



Reforming Kitimat's Local Laws During an Industrial Boom

Law reform recommendations to support a
Green Bylaws approach in the District of Kitimat

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Kitimat Rod and Gun Club

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Acknowledgements

We recognize and honour the Haisla First Nation whose authority endures in the territory in and around Kitimat.

This report does not specifically address the rights and title of the Haisla First Nation or other Indigenous nations, and is written without prejudice to those rights.

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Cover photo: Sapsucker at Goose Creek, courtesy of Walter Thorne

Images: Goose Creek watershed, wetlands photos and bear cubs (pages 4, 6 and 29) courtesy of Mike Langeegger. Goose Creek is a tributary of the Kitimat River and area being considered for a large railyard, propane unloading stations, and pipeline to the ocean front. All other photos (pages 10 and 12) by Holly Pattison, Environmental Law Centre.

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Contents

Acknowledgements	2
Executive Summary	4
1. Context	6
2. Green Bylaws Overview	10
3. Green Bylaws Recommendations	12
Recommendation 3.1: Prioritize connectivity throughout the District to connect ecologically sensitive areas through a Green Infrastructure Network, Environmental Development Permit Areas, and Connectivity Mapping	12
Recommendation 3.2: Implement a growth boundary to rationalize the expansion of industry within the existing Industrial Zone	17
Recommendation 3.3: Require developers of industrial land to build on brownfield rather than greenfield sites and provide incentives for that redevelopment.	19
Recommendation 3.4: Identify and monitor the cumulative impacts of development through environmental impact assessment procedures and ecological indicators	22
Recommendation 3.5: Establish long-term watershed protection and management policies	25
Recommendation 3.6: Implement hiring and consultation procedures to incorporate a broader range of knowledge and input into municipal decision making	27
4. Conclusion	29
Appendix A: Village of Cumberland Environmental Development Permit Area Map	30



Goose Creek Watershed (Photo: Mike Langegger)

Executive Summary

The purpose of this report is to provide recommendations that can assist the District of Kitimat in adopting an ecological health approach using green bylaws to preserve its valuable green infrastructure during a time of rapid industrial expansion. These recommendations are oriented towards using green bylaws to make the best use of existing public infrastructure supporting the community's important biodiversity, habitat, and connectivity areas.¹

An ecological health and green bylaws orientation empowers local governments to adopt a broad range of tools to protect green infrastructure in their communities.² Municipalities take on the important tasks of facilitating environmental protection at a local scale, preventing biodiversity and habitat loss within municipal boundaries, and facilitating collaboration among community stakeholders.³

¹ This report was commissioned by the Kitimat Rod and Gun Association.

² Deborah Curran *et al*, *Green Bylaws Toolkit for Conserving Ecosystems and Green Infrastructure* (2016) at page 18, accessed at https://stewardshipcentrebc.ca/PDF_docs/GreenBylaws/GreenBylawsToolkit_2016.pdf.

³ Curran *et al*, *supra* note 2 at page 22.

[Part 1](#) of this report sets out context, including acknowledging the ongoing industrial boom and the District of Kitimat's current land use, development permit area, and water-related management bylaws and policies. [Part 2](#) describes a green bylaws approach and why it is important for local governments to update their policies and bylaws to best support green infrastructure.

Within this context, [Part 3](#) of the report outlines substantive recommendations to assist the District of Kitimat in adopting an ecological health approach using green bylaws. First, we recommend that Kitimat focus on connectivity to support a network of green infrastructure among Kitimat's ecologically sensitive areas. Second, we discuss the importance of adopting growth management tools to rationalize the expansion of industry within Kitimat's existing Industrial Zone. Third, we recommend that Kitimat's growth management approach set limits for industrial development on brownfield sites and provide incentives for redevelopment. Fourth, we recommend that Kitimat implement strategies to identify and monitor the environmental impacts of development, including evaluating cumulative impacts through environmental impact assessment procedures and identifying and monitoring environmental indicators. Fifth, we discuss the benefits of establishing long-term watershed protection and management policies to protect water quality and aquatic habitats. Finally, we discuss the importance of implementing procedures to incorporate a broader range of knowledge and input into municipal decision making. These recommendations will assist the District of Kitimat in updating its bylaws to achieve a more robust balance between industrial development, ecological health and environmental conservation.



Goose Creek Watershed (Photo: Mike Langegger)

1. CONTEXT

The District of Kitimat is uniquely situated on the Douglas Channel within a Pacific Inland Coast environment in British Columbia, and is home to many biodiverse and habitat areas that are valued by community members and local wildlife alike.⁴ As was identified as a “Core Theme for the Future” in the District’s Official Community Plan (OCP), there is a strong need to balance environmental protection with industrial development in order to encourage population and economic growth while preserving the natural areas that are so highly valued by the community.⁵

Kitimat is currently experiencing a significant industrial boom, and there are several ongoing and proposed industrial development projects in the area. For example, a \$40 billion LNG Canada export facility is currently undergoing construction in Kitimat,⁶ and Pacific Traverse

⁴ District of Kitimat, *District of Kitimat Official Community Plan* (2008, amended as of 8 May 2020), accessed at: <<https://www.kitimat.ca/en/our-community/resources/OCP-revision-May-2020-CB.pdf>> at page 4.

⁵ District of Kitimat, *supra* note 4 at page 20.

⁶ District of Kitimat, *Current Major Projects* (2018) accessed at: <<https://www.kitimat.ca/en/business-and-development/current-major-projects.aspx#Pacific-Traverse-Energy---Proposed>>.

Energy (PTE) is developing a 1.25 million tonne-per-year liquified petroleum gas (LPG) export facility that will involve the construction of a railyard, a 15-km pipeline, and a marine terminal.⁷ The Kitimat OCP identifies that industrial development in the District has occurred within a specific “industrial corridor” west of the Kitimat townsite,⁸ but recently there has been increased momentum to expand development outside of the industrial corridor or zone and into undeveloped natural areas. For example, the proposed location of the PTE railyard, unloading stations, a portion of the pipeline, and BC Hydro 2L099 PTE line relocation would require rezoning forestry land for industrial use.⁹

Although the Kitimat OCP identifies a need to balance environmental protection with pursuing economic development,¹⁰ this overarching theme for community development is not comprehensively reflected in local bylaws. Kitimat’s general zoning bylaws do not identify environmental protection as a purpose for the regulations, and instead focus on facilitating human-centred conditions for development.¹¹ The Planning: Environmental Control part of the Municipal Code addresses noise and nuisance concerns, not ecological health or environmental protection.¹² The District of Kitimat has zoned all surrounding rural, park, and forestry land as a “Greenbelt Zone” for the purpose of concentrating development within existing Industrial, Commercial, and Residential Zones, providing space for rural development, and “recogniz[ing] the special character of the local environment and the development limitations of environmentally sensitive lands, steep slopes, and lands prone to flooding or other natural hazards.”¹³ A small portion of this “Greenbelt Zone” acknowledges natural open space and improvement of habitat as a G6A-Special Area – Environmentally Sensitive, which includes some riparian connectivity around Minette Bay. Although these designations have the potential to support a robust green infrastructure framework in Kitimat and reflect an urban containment approach, taken as a whole, the District’s bylaw do not create an integrated framework for environmental protection or maintaining connectivity among sensitive ecosystems.

