b) encourage the protection and restoration of trees and other ecosystems on lands with a non-urban regional land use designations and lands outside the Urban Containment Boundary;
 - c) require environmental and climate change-related analyses as part of all Metro 2050 amendment applications;
 - d) encourage the development of local hazard and risk data that meets key requirements;
 - e) add new climate-related performance monitoring metrics; and
 - f) increase intersection density and permeability of the urban street grid.
2. That the MVRD Board direct staff to prepare a bylaw to amend *Metro 2050* for consideration based on the following recommendations and as described in Tables 2 and 3 of the report dated March 13, 2024, titled “Metro 2050 Climate Policy Enhancement Study – Recommendations” to:
- a) develop a revised definition for the regional Rural land use designation;
 - b) encourage the protection and restoration of trees and other ecosystems on lands with a non-urban regional land use designations and lands outside the Urban Containment Boundary;
 - c) require environmental and climate change-related analyses as part of all *Metro 2050* amendment applications;
 - d) encourage the development of local hazard and risk data that meets key requirements;
 - e) add new climate-related performance monitoring metrics;
 - f) increase intersection density and permeability of the urban street grid;
 - g) support cooling and clean air centres in appropriate locations; and
 - h) support the development of zero-emission bus depots.
3. That the MVRD Board receive for information the report dated March 13, 2024 titled “Metro 2050 Climate Policy Enhancement Study - Recommendations” and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report. All work was developed internally within the Regional Planning work program and was considered as part of the 2023 and 2024 Board-approved budgets. If the MVRD Board approves Alternative 1 or 2 below a *Metro 2050* amendment bylaw will be prepared for Board consideration. Other climate change-related studies and projects underway may consider some of these options and continue to inform future policy changes to *Metro 2050* over time.

CONCLUSION

As directed by the MVRD Board, Regional Planning staff have undertaken a *Metro 2050* Climate Policy Enhancement Study to explore opportunities to strengthen climate change policy in *Metro 2050*. Developed in close coordination with the process to develop the *Climate 2050 Land Use and Urban Form Roadmap*, a policy shortlist was presented at two workshops held in early 2023 to gather and refine ideas about how to advance climate action through land use and growth management planning. The feedback received from the workshops informed draft recommendations for new climate policies in *Metro 2050*, which were presented to attendees of the joint Climate Action and Regional Planning Committee meeting on the *Metro 2050* Climate

Policy Enhancement Study in November, 2023. Following that engagement, this report presents staff's revised recommendations for consideration. Staff recommend Alternative 1.

ATTACHMENT

1. Presentation re: Metro 2050 Climate Policy Enhancement Study - Recommendations

REFERENCES

1. [Metro 2040 Climate Change and Natural Hazards Policy Review – Recommendations](#)
2. [Comparison of Climate Related Policies of Metro 2040 and Metro 2050](#)
3. [Consideration of Metro Vancouver Regional District Regional Growth Strategy Bylaw No. 1339](#)
4. [Process to Consider Stronger Climate Action Language and Policy for Metro 2050](#)
5. [Metro 2050 Climate Policy Enhancement Study – Project Initiation](#)
6. [Climate Action Committee and Regional Planning Committee Joint Discussion on the Metro 2050 Climate Policy Enhancement Study](#)

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Metro 2050 Climate Policy Enhancement Study: Recommendations

Edward Nichol

Senior Planner, Regional Planning and Housing Services

Regional Planning Committee Meeting | May 10, 2024
66030384



METRO 2050 CLIMATE POLICY ENHANCEMENT STUDY

Objective: to address the Board’s direction to explore ways to strengthen *Metro 2050’s* climate policies:

“Given the urgent need to respond to climate change and prepare for extreme weather events, direct staff to undertake work and engagement with an aim to proposing an early amendment to Metro 2050 post-adoption to strengthen climate action language and policy including the intent to improve integration of climate action into other Metro 2050 priorities”.

METRO 2050 CLIMATE POLICY ENHANCEMENT STUDY

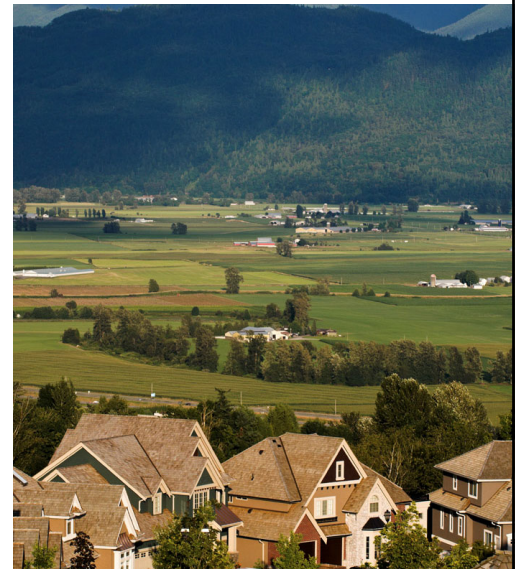
The following policy *areas* are being presented for consideration. If the Committee and Board support one / some or all of these, staff will return with a proposed amendment bylaw with specific language for *Metro 2050* reflecting that input.

No prescriptive action at this point.... Looking for feedback prior to any amendment bylaw being considered.

RECOMMENDATION A

Develop a revised definition for the regional Rural land use designation

- Metro Vancouver to work with member jurisdictions to update the definition, intent, and appropriate uses for lands
- Reinforce the importance of these lands for:
 - supporting urban containment objectives
 - protecting the region's ecosystems / agricultural lands
 - sequestering and storing carbon
 - buffering impacts of climate change / natural hazards



ANTICIPATED RESULTS

- Immediate:
 - A new policy action in *Metro 2050* for Metro Vancouver to ‘work with member jurisdictions and others to update the definition of Rural lands’
- Over time:
 - Staff to work with members to develop an updated definition
 - Once consensus achieved, a recommended *Metro 2050* amendment (post-2024) will be presented to the MVRD Board for consideration.

RECOMMENDATION B

Encourage the protection and restoration of trees and other ecosystems

- Metro Vancouver to work with partners to encourage the protection and restoration of trees and other ecosystems in areas outside the Urban Containment Boundary



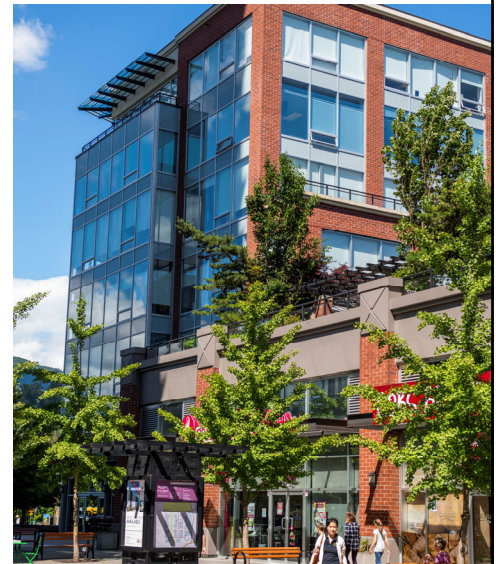
ANTICIPATED RESULTS

- Immediate:
 - A new policy action in *Metro 2050* for Metro Vancouver to ‘work with partners to encourage the protection and restoration of trees and other ecosystems in the region’s Rural, Agricultural and Conservation and Recreation lands’.
- Over time:
 - Metro Vancouver will collaborate with members, provincial ministries, First Nations, environmental stewardship groups, and others to communicate the value of trees and natural ecosystems as a climate action, and support programs that protect and enhance natural areas

RECOMMENDATION C

Require environmental / climate-related analyses for future *Metro 2050* amendment applications

- Member jurisdictions to identify applicable commitments / implications from local OCP / accepted RCS pertaining to:
 - Carbon storage levels in natural areas
 - Tree canopy cover
 - Impervious surfaces
 - Ecosystem protection
 - Agricultural land
 - Green infrastructure / ecosystem connectivity



ANTICIPATED RESULTS

- Immediate:
 - A new policy action in *Metro 2050* for ‘member jurisdictions to include additional climate-focused analysis in *Metro 2050* amendment applications showing consistency with commitments in their OCP / Regional Context Statement’
- Over time:
 - Future *Metro 2050* amendment applications would need to identify how they are consistent with commitments in their OCP related to environmental and climate change data and analysis
 - Metro Vancouver will share current, relevant data

RECOMMENDATION D

Encourage the development of local hazard and risk data

- Member jurisdictions to develop hazard / risk datasets, and where they already exist:
 - Keep them up-to-date
 - Include future climate change scenarios
 - Include both probable and severe scenarios
 - Incorporate them into OCPs, zoning, and other development regulations



ANTICIPATED RESULTS

- Immediate:
 - Amend policy action 3.4.5 in *Metro 2050* to ‘encourage member jurisdictions to develop and maintain hazard / risk datasets’
- Over time:
 - Metro Vancouver to continue collaborating with member jurisdictions to improve and share natural hazard data
 - Improve the regional baseline of data available, inform hazard mitigation projects, and meet provincial legislation requirements

RECOMMENDATION E

Add new climate-related performance metrics to *Metro 2050*

- % of new growth in known and unmitigated hazard areas
- % of lands within the UCB that contain impervious surfaces
- In Urban Centres and FTDA:
 - Tree canopy cover
 - Impervious surfaces
 - Sensitive and Modified ecosystems
 - Walkability
 - Cooling and clean air centres



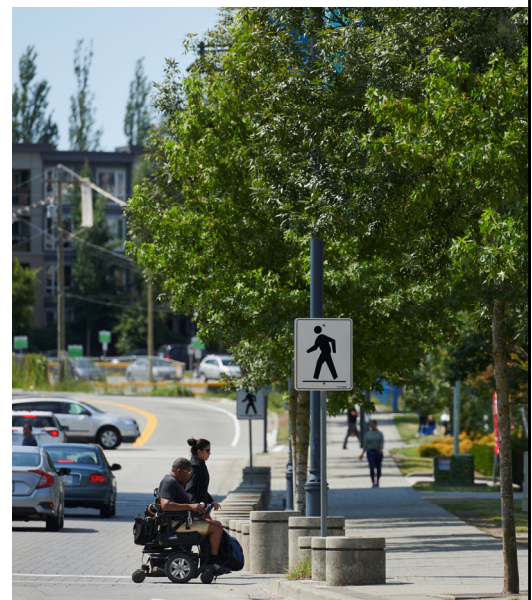
ANTICIPATED RESULTS

- Immediate:
 - New climate-related performance monitoring metrics added to Section G of *Metro 2050*
- Over time:
 - New metrics will be monitored and reported out to member jurisdictions, the MVRD Board, and the public on a regular basis
 - Member jurisdictions can use data to inform and prioritize future climate change and natural hazard policy and decision-making

RECOMMENDATION F

Increase intersection density and permeability of the urban street grid

- Member jurisdictions to develop new strategies and policies where they do not exist



ANTICIPATED RESULTS

- Immediate:
 - A new policy action in *Metro 2050* for member jurisdictions to ‘include strategies and policies in OCPs / RCSs that encourage increased intersection density and permeability of their urban street grid’
- Over time:
 - Member jurisdictions consider new / enhanced policies and strategies during neighbourhood planning and redevelopment projects to increase intersection density with the goal of improving walkability and reducing average block length

ADDITIONAL CONSIDERATIONS

G) Require the identification of cooling and clean air centres:

- Include these within the list of “General Expectations / Attributes” for Urban Centres and FTDAs
- Member jurisdictions to identify, locate and support these in appropriate locations that are accessible to vulnerable populations

H) Support zero emission bus depot infrastructure:

- Metro Vancouver to advocate to other levels of government for targeted funding
- TransLink to work with member jurisdictions to identify appropriate locations
- Member jurisdiction to consider streamlined municipal approvals to support and facilitate construction

ANTICIPATED RESULTS

- G)** • A new policy action in *Metro 2050* for Metro Vancouver and member jurisdictions to support cooling and clean air centres in appropriate locations
- When RCSs are updated, they would be required to identify how cooling and clean air centres have been supported in the community
- H)** • A new policy action in *Metro 2050* for TransLink to work with member jurisdictions to identify and facilitate future locations for zero emission bus depots
- Support greater regional coordination and advocacy to facilitate the implementation of the depots



To: Regional Planning Committee

From: Carla Stewart, Senior Planner, Regional Planning and Housing Services

Date: April 25, 2024 Meeting Date: May 10, 2024

Subject: **2024 Agriculture Awareness Grant Recommendations**

RECOMMENDATION

That the MVRD Board award the annual Agriculture Awareness Grants in the total amount of \$55,000, as presented in the report dated April 25, 2024, titled “2024 Agriculture Awareness Grant Recommendations”, to the following 16 non-profit organizations:

1. BC Agriculture in the Classroom, for “Take a Bite of BC” in the amount of \$4,725;
2. BC Agriculture Council, for “Speak Up Training” in the amount of \$3,000;
3. Delta Farmland and Wildlife Trust, for “Day at the Farm” in the amount of \$2,000;
4. Earthwise Society, for “Tomato Festival” in the amount of \$2,500;
5. Environmental Youth Alliance, for “Plant Gifts for Community Project” in the amount of \$4,725;
6. Farm Folk / City Folk, for “Days on the Farm” in the amount of \$4,725;
7. Fraser North Farmers Market Society, for “The Farmers Who Feed You” in the amount of \$3,400;
8. Growing Chef’s Society, for “Classroom Gardening & Cooking Program” in the amount of \$3,000;
9. Hives for Humanity, for “Knowing Our Soils” in the amount of \$5,500;
10. KPU Foundation, for “Productive Agroforestry Demonstrations Serving Metro Vancouver” in the amount of \$2,500;
11. Langley Environmental Partners Society, for “Langley Eats Local” in the amount of \$3,000;
12. BC Chicken Growers, for “Poultry in Motion School and PNE Attendance” in the amount of \$3,500;
13. Public Health Association of BC, for “Farm to School BC Celebration Farm Field Trips” in the amount of \$1,375;
14. The Sharing Farm, for “14th Annual Garlic Fest” in the amount of \$3,000;
15. Trinity Grace, for “Farm-to-Plate Marketplace” in the amount of \$5,050; and
16. UBC Centre for Sustainable Food Systems, for “Agriculture, Food Systems and Food Justice: A Leadership Program for Youth” in the amount of \$3,000.

