



Official Community Plan Bylaw

3900

CONSOLIDATION

This consolidation is a copy of a bylaw consolidated under the authority of section 139 of the *Community Charter* and in accordance with section 1 of Consolidation and Revision Authority Bylaw 3514, 2013.

Current to December 15, 2025

Last amended on November 19, 2025

This Bylaw has been consolidated and printed under and by authority of the Corporate Officer for the Corporation of the District of North Cowichan.

LIST OF AMENDMENTS

[illegible]



The Corporation of the District of North Cowichan

Official Community Plan Bylaw

Bylaw 3900, 2022

WHEREAS the Council of The Corporation of the District of North Cowichan ("Council") wishes to adopt an official community plan pursuant to Part 14 of the *Local Government Act*;

AND WHEREAS Council reviewed the draft Official Community Plan in conjunction with its most recent financial plan and waste management plan pursuant to Section 477 of the *Local Government Act*;

AND WHEREAS during development of the draft Official Community Plan, multiple opportunities for comment and input by any affected persons, organizations and authorities have been provided;

AND WHEREAS early and ongoing opportunities for consultation have been provided to the organizations and authorities specified in section 475(2)(b) of the *Local Government Act*;

AND WHEREAS consultation with the Agricultural Land Commission has taken place;

NOW THEREFORE the Council of The Corporation of the District of North Cowichan, in open meeting assembled, enacts as follows:

Citation

1. This bylaw may be cited as "Official Community Plan Bylaw No. 3900, 2022"

Severability

2. If any statement, section, sub-section, clause, sub-clause or phrase of this bylaw and the Official Community Plan adopted by this Bylaw is for any reason held to be invalid by a decision of a court, the decision shall not affect the validity of the remaining portions of this Bylaw and Official Community Plan.

Enactment of Official Community Plan

3. The Official Community Plan for the District of North Cowichan entitled "Municipality of North Cowichan Official Community Plan" and its associated appendices, maps, schedules, tables and figures, all attached as Schedule "A" to this bylaw, is hereby designated as the Official Community Plan for the entirety of the area within the District of North Cowichan's municipal boundary.

Repeal

4. Official Community Plan Bylaw No. 3450, and all amendments thereto, is hereby repealed.

READ a first time on April 20, 2022

First reading was rescinded on April 25, 2022

READ a first time on April 25, 2022

CONSIDERED in conjunction with all applicable Financial Plans and Waste Management Plans, including the North Cowichan 2022 Five Year Financial Plan, the Cowichan Valley Regional District Solid Waste Management Plan (as amended) and the Cowichan Valley Regional District Central Sector Liquid Waste Management Plan in accordance with section 477(3)(a) of the *Local Government Act*.

This bylaw was advertised in the Cowichan Valley Citizen on June 23, 2022, June 30, 2022, July 7, 2022 and July 14, 2022 and posted to the municipality's website and notice board on June 17, 2022

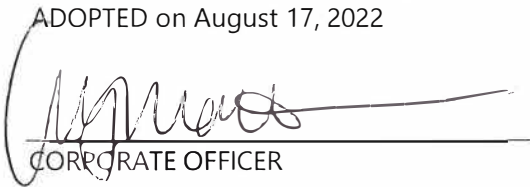
REVIEWED by the Agricultural Land Commission on July 9, 2022

PUBLIC HEARING on July 18 and 19, 2022

READ a second time on August 17, 2022

READ a third time on August 17, 2022

ADOPTED on August 17, 2022



CORPORATE OFFICER



PRESIDING MEMBER

Schedule "A"

Municipality of North Cowichan Official Community Plan

MUNICIPALITY OF
NORTH COWICHAN

OFFICIAL COMMUNITY PLAN

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1

INTRODUCTION





*Mukuw' stem 'i' utunu tumuhw, 'o' huliitun tst, mukw' stem 'i' utunu
tumuhw 'o' slhiilhukw 'ul*

*Everything on this Earth is what sustains us, everything on this Earth
is connected together.*

- Quw'utsun Teaching



1.0 INTRODUCTION

The Municipality of North Cowichan sits on the traditional, unceded territories of the Quw'utsun First Nation, which includes the Cowichan Tribes, the Halalt First Nation, the Lyackson First Nation, the Penelakut Tribe, and the Stz'uminus First Nation. The Municipality also sits on the traditional, unceded territory of the Snuneymuxw First Nation.