The District has also designated all land in Kitimat as a development permit area (DPA), which provides a promising framework for habitat protection and connectivity.¹⁴ While the

⁷ Pacific Traverse Energy, *Kitimat LPG Export Project Introduction* (2019), page 5.

⁸ District of Kitimat, *supra* note 4 at page 14.

⁹ Pacific Traverse Energy, *Pacific Traverse Energy Investigative License Application* (2018), accessed at: <<https://comment.nrs.gov.bc.ca/api/public/document/5b5f3eb5e7c8fa0019efaf4d/download>> at page 1.

¹⁰ District of Kitimat, *supra* note 4 at page 19.

¹¹ District of Kitimat, *Part 9, Division 2, Subdivision 1: Zoning Bylaws* (2019) accessed at: <<https://www.kitimat.ca/en/municipal-hall/resources/Documents/Kitimat-Municipal-Code/Part-9/PART-9-Div-2---Zoning-2019-03-01.pdf>>.

¹² District of Kitimat, *Part 9, Division 12, Subdivision 1: Noise and Subdivision 2: Nuisance* (2020) accessed at: <<https://www.kitimat.ca/en/municipal-hall/resources/Documents/Kitimat-Municipal-Code/Part-9/PART-9-Div-12---Environmental-Control-2020-05-19.pdf>>.

¹³ District of Kitimat, *Part 9, Division 7, Subdivision 1: Greenbelt Zoning* (2020) accessed at: <<https://www.kitimat.ca/en/municipal-hall/resources/Documents/Kitimat-Municipal-Code/Part-9/PART-9-Div-7---Greenbelt-Zoning-2020-08-20.pdf>>.

¹⁴ District of Kitimat, *supra* note 4 at 4.4.18.

purposes of this DPA designation are “Protection of the Natural Environment” and “Protection of Development from Hazardous Conditions,” the existing development permit guidelines focus primarily on preserving isolated environmentally sensitive areas and hazard areas (as identified in Schedules A and C of the OCP). Although guidelines also broadly identify more vague goals for conservation, including protecting “areas of environmental significance” and “natural forest”, and specifying that “proposed development should not harm the biodiversity of the Kitimat River”, they do not identify a network of ecological connection that would safeguard environmental health.¹⁵ These DPA guidelines establish broad goals and procedures related to environmental protection, but have the potential to provide a more clear and robust framework to guide the permit approval process with the goal of preserving Kitimat’s connected green infrastructure.

With regards to protecting the District of Kitimat’s aquatic ecosystems, the Kitimat OCP identifies water resource management as a “key environmental priority” for the community and recognizes that the potential environmental impacts of industrial expansion on the region’s aquatic ecosystems.¹⁶ Schedule A of the OCP identifies the Kitimat River Estuary as an environmentally sensitive area and requires in a development permit guideline that “[p]roposed development should not harm the biodiversity of the Kitimat River.”¹⁷ However, the Kitimat OCP also outlines several development-related goals that are inconsistent with the protection of Kitimat’s aquatic ecosystems and water resources. For example, the District has identified clear goals to facilitate further waterfront development opportunities for large-scale industrial and commercial services¹⁸ and to “accommodate the plans of industry” when balancing short and long-term interests in the waterfront planning process.¹⁹

Without substantive local bylaws and review processes in place, industrial development will degrade local ecosystems and encroach upon areas that are of high ecological and community value in Kitimat. To balance the interests of supporting industrial development and economic growth with protecting the community’s habitats and natural areas, the purpose of this submission is to assist the District of Kitimat in updating their local bylaws to make best use of existing public infrastructure and preserve valuable ecological connectivity that is the foundation for a healthy environment.

Part 2 of this submission describes the evolving environmental protection approaches in municipal law and outlines the benefits of more comprehensively focus on ecological health and connecting green infrastructure. In recommending that the District of Kitimat adopt a green bylaws approach, Part 3 sets out recommendations for the District. Recommendations include:

¹⁵ District of Kitimat, *supra* note 4 at 4.4.21.

¹⁶ District of Kitimat, *supra* note 4 at page 46.

¹⁷ District of Kitimat, *supra* note 4 at 4.4.21.

¹⁸ District of Kitimat, *supra* note 4 at 4.1.39.

¹⁹ District of Kitimat, *supra* note 4 at 4.1.34.

- Maintaining connectivity among Kitimat's ecologically sensitive areas;
- Implementing growth management tools to rationalize the expansion of industry within Kitimat's existing Industrial Zone;
- Concentrating industrial development on brownfield sites and providing incentives for that redevelopment;
- Identifying and monitoring environmental impacts of development through environmental impact assessment procedures and ecological indicators;
- Establishing long-term watershed protection and management policies; and
- Implementing procedures to incorporate a broader range of knowledge and input into municipal decision making.

It is crucial that the District of Kitimat adopt integrated policies and bylaws to support the health of both the population and the natural environment during a time of such rapid industrial expansion. We recommend that the District of Kitimat adopt into bylaws the range of policies and procedures outlined in this report to better incorporate a green bylaws approach into the community's municipal operations.



Wetlands Dragonfly (Photo: Holly Pattison)

2. GREEN BYLAWS OVERVIEW

The goal of a green bylaws approach is to assist local governments in implementing tools to protect green infrastructure.²⁰ Implementing such an approach is an important aspect of promoting environmental protection at a local scale, preventing incremental biodiversity and habitat loss, and promoting a collaborative stewardship approach among local governments, community members, and landowners.²¹

Green infrastructure refers to both natural and engineered ecological components that protect and add value to ecosystems. Green infrastructure can include components such as natural, degraded and undeveloped greenfield sites, wetlands, watersheds, parks, and greenways. Further, it includes sensitive ecosystems, which include fragile or rare areas of land containing more uniform dominant vegetation.²² Preserving green infrastructure and sensitive ecosystems can yield important economic, social, and environmental benefits for communities. For example, protecting wetlands and riparian areas can maintain valuable ecosystem services such as protecting water, soil, and air quality, supporting local recreation

²⁰ Curran *et al*, *supra* note 2 at page 18.

²¹ Curran *et al*, *supra* note 2 at page 22.

