

# Coquitlam

# For Committee

May 10, 2016

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To: City Manager

From: General Manager Planning and Development

Subject: **Northwest Burke Vision – Phase 2 Project Update**

For: **Council-in-Committee**

**Recommendation:**

That Council-in-Committee receive the report of the General Manager, Planning and Development entitled 'Northwest Burke Vision – Phase 2 Project Update' dated May 10, 2016, and the attached '*Northwest Burke Vision – Phase 2 Report: Land Use, Access, & Servicing*' for information prior to initiating public consultation.

**Report Purpose:**

This report highlights the key findings of the *Northwest Burke Vision Phase 2 Report: Land Use, Access & Servicing* (Phase 2 Report) for Council's information and feedback. The Phase 2 Report identifies opportunities and considerations for major land uses, preliminary transportation and utility networks, and major natural areas in the NBV area.

**Strategic Goal:**

This report supports the strategic goal of 'Strengthening Neighbourhoods' by guiding future neighbourhood planning and also works towards the strategic goal of 'Achieving Excellence in City Governance' through encouraging citizen participation and input into the NBV process.

**Executive Summary:**

The Northwest Burke Vision (the Vision) is a 2016 Business Plan 'B' priority for the Planning and Development Department. Once complete, the Vision will provide a comprehensive approach to land use and infrastructure planning to accommodate growth in this area of Burke Mountain over the next 30-plus years and to be implemented through a phasing plan and subsequent neighbourhood plans.

A key deliverable of the Vision process is a Phase 2 Report (Attachment 2) which identifies major land uses, preliminary transportation and utility networks, and major natural areas. The Phase 2 Report links the findings of the constraints and opportunities review and landowner input undertaken in Phase 1 with additional technical analysis. The Phase 2 Report provides important direction for establishing strategies to guide the long-term development of the Vision area. A key outcome of the Phase 2 work is a high level neighbourhood structure concept, which incorporates the work and analysis done to date and provides the basis for the final Vision document in Phase 3.

**Executive Summary:** cont'd/

After providing Council with an update on the Vision process and incorporating any feedback from Council, staff will consult on the Phase 2 Report findings with the Project Advisory Group, the Property Owners Group and the general public and report back to Council on input received.

**Background:**

***Northwest Burke Vision Process***

The City of Coquitlam is planning for future growth in one of the last significant 'greenfield' areas in Coquitlam, referred to as the Vision area. The Vision area presents a significant opportunity to accommodate regional growth and housing demand within one of the last greenfield sites in Metro Vancouver. On February 24, 2014, Council endorsed a planning process and directed staff to prepare a Vision for the Northwest Burke area which encompasses nearly 400-hectares of largely undeveloped lands on Burke Mountain in northeast Coquitlam (Attachment 1, Location Map).

Similar to the Transit-Oriented Development Strategy (TDS), the Vision is intended to be an overarching policy document. Once complete, the Vision will provide a comprehensive approach to land use and infrastructure planning to accommodate the anticipated growth in the area over the next 30-plus years.

This includes:

- Establishing guidelines and a policy context for subsequent planning initiatives (e.g., neighbourhood plans) that will define the land use pattern and details of how development occurs;
- Providing a framework within which adjacent landowners can cooperatively work towards implementing the Vision; and
- Providing a phasing plan to guide future neighbourhood planning, and a financial feasibility assessment outlining the timing and infrastructure funding requirements for the successful implementation of the Vision.

The Vision is being prepared through a three-phase process.

Phase 1: Develops a high-level understanding of the Vision area's topographical, bio-physical and environmental constraints and opportunities.

Phase 2: Identifies and explores potential land use, access, and servicing ideas.

Phase 3: Synthesizes the technical outcomes and feedback gathered during Phases 1 and 2 into the complete Vision policy document.

The project is currently approaching the end of Phase 2.