North Cowichan continues to engage with these Nations in ongoing dialogue to create new ways to ensure a healthy future for all residents. This dialogue includes engagement on key activities on the land and ways to improve this Official Community Plan.

Working together with nuts'amaat, (Hul'quimimum: one heart, one mind) we can learn about the history of these Nations whose land we occupy, both before and after settlers arrived, and how to practice Truth and Reconciliation, a process that will take humility, openness, courage and listening.

Systemic racism and colonialism still affect this land's First Peoples and we must work with nuts'amaat to reconcile and build relationships that create a shared mutual, just and equitable future.

Quw'utsun mustmuhw, ni' 'o' ni' tthusht'es-
ulhkw 'itst 'u tun'atumuhw, 'i 'o' hwunst'e.

Nilh 'o' thu-'it syuw'entst, tun ni' 'u
kwthuhwun'amustimuhw 'iwutl'uts' 'i 'u
tun'atumuhwtst. Ni' yuxtse'tumtthu Quw'ut-
sun 'u tthu-imumuhw, qa', kw'at'l'kwatthuni'
spupin' 'u tthutumuhw, ttho' mukw' stem ni'
hakwni' 'u tthustl'ulnuptst. Kwuthushtun-ni'
'iwststni' yuxtse'tum 'u ttho' mukw' stem
ni' ha'kwkwsstthuthi'skwshuli-s. O' nilhtthu
Quw'utsun mustumuhw, nilemuxutunstum
'u tthuni' snuwuntewut 'u tthushtunaalhtun,
tst. Uwutumtem-us 'i' ni' tsstsmem't 'aanlhk-
wskwun-etewut, hwayumtun'as'aalhtl'ulnup.

Quw'utsun Mustimuhw, ha'kwushtst kw'
stutul'na'mutsxetsul's kw' shtuhimstthustl'ul-
nuptst. Mukw' stem 'o' shilukw'tul 'i' nilhni'
shkw'akw'umstthusulsuli'tst.

OCP principles of reconciliation and social justice (see Chapter 2: Vision, Goals, Principles & Frameworks) guide our actions to:

Strengthen cooperation and mutual support by working collaboratively with all of the Cowichan Nations to develop respective goals and objectives - a vital component to fostering more understanding, resilient and connected communities. A collective journey towards true reconciliation that includes creating mutually agreed-upon government-to-government protocols and processes based on meaningful consultation in matters of mutual interest.

The United Nations Declaration on the Rights of Indigenous People¹ (UNDRIP) published in 2007 outlines 46 articles that focus on such matters as self-determination, equal rights, cultural revitalization, spiritual resurgence, and the right to good-faith consultation and participation in decision-making matters that affect Indigenous rights.

In 2019 the Province of BC adopted UNDRIP through their Declaration on the Rights of Indigenous Peoples Act² (DRIPA).

The Five Calls to Action³ published in 2015 by the Truth and Reconciliation Commission (TRC) and many of the Calls for Action are relevant to this OCP.

Cowichan Peoples have existing inherent rights. Cowichan as the original Peoples of this territory within which the Cowichan Watershed is included, continue the right and responsibility to make informed decisions to manage and organize based on our history and continued connections. As told through time by our ancestors; the lands, waters, seas, minerals, air and all elements interconnected within the territories provided for and can provide a good sustainable life for Cowichan Peoples. Cowichan has never given away this right and continues to govern and make decisions to support the well-being and sustainability of our Peoples and territories.

¹ United Nations Declaration on the Rights of Indigenous People: https://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf

² Declaration on the Rights of Indigenous Peoples Act: <https://www2.gov.bc.ca/gov/content/governments/indigenous-people/new-relationship/united-nations-declaration-on-the-rights-of-indigenous-peoples>

³ The Five Calls to Action: https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/indigenous-people/aboriginal-peoples-documents/calls_to_action_english2.pdf

1.1 LEGISLATIVE AUTHORITY

The legislative authority for the Municipality to adopt an Official Community Plan (OCP) comes from the *Local Government Act*.

Part 14, Divisions 3 and 4 outlines the required content of an Official Community Plan and describes the procedures a municipality must follow in order to adopt a OCP. This OCP has been prepared in compliance with the legislation.

This OCP applies to all lands within the boundaries and jurisdiction of the Municipality of North Cowichan.