²² Curran *et al*, *supra* note 2 at page 23.

opportunities, contributing to community health, maintaining biodiversity, and conserving important habitat areas.²³

A green bylaws framework is comprised of multiple components that seek to address a community's conservation-related needs. The concept of ecosystem connectivity refers to protecting and maintaining connections between a community's natural areas²⁴ and is a central element of a green bylaws approach. Supporting connectivity allows local governments to meet a community's broad conservation needs by supporting ecosystem function and the movement of species rather than simply focusing on isolated areas in need of protection.²⁵ The practice of growth management is another important approach that allow local governments to direct development toward areas that allow for the most efficient use of existing built public infrastructure.²⁶ Municipalities can delineate areas where new development is supported and create incentives for growth within those spaces. To assess the impacts of development within a community, local governments can implement tools such as environmental impact assessments (EIAs) and ecological indicators. EIAs provide decision makers with objective information about the potential individual and cumulative impacts of a proposed project before it has occurred,²⁷ whereas ecological indicators provide important insight into the ongoing or past impacts of development or other environmental damage.²⁸ Local governments can also engage a variety of tools to protect the long-term health of watersheds and other aquatic ecosystems. For example, water sustainability plans are a new strategy for local governments (alongside other organizations and communities) to engage with the Province of British Columbia to respond to risks and conflicts related to water quality or aquatic ecosystems.²⁹ Finally, local governments can also ensure that their policies are informed by a wide range of knowledge-holders through hiring and community consultation procedures.

²³ Curran *et al*, *supra* note 2 at pp. 24-26.

²⁴ Susan Latimer and Alison Peatt, *Keeping Nature in our Future: Designing and Implementing Ecosystem Connectivity in the Okanagan* (2014) at page 3, accessed at: http://a100.gov.bc.ca/appsdata/acat/documents/r42389/Part3DesigningandImplementingEcosystemConnectivity_1405351562655_5351338661.pdf.

²⁵ *Ibid*.

²⁶ Curran *et al*, *supra* note 2 at pps. 48-49.

²⁷ Curran *et al*, *supra* note 2 at page 109.

²⁸ City of Surrey, *Biodiversity Conservation Strategy* (2014) at page 90.

²⁹ *Water Sustainability Act* SBC 2014 c. 15, division 4.



University of Victoria rain garden (Photo: Holly Pattison)

3. GREEN BYLAWS RECOMMENDATIONS

The recommendations in this part are organized under six broader approaches that will be useful to the District of Kitimat in protecting green infrastructure from the impacts of industrial expansion.

Recommendation 3.1: Prioritize connectivity throughout the District to connect ecologically sensitive areas through a Green Infrastructure Network, Environmental Development Permit Areas, and Connectivity Mapping

Habitat fragmentation refers to the destruction of habitat such that only isolated parcels of land, rather than a larger cohesive habitat area, remain.³⁰ Habitat fragmentation presents a significant threat to biodiversity and wildlife conservation, as it disrupts species' ability to

³⁰ City of Surrey, *supra* note 28 at page 15.

move across their environment (including important functions such as migration and pollination).³¹

Planning for connectivity describes the practice of reducing the impacts of habitat fragmentation and ensuring that important ecosystem areas, such as riparian areas, are connected through a green infrastructure network.³² Facilitating ecosystem connectivity can provide a variety of ecological and social benefits for communities, such as supporting ecosystem services, preserving water quality, supporting genetic diversity and species at risk, and providing community recreation and tourism opportunities.³³ As ecosystems are at greater risk of habitat fragmentation in areas where humans live and work, it is important for local governments to plan for connectivity rather than assume that ecosystem function will not be impacted by development.³⁴

On private land, OCP policies related to connectivity can be expressed through Development Permit Areas for protection of the natural environment (EDPAs). Local governments in BC may designate development permit areas for a variety of purposes, including “protection of the natural environment, its ecosystems and biological diversity.”³⁵ EDPAs are an important tool in supporting the protection of sensitive ecosystems and biodiversity, as they allow staff and council to consider site-specific conservation needs and factors before issuing development permits.³⁶ EDPAs enumerate specific conditions and standards that a proposed project must meet, which allows local governments to avoid site disturbance in identified corridors, environmentally sensitive areas, and potential environmental damage before the development occurs.³⁷

Introducing a Green Infrastructure Network

The Kitimat OCP currently outlines goals to facilitate connective corridors for walking or active transport in the community³⁸ but does not acknowledge the need for ecological connectivity in supporting ecosystems, biodiversity, and wildlife. By implementing a green infrastructure network to support connectivity among habitats and areas of high ecological value, the District of Kitimat will be able to maintain ecological function and facilitate the movement of wildlife.

³¹ Jordan E. Rogan and Thomas E. Lacher Jr., *Impacts of Habitat Loss and Fragmentation on Terrestrial Biodiversity* (2018), accessed at: <<https://www.sciencedirect.com/science/article/pii/B9780124095489109133>>.

³² City of Surrey, *supra* note 28 at page 67.

³³ Susan Latimer and Alison Peatt, *supra* note 24 at pages 4-5.

³⁴ Susan Latimer and Alison Peatt, *supra* note 24 at page 3.

³⁵ *Local Government Act*, RSBC 2015 c.1 s.488.

³⁶ Curran *et al*, *supra* note 2 at page 86.

³⁷ *Ibid*.

³⁸ District of Kitimat, *supra* note 4 at 4.1.25-26.

The City of Surrey created a *Biodiversity Conservation Strategy* from which it identified a *Green Infrastructure Network* of connected areas.³⁹ In a largely developed or agricultural land use context, Surrey's map clearly depicts the connectivity between larger hubs and sites.⁴⁰

Recommendations to facilitate connectivity and introduce a green infrastructure network:

- Clearly outline goals in the OCP to protect, restore, and enhance the community's ecological connectivity and green infrastructure;⁴¹
- Adhere to the three core principles of biodiversity conservation:
 - 1) Preserve large core habitat areas;
 - 2) Ensure connectivity between habitat areas; and
 - 3) Maintain a broad diversity of habitat features;⁴²
- Prioritize the preservation of "hubs" (large intact habitat areas) while also maintaining valuable privately owned land, smaller public sites, and corridors that connect these sites and hubs;⁴³
- Connect the goals and policies related to establishing and maintaining wildlife corridors with the Kitimat OCP's existing goals of further developing greenways and walking paths in the community, depending on the sensitivity and ecological needs of a given area.⁴⁴

Supporting Connectivity through Environmental Development Permit Areas

The Kitimat OCP designates all lands in the District as EDPA and DPA for protection of development from hazardous conditions.⁴⁵ Within the broader purpose of "protection of the natural environment," development permit guidelines identify specific environmentally sensitive areas (as outlined in schedule A) that should remain free of development, as well as the Kitimat River Estuary and Minette Bay areas on which public access and limited development may be permitted subject to specific conditions.⁴⁶ The guidelines also identify broader conditions, including protecting "areas of environmental significance" and "natural forest" and requiring that "proposed development should not harm the biodiversity of the

³⁹ City of Surrey, *supra* note 28.

⁴⁰ City of Surrey Green Infrastructure Network Map accessed at: https://www.surrey.ca/sites/default/files/media/documents/BCS_GIN_Map_8X11.pdf.

⁴¹ Curran *et al supra* note 2 at page 161.

⁴² City of Surrey, *supra* note 28 at page 67.

⁴³ City of Surrey, *supra* note 28 at page 68.

⁴⁴ City of Surrey, *supra* note 28 at page 69.