EXECUTIVE SUMMARY

Metro Vancouver has awarded annual grants for agriculture awareness since 2008, as recommended by the Metro Vancouver Agricultural Advisory Committee. Programs and outreach that support local sustainable food production are important contributions toward increasing awareness across the region. The funding provided through the Agriculture Awareness Grants is particularly valuable for those community organizations doing public outreach on the value of producing or buying food close to home and for those organizations looking to share knowledge and support hands-on learning about local agriculture and food systems. This report supports those

efforts by providing recommendations to the Regional Planning Committee and MVRD Board to award a total of \$55,000 in Agricultural Awareness Grants to 16 non-profit organizations in 2024.

PURPOSE

The purpose of this report is to recommend that the MVRD Board award \$55,000 in agriculture awareness grants to 16 non-profit organizations from around the region.

BACKGROUND

The MVRD Board has supported agriculture awareness since 1994 to, in part, to raise public understanding about the importance of local food and agriculture production in the region. The grant program started in 2008 and continues to provide annual funding to non-profit organizations that undertake such things as hosting events, workshops and educational programs in schools and communities. These organizations lead public awareness activities about the importance of local agriculture and food production, and inform residents on how to grow and cook food produced in the region. This report provides the MVRD with a summary of the applications and recommends the awards for 2024.

AGRICULTURE AWARENESS GRANTS

The number of applications and grants awarded over the past 15 years is listed by year in Table 1. A description of previous grant recipients (Reference 1) and a video highlighting the positive impacts for two of the 2022 grant recipients (Reference 2) is available on the Metro Vancouver website.

Table 1. Metro Vancouver Agricultural Awareness Grant Program 2008 – 2023

Year	Number of Applications	Number of Grants Awarded	Funding Awarded
2008	11	3	\$25,000
2009	14	5	\$25,000
2010	14	7	\$30,000
2011	12	9	\$35,000
2012	27	8	\$35,000
2013	13	9	\$40,000
2014	15	11	\$40,000
2015	14	11	\$40,000
2016	12	11	\$40,000
2017	21	13	\$40,000
2018	24	12	\$40,000
2019	15	13	\$45,000
2020	21	12	\$45,000
2021	14	11	\$50,000
2022	16	14	\$50,000
2023	16	14	\$50,000
TOTAL	259	163	\$630,000

In 2023, a total of \$50,000 in Agricultural Awareness Grants was awarded to 14 non-profit organizations. Recurring projects supported in 2023 include: Take a Bite of BC classroom program,

Poultry in Motion’s travelling Mini Barn, Delta Farmland & Wildlife Trust’s Day at the Farm, Earthwise Society’s Tomato Festival, The Sharing Farm’s Garlic Festival, and Langley Eats Local school program provided by Langley Environmental Partners Society.

New programs supported through the grant program in 2023 included a farm market and urban-agricultural education series, plant gifts for community projects, programs on classroom gardening and cooking, instruction on wool including how it’s created, permaculture expansion, growing food literacy and a project by the BC Association of Farmers’ Markets (BCAFM) that created a travelling photography exhibit showcasing regional farmers and the food they grow. Images provided by the BCAFM in Figure 1 illustrates some of the projects supported by these grants:

Figure 1. Travelling Photography Exhibit by the BC Association of Farmers’ Markets



GRANT APPLICATION EVALUATION CRITERIA

The mandatory requirements for agricultural awareness projects receiving a grant are:

- a) having a regional scope (i.e., impacting more than one municipality);
- b) being located in Metro Vancouver;
- c) being administered by a non-profit organization in good standing; and
- d) having matching funding (dollars or in-kind) from another organization.

The six evaluation criteria and basis for scoring are the following:

1. The agriculture awareness activity is unique. A high score will be given to awareness activities that are one of a kind in the region and are currently not being done by another organization in Metro Vancouver.
2. The geographic scope of the grants awarded reaches out to municipalities across the region. A high score will be awarded to projects that provide a broad reach in Metro Vancouver or are targeting areas that are currently not well served by agriculture awareness activities.
3. The activity reaches out to culturally diverse audiences, urban residents, youth or K-12 school aged children. A high score will be awarded when these audiences are targeted in the awareness activity.
4. The activity contributes to the following desirable outcomes that support regional policy objectives, where a high score is awarded when the agriculture awareness activity aligns with two or more of the regional policy objectives:
 - Educates residents about local food production;
 - Enhances food literacy and skills in schools;
 - Communicates how food choices support the local economy;
 - Supports the next generation of food producers; and
 - Involves community gatherings that educate residents about local food.
5. The grant request is in the range of \$500 to \$6,000. A higher score will be awarded if the Metro Vancouver cash contribution is greater than 20 percent of the total cash budget, so that projects that may have a greater financial need are prioritized.
6. The extent to which grant applicants have received previous Agriculture Awareness Grant funding, and the completion of the imposed conditions listed on the application form. Groups that have not previously received a grant would automatically score high, while the previous grant recipients would be scored based on past compliance with the five criteria.

2024 AGRICULTURE AWARENESS GRANTS

On February 2, 2024, agricultural-related organizations, community groups and municipal staff liaisons were notified about Metro Vancouver's 2024 Agriculture Awareness grants with an invitation to submit an application, which was available for download on the Metro Vancouver website. 18 applications were received by the deadline of March 1, 2024.

Grant applications were initially evaluated by Metro Vancouver staff using the mandatory requirements and evaluation criteria listed above. The evaluation results were reviewed and endorsed by the Metro Vancouver Agricultural Advisory Committee at its meeting on April, 25, 2024. Table 2 highlights the 2024 Agriculture Awareness Grant applications submitted by non-profit organizations, and the recommended grant amounts for each. Each funding request was reviewed based on the amount of additional funding available to that organization and the overall amount that the organization was relying on the grant funding. The proposed grants being recommended were deemed to be the fairest based on the information received in each application. A summary description of all of the applications is provided in Attachment 1.

Table 2. List of Recommended 2024 Agriculture Awareness Grant Amounts

#	NON-PROFIT GROUP	PROJECT TITLE	GRANT REQUESTED	RECOMMENDED GRANT
1	BC Agriculture in the Classroom	Take a Bite of BC	\$6,000	\$4,725
2	BC Agriculture Council	Speak Up Training	\$5,000	\$3,000
3	Delta Farmland and Wildlife Trust	Day at the Farm	\$2,000	\$2,000
4	Earthwise Society	Tomato Festival	\$2,500	\$2,500
5	Environmental Youth Alliance	Plant Gifts for Community Project	\$6,000	\$4,725
6	Farm Folk/CityFolk	Days on the Farm	\$6,000	\$4,725
7	Fraser North Farmers Market Society	The Farmers Who Feed You	\$3,455	\$3,400
8	Growing Chef's Society	Classroom Gardening & Cooking Program	\$6,000	\$3,000
9	Hives for Humanity	Knowing Our Soils	\$6,000	\$5,500
10	KPU Foundation	Productive Agroforestry Demonstrations Serving Metro Vancouver	\$3,000	\$2,500
11	Langley Environmental Partners Society	Langley Eats Local	\$6,000	\$3,000
12	BC Chicken Growers	Poultry in Motion School and PNE Attendance	\$5,000	\$3,500
13	Public Health Association of BC	Farm to School BC Celebration Farm Field Trips	\$1,375	\$1,375
14	The Sharing Farm	14th Annual Garlic Fest	\$3,000	\$3,000
15	Trinity Grace	Farm-to-Plate Marketplace	\$5,997	\$5,050
16	UBC Centre for Sustainable Food Systems	Agriculture, Food Systems and Food Justice: A Leadership Program for Youth	\$5,400	\$3,000
Total			\$80,727	\$55,000

ALTERNATIVES

1. That the MVRD Board award the annual Agriculture Awareness Grants in the total amount of \$55,000, as presented in the report dated April 25, 2024, titled "2024 Agriculture Awareness Grant Recommendations", to the following 16 non-profit organizations:
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 10. KPU Foundation, for “Productive Agroforestry Demonstrations Serving Metro Vancouver” in the amount of \$2,500;
 11. Langley Environmental Partners Society, for “Langley Eats Local” in the amount of \$3,000;
 12. BC Chicken Growers, for “Poultry in Motion School and PNE Attendance” in the amount of \$3,500;
 13. Public Health Association of BC, for “Farm to School BC Celebration Farm Field Trips” in the amount of \$1,375;
 14. The Sharing Farm, for “14th Annual Garlic Fest” in the amount of \$3,000;
 15. Trinity Grace, for “Farm-to-Plate Marketplace” in the amount of \$5,050; and
 16. UBC Centre for Sustainable Food Systems, for “Agriculture, Food Systems and Food Justice: A Leadership Program for Youth” in the amount of \$3,000.
2. That the MVRD Board receive for information the report dated April 25, 2024 titled “2024 Agriculture Awareness Grant Recommendations” and provide alternative direction to staff.

FINANCIAL IMPLICATIONS

The total funds available for the Agriculture Awareness Grants in 2024 is \$55,000. This amount is included in the Board-approved 2024 Regional Planning budget. If the Board chooses Alternative 1, the 16 successful grant recipients will be notified.

CONCLUSION

Based on the evaluation by Metro Vancouver Agricultural Advisory Committee members and by Metro Vancouver staff, 16 non-profit organizations are recommended to receive a 2024 Agriculture Awareness Grant, for a total amount of \$55,000. The recommendations enable the continuation of successful educational programs and community agriculture-related events in 2024 and undertake such things as hosting events, workshops and educational programs in schools and communities. The grants also serve to increase public awareness about the importance of local agriculture and food production, and how to grow and cook food produced in the region. Staff recommend Alternative 1.