***Public Consultation***

Each phase of the visioning process includes public and stakeholder consultation. Consultation completed to date has focused on collecting input from the Property Owners Group (POG), the Project Advisory Committee (PAG), and committees/external agencies. To date the following public consultation has been undertaken:

**Background cont'd/**

***Public Consultation*** cont'd/

Property Owners Group/Project Advisory Group

- Two workshops with the POG with the most recent held in April 2015 to discuss the Phase 1 *Constraints & Opportunities Report*.
- Two meetings and a site tour were held with the PAG. As with the POG, the most recent meeting was held in April 2015 to discuss the Phase 1 findings. Members include the Burke Mountain Naturalists, Northeast Coquitlam Ratepayer's Association, Coquitlam River Watershed Roundtable, Coquitlam Youth Council, Ministry of Environment, School District No. 43, Greater Vancouver Homebuilders' Association and the Urban Development Institute.

Committees/External Agencies

- City staff participated in a Pinecone Burke Provincial Park Management Plan workshop. A follow-up meeting with the BC Ministry of the Environment to discuss progress also was held.
- Meeting with and attending several of the Coquitlam River Watershed Roundtable workshops.
- Meetings with two City Advisory Committees, the Sustainability and Environmental Advisory Committee, and the City's Coquitlam River Aggregate Committee.

**Discussion/Analysis:**

***Phase 2 Report Overview***

The Phase 2 Report is the key deliverable of Phase 2 (Attachment 2). Linking the findings of the Phase 1 *Constraints & Opportunities Report* with additional technical analysis, the Phase 2 Report:

- Considers site, land use and local/regional policy context;
- Identifies a lower, middle and upper range of potentially developable land;
- Explores several land use scenarios to estimate future potential dwelling unit and population levels;
- Determines conceptual transportation and utility networks to provide access and service to developable areas; and,
- Combines the outputs for Phase 1 and Phase 2 to create a high level neighbourhood structure which will be used as the basis for the final Vision document in Phase 3.

***Technical Analysis***

A number of technical studies were prepared in support of Phase 2. These are available as part of a consolidated technical binder titled "Northwest Burke Vision Discussion Papers and Technical Memos" and include:

- *Northwest Burke Vision Housing Market Analysis Technical Memo;*
- *Slope Analysis of Selected Existing City Streets to Support Northwest Visioning Memo;*
- *Northwest Burke Vision Planning Study: Transportation Discussion Paper; and*
- *Northwest Burke Vision Planning Study: Utilities Discussion Paper.*

## **Discussion/Analysis cont'd/**

### ***Key Findings***

Below is a summary of the key findings of the Phase 2 analyses. Planning considerations discussed are Land Use Allocation, Developable Area & Land Use Scenarios, Transportation, and Utilities. A summary of the findings and additional information on the analyses process and site/policy context are set out in the Phase 2 Report.

### **Land Use Allocation**

The land use allocation analysis (Attachment 2, pp. 16-17) takes into consideration a mix of potential land uses including residential, commercial, schools, civic facilities, parks, and recreational and cultural facilities. Findings for major land use categories include:

#### ***Residential***

- Since 2010, existing neighbourhood development trends in the Northeast have averaged a housing split of 55% single family and 45% townhouse.
- A recently completed market analysis identifies an anticipated future housing split of 70% townhouses/low-rise apartments and 30% single-family dwellings.

#### ***Commercial***

- There are a number of challenges to commercial development in the Vision area including site configuration, shopping patterns, location, and trade area size.
- The Partington Creek Neighbourhood Centre is planned to become a commercial, civic, and recreational hub for Northeast Coquitlam. Population growth in the Vision area will reinforce this civic hub.
- As a result of the above, some limited commercial may be possible in the Vision area (i.e., small scale retail, personal services, daycare), but this will need to be confirmed through further market assessment analysis at the neighbourhood plan stage.

#### ***Park and Recreation Uses***

- The unique natural environment in the Vision area creates a number of opportunities to preserve natural green spaces and create neighbourhood parks.

### **Developable Land Area: A Range of Possibilities**

To gain an understanding of the lands in the NBV area that may be suitable for neighbourhood development and those that may remain in their natural state, a 'desk top' analysis was undertaken (Attachment 2, pp.10-15). This analysis is a continuation and refinement of the environmental conditions assessment completed in Phase 1.

**Discussion/Analysis cont'd/**

**Key Findings cont'd/**

Developable Land Area: A Range of Possibilities cont'd/

Because of the challenging topographic and environmental characteristics of the Vision area, including the steep and unstable slopes, debris runout areas, numerous watercourses, and anticipated Streamside Protection and Enhancement Area (SPEA) and floodplain setbacks combined with the large area (ca. 400-hectares) that the Vision area covers, a desktop analysis cannot definitively determine the precise amount of developable land in the Vision area. Taking this into account a 'continuum of development potential' has been defined.