⁴⁵ District of Kitimat *supra* note 4 at 4.4.18.

⁴⁶ District of Kitimat, *supra* note 4 at 4.4.21.

Kitimat River.”⁴⁷ These DPA provisions establish broad goals and procedures related to environmental protection, but can use more specific and robust language to guide the permit approval process with the goal of preserving Kitimat’s green infrastructure.

The Village of Cumberland, BC has implemented 11 types of DPAs to support a variety of purposes and land uses. Like Kitimat, Cumberland is a relatively small municipality with a significant industrial area and considerable surrounding forestry uses. The Village’s EDPA aims to “conserve and enhance ecosystem services, to sustain quality of life in the community, and to maintain and restore habitat connectivity for species movement.”⁴⁸ In addition to designating Core Area (Terrestrial and Aquatic Ecosystems), the Cumberland OCP designates as Connectivity Area “[t]he area between Terrestrial and Aquatic Ecosystems Areas, that can be developed for sustainable human use in a manner that demonstrates stewardship through the protection, remediation and enhancement of: 1) Connectivity for habitat and wildlife in the area, as well as surrounding sensitive environmental areas; and 2) Overlays and implements through best practice planning, design, and management the integration of passive or active outdoor recreation, forestry, and agriculture.”⁴⁹ All land outside the Cumberland Village Core and disturbed industrial sites is designated as Connectivity Area.⁵⁰⁵¹ The Resort Municipality of Whistler has also identified EDPAs for the purposes of protecting riparian and sensitive ecosystems and has applied extensive development permit guidelines to all unserviced land in the municipality.⁵² These guidelines require applicants to engage with a qualified environmental professional to identify sensitive ecosystems, potential impacts of the proposed development, and provide recommendations on how to avoid or minimize encroachment on sensitive ecosystems.⁵³

Recommendations to promote ecosystem function and connectivity through EDPAs:

- Clarify the language of Kitimat’s EDPA by designating the entire non-urbanized/unserviced area of Kitimat as an EDPA for the purpose of maintaining connectivity among environmentally sensitive areas;
- Designate Kitimat’s Greenbelt Zones as Connectivity area (similar to the Village of Cumberland EDPA map reproduced in Appendix A);⁵⁴

⁴⁷ *Ibid.*

⁴⁸ Village of Cumberland, *Village of Cumberland Official Community Plan Bylaw No.990, 2014* (2016) at page 85, accessed at: <<https://cumberland.ca/ocp/>>.

⁴⁹ *Ibid* at page 88.

⁵⁰ *Ibid* at Appendix B, Map E.

⁵¹ See the Village of Cumberland EDPA Map at [Appendix A](#) of this report.

⁵² Resort Municipality of Whistler, *Official Community Plan* (2019) at Schedule K, accessed at: <https://www.whistler.ca/sites/default/files/ocp-schedules/ocp_adopted_version.pdf>.

⁵³ *Ibid* at s.13-10.

⁵⁴ Village of Cumberland, *supra* note 48 at Appendix B, Map E.

- Clearly outline the importance of ecosystem connectivity in EDPA guidelines by establishing conditions that require development to maintain a high quality of ecological function and connectivity;
- Require that developers consider ecosystem connectivity as a factor when conducting environmental impact assessments and drafting site design in EDPAs.

Incorporate mapping to identify Kitimat's green infrastructure and connectivity areas

Mapping is an important tool that enables local governments to approximate the location, size, and characteristics of a community's terrestrial and aquatic areas, and assists land developers in understanding the characteristics of green infrastructure on potential development sites.⁵⁵ More recently, local governments in North America have begun to shift their mapping strategies from an approach focused on environmentally sensitive areas (ESAs) to a green infrastructure model that more broadly captures a community's habitat and connectivity areas.⁵⁶ Although this type of mapping is not intended to be interpreted in the most precise way possible, green infrastructure maps can assist in guiding conservation-oriented decision making more broadly rather than focusing solely on specific ESAs.

The Village of Cumberland has supported their EDPA designations with an "Environmental Protection" map that clearly designates as EDPA all land in the municipality except for the Village core and industrial land. The map visually represents the municipality's designation of terrestrial and aquatic "Core Area," as well as the "Connectivity Area," which describes all remaining unserviced land within the municipality (see [Appendix A](#)).⁵⁷

Updating mapping practices in Kitimat

The District of Kitimat currently relies on the older practice of mapping sensitive ecosystems within the municipal boundary and implementing specific guidelines for development permits within those discrete areas.⁵⁸ While local governments should identify the location and unique needs of ESAs, it is also important to recognize the broader value of connectivity area through mapping practices.

⁵⁵ Curran *et al*, *supra* note 2 at pages 36-37.

⁵⁶ Mark A. Benedict and Edward T. McMahon, *Green Infrastructure: Linking Landscapes and Communities* (2006), accessed at: https://books.google.ca/books/about/Green_Infrastructure.html?id=2xTJvYqzFNkC&printsec=frontcover&source=hp_read_button&redir_esc=y#v=onepage&q&f=false.

⁵⁷ *Ibid* at Appendix B, Map E.

⁵⁸ District of Kitimat, *supra* note 4 at Schedule A.

Recommendations to update their mapping practices to best support the community's green infrastructure:

- Update the Kitimat OCP's Schedule A map to designate core ecosystems and connectivity area rather than focusing solely on sensitive ecosystems and hazard areas;
- Ensure that all unserviced land in Kitimat (all land except for the Village core and developed areas of the Industrial Corridor) is designated as connectivity area;
- Clearly designate all core and connectivity area as an EDPA (see EDPA recommendations above).

Recommendation 3.2: Implement a growth boundary to rationalize the expansion of industry within the existing Industrial Zone

Establishing growth management policies is a foundational policy approach for local governments. These policies direct growth to appropriate locations and in an orderly manner that makes the most efficient use of public investment in infrastructure and the use of taxpayer resources.⁵⁹ Growth management policies, typically contained in OCPs, also reflect a community's large-scale attention to environmental protection needs⁶⁰ and guide local governments in holistically considering efficiency and best practices for land use rather than responding to individual rezoning or development applications on a case-by-case basis.⁶¹ Key growth management policies relate to creating different types of growth boundaries, typically called urban growth boundaries. Although the District of Kitimat has implemented Greenbelt Zones with the purpose of concentrating development within recognized industrial, residential, and commercial areas,⁶² the District currently has no growth management goals or policies in its OCP to protect these Greenbelt areas for their ecological values and actively prevent their rezoning for other uses. This means that the municipality is lacking big-picture direction to ensure that development makes the best and full use of existing public and private investment in industrial infrastructure rather than turning to greenfield sites.

⁵⁹ Curran *et al*, *supra* note 2 at page 161.

⁶⁰ Curran *et al*, *supra* note 2 at page 68.

⁶¹ Curran *et al*, *supra* note 2 at page 161.