The OCP also suggests how the Municipality will interact with others – including neighbouring jurisdictions and senior levels of government – to address issues within the community that are not directly land-based.



Figure 1.1: Early sunrise on Quamichan Lake, Earth Day 2021

1.2 HISTORY AND CONTEXT

MUNICIPAL CONTEXT

Established in 1873 and the oldest District Municipality in British Columbia, North Cowichan spans 195 square kilometers, with 40 kilometers of ocean front on the east side of Vancouver Island. We are a member municipality of the Cowichan Valley Regional District (CVRD) and bordered by the Salish Sea on the east, CVRD electoral areas D (Cowichan Bay) and E (Cowichan Station, Glenora, Sahtlam) to the southeast and southwest, area F (Saltair) to the north, and Quw'utsun Tribes IR1 and the City of Duncan to the south.

The District of North Cowichan employs approximately 450 staff (including around 150 paid on-call Fire Fighters) across multiple worksites including the Cowichan Aquatic Centre, Fuller Lake Arena, Safer Community Office, RCMP Detachment, four fire halls, the Municipal Hall and the Operations and Public Works Yard. Our staff deliver a wide range of diverse programs and services for our citizens daily.

We are a community of communities, including Crofton, Chemainus, Maple Bay, Quamichan, Bell McKinnon, Berkey's Corner, and South End Centre/ University Village. Each unique area has its own history and values, as well as natural and built environments that define its character. Our OCP recognizes and addresses specific needs at the neighbourhood or community level to celebrate that character. In some areas, particularly where significant new development is planned, a Local Area Plan is appropriate to provide a finer-grained level of policy direction.



Figure 1.2: View from Mt. Tzouhalem

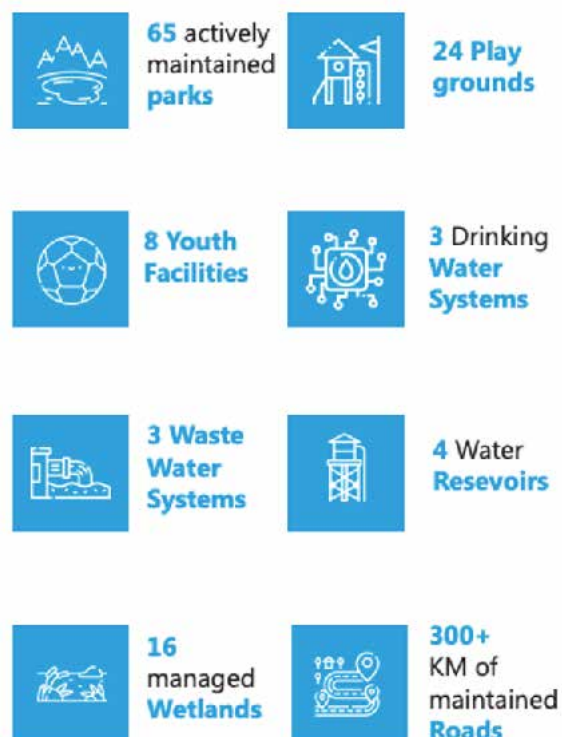


Figure 1.3: North Cowichan in 8 Numbers

REGIONAL CONTEXT

The CVRD has four member municipalities (North Cowichan, Lake Cowichan, Ladysmith and Duncan), nine electoral areas, and administers and levies taxes for local services and regional initiatives. The Quw'utsun, Malahat, Ts'uubaa-asatx, Halat, Penelakut, Stz'uminus, Snuneymuxw, Lyackson, Dididaht and Pacheedaht Peoples have occupied their unceded lands for millennia, and have traditional rights to areas within the Regional District.

North Cowichan is strongly influenced by land use and other policy and decision-making in adjacent jurisdictions. This pertains to everything from agricultural and growth management policy to support for connectivity with other regions of Vancouver Island (e.g., along the rail corridor).

For the goals of North Cowichan to be fully realized, we need to work with other jurisdictions to ensure a compatible, regional approach to address issues.

This is particularly true for the management of common services, and issues that are not easily contained within jurisdictional boundaries such as transportation, land use planning, and air quality.

POPULATION

In 2021, North Cowichan had a total population of 31,990 (Census Canada, 2021). The population has increased almost 50% since 1991 when it had a population of 21,360, and by 11% since 2011. North Cowichan is projected to reach a population of over 38,612 by 2050, which represents a population increase of 30% over the same 30-year time-frame. However, significant new residential development such as that envisioned within the Bell McKinnon Local Area Plan (see Chapter 3 and Appendix 2) could shift this number significantly.