The lower end of this continuum is the most constrained land area while the upper end approximates the maximum potential land area that could theoretically be developed. The range values are as follows:

- Lower range – 95-hectares;
- Mid-range – 165-hectares; and
- Upper range - 200-hectares.

Based on historical developments patterns to the south of the Vision area, and the environmental considerations and associated setbacks that are being applied, it is anticipated that as the Vision is implemented, the total developable land area will be closer to the mid-range of approximately 165-hectares.

The 105-hectare difference between the lower range and upper range is attributed to the variable factors (e.g., steep and unstable slopes, debris run-out areas, numerous watercourses, and anticipated SPEA and flood plain setbacks) that potentially constrain the developability of the Vision lands. Further investigation by qualified environmental and engineering professionals will be required at the implementation stage (e.g., Integrated (Sub) Watershed Management Plans, neighbourhood planning, site development) to determine the actual developable area.

Land Use Scenarios

To generate estimates of the potential housing unit and population levels in the Vision area, several land use scenarios (Attachment 2, pp.18-22) were prepared. These scenarios were based on different assumptions regarding the residential housing mix:

1. Historical development activity which assumes 50% townhouse and 50% single-family; and
2. Housing Market Analysis findings which assume 70% townhouse and 30% single-family.

A key factor in determining projected housing units is the amount of potentially developable land available. Applying the housing unit scenarios to the mid-range of developable land area (165-hectares) noted above, results in between some 3,800 to 4,500 housing units; and a population, at full build out, of between 11,500 and 13,300 or so residents.

***Discussion/Analysis cont'd/***

***Key Findings cont'd/***

***Land Use Scenarios cont'd/***

In Phase 3, the land use assumptions outlined above will be refined to provide direction as to the type and density of housing and resulting population levels set in broad land use overlays. This process will be informed by discussions with Council, landowners, School District 43 (SD43) and the broader community.

***Transportation Network***

***Network Design Principles***

The steep terrain in the area is a significant constraint to transportation network planning and access. The conceptual road network provides a network of collector streets integrated with pedestrian, cycling pathways and trails which together support mobility within and external to the Vision area.

Several factors were considered when developing the network (Attachment 2, p.25):

- Direct and convenient, multi-modal access to the Partington Creek Neighbourhood Centre;
- Multiple route options where possible supporting different travel modes and emergency response access; and
- Access to Pinecone Burke Provincial Park for both residents and tourists that minimizes intrusion into future neighbourhoods and facilitates different modes of travel.

In addition, the conceptual network provides convenient connections while still meeting technical and environmental objectives including (Attachment 2, p.25):

- Minimizing the number of creek crossings;
- Avoiding disruptive alignments (e.g., large 'cut and fill' visual impacts);
- Providing manageable grades for walking and cycling; and
- Developing roadway grades and alignments consistent with City design criteria and bylaws (maximum 12% grade).

***Key Internal Road Network Features (Attachment 2, pp.25-32)***

- Based on expected traffic volumes, it is anticipated that arterial roads will not be required within the Vision lands. The conceptual road network uses a collector system to provide access to and around the Vision area with future local road connections providing access into developable areas.
- The extension of Oxford Street is an important connection for managing traffic flow and for reducing traffic on Coast Meridian Road. It also provides an alternative access point to the Hazel/Coy area for emergency vehicles.
- Though two potential bridge crossing options over the Coquitlam River are identified (i.e., in the vicinity of the "Riverwalk" lands), only one bridge crossing is required with the final location to be determined as part of neighbourhood planning.
- The current analysis notes that Coast Meridian Road will transition from an Arterial Road to a Collector Road north of the proposed Harper Road extension east. The extension of Coast Meridian Road will require a bridge or significant culvert structure to cross Hyde Creek and parts of the adjacent ravine as well as a major road right-of-way realignment.

**Discussion/Analysis cont'd/**

**Key Findings cont'd/**

*Key Internal Road Network Features (Attachment 2, pp.25-32) cont'd/*

- Several vehicle/pedestrian access points into Pinecone Burke Provincial Park from the NBV area have been identified through preliminary discussions with Provincial staff. The Province is currently developing a Management Plan for the park as future park uses (e.g., hiking, camping, mountain biking) are identified through the management plan process.