⁶² District of Kitimat, *Municipal Code Part 9, Division 7: Greenbelt Zoning Bylaw* (2020), accessed at: <https://www.kitimat.ca/en/municipal-hall/resources/Documents/Kitimat-Municipal-Code/Part-9/PART-9-Div-7--Greenbelt-Zoning-2020-08-20.pdf>.

Urban Growth Boundaries

Many local governments regulate growth management in their communities by establishing an urban growth boundary (UGB), which typically addresses the problem of relatively unrestrained growth by delineating a clear area within which a large percentage (for example, 95%) of urban development must occur.⁶³ UGBs designate a “planning line” around urban or other areas to prevent development from expanding into rural or natural areas⁶⁴ and delineate the area in which a municipality is expected to expand over a given number of years.⁶⁵

Certain jurisdictions, such as the State of Oregon, have established rigorous requirements and procedures for the implementation of UGBs. All municipalities in Oregon are required to identify and designate a supply of land to facilitate efficient land use and plan for their expected needs (including industrial growth) over the next 20 years.⁶⁶ UGBs in Oregon are frequently applied to promote the efficient use of industrial lands through the process of conducting an Industrial and Other Employment Lands Analysis.⁶⁷ When new land is added to a UGB, local governments in Oregon are required to zone urban and industrial land for their intended purposes and are prohibited from rezoning forest and agricultural land for urban development.⁶⁸

In British Columbia, the District of Saanich has had an Urban Containment Boundary as the municipality’s main growth management tool since 1968. The Saanich OCP explicitly prohibits major changes to the Boundary except as part of a five-year review of the Capital Regional District’s Regional Growth Strategy (RGS) and prohibits any major expansions to the UCB without first attaining the assent of the electors.⁶⁹

⁶³ Curran *et al*, *supra* note 2 at page 68.

⁶⁴ Oregon Metro, *Urban Growth Boundary* (2020), accessed at: <<https://www.oregonmetro.gov/urban-growth-boundary>>.

⁶⁵ Oregon Department of Land Conservation and Development, *Goal 14: Urbanization*, accessed at: <<https://www.oregon.gov/lcd/OP/Pages/Goal-14.aspx>>.

⁶⁶ *Ibid*.

⁶⁷ For more information see Oregon Department of Land Conservation and Development, *Industrial and Other Employment Lands Analysis Guidebook* (2005), accessed at: <https://www.oregon.gov/lcd/Publications/goal9guidebook_2005.pdf>.

⁶⁸ Oregon Secretary of State, *Chapter 660, Division 4: Urban Growth Boundaries* 660-024-0050 ss.6-7, accessed at: <<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3074>>.

⁶⁹ District of Saanich, *Sustainable Saanich: Official Community Plan* (2008), 4-11, accessed at: <<https://www.saanich.ca/assets/Local~Government/Documents/Corporate~and~Annual~Reports/2008%20OCP.pdf>>.

Recommendations to support responsible growth management in the community:

- Add a Growth Management section to the Kitimat OCP that establishes an Industrial Growth Boundary to delineate where new industrial activity is supported with a focus on fully developing Kitimat's existing Industrial Zone before moving to greenfield sites;⁷⁰
- Set a high standard in the OCP for the percentage of industrial development (for example, 99%) that must occur within the growth boundaries to enforce new development within the growth boundary;⁷¹
- Establish a clear intention in the OCP to direct industrial development into areas that are already serviced and zoned for industrial use;
- Indicate that the District of Kitimat will not support contributing public funds to extend servicing to industrial infrastructure outside the industrial growth boundaries;⁷²
- Set out specific circumstances under which Council will consider amendments to the growth boundary (including the frequency of the review and requirements for public consultation).⁷³

Recommendation 3.3: Require developers of industrial land to build on brownfield rather than greenfield sites and provide incentives for that redevelopment.

Brownfield sites describe “abandoned, vacant, derelict or underutilized commercial and industrial properties where past actions have resulted in actual or perceived contamination.”⁷⁴ Conversely, greenfield sites refer to undeveloped land that has the potential to be cleared and developed.⁷⁵ Although many public and private entities have been hesitant to remediate brownfields due to concerns related to liability, expenses, and regulatory procedures,⁷⁶ these sites are in fact a “hidden asset” that can provide environmental, economic, and community benefits for a municipality.⁷⁷ Remediating

⁷⁰ Curran *et al*, *supra* note 2 at page 161.

⁷¹ Curran *et al*, *supra* note 2 at page 162.

⁷² *Ibid*.

⁷³ District of Saanich, *supra* note 69 at 4-11.

⁷⁴ National Round Table on the Environment and the Economy, *Cleaning Up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada* (2003), accessed at: https://ocpm.qc.ca/sites/ocpm.qc.ca/files/pdf/P85/5.10.2_cleaning-up-the-past.pdf.

⁷⁵ BC Ministry of Environment, *Brownfields and Brownfield Redevelopment* (2007), accessed at: <https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/fact-sheets/fs38.pdf>.

⁷⁶ National Round Table on the Environment and the Economy, *supra* note 72 at page xi.

⁷⁷ BC Ministry of the Environment, *supra* note 73.

brownfield sites can reduce rates of sprawl and greenfield development, promote the efficient use of existing public infrastructure, and improve environmental and community safety through the safe management of site contaminants.⁷⁸ Local governments play an important role in promoting the remediation of brownfield sites, including creating incentives, establishing robust policy regimes, and improving public awareness of brownfield revitalization.⁷⁹

In Kitimat, approximately 1600ha of zoned industrial land has been developed, and approximately 985 ha (38%) of the industrial zone is undeveloped (greenfield) land.⁸⁰ Restricting industrial development on greenfield sites (both within and outside the Industrial zone) as much as possible is an important aspect of preserving Kitimat's functioning ecosystems. By promoting brownfield redevelopment on existing industrial sites as much as possible, the District of Kitimat will be able to avoid habitat destruction, revitalize previously developed industrial sites, and act in the community's interest by protecting local natural areas.

Recommendations to encourage brownfield redevelopment:

- Establish a clear goal to preserve the community's green infrastructure by restricting rezoning and industrial development on greenfield sites that are not currently zoned as industrial and by creating incentives for redevelopment of brownfield sites;
- Continue to allow industrial use on brownfield sites that are (i) currently zoned for industry and (ii) already host industrial uses outside of the industrial zone, but otherwise prohibit new industrial uses outside of the industrial growth boundary;
- Consider rezoning a substantial percentage of Kitimat's undeveloped greenfield industrial land as Greenway to concentrate new development within existing brownfield sites.

Local governments in British Columbia are empowered to encourage revitalization in their communities by issuing tax exemptions for specific types of redevelopment called revitalization tax exemptions.⁸¹ The *Community Charter* enables local governments to enact bylaws that provide municipal property tax exemptions for specific areas of land for the purpose of promoting social or environmental revitalization.⁸² These exemptions can remain

⁷⁸ Canadian Brownfield Network, *Compelling Reasons for Promoting Brownfield Redevelopment in your Community* (2020), accessed at: <<https://canadianbrownfieldsnetwork.ca/resources/compelling-reasons-brownfields>>.