ATTACHMENT

1. Description of the 2024 Agriculture Awareness Grant Applications Received

REFERENCES

1. [Previous Agriculture Awareness Grant Recipients](#)
2. [2022 Agriculture Awareness Grant Video](#)

Description of the 2024 Agriculture Awareness Grant Applications Received

#	NON-PROFIT GROUP	PROJECT TITLE	PROJECT DESCRIPTION	GRANT REQUEST	TOTAL BUDGET
1	BC Agriculture in the Classroom	Take a Bite of BC	Provides fresh BC grown products to BC Culinary Arts Secondary schools.	\$6,000	\$33,000
2	BC Agriculture Council (BCAC)	Speak Up Training	Provide farmers and ranchers in Metro Vancouver the tools and resources to communicate to the public about agriculture.	\$5,000	\$5,000
3	Collingwood Neighbourhood House	The Norquay Community Food Forest	Transform the Norquay Community Forest into an environmental education hub, fostering awareness of agriculture.	\$6,000	\$30,000
4	Delta Farmland and Wildlife Trust	Day at the Farm	Day event intended to increase awareness and support for local agriculture with a focus on critical importance of local, sustainable agriculture.	\$2,000	\$42,325
5	Earthwise Society	Tomato Festival	Family-friendly community gathering and celebration of the history and diversity of BC agriculture with a focus on heirloom tomatoes.	\$2,500	\$6,000
6	Environmental Youth Alliance	Plant Gifts for Community Project	Provide opportunity for youth from equity-deserving communities to gain hands-on skills in native plant food and medicine production and develop land-based job skills to support the next generation of growers.	\$6,000	\$27,750
7	FarmFolk/CityFolk	Day on the Farm	Encourage Metro Vancouver residents to learn about and advance climate-friendly, resilient, thriving, sustainable food systems in the Lower Mainland.	\$6,000	\$13,600
8	Fraser North Farmers Market Society	The Farmers Who Feed You	Promoting local farmers through tangible signage, farmer profiles, children's activities and food-related competitions at the Fraser North Farmers Market.	\$3,455	\$4,455
9	Growing Chef's Society	Classroom Gardening & Cooking Program	Hands-on education of elementary school aged students to increase their awareness of local food options and to learn how their food and food choices affect their health, community, environment and economy.	\$6,000	\$127,715
10	Hives for Humanity	Knowing our Soils	Build and share a pathway, including resources, relationships, strategies, practices and baseline results, for conducting annual soil tests in community gardens across Metro Vancouver.	\$6,000	\$12,600
11	KPU Foundation	Productive Agroforestry Demonstrations serving Metro Vancouver	Develop, document and provide resources about productive agroforestry practices to advance nutritional diversity, income generation, ecological sustainability and peer support for the local farming community.	\$3,000	\$29,200
12	Langley Environmental Partners Society	Langley Eats Local	Engage children and youth in learning about food systems and increase awareness about local agriculture through school-based, outdoor education programming.	\$6,000	\$57,200
13	Little Mountain Neighbourhood House	Yard Garden Harvest Project	Create a connected and empowered neighbourhood by learning, growing and providing fresh food to food insecure community members.	\$2,000	\$2,000
14	BC Chicken Growers – Poultry in Motion	Poultry in Motion School and PNE Attendance	Mobile live bird mini barn for community events used to increase public awareness and understanding of family farming, food safety, animal care and bio-security.	\$5,000	\$75,000
15	Public Health Association of BC	F2SBC Spring Celebration Farm Field Trips	Educate students in a fun and engaging way about local farming through farm visits and social media posts.	\$1,375	\$2,525
16	The Sharing Farm	14th Annual Garlic Fest	Celebrates local, sustainable agriculture and the relationship between farming and the natural environment.	\$3,000	\$31,600
17	Trinity Grace	Farm-to-Plate Marketplace	Create a virtual farmers market to facilitate access to local food directly from vendors and create opportunities to rescue surplus food.	\$5,997	\$7,922
18	UBC Centre for Sustainable Food Systems	Agriculture, Food Systems and Food Justice: A Leadership Program for Youth	Provide a full-day camp for youth to explore agriculture, climate science, food citizenship, decolonization, systems-thinking, farming and food justice.	\$5,400	\$10,450
TOTALS				\$80,727	\$518,342

To: Regional Planning Committee

From: Victor Cheung, Regional Planner, Regional Planning and Housing Services

Date: April 22, 2024 Meeting Date: May 10, 2024

Subject: **Metro 2050 Implementation Guideline – Regional Liquid Waste Services Planning**

RECOMMENDATION

That the MVRD Board endorse the *Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning as presented in the report dated April 22, 2024, titled “*Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning”.

EXECUTIVE SUMMARY

Metro Vancouver is developing and updating a suite of implementation guidelines to support the interpretation and implementation of *Metro 2050*. A new Regional Liquid Waste Services Planning Implementation Guideline has just been completed; it is intended to help planners and engineers from member jurisdictions better understand the relationship between anticipated population growth and regional liquid waste infrastructure planning. The Implementation Guideline provides guidance on when and what type of growth-related data from Regional Planning and member jurisdictions is required to better plan for long-term regional liquid waste infrastructure needed to service such growth.

PURPOSE

To provide the Regional Planning Committee and the MVRD Board with the opportunity to consider and endorse the *Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning.

BACKGROUND

Implementation Guidelines were first introduced as companion documents to support the previous Regional Growth Strategy, *Metro Vancouver 2040: Shaping our Future*. The Regional Liquid Waste Services Planning Implementation Guideline serves as a companion document to *Metro 2050*. The development of the Implementation Guideline is an action item in *Metro 2050* listed in Section 1.1.3:

In collaboration with member jurisdictions, develop an Implementation Guideline to guide the process by which member jurisdictions are to provide Metro Vancouver’s Liquid Waste Services with specific, early, and ongoing information about plans for growth that may impact the regional sewer system, as well as plans to separate combined sewer systems.

SUMMARY OF THE IMPLEMENTATION GUIDELINE

This Implementation Guideline outlines when member jurisdictions should engage with Metro Vancouver, and what data and information may be required to help Metro Vancouver refine its regional liquid waste service capacity modelling. This information is integral for planning the

delivery of regional liquid waste services for member jurisdictions and to minimize the risk of service disruptions.

The Implementation Guideline covers two distinct engagement processes:

1. The first process, **Trigger Scenarios**, outlines when member jurisdictions should engage with Metro Vancouver when anticipated growth deviates from what was presented in the Regional Context Statement; and
2. The second process, **Sewerage Catchment Area Long-Range Population Projections**, is an ongoing data sharing process in which Regional Planning provides 100-year population projections within each Sewerage Catchment, to be supplemented with municipal and other data were available.

Metro Vancouver faces challenges when planning for regional liquid waste infrastructure. At present, Metro Vancouver staff use population and land use projections provided by Regional Planning to model future infrastructure demand. This data is provided at a region-wide scale and includes projections for approximately 50 years, extrapolated out to 100 years. However, this information does not always account for spatial allocation, density, pace of development, or changes to anticipated growth. The region's growth typically exceeds the pace of data collection and distribution. Therefore, to improve the accuracy of future liquid waste capital planning, it is essential for member jurisdictions to coordinate with Metro Vancouver to determine where regional upgrades may be needed as local and neighbourhood plans evolve.

Engaging on an ongoing and timely basis is crucial. By notifying Metro Vancouver of future development plans, member jurisdictions can help in the planning and delivery of consistent, high quality, and economical regional liquid waste services. This will ultimately minimize the risk of service disruptions, delayed occupancy or completion, and ensures the continued growth and success of the region.

REGIONAL STAFF ADVISORY COMMITTEE REVIEW

As part of the work of to develop the Implementation Guidelines, Metro Vancouver staff presented and sought feedback from several regional staff advisory committees:

September 15, 2023 – Regional Planning Advisory Committee

September 28, 2023 – Regional Engineers Advisory Committee – Liquid Waste Subcommittee

November 22, 2023 – Regional Engineers Advisory Committee – Water Services Subcommittee

The Regional Engineers Advisory Committee has also been provided a copy of the Implementation Guidelines for information.

Staff answered questions from member jurisdiction planning and engineering staff and incorporated feedback to improve usability of the Implementation Guidelines. Overall, there was acknowledgement for the need for such information to help with planning large scale infrastructure, and Metro Vancouver is working to make the process of sharing the information as easy as possible for member jurisdiction staff.

ALTERNATIVES

1. That the MVRD Board endorse the *Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning as presented in the report dated April 22, 2024, titled “*Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning”.
2. That the Regional Planning Committee receive for information the report dated April 22, 2024, titled “*Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning” and provide alternative direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report. All work to develop implementation guidelines is within the Regional Planning work program and was considered as part of the 2023 and 2024 Board-approved budgets.

CONCLUSION

The *Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning has been created to support the interpretation and implementation of *Metro 2050* goals, strategies and actions. Staff recommend Alternative 1, that the MVRD Board endorse the updated *Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning.

ATTACHMENT

1. *Metro 2050* Implementation Guideline – Regional Liquid Waste Services Planning

62131103

Metro 2050

IMPLEMENTATION GUIDELINE Regional Liquid Waste Services Planning

April 2024

Preamble

The successful implementation of [Metro 2050](#) depends on ongoing cooperation and collaboration between Metro Vancouver and member jurisdictions. *Metro 2050* represents consensus among member jurisdictions to work collaboratively on meeting five long-term regional planning goals:

1. Create a compact urban area
2. Support a sustainable economy
3. Protect the environment, address climate change, and respond to natural hazards
4. Provide diverse and affordable housing choices
5. Support sustainable transportation choices

The *Metro 2050* Regional Liquid Waste Services Planning Implementation Guideline is geared towards locations that are expecting to densify and are already within Metro Vancouver’s approved Sewerage Areas. The process outlined in the Implementation Guideline can be used to guide the collaboration, engagement, and information sharing between member jurisdictions and Metro Vancouver. The Implementation Guideline outlines the necessary engagement and up-to-date population projections necessary to ensure regional sewerage capacity can meet growth demands.

This Implementation Guideline will be updated periodically to ensure the most current information is available to member jurisdictions. This guideline should be read in conjunction with *Metro 2050* and the [Local Government Act](#), and does not replace or supersede the requirements set out in those documents.

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1.0 SUPPORTING REGIONAL GROWTH

CONSISTENCY WITH METRO 2050 AND THE LOCAL GOVERNMENT ACT

Metro Vancouver collects and treats the region's wastewater through five wastewater treatment plants and a region-wide network of sewers and pumping stations. To support the continued growth in the region, Metro Vancouver manages upgrades and builds new infrastructure to meet current and future demand. This vital work requires Metro Vancouver staff to understand the planned growth in each member jurisdiction and necessitates a collaborative working relationship with municipal planners and engineers to ensure the region's wastewater can be adequately managed to protect public health and the environment.

PURPOSE OF THIS IMPLEMENTATION GUIDELINE

This Implementation Guideline is designed to help planners and engineers from member jurisdictions better understand the relationship between anticipated population growth and regional liquid waste infrastructure planning. Metro Vancouver encourages engineers and planners from member jurisdictions to collaborate and share applicable data as we respond to population growth as a region.

INFRASTRUCTURE PLANNING CHALLENGES

At present, Metro Vancouver staff utilize population and land use projections provided by Regional Planning, supplemented by data from member jurisdictions and other means, to model future infrastructure demand. This data is provided at a region-wide scale and includes projections for approximately 50 years, extrapolated out to 100 years. However, this information does not always account for spatial allocation, density, pace of development, or changes to anticipated growth. Metro Vancouver's growth typically exceeds the pace of data collection and distribution. Therefore, to improve the accuracy of future liquid waste capital planning, it is essential for member jurisdiction planners and engineers to coordinate with Metro Vancouver staff to determine where regional upgrades may be needed as local and neighbourhood plans evolve.

IMPORTANCE OF ENGAGEMENT

Engaging on an ongoing and timely basis is crucial. By notifying Metro Vancouver of future development plans, member jurisdictions can help in the planning and delivery of consistent, high quality, and economical regional liquid waste services. This will ultimately minimize the risk of service disruptions, delayed occupancy or completion, and ensures the continued growth and success of the region. The following sections outline when member jurisdictions should engage with Metro Vancouver, and what data and information may be required to help Metro Vancouver refine its regional liquid waste service capacity modelling. This information is integral for planning the delivery of regional liquid waste services for member jurisdictions and to minimize the risk of service disruptions.

NOTE REGARDING REGIONAL WATER SERVICES PLANNING

While this implementation guideline is limited in scope to regional liquid waste planning, the same challenges and need for coordination and information sharing also apply to regional water services planning, which is done by Metro Vancouver Water Services staff under the legal entity of the Greater Vancouver Water District (GVWD). [Click here](#) for more information.

Metro Vancouver Regional Planning staff routinely share information provided by member jurisdictions regarding anticipated growth and new land use plans with both Liquid Waste Services and Water Services staff to assist with utility planning. Member jurisdictions are encouraged to have early and

ongoing engagement with Water Services when updating or creating new neighbourhood plans and/or when considering a development proposal that is for greater than 1,000 equivalent population.

In addition, members are strongly encouraged to provide a digital copy of their Water Master Plan to Metro Vancouver Regional Planning and Water Services staff every time it is updated (normally every five years). This would assist Water Services staff with remaining up-to-date of growth-driven projects within member jurisdictions and understanding if they need to be taken into consideration in the regional water system planning.

This Implementation Guideline covers two distinct engagement processes:

1. The first process, **Trigger Scenarios**, outlines when member jurisdictions should engage with Metro Vancouver when anticipated growth deviates from what was presented in the Regional Context Statement (See Section 2);
2. The second process, **Sewerage Catchment Area Long-Range Population Projections**, is an ongoing data sharing process in which member jurisdictions provide population projections extending 50 years beyond *Metro 2050* projections, within each Sewerage Catchment (See Section 3).

2.0 TRIGGER SCENARIOS: WHEN TO ENGAGE WITH METRO VANCOUVER

WHAT ARE TRIGGER SCENARIOS/CRITERIA AND WHY ARE THEY IMPORTANT?

Member jurisdictions are faced with a range of growth pressures which may have regional liquid waste service impacts. To assess when member jurisdictions should engage and notify Metro Vancouver of future development plans, a series of trigger criteria have been identified to act as a filter. Engagement when these triggers are satisfied minimizes the risk of service disruptions, delayed occupancy or completion, and supports sustained growth in the region.

The three trigger criteria are summarized below:

- Trigger 1 - When a member jurisdiction is planning to upsize their own local waste water infrastructure due to anticipated growth.
- Trigger 2 - When a member jurisdiction is updating or creating new neighbourhood plans.
- Trigger 3 - When a development proposal is greater than 400 equivalent population and
 - would substantially change or add new density or land uses; or
 - result in more rapid or denser growth than what is currently envisioned.