City staff will work with the Province to confirm the primary vehicular entry point into the park.

*Key External Network Factors (Attachment 2, p.25)*

- Arterial roads outside of the NBV area can accommodate future growth in the area. These include David Avenue, Coast Meridian Road, and Pipeline Road.
- Identified in the Strategic Transportation Plan (the STP), the Lincoln Bridge will provide an important future east-west connection for Northeast Coquitlam, including the Vision area. Depending on the pace the overall Northeast Coquitlam area develops, it may be necessary to review the timing for this bridge.

*Pedestrian and Cycling Considerations (Attachment 2, pp.33-34)*

As the Vision area develops, pedestrian and cycling facilities (e.g., sidewalks, walkways, multi-use pathways, and trails) will ensure people can safely and conveniently move through and between neighbourhoods. Key features of this network are discussed below:

- The extent and diversity of natural green spaces in the Vision area provides an opportunity to create attractive and unique pedestrian and cycling corridors.
- Within the Vision area, important connections include a north-south trail adjacent to the Coquitlam River and trail connections between major developable areas and neighbourhoods to the south.
- Notable planned facilities and trails in proximity to the Vision area include the Coquitlam River Recreational Trail system and the Partington Creek neighbourhood network.
- Pedestrian and bicycle access to Pinecone Burke Provincial Park is an important connection. Multiple potential access points are envisioned.

Utilities

*Overview*

Servicing concepts for water, sanitary sewer, and drainage/stormwater are integrated into the broader utility network design for Northeast Coquitlam. As with land use and transportation, the environmental constraints provide challenges for utility planning. Infrastructure requirements and upgrades are identified at a high-level with further refinement required when an Engineering Servicing Plan is developed at the neighbourhood planning stage.

**Discussion/Analysis cont'd/  
Key Findings cont'd/**

*Water Servicing (Attachment 2, pp.35-36)*

- The majority of the NBV area is currently serviceable without major capital upgrades.
- A new water reservoir is needed to serve portions of Zone 4 and Zone 5.
- Areas above 320-meters elevation are not included in the current city-wide servicing strategy and are identified as water service constrained lands (approximately 30-hectares). Options for providing water service above 320-metres are currently being assessed.
- While the Hazel/Coy area is currently served by Zone 4 infrastructure, the system does not have adequate capacity to continue to provide the water service that is required to allow (significant) urban development in the area. Potential upgrades to increase the capacity of the Harper pump station are currently being examined, though in the long term the Hazel/Coy area will need to be serviced by the new water reservoir.
- A utility bridge crossing Hyde Creek is required to support water service to developable lands adjacent to the proposed Oxford Street extension.

*Sanitary Sewer Servicing (Attachment 2, pp.37-38)*

- The majority of the flow will be accommodated in existing trunk sewers located outside the NBV area. These sewers have the capacity to service areas above 320-metres elevation.
- Sanitary sewer upgrades and improvements, however, will be required to enable the development of the Riverwalk lands, and the Quarry lands on the west side of the Coquitlam River.
- A utility bridge crossing Hyde Creek is also required to support sanitary sewer service to the Hazel/Coy neighbourhood.

*Drainage and Stormwater Management (Attachment 2, pp.38-30)*

- There are three watersheds in the NBV area: the Coquitlam River, Hyde Creek, and Partington Creek.
- Integrated Watershed Management Plans (IWMPs) have been completed for the Hyde and Partington Creek watersheds. IWMPs will need to be prepared for subwatersheds of the Coquitlam River (e.g., Riverwalk) at the implementation stage of the NBV process.
- Additional drainage pipes are required to divert flow to the Partington Creek catchment area.
- A utility bridge crossing Hyde Creek is also required to support drainage services to the Hazel/Coy neighbourhood.

*Utility Infrastructure Funding*

The financial feasibility analysis, to be completed as part of Phase 3, will provide cost estimates and a funding strategy to complete the required infrastructure improvements. This analysis will confirm projects to be accounted for in the Development Cost Charges (DCC) program as well as those projects that are non-DCC and anticipated to be funded directly through development.