⁷⁹ National Round Table on the Environment and the Economy, *supra* note 72 at page xi.

⁸⁰ District of Kitimat *supra* note 4 at page 14.

⁸¹ *Community Charter*, SBC 2003 c.26 s.226.

⁸² Government of British Columbia, *Municipal Revitalization Tax Exemptions*, accessed at: <<https://www2.gov.bc.ca/gov/content/governments/local-governments/finance/requisition-taxation/tax-exemptions/permissive-tax-exemptions/municipal-revitalization-tax-exemptions>>.

in place for up to 10 years, and are typically applied according to specific circumstances of economic, social, or environmental revitalization.⁸³

In 2018, Kitimat Council adopted this tool through the Revitalization Tax Exemption Program Bylaw No. 1923.⁸⁴ This bylaw offers tax exemptions for LNG Canada in response to the establishment of the large-scale industrial project and contributions to employment and economic opportunities in Kitimat.⁸⁵ This incentive can be applied more broadly for environmental purposes and to create incentives for brownfield redevelopment on existing industrial sites.

In 2019, the City of Salmon Arm introduced an Industrial Revitalization Tax Exemption bylaw in accordance with their OCP's goal of revitalizing the municipality's industrial zones. The bylaw offers a tax exemption to new improvements or alterations to existing improvements with a value of \$300,000 or more within designated existing industrial zones.⁸⁶ This bylaw has the effect of encouraging redevelopment within existing industrial sites rather than undeveloped greenfield sites.

Recommendations to create incentives for brownfield redevelopment on industrial land:

- Introduce an industrial revitalization tax exemption bylaw with the purpose of creating incentives for brownfield redevelopment within the municipality's existing industrial zones;
- Identify Council's intention to prioritize brownfield redevelopment in the interest of conserving greenfield sites; and
- Clearly map and identify the industrial brownfield sites to which the tax exemption applies.⁸⁷

⁸³ *Ibid.*

⁸⁴ District of Kitimat, *Minutes of District of Kitimat Regular Meeting: June 18, 2018* (2018), accessed at: <<https://www.kitimat.ca/en/municipal-hall/resources/Documents/Council-Meetings-and-Agendas/Minutes/2018-06-18-reg.pdf>>.

⁸⁵ District of Kitimat, *LNG Canada Revitalization Program Bylaw No. 1923, 2018* (2018).

⁸⁶ City of Salmon Arm, *Bylaw 4020: A Bylaw to provide for an Industrial Revitalization Tax Exemption* (2019) at s.2(a), accessed at: <<https://www.salmonarm.ca/DocumentCenter/View/990/Industrial-Revitalization-Tax-Exemption-Bylaw-4020?bidId=>>.

⁸⁷ *Ibid.*

Recommendation 3.4: Identify and monitor the cumulative impacts of development through environmental impact assessment procedures and ecological indicators

Environmental impact assessments (EIAs) and ecological indicators are tools that empower local governments to identify and monitor the environmental impacts of development projects both before and after the development occurs. EIAs allow local governments to assess potential impacts on ecological function prior to making decisions related to proposed development projects.⁸⁸ EIAs encourage local governments to proactively identify and prevent potential environmental harms rather than reacting to those problems after they have occurred.⁸⁹ Further, local governments can establish in their OCP other requirements and guidelines for approving EIAs to ensure that proposed development projects align with the community's environmental goals and needs, including making siting decisions that maintain connectivity.⁹⁰

Conversely, ecological indicators provide a means for assessing environmental impact during or following development in a specific area or more broadly throughout the municipality. This tool allows local governments to evaluate the current ecological status and track environmental changes caused by cumulative natural occurrences or human development.⁹¹

Local governments can require development applicants to complete EIAs by establishing procedures through EDPAs and development approval information areas (DAIAs). DAIA designations empower local governments to require information “on the anticipated impact of a proposed activity or development on the community,” including “the natural environment of the area affected.”⁹² In practice, DAIAs permit local governments to request any type of information from applicants. OCPs may identify specific areas and circumstances in which development area information may be required.⁹³ The Kitimat OCP identifies that all lands in Kitimat are designated as DPA,⁹⁴ and designates specific development restrictions for environmentally sensitive lands and hazard areas as per Schedules A and C.⁹⁵ The OCP also makes reference to development approval information designations,⁹⁶ but it is unclear whether the District has officially identified and implemented a DAIA pursuant to

⁸⁸ Curran *et al supra* note 2 at page 109.

⁸⁹ *Ibid.*

⁹⁰ *Ibid.*

⁹¹ City of Surrey, *supra* note 28 at page 97.

⁹² *Local Government Act supra* note 35 at s.485.

⁹³ *Ibid.*

⁹⁴ District of Kitimat *supra* note 4 at 4.4.18.

⁹⁵ District of Kitimat *supra* note 4 at 4.4.21.

⁹⁶ District of Kitimat, *supra* note 4 at 4.4.19.

ss.488-491 of the *Local Government Act*.⁹⁷ We recommend that the District of Kitimat take the following measures to apply these guidelines to serve the community's environmental protection needs:

Identifying the importance of assessing cumulative impacts of development in the OCP

The Kitimat OCP currently states that proposed industrial development projects (and their potential environmental impacts) must be considered on their own merits,⁹⁸ but fails to capture the importance of considering the cumulative impacts of multiple projects. This omission misses the significant environmental impact that multiple distinct projects can have on important connectivity values, habitats, and biodiversity.

Recommendations to establish the requirement to assess cumulative environmental impacts of proposed development:

- Enact the goal of safeguarding ecological health by protecting local ecosystems and wildlife from the cumulative impacts of all development and industrial activities;
- Specify that staff and council will consider industrial development proposals on their own merits in the context of the proposed project's cumulative environmental impacts alongside other existing or proposed development.

Ensure that EDPA guidelines in the Kitimat OCP require developers to consider cumulative impacts in their EIAs

As was outlined in part 3.1, the Kitimat OCP designates all lands in the District as EDPA,⁹⁹ and it is unclear whether the District of Kitimat has implemented a DAIA designation. The OCP designated ESAs in Schedule A,¹⁰⁰ and sets out broader guidelines for protecting "areas of environmental significance" and "natural forest" and requiring that "proposed development should not harm the biodiversity of the Kitimat River."¹⁰¹ It is important that the District require potential developers to complete an EIA before approving development in all areas subject to EDPA regulations, including expanded connectivity areas.

⁹⁷ The ELC could not find a specific designation or DAIA bylaw in the Kitimat *Municipal Code* nor after reaching out to District of Kitimat staff.

⁹⁸ District of Kitimat *supra* note 4 at 4.1.35.

⁹⁹ District of Kitimat *supra* note 4 at 4.4.18.

¹⁰⁰ District of Kitimat *supra* note 4 at 4.4.21.