WHAT IS THE PROCESS?

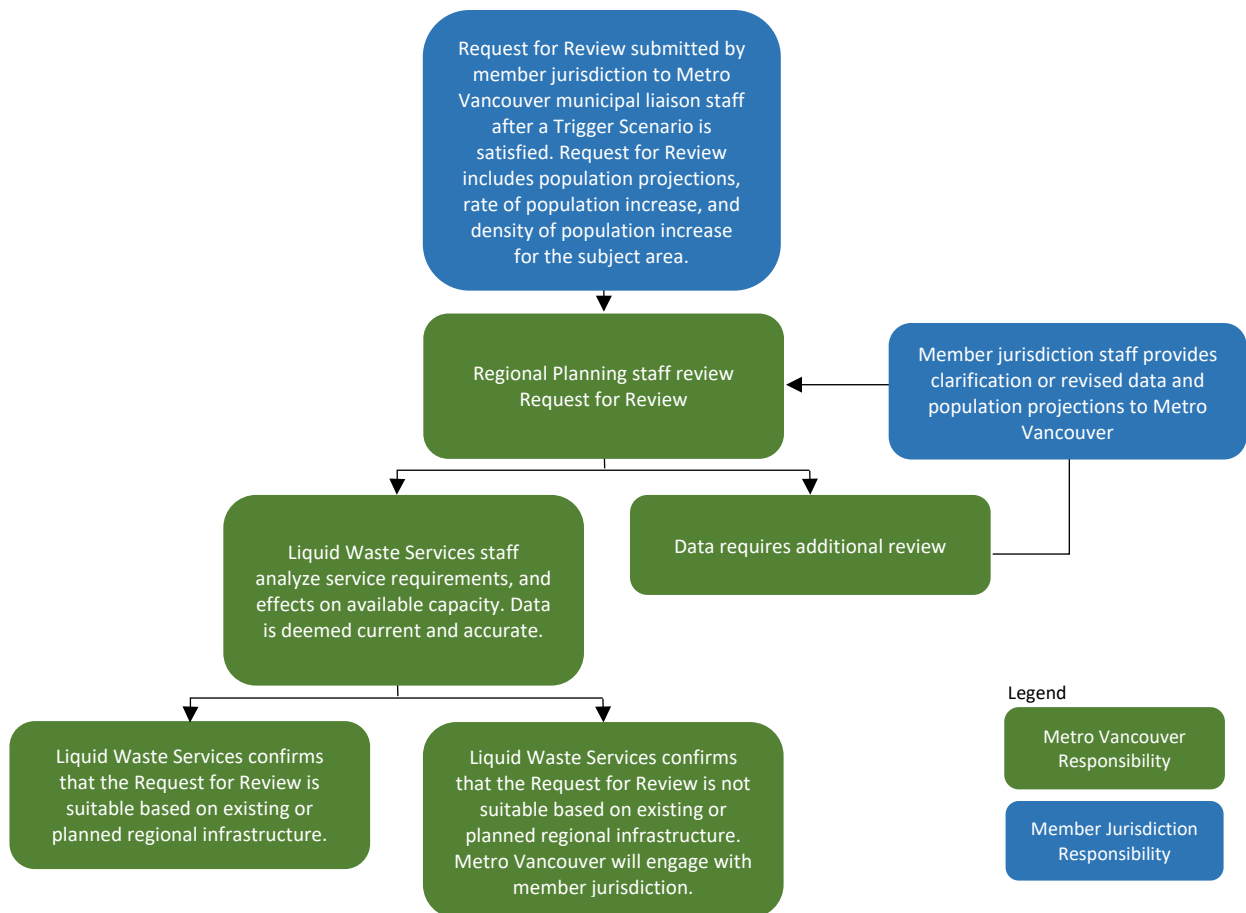
The engagement process should be initiated by member jurisdictions when at least one of the three criteria noted above is satisfied. Member jurisdictions should contact their Metro Vancouver Regional Planning municipal liaison staff with a “Request for Review” that includes population and land use projection data for the subject area. Trigger Scenarios 1 and 2 do not require additional supplemental information. Trigger Scenario 3 requires additional assessment covered in Section 2.1 below.

Once the Request for Review and the associated information has been received, the request will be forwarded to Regional Planning staff. Staff will review the population and land use projections based on both Regional Planning’s projections and the member jurisdiction’s data (and other data, if applicable). This analysis will verify that the submission meets at least one of the three trigger criteria. Metro Vancouver staff may contact the member jurisdiction if there are questions related to the Request for Review.

Once the data is deemed to be current, accurate, and satisfies at least one of the threshold triggers, the information will be forwarded to Liquid Waste Services to review the servicing implications. Following this review, Liquid Waste Services staff will provide a summary of their findings to Regional Planning and the member jurisdiction. These findings will identify any issues that would impact the proposed timeline. This process is further highlighted in Diagram 1 below.

If there are revisions to the subject area that affect density, land use, and/or population projections, member jurisdictions must provide new data and projections to Metro Vancouver staff as soon as possible. Liquid Waste Services and Regional Planning staff will work with member jurisdiction counterparts on revisions to maintain current and accurate projections. Early and ongoing engagement with Metro Vancouver minimizes the risk of service disruptions, delayed occupancy, or completion.

Diagram 1: Trigger Scenarios Process



DATA REQUIREMENTS FOR TRIGGER SCENARIOS

Metro Vancouver staff require projected population, land use and timeline data in order to complete the review. Detailed information required as a part of Trigger Scenario engagement may vary based on the land use classification, development type, and build out phasing.

Generally, member jurisdiction staff should be prepared to submit the following data when submitting a Request for Review based on one of the Trigger Scenario to demonstrate how the proposed population for a subject area aligns or is different from *Metro 2050* policies and current population projections:

- The total residential population expected, along with best estimates of build out phasing projections for the duration of the project in 10 year increments;
- The proposed land use changes and associated population equivalents if the land use proposed is industrial, commercial, or institutional; and
- The geographic scope of the study area and how it fits within the applicable sewer catchment area.

LIQUID WASTE SERVICING INFORMATION FOR REGIONAL GROWTH STRATEGY AMENDMENT APPLICATIONS

In some cases, a development results in an Official Community Plan amendment that requires the member jurisdiction to apply to Metro Vancouver to amend *Metro 2050*. In addition to land use impacts, the MVRD Board of Directors needs to understand how the proposed development may impact Metro Vancouver infrastructure, including the regional sewerage system, when considering such applications. To do so, the following initial information related to liquid waste servicing should be submitted as part of any application intending to connect to regional sewer services:

- Timing of the proposed development and connection to sewer services;
- Population, dwelling units, and land use projections (preferably till year 2100);
- Sanitary flow projections (average dry weather (ADWF) and design flows);
- Any pumps required within the servicing area;
- Proposed options and tie-in locations to Metro Vancouver systems; and
- Map of the area showing the sewer catchments (preferably as a shape file).

The list above is not exhaustive, and Liquid Waste Services staff may request additional information from the member jurisdiction after reviewing the initial submission.

2.1. ASSESSING IMPACT OF CHANGE TO CURRENT PROJECTIONS: TRIGGER 3

Trigger Scenario 3 is intended to identify if a development proposal's size, density, or rate of development necessitates upgrade plans to the Regional sewer system.

To limit the number of reviews required and eliminate smaller developments that are not expected to significantly impact the regional system, a minimum development size with a projected population equivalent of 400 has been selected. Any development proposal smaller than this will not need to be reviewed. However, these smaller developments should be cumulatively provided to Regional Planning during regular updates.

For larger developments, three parameters have been developed to characterize the potential impact of a development proposal. These are:

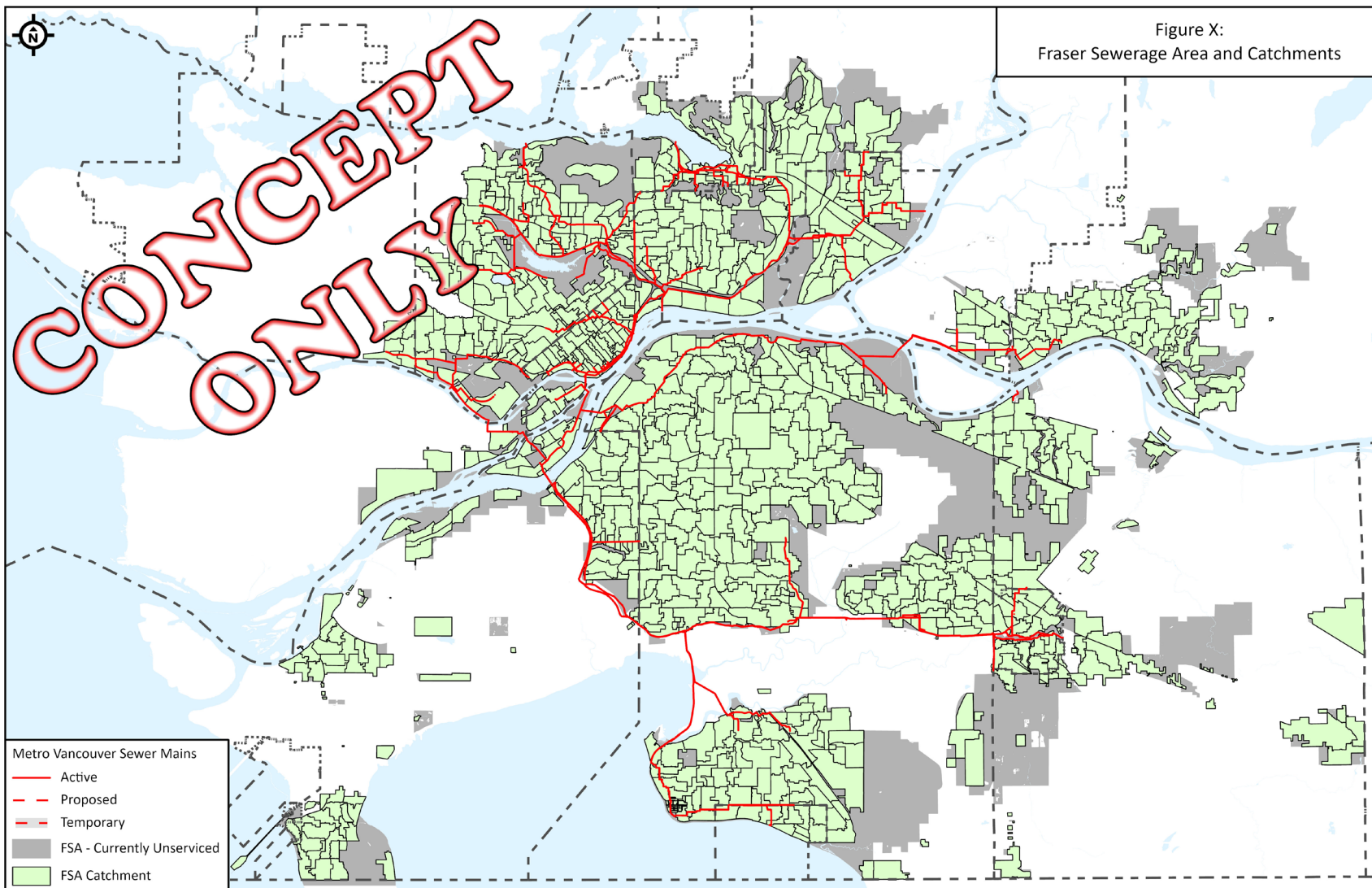
1. Magnitude of population increase;
2. Rate of population increase; and
3. Density of population increase.

Should the values calculated for any of these parameters sufficiently exceed the current projections, a more detailed review of the available capacity in the Regional Liquid Waste Services system may be warranted. See *Parameter Estimation Process* section below for more information.

WHAT IS A SEWERAGE CATCHMENT AREA?

Metro Vancouver is divided up into four sewerage areas including Fraser, Lulu Island, North Shore, and Vancouver, typically with multiple contributing municipalities and member jurisdictions. Each sewerage area is serviced by its own regional infrastructure network. To determine your jurisdiction's sewerage area, see [Metro Vancouver's Sewerage and Drainage Service GIS Portal](#) (*To be updated based on map portal update*).

Within each sewerage area, smaller sewer catchment areas have been identified based on the regional collection system. Figure 1 illustrates the sewer catchment areas within the Fraser Sewerage Area (FSA) as an example.



PARAMETER ESTIMATION PROCESS

Using the information noted above, member jurisdiction staff should calculate the following three Ratios and compare results with current projections identified in the GIS shape files for the applicable sewer catchment area (*GIS Mapping Portal Link will be added/updated in the future*). If the calculated values exceed the anticipated growth projections, this would then result in the need for further review. Appendix A provides examples to assist in the calculation and assessment of the Trigger 3 ratios.