**Discussion/Analysis cont'd/  
Key Findings cont'd/**

**High-Level Neighbourhood Structure (p.42)**

A key outcome of Phase 2 is a high-level neighbourhood structure concept. This general, illustrative concept combines Phase 2 work outcomes on developable areas, land use context, transportation/trails, and utilities, along with the constraints and opportunities analysis undertaken in Phase 1. This concept generally shows potential developable areas or 'pockets', set within the overall framework of the conceptual road network and associated utility corridors. Phase 3 will build on the Phase 1 and 2 outputs and use the high-level neighbourhood structure as the basis for creating the final Vision document, which will include land use overlays, a phasing plan and financial feasibility analysis outcomes.

**Next Steps:**

Following Council's consideration of the Vision process update and Phase 2 Report findings, staff will initiate the next steps as outlined below. These include finalizing the Early Release Criteria for Council's consideration, undertaking Phase 2 consultation and further analyses, and initiating the Phase 3 work.

**Early Release Lands**

Drawing on the technical findings of Phase 2, Early Release Criteria are currently being prepared. The criteria are an interim measure to identify lands that can be developed before the Vision is finalized. The criteria would facilitate the development of "residual" lands within the NBV area that could be integrated into existing or planned neighbourhoods and can immediately tie into existing services (i.e., roads, sewers, drainage, and water), with no servicing upgrades required. The draft criteria will be brought forward to Council early in Phase 3.

**Phase 2 – Consultation and Further Analyses**

Following Council's feedback and direction, the Phase 2 Report is proposed to be presented in June 2016 at:

- Workshop with the Property Owners Group;
- Meeting with the Project Advisory Group; and
- Public Open House.

Staff will also hold discussions with the SD43 and other key external agencies, including TransLink and the Province, as well as community stakeholder groups. In addition, further analyses will be completed including:

- undertaking a financial feasibility to identify capital infrastructure and long-term life cycle costs (e.g. operation, maintenance, and replacement) and potential revenue sources;
- identifying options and the feasibility of providing water servicing above 320-metres elevation;
- exploring potential upgrades to increase the water pumping capacity of the Harper pump station; and
- developing a wildfire risk and mitigation strategy.

**Next Steps** cont'd/

**Phase 3 – Final Vision and Phasing Plan**

Phase 3 will use the results of these consultations and analyses to refine the high level neighbourhood structure concept and develop the NBV vision statement. Phase 3 will also:

- Establish a general land use overlays and policy direction for considerations such as parks/natural areas, transportation/access, place-making, wildfire risk and mitigation, utilities, and pedestrian connectivity;
- Provide a framework to facilitate landowner cooperation to implement the NBV; and
- Prepare a phasing plan to guide the preparation and timing of future stormwater management planning, neighbourhood plans, and development.

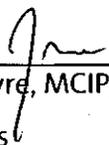
As part of Phase 3, staff will report back to Phase 2 Council consultation outcomes. The draft Vision document and Phasing Plan will also be presented to Council before undertaking Phase 3 consultation events on the draft Vision and Phasing Plan with the POG, the PAG, committees/external agencies and the general public.

**Financial Implications:**

The NBV is identified as a key part of the Planning and Development Department's 2016 work plan and is resourced within existing budgets.