¹⁰¹ *Ibid.*

Recommendations that the OCP establish the following guidelines for completing EIAs in EDPAs and DAIAs:

- Clarify in District bylaws the establishment of a DAIA for the entire District;
- Require that EIAs consider all ongoing development projects in the proposed area and assess the cumulative environmental impacts of a potential development project prior to approval;
- Require that developers consider the following key environmental factors in the EIA process: proximity to and impact on watershed, riparian or wetland processes; proximity to and impact on ESAs and their function; known wildlife corridors or habitat areas; and proximity to pre-existing or proposed development projects.

Establish and track ecological indicators to assess impacts of development

Ecological indicators are measurable targets that can assist in determining the effectiveness of green infrastructure policies and tracking ecological change in a community.¹⁰² Local governments can implement environmental indicators to measure the effectiveness of a policy at a specific scale (i.e. area or project) or can assess environmental health at the broader community level.¹⁰³ Identifying indicators is an effective way of monitoring a community's environmental health and can assist in forming and modifying green infrastructure goals and policies over time.

The District of Kitimat's *Official Community Plan 2016 Report Card* is a good example of the intent to start a long-term indicators program.¹⁰⁴ However, we note that it includes only two goals related to the theme "Protect the Natural Environment," and those goals were programmatic and not related to land use planning, bylaws or municipal operations.¹⁰⁵

The City of Surrey has incorporated environmental indicators into their *Biodiversity Conservation Strategy* by identifying ecological indicator species and broader criteria to assess the success of their *Biodiversity Conservation Strategy* policies. These indicators are specific to Surrey's unique biodiversity management objectives within an urban environment. Surrey's *Biodiversity Conservation Strategy* recommends that municipalities choose indicator species that have been scientifically demonstrated to respond quickly to habitat changes and environmental conditions so that the species' health can be an accurate indicator of the health of the surrounding environment.¹⁰⁶ The municipality selected a variety of indicator species for a variety of zones within Surrey, including

¹⁰² City of Surrey, *supra* note 28 at page 97.

¹⁰³ Curran *et al supra* note 2 at page 71.

¹⁰⁴ Accessed at: <<https://www.kitimat.ca/en/our-community/resources/OCP-2016-Report-Card-with-edits.pdf>>.

¹⁰⁵ *Ibid* at page 18.

¹⁰⁶ City of Surrey *supra* note 28 at page 90.

agricultural, industrial, suburban, and urban areas.¹⁰⁷ Further, Surrey also incorporated many other criteria for indicating the success of their conservation strategies, including the proportion of Green Infrastructure Network protected, proportion of tree canopy cover in the municipality, and the implementation and enforcement of policies and bylaws.¹⁰⁸

Recommendations for the District of Kitimat to take the following steps to monitor ongoing impacts of development:

- Conduct research to select indicator species and ecological conditions that would effectively reflect the health of the community's ecosystems, and subsequently implement a strategy to monitor the health of these species;
- Like Surrey, designate a wide variety of indicator species and conditions that represent the various ecosystems and zones throughout the community;
- Consider identifying further criteria by which the District of Kitimat can measure the success of environmental policies and bylaws. These criteria could include:
 - Water quality at specific sites (with special attention to watersheds or wetlands near industrial sites);
 - Connectivity area created or preserved;
 - Degree of intact riparian corridor;
 - Brownfield sites redeveloped;
 - Implementation and enforcement of green bylaws; and
 - Land area developed beyond the existing industrial zone.

Recommendation 3.5: Establish long-term watershed protection and management policies

Water is an important aspect of Kitimat's unique location and identity, and plays a significant role in the health of the community and surrounding ecosystems. The Kitimat River serves as the community's water supply, supports public works, and provides habitat for a wide variety of fish and other aquatic species.¹⁰⁹ The Kitimat OCP identifies water resource management as a key environmental priority for the community and identifies that the expansion of industrial activity and population growth may inflict increased stress on the community's aquatic environments.¹¹⁰ Further, Schedule A of the OCP identifies the Kitimat River Estuary and the northwest corner of Minette Bay as important habitat areas, and Fisheries and Oceans Canada has identified the Kitimat River Estuary as an environmentally

¹⁰⁷ City of Surrey *supra* note 28 at page 64.

¹⁰⁸ City of Surrey *supra* note 28 at pp.93-94.

¹⁰⁹ District of Kitimat, *supra* note 4 at page 6.

¹¹⁰ District of Kitimat *supra* note 4 at page 46.

sensitive area.¹¹¹ The following recommendations identify potential strategies for the District of Kitimat to establish water management and protection practices that will benefit the community's long-term environmental health.

Recommendations to facilitate stronger watershed and aquatic ecosystem protection:

- Establish more specific and rigorous OCP policies related to protecting the community's watersheds and aquatic ecosystems;
- Reassess the OCP's current goals to expand waterfront development, including policy 4.1.39, which encourages the expansion of port development and water lot acquisition for purposes such as establishing a cruise ship or mega-yacht facility, a cargo shipping terminal, or industrial docks.¹¹²

Establishing a Water Sustainability Plan for watersheds in the Kitimat area

Division 4 of British Columbia's *Water Sustainability Act* empowers "local authorities," including municipalities, to engage with the Province of British Columbia to create a water sustainability plan for a community's watersheds.¹¹³ Water sustainability plans are tools that aim to respond to water use conflicts or risks to water quality or aquatic ecosystem health¹¹⁴ and establish long-term plans related to the vision and governance of water.¹¹⁵ This long-term approach allows communities to assist in implementing response strategies for conflicts or environmental changes, and can create collaborative government structures involving Indigenous communities and local governments by incorporating their own governance practices and goals.¹¹⁶

Recommendations to plan for long-term water sustainability:

- Consider engaging the Province of British Columbia in a water sustainability plan for the community's watersheds;
- Collaborate with local and Indigenous organizations to ensure that the plan represents the long-term environmental interests of the community.

¹¹¹ *Ibid.*

¹¹² District of Kitimat, *supra* note 4 at s.4.1.39.

¹¹³ *Water Sustainability Act* SBC 2014 c. 15, division 4.

¹¹⁴ *Ibid* at s.65(1).

¹¹⁵ Curran, D., & Brandes, O.M., *Water Sustainability Plans: Potential, Options, and Essential Content* (2019), at i, accessed at: <<https://poliswaterproject.org/polis-research-publication/water-sustainability-plans/>>.

¹¹⁶ *Ibid.*

For more information, District of Kitimat staff and council members may wish to consult *Water Sustainability Plans: Potential, Options, and Essential Content* (see the URL in footnote 113).

Recommendation 3.6: Implement hiring and consultation procedures to incorporate a broader range of knowledge and input into municipal decision making

In addition to implementing more robust green bylaw approaches, it is also important for local governments to implement hiring and consultation procedures to ensure that policy decisions are informed by complete and diverse sources of knowledge. Although planners may be able to learn how to identify and respond to environmental concerns relating to municipal development, it is important that municipalities engage staff or a consultant who have a specific background in biology, ecology, or natural resource management.¹¹⁷ These individuals possess unique skills and training that allow them to effectively gather and assess evidence of environmental harms or changes, and can also fulfill an important education role when working with developers and landowners.¹¹⁸

It is also important for municipalities to engage in public consultation and education practices to ensure that the municipality's practices are transparent and accountable. The benefits of implementing more robust public consultation practices are twofold: first, it will improve the public's confidence and trust in their local government by establishing common goals between government and the public; and second, members of the public will be empowered to share insights and information about the community's values and the local environment.¹¹⁹ For example, members of the public or Indigenous communities may be able to contribute information regarding sensitive habitat areas, sites frequented by endangered species, or areas of significant community value.