Ratios:

1. R1 - Magnitude of population increase = $\text{Population Equivalent}_{\text{proposed}} / \text{Total projected population change}$
2. R2 – Rate of population increase = $\text{Population Equivalent}_{\text{proposed}} / \text{Years to implement (population equivalent / yr)}$
3. R3 – Density of population increase = $\text{Population Equivalent}_{\text{proposed}} / \text{Development area (population equivalent / ha)}$

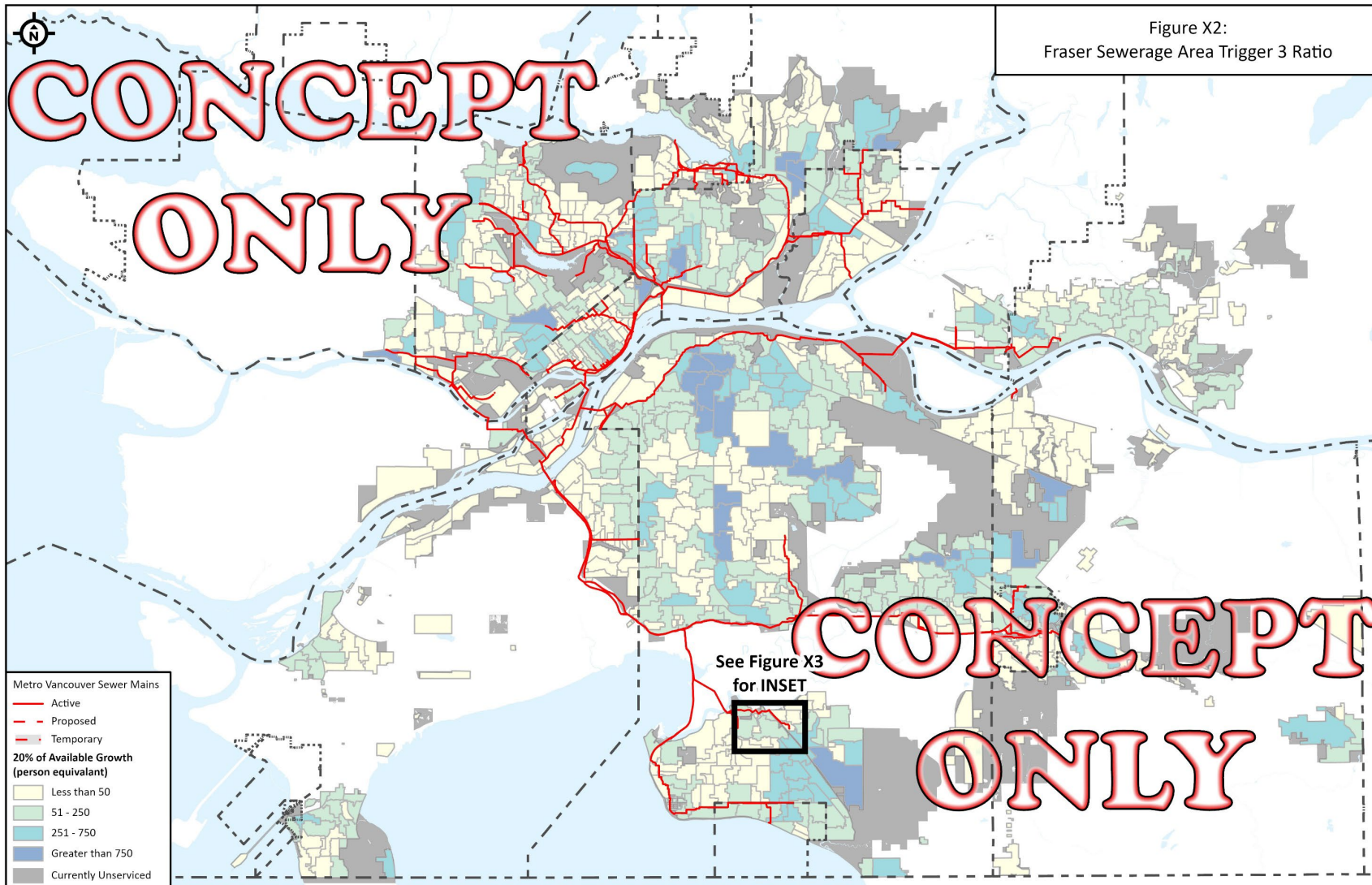
Thresholds:

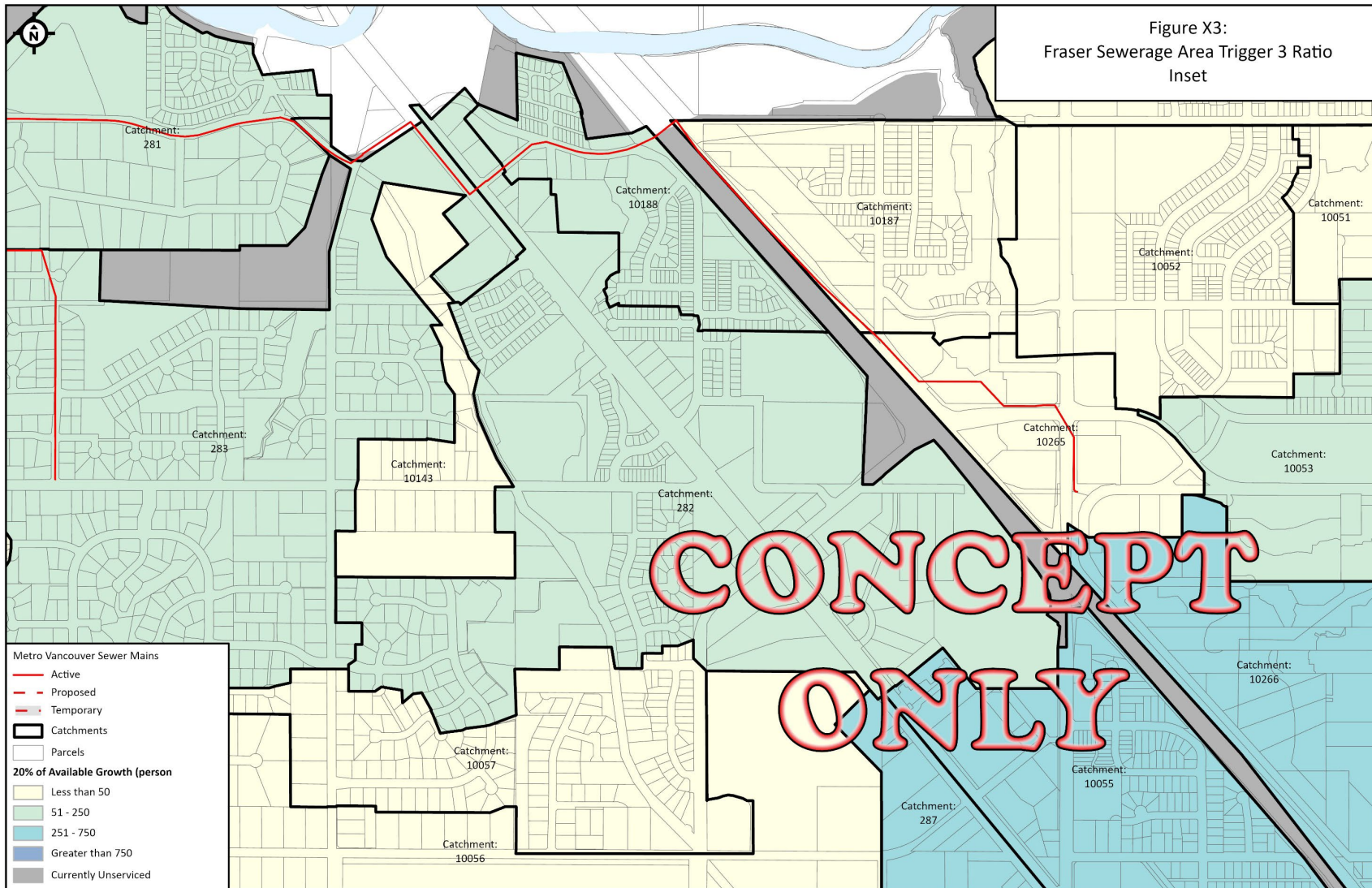
1. If $R1_{\text{proposed}}$ is > 0.2 (i.e., $> 20\%$ of total future capacity increase expected) a review may be warranted to determine if current or future planned upgrades are sufficient.
2. If $R2_{\text{proposed}}$ is $> R2$ for the applicable sewer catchment (i.e., faster than previously projected) a review may be warranted to assess if future upgrades need to be accelerated.
3. If $R3_{\text{proposed}}$ is $> R3$ for the applicable sewer catchment (i.e., denser than previously projected) a review may be warranted due to the remaining area potentially increasing the total future population.

Current Growth Projections

The current growth projections referenced above along with the calculated R2 and R3 values have been calculated for each sewer catchment area and are provided in both shape file and table format (*GIS Mapping Portal Link will be added/updated in the future*). Figures X2 and X3 illustrate examples of the information contained in the sewerage area wide digital versions.

Metro Vancouver has data available on its [Open Data Portal](#) (*GIS Mapping Portal Link will be added/updated in the future*). Metro Vancouver Regional Planning staff can provide assistance and additional data as needed.





3.0 SEWERAGE CATCHMENT AREA LONG-RANGE POPULATION PROJECTIONS

THE IMPORTANCE OF LONG-RANGE POPULATION PROJECTIONS FOR SEWERAGE CATCHMENT AREA PLANNING?

Metro Vancouver requires population projections that extend out 100 years. This projection timeline is important because regional liquid waste infrastructure is planned on a 100-year timescale. Consistent projection data sharing (e.g. every three to five years) helps Metro Vancouver make informed planning decisions and capital investments to accommodate future growth for the region.

Metro Vancouver maintains a population projection model with a variety of inputs to build an understanding of the implications on local infrastructure including liquid waste services. Obtaining and understanding local long-range population projections is intended to help Metro Vancouver create a more accurate estimate based on each member jurisdiction's assessment of their population growth.

WHAT ARE THE DATA REQUIREMENTS FOR SEWERAGE CATCHMENT AREA?

Metro Vancouver staff require population projection and density data [by sewerage catchment area boundary](#). Metro Vancouver will utilize Regional Planning projections that extend out 50 years extrapolated to 100 years.

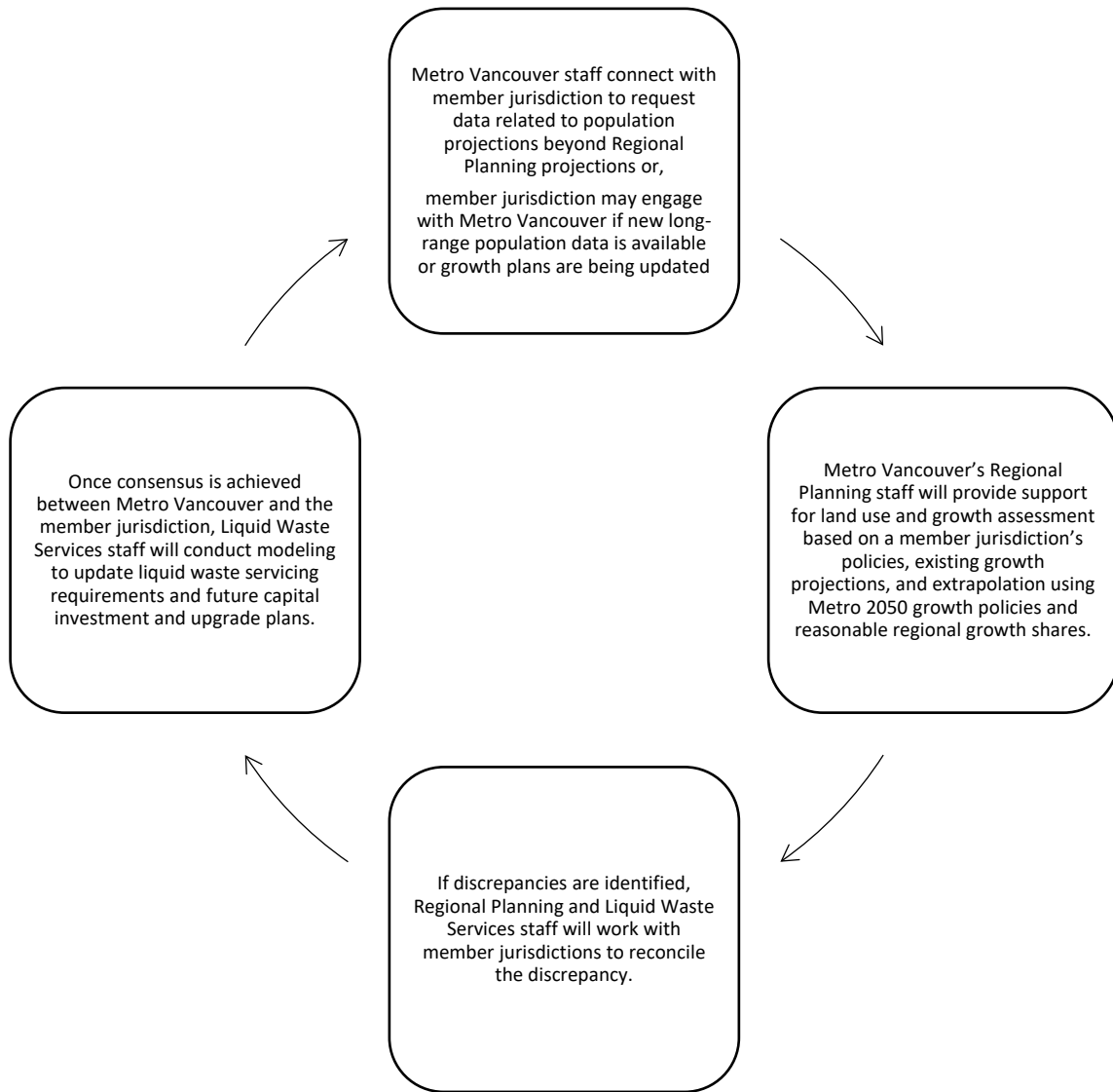
WHAT IS THE PROCESS?