**Conclusion:**

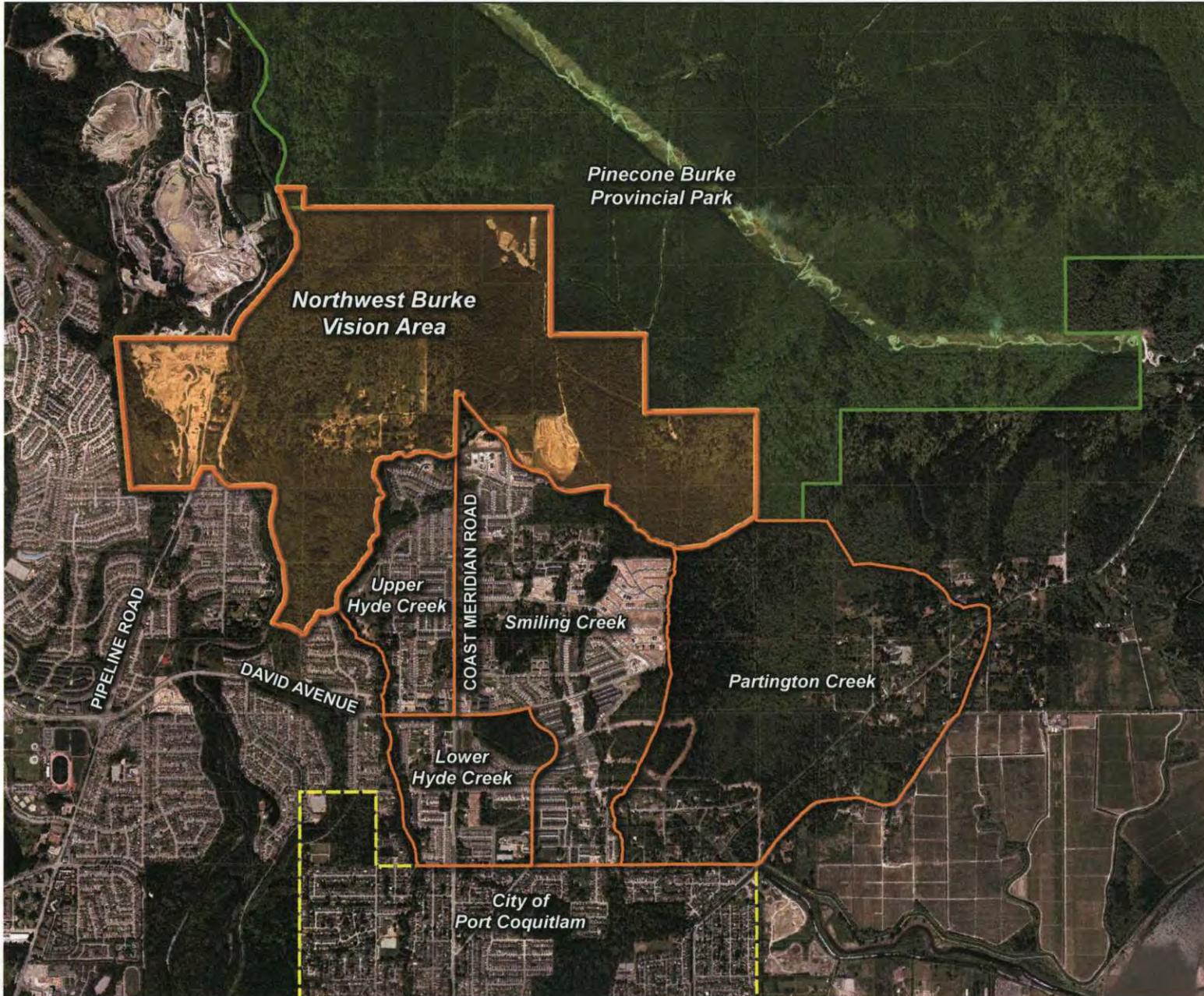
The Vision is a 2016 Business Plan 'B' priority, and when complete will provide a high-level land use overlays and servicing concept and a phasing plan that will guide planning and development over 30+ years. A key deliverable for Phase 2 is the attached Phase 2 report (Attachment 2) which identifies major land uses, preliminary transportation and utility networks, and major natural areas. The Phase 2 report also uses the Phase 1 and Phase 2 outputs to create a high level neighbourhood structure concept to transition the project from Phase 2 to Phase 3. Next steps involve undertaking public consultation on this work, including a meeting with property owners, a Project Advisory Group meeting and a public open house.

  
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J.L. McIntyre, MCIP, RPP  
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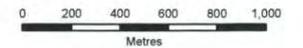
**Attachments:**

1. Northwest Burke Location Map (Doc# 1916278)
2. Northwest Burke Vision – Phase 2 Report | Land Use, Access and Servicing (Doc# 2270152)
3. Northwest Burke Vision – Phase 2 Report Presentation for Committee (Doc# 2275556).

This report was prepared by Amber Nicol, Community Planner, Kasia Biegun, Community Planner and reviewed by Steve Gauley, Senior Planner and Carl Johannsen, Manager Community Planning.



**NORTHWEST BURKE  
VISION  
LOCATION MAP**



Map Date: Feb 13, 2015  
Prepared By: Planning & Development  
Source: City of Coquitlam - OCP GIS layer