The District of Kitimat Community Planning Department does not currently retain a designated staff member with biological or environmental expertise and relies on a team of planners to design and carry out these policies.¹²⁰ Recognizing that the District is a small municipality with a limited budget, hiring a designated individual with environmental expertise is nonetheless an important aspect of promoting accuracy and adherence to

¹¹⁷ Curran *et al*, *supra* note 2 at page 37.

¹¹⁸ *Ibid*.

¹¹⁹ Curran *et al*, *supra* note 2 at page 148.

¹²⁰ District of Kitimat, *Staff Directory* (2018), accessed at: <https://www.kitimat.ca/Modules/contact/search.aspx?s=qu31Zi5IA5HPyBC2mbBnNbiz0AeQuAleQuAl#>>.

District policies in assessing EIAs, executing environmental bylaws, and fulfilling a community's environmental public education needs.¹²¹

The Kitimat OCP emphasizes the need for community consultation and highlights the community's call for a "willingness to embrace change" and a "sustainability ethic" in policymaking and implementation.¹²² The OCP also identifies goals to "include a community consultation process" during the OCP review process every five years¹²³ and to "enhance joint communication with the Haisla First Nation and commit to early consultation on decision making that may affect the Haisla."¹²⁴ These policies demonstrate a willingness to consult with local and Indigenous knowledge-holders on a broad scale, but the District can express similar goals on a more specific scale to ensure robust community and Indigenous consultation regarding the environmental impacts of proposed and ongoing development.

Recommendations to ensure that green bylaw decisions and assessments are informed by broad and robust sources of knowledge:

- Hire or retain on Kitimat municipal staff a biologist or professional with ecological expertise to ensure that Council has the benefit of relevant expertise and training when implementing environmental bylaws and assessments; and
- Establish more specific OCP provisions aimed at strengthening consultation with local and Indigenous knowledge-holders when drafting green bylaws and assessing potential development projects.

¹²¹ Curran *et al*, *supra* note 2 at page 37.

¹²² District of Kitimat, *supra* note 4 at page 62.

¹²³ *Ibid*.

¹²⁴ District of Kitimat, *supra* note 4 at s.4.7.11.



Black bear cubs (Photo: Mike Langegger)

4. Conclusion

The District of Kitimat is home to unique natural features and ecosystems that provide important habitat and connectivity area for wildlife. Kitimat's natural areas are similarly important for the District's citizens who value these spaces for the social and environmental services they provide. However, the District of Kitimat lacks a robust framework of green bylaws to protect these valuable spaces. It is especially important that Kitimat update its policies and bylaws when the community is experiencing a period of rapid industrial expansion. By adopting a green bylaws approach consistent with many other municipalities in British Columbia, the District of Kitimat will be able to facilitate connectivity among sensitive ecosystems, adopt a growth management approach to maintain the most efficient use of existing infrastructure, and identify and monitor potential and ongoing environmental impacts of development projects. Further, Kitimat can adopt policy tools to better protect the community's water supply and aquatic ecosystems and ensure that policy decisions are informed by credible and informed knowledge holders. Through adopting a green bylaws approach, the District of Kitimat will be able to more effectively work towards its goal of balancing economic growth with protecting the important natural areas that are so highly valued by the District's wildlife and community members.¹²⁵

¹²⁵ District of Kitimat, *supra* note 4 at page 20.

Appendix A: Village of Cumberland Environmental Development Permit Area Map¹²⁶

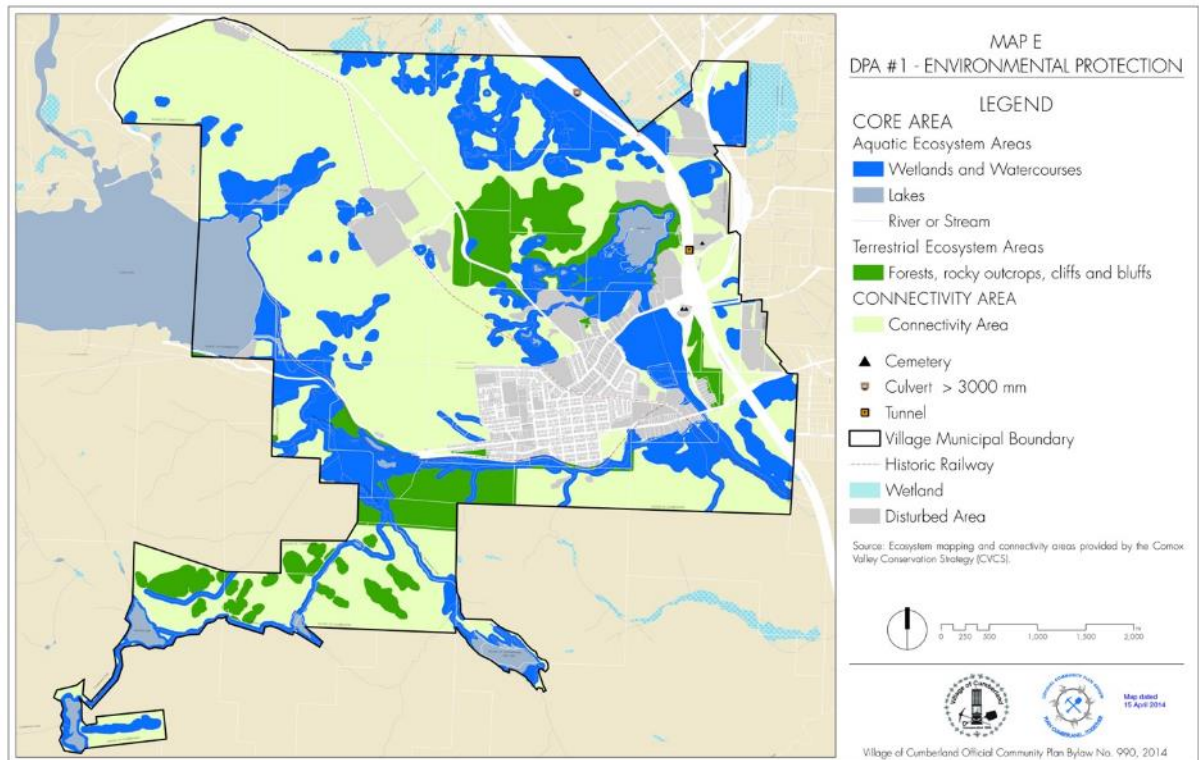


Image used with permission of the Village of Cumberland

¹²⁶ Village of Cumberland, *supra* note 44 at Appendix B.