On a regular basis, Metro Vancouver staff will connect with member jurisdiction staff to request data related to long range population projections. Likewise, if a member jurisdiction has new long-range population data or is updating a growth plan (e.g. official community plan), they are encouraged to contact Metro Vancouver staff to discuss long-range population projections.

Metro Vancouver's Regional Planning staff will provide support for land use and growth assessment based on a member jurisdiction's policies, existing growth projections, and extrapolation using *Metro 2050* growth policies and reasonable regional growth shares. If discrepancies are identified, Regional Planning staff will work with member jurisdictions to reconcile the discrepancy. Once consensus is achieved between Metro Vancouver and the member jurisdiction, Liquid Waste Services staff will conduct modeling that may show a need to adjust regional liquid waste servicing requirements and future capital investment and upgrade plans.

This process is further highlighted in Diagram 2 below.

Diagram 2: Sewerage Catchment Area Engagement Cycle



4.0 CONTACT INFORMATION & ADDITIONAL RESOURCES

KEY CONTACT INFORMATION

- Metro Vancouver Liquid Waste Services: LWS-Admin@metrovancover.org
- Metro Vancouver Regional Planning: RPH-RegionalPlanning@metrovancover.org

LINKS TO LWS RESOURCES AND WEBSITE

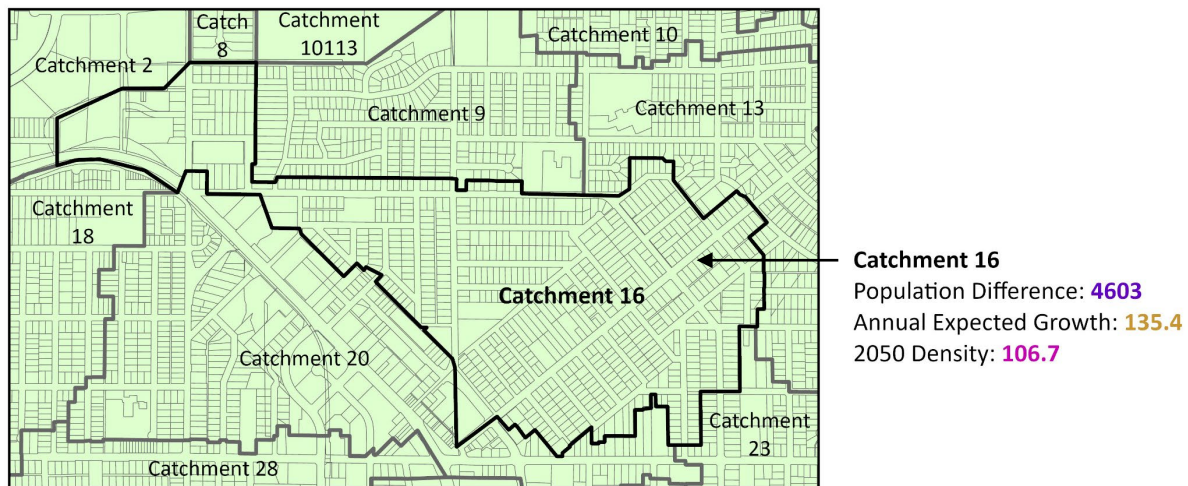
- To be added based on map portal updates

APPENDIX A: IMPLEMENTATION GUIDELINE - TRIGGER 3 EXAMPLES

Ratios:

Ratio	Description	Calculation
R1	Magnitude of population increase	$R1 = \frac{\text{Population Equivalent}_{\text{Proposed}}}{\text{Total projected population change}}$
R2	Rate of population increase (population equivalent / yr)	$R2 = \frac{\text{Population Equivalent}_{\text{Proposed}}}{\text{Years to implement}}$
R3	Density of population increase (population equivalent / ha)	$R3 = \frac{\text{Population Equivalent}_{\text{Proposed}}}{\text{Development Area}}$

Catchment 16 values are from the *Implementation Guideline Map GIS file*. The “Proposed Developments” are fictitious, and as such do not reflect any actual development proposals.



Catchment *	Population_2016	Population_2050	Proj_Pop_Change	AnnualGrowth	Res_Area	Density2050	
1	16	3182.47	7785.67	4603.2	135.39	70.75	106.67

Proposed Development:

Population	350
Years to implement	1
Residential Area	1

Threshold Check: 350 < 400 - NOT REQUIRED

Proposed Development:

Population	500
Years to implement	2
Residential Area	5

Threshold Check:

Ratio	Calculation	Threshold	Exceeds
R1	500 / 4603 = 0.11	0.2	No
R2	500 / 2 = 250	135.4	Yes
R3	500 / 5 = 100	106.7	No

Proposed Development:

Population	1000
Years to implement	3
Residential Area	6

Threshold Check:

Ratio	Calculation	Threshold	Exceeds
R1	1000 / 4603 = 0.22	0.2	Yes
R2	1000 / 3 = 333.3	135.4	Yes
R3	1000 / 6 = 167.7	106.7	Yes

To: Regional Planning Committee

From: Jonathan Cote, Deputy General Manager, Regional Planning and Housing Development, Regional Planning and Housing Services

Date: April 19, 2024 Meeting Date: May 10, 2024

Subject: **Manager's Report**

RECOMMENDATION

That the Regional Planning Committee receive for information the report dated April 19, 2024, titled "Manager's Report".

REGIONAL PLANNING COMMITTEE 2024 WORK PLAN

The Regional Planning Committee's Work Plan for 2024 is attached to this report (Attachment 1). The status of work program elements is indicated as pending, in progress, ongoing or complete. The listing is updated as needed to include new issues that arise, items requested by the committee, and changes to the schedule.

SHORT SEA SHIPPING

The Vancouver Fraser Port Authority recently provided an update on their short sea shipping study (Attachment 2). The study was funded through Transport Canada's National Trade Corridors Fund and took place between 2020 and 2023.

Short sea shipping involves moving cargo on barges over relatively short distances between deep-sea terminals and cargo handling facilities, which could increase efficiency and reduce the impacts of cargo movements in the region (Reference 1). Such a facility would provide a common user facility with some complementary services on site, such as import and export trans-load facilities, empty container services, and rail loading / unloading infrastructure.

As additional reference, in 2015, Metro Vancouver commissioned a study exploring the potential for short sea shipping in the region, noting the land use and transportation aspects and implications of goods movement (Reference 2). The Metro Vancouver publication provides a broad understanding of the key issues and opportunities framed around Metro Vancouver's implementation of the Regional Growth Strategy. Specifically, it provides a summary of short sea shipping activities in the region as well as international examples, lessons learned, an investigation of the feasibility of new or expanded short sea shipping, and identifies issues for further exploration.

INDUSTRIAL INTENSIFICATION AND ECONOMIC INNOVATION: OLD LANDS AND NEW ECONOMIES

"Industrial Intensification and Economic Innovation: Old Lands and New Economies", a recent article in PLAN North West Magazine, outlines the evolution of industrial uses, opportunities for industrial intensification, and the relationship between industrial lands, innovation districts and

the modern economy (Attachment 3). The article explores ways that regional and municipal objectives for a prosperous economy and diverse workforce can be achieved through thoughtful land use planning, policy, and decision-making, including enhanced industrial lands protection and utilization.

REGIONAL GREEN INFRASTRUCTURE NETWORK UPDATE

On February 27, 2023, the Regional Planning Committee received a report titled “Regional Green Infrastructure Network – Scope and Engagement”, which outlined the work streams and timelines associated with requirements in Metro 2050 for Metro Vancouver to collaboratively identify a regional green infrastructure network (RGIN) and develop implementation guidelines. Since that time, Regional Planning staff have been actively engaging staff from member jurisdictions, First Nations, conservation groups, provincial and federal government staff, academics, and consultants to develop and test the RGIN mapping methodology. Attachment 4 provides a high-level summary of engagement to date. A draft RGIN map has recently been reviewed by members of the Regional Planning Advisory Committee – Environment Subcommittee and Regional Planning staff. Map refinements are planned for this year, including updating the regional ecosystem connectivity evaluation using the 2020 Sensitive Ecosystem Inventory and Land Cover Classification, and running several scenarios to identify future corridors to improve ecosystem connectivity through restoration.

To be initiated shortly, Work Stream 3 (Research and Design) will involve retaining a consultant to explore implementation tools and sustainable financing options. Metro Vancouver has been awarded a grant from Environment and Climate Change Canada’s Priority Places Program to support a valuable scope expansion for this phase and the involvement of a Financing Advisory Committee.

Work Stream 4 (Implementation Guidelines) will build on the existing “Connecting the Dots: Regional Green Infrastructure Network Guide” (Reference 3). The scope of work for these guidelines will be shared with the Regional Planning Advisory Committee and the Regional Planning Committee later in 2024. As the outcomes of Work Stream 3 will heavily inform the implementation guidelines, Regional Planning staff have extended the timelines for the draft RGIN implementation guidelines to early 2025.

ATTACHMENTS

1. Regional Planning Committee 2024 Work Plan
2. Vancouver Fraser Port Authority – Short Sea Shipping March 2024 Update
3. Industrial Intensification and Economic Innovation: Old Lands and New Economies, Eric Aderneck, PLAN North West Magazine, Spring 2024.
4. Summary of Engagement on the Regional Green Infrastructure Network (RGIN) - January 2023 to March 2024

REFERENCES

1. [Port of Vancouver – Short Sea Shipping](#)
2. [Metro Vancouver Facts in Focus - Short Sea Shipping](#)
3. [Connecting the Dots: Regional Green Infrastructure Network Resource Guide](#)

Regional Planning Committee 2024 Work Plan

Report Date: April 19, 2024

Priorities

1st Quarter	Status
Where Matters II - Final Report	Completed
Childcare Inventory Report - Update	Completed
<i>Metro 2050</i> Climate Policy Enhancement Project - Report	Completed
Regional Multi-Hazard Mapping Project – Final Report	Completed
Tree Canopy Cover and Impervious Surfaces Update – Final Report	Completed
Industrial Lands Bring to Market Initiative – Scope of Work	Completed
<i>Metro 2050</i> Urban Centres and Corridors Target Update – Scope of Work	Completed
Regional Food Systems Strategy Update – Scope of Work	Completed
Inclusionary Housing Policy Review – Final Report and Regional Policy Models	Completed
Regional Affordable Housing Strategy Update (Housing 2050) – Scope of Work	Completed
<i>Metro 2050</i> Implementation Guideline Industrial & Employment Lands	Completed
Housing Data Book update – Presentation	Completed
Regional Growth Strategy Amendments, Regional Context Statements, and Sewerage Area Amendments (as applicable)	Ongoing
2nd Quarter	Status
Agriculture Data Book - Presentation	Pending
What Works: Municipal Measures for Sustaining and Expanding the Supply of Purpose-Built Rental Housing Update	In Progress
Economic Value of Industrial Lands Update – Scope of Work	Completed
Hazard Risk and Vulnerability Blueprint – Scope of Work	Completed
Matrix of Municipal Measures for Housing Affordability and Diversity - Update	In Progress
Regional Green Infrastructure Network – Update	Completed
Projections Update (population, dwelling units and employment) - Report	In Progress
Regional Growth Strategy Amendments, Regional Context Statements, and Sewerage Area Amendments (as applicable)	Ongoing
3rd Quarter	Status
Payment for Ecosystem Services on Agricultural Lands - White Paper	Pending
Ecological Health Framework Progress Report	Pending
Agriculture Data Book - Presentation	Pending
The Walkability Index Update – Presentation	Pending
Regional Growth Strategy Amendments, Regional Context Statements, and Sewerage Area Amendments (as applicable)	Ongoing
4th Quarter	Status
Regional Food Systems Strategy Engagement - Update	Pending
Economic Value of Industrial Lands Update – Final Report	Pending
Regional Parking Strategy – Final Report	Pending
Housing + Transportation Cost Burden Study Update – Final Report	Pending
Regional Affordable Housing Strategy Update (Housing 2050) – Issues and Options Discussion Paper	Pending
Performance measures dashboard - Presentation	Pending
MV extended reality modelling project update – Update	Pending
Regional Growth Strategy Amendments, Regional Context Statements, and Sewerage Area Amendments (as applicable)	Ongoing

The Vancouver Fraser Port Authority has been working with industry stakeholders to advance the development of a dedicated common user short sea shipping terminal and service to increase the sustainable movement of containers through the Port of Vancouver.