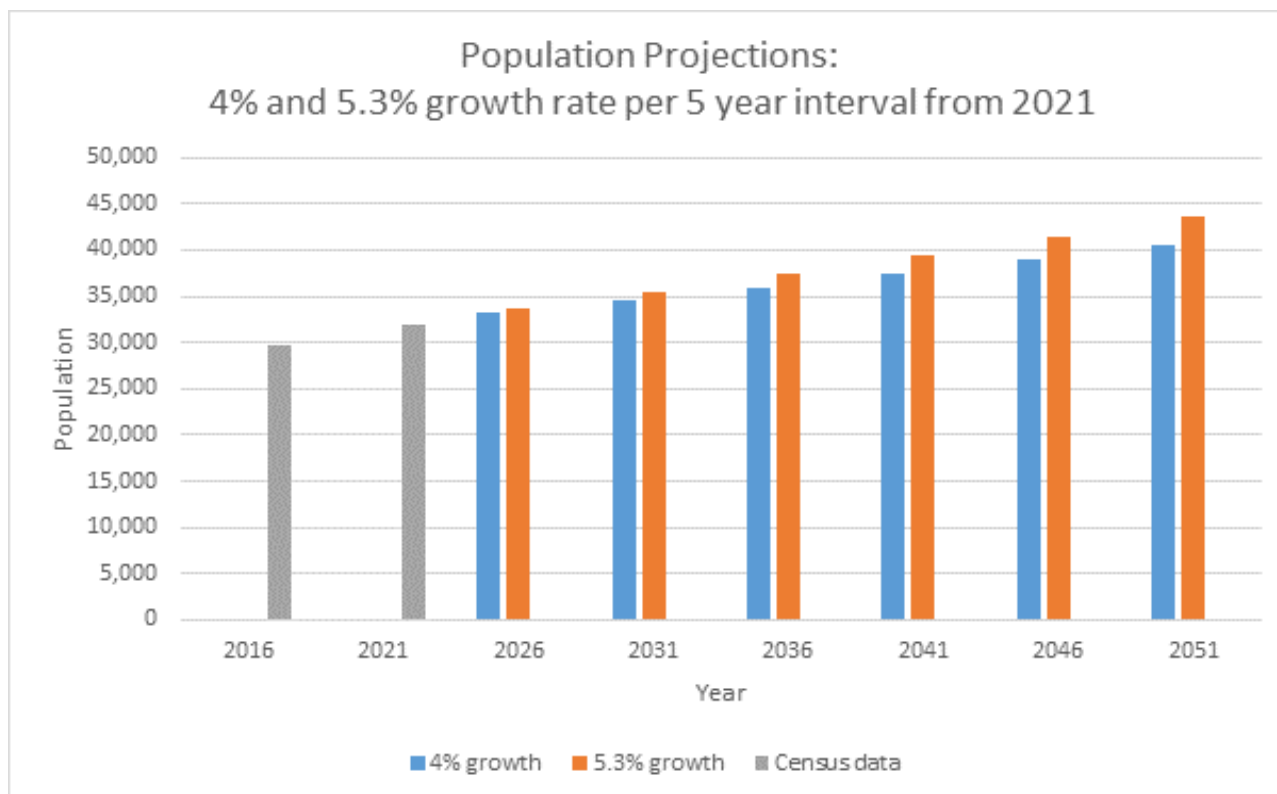


Figure 1.4: Past and Projected Population of North Cowichan

NORTH COWICHAN'S POPULATION

North Cowichan has a higher median age than the provincial average, and which is steadily increasing. As of the 2016 Census, 25% of the population was over 65. Figure 1.5 projects the change by age group from 2017 to 2050.

By 2050 the 85+ age group is expected to increase by 230% as show on the graph, while

all other age groups are projected to increase by less than 50%. This shift in demographics presents challenges and opportunities alike. The Municipality needs to work to meet the service, infrastructure, and land use needs of a changing climate, and an aging population while attracting and retaining young people that contribute to a well-rounded community.