This work over the past several years has been supported by funding received from Transport Canada through the National Trade Corridors Fund.



Short sea shipping has the potential to transform the movement of goods through the Vancouver Gateway while improving resiliency of the local supply chain

Over the past 15 years, the Vancouver Fraser Port Authority and industry have been exploring short sea shipping in the Vancouver Gateway, primarily for the movement of containerized goods.

In 2020, the port authority, with support from Transport Canada, initiated an in-depth analysis of the viability of short sea shipping in the Vancouver Gateway. This study included engagement with over 50 industry and government members, Indigenous groups, as well as interviews with other North American and European jurisdictions currently offering barging services, and additional operating model analysis. While most cargo types were discussed and considered—containers, breakbulk, project cargo, auto—the study focused primarily on models for barging containerized goods, based on industry interest and the context of the Vancouver Gateway.

The study also explored viable operating models for a regular short sea shipping service. Through this analysis, it became evident that an inland hub facility model has the potential to be highly transformative for the Vancouver Gateway.

Benefits of short sea shipping

The short sea shipping study identified several potential benefits of a regular short sea shipping service for containers, including:

- Increasing supply chain resilience by reducing local transportation bottlenecks
- Mitigating congestion and pollution on major arterial routes through Vancouver and Delta
- Spurring local economic development opportunities
- Enabling efficient use of existing and planned marine terminal infrastructure by reducing the need for on-site container storage
- Reducing container turn times and missed sailings through the delivery of a consistent alternative transportation option
- Stabilizing local transportation costs by offering another transportation option with predictable costs for importers and exporters

An inland hub facility would be a common user facility, with complementary container services on site, including import and export transload facilities, empty container services, and rail loading/unloading infrastructure or proximity to railheads.

Two potentially viable alternatives for an inland hub facility



A **comprehensive option** involves establishing a new container services cluster and barge service at or near an existing railhead in the Lower Mainland. This inland hub facility would maximize efficiencies by having on-site import and export transload facilities, empty container services and supporting infrastructure to load directly to rail. Establishing a facility of this complexity would be challenging as it requires assembly of a large parcel of land (larger than 60 acres) with water access as well as connectivity to existing road and rail infrastructure.



A **compact option** involves establishing a barging facility at an existing container services cluster. This inland hub facility would have minimal on-site container storage and staging, and as such, could require a short (less than 5 km) truck trip between the short sea shipping facility and nearby container services. This inland hub facility may be less complex to implement as it requires a smaller parcel of land (30 to 40 acres) and a proportionally smaller capital investment while still offering significant benefits to the Vancouver Gateway.

Legend

- Fully Integrated
- Partially Integrated

Potential compact inland hub facility at Area V in the Richmond Properties

The Vancouver Fraser Port Authority’s Richmond Properties are well positioned to house a common user short sea shipping terminal—a large portion of the transload activity in the Vancouver Gateway already takes place in this region and there are complementary container services in the vicinity.

A portion of the Richmond Properties, referred to as Area V, is under consideration for a common user short sea shipping terminal. We have been collaborating with DP World, who has been advising the port authority on an operating model and conceptual design.

Additional insights from short sea shipping study

In addition to considering viable models for an inland hub facility, the study explored several other aspects of short sea shipping:

Deep-sea terminal access

Most of the short sea shipping routes considered in the study take place between a location along the Fraser River and a deep-sea terminal. The study explored the viability of securing a barge berth at each of the port authority's deep-sea container terminals: Centerm, Vanterm, and Deltaport. Through engagement with deep-sea terminals, marine experts at the port authority, and an engineering consultancy, various elements were considered. These included required marine or land-side infrastructure upgrades, potential conflicts with other marine or air traffic, and impacts to existing terminal operations. Overall, openness by terminal operators and high-level site assessments are encouraging and suggest a regular short sea shipping service could secure deep-sea terminal access.

Alternative short sea shipping models

The study evaluated the viability of a few alternative short sea shipping models: a minimalist model and a bus-stop model. A minimalist model would utilize a smaller site and require less infrastructure

than an inland hub facility, operating with a mobile harbour crane and minimum container stacking or staging space. A bus-stop or shuttle model would service multiple pick up/drop off locations along the Fraser River during trips to/from a deep-sea terminal. Early operational modelling suggests that these options would struggle to be viable in the current context of the Vancouver Gateway but could be considered during supply chain disruptions or as complementary to an inland hub facility once a reliable common-user short sea shipping service is established.

Greenhouse gas emissions

The port authority's Climate Action and Sustainability Leadership team compared the relative greenhouse gas emissions of trucking and barging different goods through the Vancouver Gateway. The team estimated baseline emissions (2020) and those in the future (2035) to incorporate the impact of predicted technological advancements. Overall, the modelling suggests that transporting containerized and breakbulk goods via short sea shipping may provide environmental benefits when compared to trucking.

More detail on each of these aspects of short sea shipping is included in the Short Sea Shipping Study: Summary insights and reference report, which is available upon request.



Looking forward to a positive short sea shipping future

The research conducted over the last four years has provided important insight into the viability of short sea shipping in the Lower Mainland.

Short sea shipping has the potential to provide many benefits to the Vancouver Gateway and an inland hub facility could transform the movement of goods through the region. Despite the complexities of establishing a consistent short sea shipping service the port authority is optimistic that short sea shipping will grow in the Vancouver Gateway and become a regular complementary mode to the transportation of containers.

If you have any questions or to request a copy of the Short Sea Shipping Study: Summary insights and reference report, please email shortseashipping@portvancouver.com.

Industrial Intensification and Economic Innovation: Old Lands and New Economies

Eric Aderneck, RPP, MCIP, MPL, BCOM, DULE

Introduction

Industrial lands have existed for centuries, while innovation districts have gained much attention in the past decade. In cities with scarce lands and growing economies, how can we retain, rather than lose, industrial uses when developing innovation districts? This article profiles the matter from an urban industrial economy perspective and proposes ways that the objectives of a prosperous economy and diverse workforce can be achieved through thoughtful land use planning, policy, and decision-making.

Innovation Districts Definition

Innovation districts have been much discussed, and often hyped, in recent years. In a series of publications by the Brookings Institute, Innovation Districts are defined as:

... geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators, and accelerators ... also physically compact, transit-accessible, and technically-wired and offer mixed-use housing, office, and retail ... innovative firms and talented workers are choosing to congregate and co-locate in compact, amenity-rich enclaves in the cores of central cities. (The Rise of Innovation Districts: A New Geography of Innovation in America, Bruce Katz and Julie Wagner, Brookings, 2014)

Katz and Wagner (2014) go on to list contents of innovation districts as three categories of assets: economic, physical, and networking, where they overlap to create an 'innovation ecosystem' that facilitates idea generation and accelerates commercialization:

- **Economic assets** are the firms, institutions and organizations that drive, cultivate or support an innovation-rich environment.
- **Physical assets** are the public and privately-owned spaces—buildings, open spaces, streets and other infrastructure—designed and organized to stimulate new and higher levels of connectivity, collaboration, and innovation.
- **Networking assets** are the relationships between actors—such as between individuals, firms, and institutions—that have the potential to generate, sharpen, and/or accelerate the advancement of ideas.

Expanding on this concept, the list of ingredients in the recipe and attributes of the phenomenon have expanded over the years, elaborating on the need to accommodate both large tenants and incubator startups, and provision of amenities and programming, to attract a discerning workforce and shifting demographic. Simply put, innovation is when and where new or better ideas, products, services, technologies, or processes are created. But what does this mean from a land use planning perspective?

Now sometimes called urban innovation districts, innovation corridors or tech hubs, common profiles of success tend to be large developments anchored by a research university or some other major institution, driven by public or private sector investments or a combination thereof. These often focus on attracting international firms, within a large city-region, in an urban location, and usually on older, underutilized industrial lands prime for redevelopment.

Cited cases include Kendall Square in Cambridge, Research Triangle Park in Raleigh-Durham, and 22@ Project in Barcelona. The list of cities with attempted or planned but unrealized innovation districts is surely much longer. The potential, form, and viability of innovation districts in small-scale regions and more modest locales could be a study unto itself.

In terms of the business sector and employment aspect of these areas, the focus is decidedly on the high-tech economy and creative classes, such as knowledge-based research, technology, software, life sciences, design, etc. Some of these activities may have some conventional industrial attributes, but are limited, with visible remnants of industry being the adaptive reuse of historic buildings that once housed factories and warehouses.

Industrial Uses Definition

Although the long-term decline of manufacturing in North America has been well-reported, and the move towards a service economy well-observed, that's not the entire story.

Manufacturing, albeit increasingly benefiting from technological investments and higher productivity and thus

reduced number of workers, is still a major contributor to some regions in North America. Furthermore, there are many types of urban industrial activities that are still required to serve local businesses and residents. Industrial jobs, which could be called blue collar, generally pay higher than average and don't all require graduate degrees.

As defined in other publications by the author, industry is diverse and nuanced (Industrial Lands Densification and Intensification: Profiling Planning Policies and Development Projects in Metro Vancouver, Eric Aderneck, PND Magazine, 2023):

The term industrial represents a wide spectrum of uses and intensities, which do not all fit into conventional definitions of heavy or light, or traditional and modern. An industrial use can include everything from large transportation, distribution, and manufacturing facilities to small local-serving producers and suppliers as well as new sectors like advanced technology, media / design, bio-tech, and e-commerce.

New light, low impact industrial uses, often with a high proportion of commercial uses, do not need the same types of accommodations as heavy and noxious operations, and associated separation of uses and building setbacks. While some industrial sectors continue to be land-intensive, multi-level buildings can provide more space for sectors that can function on upper levels, be it industrial or other forms of employment uses.

There are two ways to define industrial land uses, and associated measures of utilization:

- *Intensity / intensification refers to the amount of activity - measured as jobs per building or land area, or the volume of goods produced or processed.*
- *Density / densification refers to the dimensions of a building - measured as floor area ratio, site coverage or building heights/ volumes.*

Increasing both industrial space and activity can be achieved through higher density buildings and higher intensity occupants.

The common misconception that industrial activities are noxious, noisy, and ugly, and thus incompatible with modern cities, as they have been in the past, is only true for some today. It is often forgotten that while there may be negative externalities, there are also many positive ones, in the form of economic, employment, and taxation benefits for the rest of the community. While some industrial uses, be it large scale manufacturing or distribution, may be best located

on suburban-scaled sites in areas well-served by major transportation infrastructure, others are low impact and can be accommodated on compact urban footprints, such as small-scale manufacturing and just-in-time deliveries serving urban populations.

The Value of Industry in the City

The need for urban industrial land declined with the removal of warehouses to highway-oriented suburban locations and the relocation of manufacturing factories to other continents. More recently, there is a growing recognition of the need for industrial space that serves the urban core. This includes growth of e-commerce delivery sorting, reshoring of some manufacturing sectors, growth of innovative light industrial or quasi-industrial sectors, local serving businesses, construction industry, and enhanced infrastructure such as, electrical utilities to power renewable energy forms.

Close proximity to other related businesses, workers, suppliers, and customers are an important part of an efficient economy, which also contributes to reduced travel distances and times which can provide financial and environmental benefits. Industrial and commercial sectors are related and complementary. Even with digital communications, physical proximity can still be important. For example, product designing, prototyping, and testing, could all be located within an integrated space or proximate facilities to allow for both efficiencies and opportunities for close collaboration that spur discovery and innovation. Advanced manufacturing creates quality jobs from the research and design and the production and distribution of products to domestic and international markets. This can include both high skilled and lower skilled workforces to provide a diversity of employment opportunities for residents of a city.

Furthermore, industrial has many associated linkages (e.g. strong ties and weak ties) to other activities, with economic and employment multipliers that contribute to the wider economy and workforce. Such entrepreneurial ecosystems are stronger and more successful if containing a wider and deeper pool of participants. This range and diversity helps create a more dynamic and resilient economic ecosystem.

Industrial lands also increasingly accommodate city-serving industrial uses and new industrial forms such as the craft industry, maker movements, local food production, and breweries. The space needs of these uses may be relatively simple, while their proximity to the urban population core is critical.

Yet in the case of many older industrial areas, land values are relatively low and building improvements are dated and functionally obsolete, leading to a decline in

further investment. In some cases with brownfields being encumbered with environmental remediation issues, the most financially rewarding form of development is another use. While industrial tenants typically pay lower rents than commercial and residential tenants, that in of itself is not an indication of which is the most appropriate use on those lands.

Innovation Districts and Industrial Uses

Some of the innovation district cases include uses that have certain industrial attributes, be it research and development, biotech, labs, or other types of activities that tend to not fill well into an office tower, warehouse, factory, or other conventional building. But as seen from any gleaning of innovation district literature, the types of businesses and workers are decidedly of the clean and green type, up-scale, well-trained, and highly-paid urbanites. But what of industrial uses, be they in traditional or modern forms?

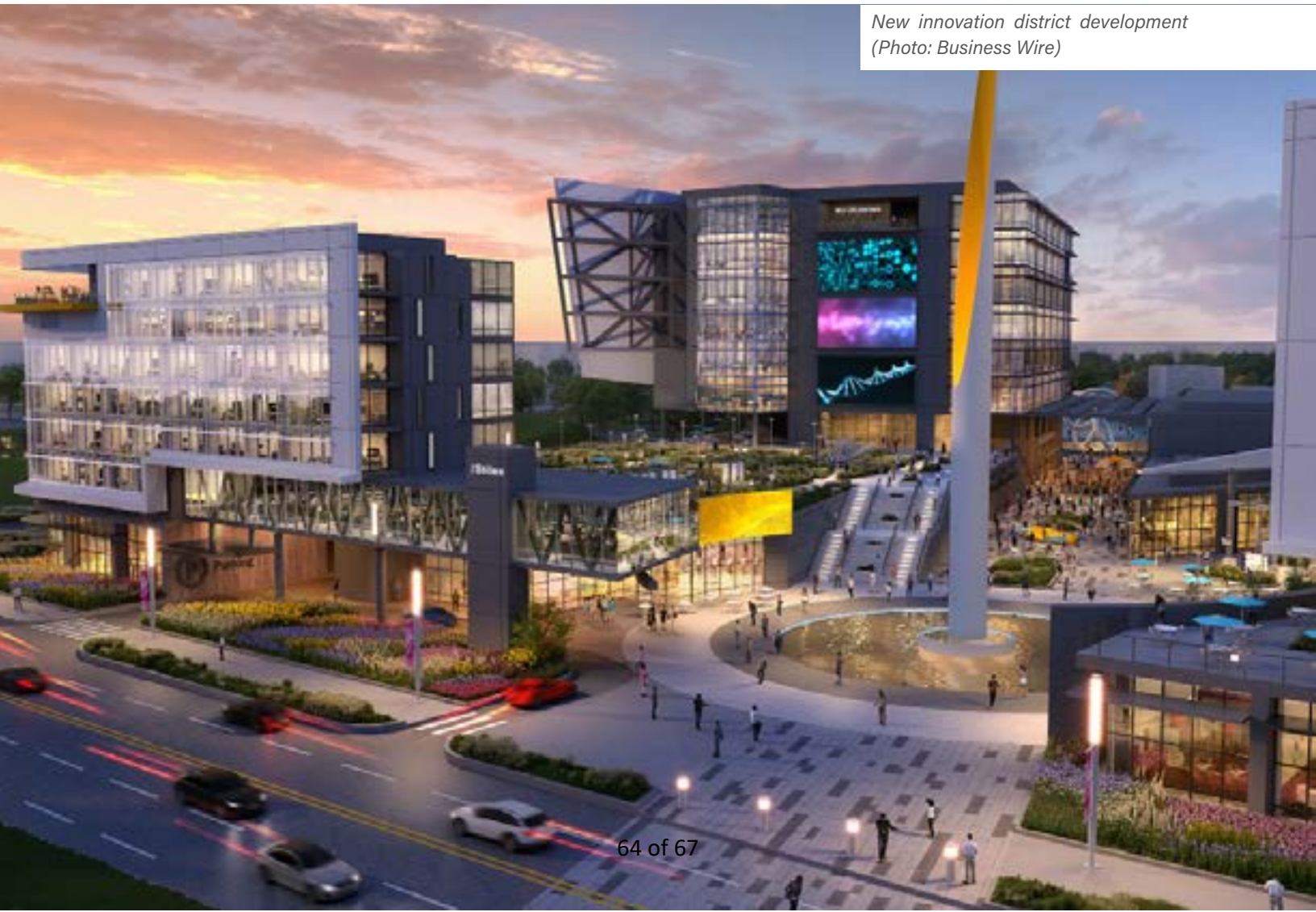
For a city facing population increases, the need to accommodate and attract economic growth may necessitate a review of its lands to determine the best future uses for them. A comprehensive city-wide plan can accommodate different types of land uses in different areas considering

such matters as infrastructure, accessibility, and context. While being responsive to the changing economy, plans should not come at the cost of displacing industrial users.

If there are old, underutilized surplus industrial lands, possibly some can be redeveloped as innovation districts or mixed-use developments, however consideration should be given to finding viable accommodations to keep industrial businesses in the area and within the community. As noted elsewhere, there is an opportunity to intensify and densify industrial uses such that the amount of industrial space and activity can be retained or even increased with a static or declining amount of industrial land in certain markets.

Cities were created through and because of urban economic agglomerations, specialized uses, and knowledge spillover effects. At the district and business level this can include a mix of related functions that contribute to eco-industrial and circular economy outcomes, such as closer cooperation between businesses and integration of processes, operational synergies, increased productivity, sharing resources, reduced waste, and decreased traffic. These can contribute to long-term economic, social, and environmental benefits to the area and a city.

*New innovation district development
(Photo: Business Wire)*



Solutions, Old and New – Industry and Innovation

Where contextually-appropriate and possible, a greater amount of industrial uses should be included within innovation districts. This could be done through purposefully retaining and growing existing industrial businesses in an area, with specific efforts to encourage them to stay and succeed, and attracting and accommodating additional industrial activities – be they stand-alone industrial businesses or industrial components of multi-sector businesses – into the new complex or district. Acknowledge that different types of uses have different needs; and in particular ground level loading, ceiling clearance, and road accessibility are requirements for industrial occupants.

In some places, through thoughtful policy, development, design, and finance, these components can be combined or ‘mashed up’ to different degrees. Innovation districts can incorporate industrial uses (e.g., commercial cleaning, construction contractors, equipment suppliers, repair and maintenance services, auto servicing, courier providers) on the ground floor of such buildings, accessed via the back or lane, and accessory uses on mezzanine or upper levels accessible via freight elevators, through contextual consideration, appropriate scale, and integrated designs.

Yet as much as there are opportunities to integrate light industrial uses into commercial areas and innovation districts, there are heavier industrial processes that are incompatible



Ho Chi Minh City Innovation District, sasaki.com

with urban and residential areas. For certain industrial uses, there remains the need to protect the industrial lands through industrial-only zones with appropriate buffers in place. Directly combining together industrial and residential uses can be possible, but should only be considered with caution. Notably, most, but not all, mixed-use schemes tend to be predominantly residential and commercial, with limited attention to employment and industrial matters.

Recognizing the land value differential and development profit potential, municipal planning policies should strive to ensure that land use plans include a variety of uses that meet a community's needs, not just those that are financially the highest and best use. Planning should be pragmatic, scalable, and flexible, yet also acknowledge the limitations of future forecasts, and not be overly-prescriptive. Cities should strategically and proactively plan for industry within the city, including allowing innovative ways to accommodate industry's evolution and its integration into an urban environment and modern economy.

We cannot simply consider individual sites in isolation of the wider city context, nor specific land uses in isolation of the function and service that they provide to the rest of the community. A diverse economy includes a diversity of land uses, some containing significant employment opportunities, such as commercial precincts, industrial lands, and innovation districts, and others that are primarily residential. Through intensification and densification at multiple places within a city, multiple community objectives can be achieved, ranging from infill residential, transit-oriented development, employment intensification, industrial densification, and the creation of innovation districts, while advancing key goals.

Industrial lands and uses can also contribute to economic development that is more equitable, by providing a source of diverse, distributed, and quality jobs. When done well, such urban revitalization offers business and employment opportunities and benefits that are accessible to an entire community.

The creation of intensive industrial innovation districts is both a land use planning and an economic development matter. While the creative class workforce desires placemaking and lifestyle amenities, the industrial sector prioritizes functionality, infrastructure, and access. We can have some of both. We may live in a post-modern society, but not a post-industrial economy.

About the Author

Eric Aderneck, RPP, MCIP, MPL, BCOM, DULE (eric@aderneck.ca) - Over the past two decades, his diverse experience includes working for the public and private sectors in the Metro Vancouver region through a number of different capacities including planning policy, real estate development, consultant, and instructor. His expertise is in industrial and employment land use planning and development matters, including documenting the supply, demand, utilization, intensification, and stratification of industrial lands and office development patterns and trends.

Summary of Engagement on the Regional Green Infrastructure Network (RGIN)

January 2023 to March 2024

Table A. First Nations Engagement High-level Summary

First Nation	Engagement so far	What we heard (high-level)
q̓wɑ:ńłəń (Kwantlen First Nation)	<ul style="list-style-type: none"> One-on-one meeting (March 2023) RGIN Technical Advisory Committee member Presentation and discussion during regular q̓wɑ:ńłəń-Metro Vancouver meeting (February 2024) 	<ul style="list-style-type: none"> Interested in cumulative effects and restoration Optimistic and grateful to be involved in the RGIN project
se'mya'me (Semiahmoo First Nation)	<ul style="list-style-type: none"> One-on-one meeting (May 2023) RGIN Technical Advisory Committee member 	<ul style="list-style-type: none"> Concerns about impacts of upstream development on shellfish in Semiahmoo Bay and salmon habitat Keen to be involved as capacity allows
k̓wik̓əłəm (Kwikwetlem First Nation)	<ul style="list-style-type: none"> Presentation and discussion during regular k̓wik̓əłəm-Metro Vancouver meeting (November 2023) 	<ul style="list-style-type: none"> Current capacity constraints, but eager to be more involved in the future
S̓k̓w̓x̓w̓ú7mesh Úxwumixw (Squamish Nation)	<ul style="list-style-type: none"> One-on-one meeting (February 2023) Provided written feedback on the mapping methodology (October 2023) 	<ul style="list-style-type: none"> Requested to be engaged on mapping aquatic habitat and urban networks Species-at-risk habitat and ecological features of cultural importance should be prioritized Culturally-important plant species should be used for restoration Ensure cultural representation, training, and education of staff and public
səlilwətał (Tsleil- Waututh Nation)	<ul style="list-style-type: none"> One-on-one meeting (February 2024) 	<ul style="list-style-type: none"> Interest in how aquatic elements will be incorporated in the RGIN, and restoration opportunities (e.g., daylighting creeks) Connections to water quality (which is terrestrially-derived) and updates to the Liquid Waste Management Plan
scəwəθən məsteyəx̓w (Tsawwassen First Nation)	<ul style="list-style-type: none"> Confirmed attendance at the Map Review Workshop (March 13, 2024) 	<ul style="list-style-type: none"> More funding and capacity for participation More collaboration with TFN and other Coast Salish peoples (both members and staff) Develop ideas with First Nations Peoples about which natural areas should be prioritized

Table B. Member Jurisdiction Engagement High-level Summary

Group Engaged	Dates	Comment overview
Regional Planning Advisory Committee (RPAC)	<ul style="list-style-type: none"> • Scope presentation (February 3, 2023) • Update (September 15, 2023) 	Requested to stay informed about future opportunities to provide feedback
RPAC-Environment Subcommittee	<ul style="list-style-type: none"> • Scope presentation (February 16, 2023) • Updates (May 18, 2023 and February 15, 2024) • Invitation to map review workshop (March 13, 2024) • Follow up email extending RGIN Map comment period to April 19, 2024 (March 22, 2024) 	
Stormwater Interagency Liaison Group	<ul style="list-style-type: none"> • Scope presentation (January 19, 2023) 	
Regional Engineers Advisory Committee – Climate Protection Subcommittee	<ul style="list-style-type: none"> • Scope presentation (February 16, 2023) 	
Regional Parks Advisory Committee	<ul style="list-style-type: none"> • Scope presentation (May 31, 2023) 	
All of the above	<ul style="list-style-type: none"> • Email invitation to provide comment on draft mapping methodology (October 19, 2023) 	Received comments from Cities of Delta, North Vancouver, and Surrey
Metro Vancouver Agricultural Advisory Committee	<ul style="list-style-type: none"> • Scope presentation (April 20, 2023) • Update (February 29, 2024) 	Concerned about pressure on limited land for agriculture and need for adequate compensation
RGIN Technical Advisory Committee (TAC)	<ul style="list-style-type: none"> • June 13, 2023 • September 19, 2023 • December 4, 2023 • February 14, 2024 • Two additional meetings expected in 2024 	Discussed mapping methodology and draft maps