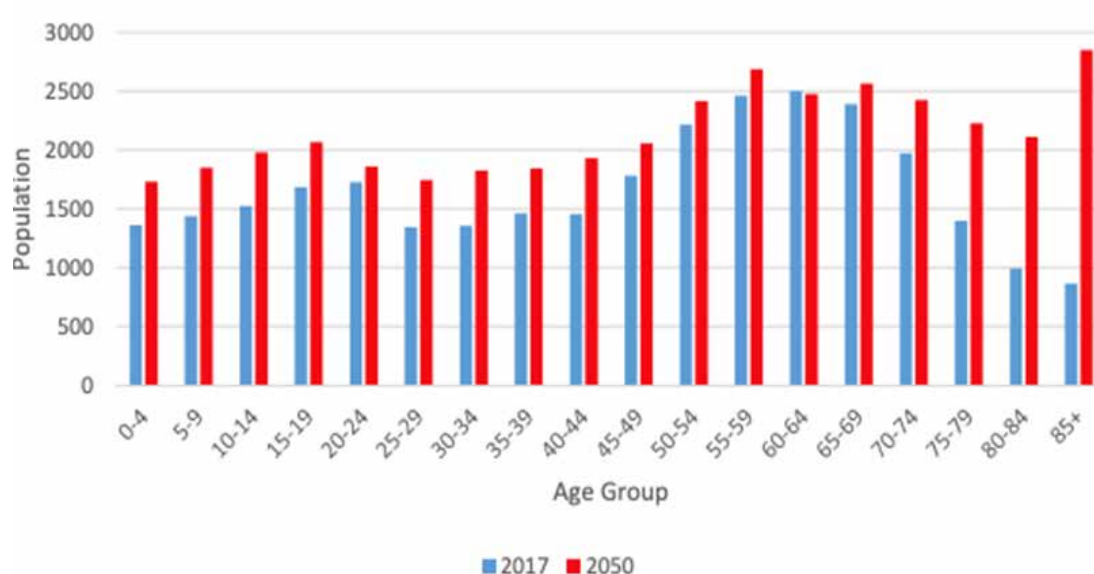


Figure 1.5: Projected population change, by age group to 2050

Issues and trends identified through this update that the OCP attempts to address includes:

- Climate change which will bring more extreme weather and hotter drier summers creating flooding, forest fire risk and water shortages.
- Poor water quality in Quamichan and Somenos Lake and the improvement necessary to protect biodiversity and natural environment.
- Single-family as the dominant housing form, which means a lack of housing options, especially ground-oriented attached housing for seniors to age in place, or multi-family types for lower-income families.
- Insufficient supply of purpose-built rental housing and affordable housing in general.
- The aging population.
- Mental health supports (including substance use disorders) necessary to support the visible homeless population mainly in the South End Centre
- Transition from a resource-based economy and the loss of young families from the area.

1.3 PLAN OVERVIEW

THREE MAIN PURPOSES

This OCP serves three main purposes:

1. Set out the community vision and values that will guide decision-makers.
2. Clarify the primary goals and objectives, with the supporting policies that help the Municipality meet its goals.
3. Inform other governments, community partners, and potential newcomers of our planned direction and identify opportunities for mutual cooperation to help us meet certain goals.

This OCP comprehensively addresses a complex mix of issues, yet remains sufficiently flexible to enable the Municipality to adapt to emergent issues. The plan belongs to all residents of the Municipality, and all are collectively responsible for making it work, meaning continued engagement and participation is essential. New and informed perspectives and ongoing assessment of progress can ensure the work we undertake together upholds the vision we share for our community.

HOW THE PLAN IS ORGANIZED

The OCP has eleven chapters with three appendices that include:

- Chapter 1: introduces the plan and includes background and context.
- Chapter 2: identifies the vision, goals, principles, and frameworks.
- Chapters 3 to 9: lay out six key planning goals and summarize the context, opportunities, and challenges we face pursuing them, including the objectives and policies we will follow to achieve them.
- Chapter 10: sets out the Municipality's Development Permit Areas.
- Chapter 11: contains Development Approval Information and Temporary Use Permits
- Appendix 1: Maps
- Appendix 2: Local Area Plans
- Appendix 3: Comprehensive Development Plans.

Ecological and Climate Action, the seventh key planning goal and related principle, prioritizes climate change and ecological overshoot as an overarching framework in each of the chapters, along with a principle of social justice and equity.

The next section explains how the principles, frameworks, goals, objectives, and policies are organized within the document.

PRINCIPLES

Nine guiding principles underpin the plan. Reflecting the shared values of the community, these principles help assure that the decisions we make and actions we take are true to those values. They reflect what the community values, and they shape how we plan to achieve our goals. These principles are critical in guiding all policy development, programs and actions pursued under the plan.

FRAMEWORKS

Two overarching frameworks, Ecological & Climate Action, and Social Justice & Equity, based on the Plan's principles, provide guidance in each chapter ensuring these two important concepts are integrated through the plan. Readers will find icons representing these concepts to highlight how the two frameworks are being considered.

OCP POLICIES FALL UNDER THREE HEADINGS

"The Municipality will strive to"

These are actions that the Municipality recognizes would work to achieve the OCP's goals. It will be for future Councils to decide which elements of the plan to prioritize during their terms.

The *Local Government Act* makes it clear that a municipality is not specifically authorized or committed to proceed with any projects or policy identified in the OCP, as long as it does not enact bylaws or carry out works that would be contradictory to the OCP.

"Where appropriate the Municipality will ask developers and landowners to"

These policies are directed towards those owning and developing land in our District. Typically a municipality works with the development community through a combination of regulatory requirements, negotiated outcomes and voluntary incentives. Policies under this heading may "require" something as a bylaw or procedural matter, or may "encourage" or "consider" if the issues are more subjective or discretionary. The Municipality will not necessarily ask for every item in this set of policies for every development; the policies will be judiciously applied depending on each development or site's unique circumstances.

GOALS

The seven goals are high level aspirations with set targets. Each has a corresponding chapter. Some goals have more than one component. For example, Chapter 5 (Attainable Housing) has two components: diversity of housing and affordability of housing.

OBJECTIVES

Each component of a goal has key objectives set, reflecting the outcomes the Municipality wants to achieve each goal. Progress in achieving each objective will be measured through the example indicators listed, along with other more specific metrics.

"The Municipality will work with others to"

These policies cover a range of actions where the outcomes cannot be achieved by the Municipality and development alone. These may be areas needing a partnership, another agency to take the lead (perhaps with political, administrative or financial support from the Municipality as Council may decide), or where the Municipality advocates to senior levels of government for change.

DEFINING SUCCESS

Key qualitative and quantitative indicators are listed for each objective to help the Municipality measure progress in achieving each objective over the life of the OCP. These indicators are not exhaustive, and may be further developed and evaluated by regularly measuring outcomes and results towards reaching our OCP goals.

1.4 OCP UPDATE PROCESS

This OCP update began in February 2020 shortly before the World Health Organization declared a global pandemic. The original community engagement process for in-person meetings and other forms of face to face engagement was reconsidered, since these were prohibited by Provincial Public Health Orders.

As a result, joining much of the world, we shifted to online platforms. Public engagement sessions, OCP Advisory Committee meetings, and Council meetings moved to a virtual format.

In spite of this shift, we were able to complete broad and far-reaching community engagement.

Paper versions of surveys and background information were also provided on request at the Municipal Hall to include anyone uncomfortable or unable to participate via digital means.

Consequently, throughout the process, input and feedback from the community was sought, summarized, and incorporated into reports and policy making. Each phase of engagement built upon the feedback received and shaped the plan from start to finish. Input came from:

OCP Advisory Committee

Council-appointed experienced residents from key sectors who provided advice to the OCP Project Team through all phases of the community planning process.

Community Ambassador Teams

Council-appointed residents representing various areas in the Municipality provided unique communities-specific information to OCP policies, reviewed draft OCP directions and policies for community impact and relevance.

North Cowichan Citizens

Members of the public that live or work in North Cowichan gave input at engagement sessions during the Vision and Goals, Community Character, Growth Scenarios and Final OCP document review.



Figure 1.6: Vimy Road, Looking north towards Mount Prevost

Community Stakeholder Groups

A range of business, environmental, social and neighbourhood organizations were contacted directly and invited to provide input on the draft OCP.

North Cowichan Council

The project team checked in at key milestones to seek feedback and confirm direction from Council.

Staff Technical Team

Planning, Environment, Engineering, Parks and Recreation, Mapping, and other departments have provided technical guidance and advice for the OCP update.

Other Committees of North Cowichan

- Environmental Advisory Committee

PHASES OF THE OCP UPDATE

The diagram below outlines the phases of the OCP Update.

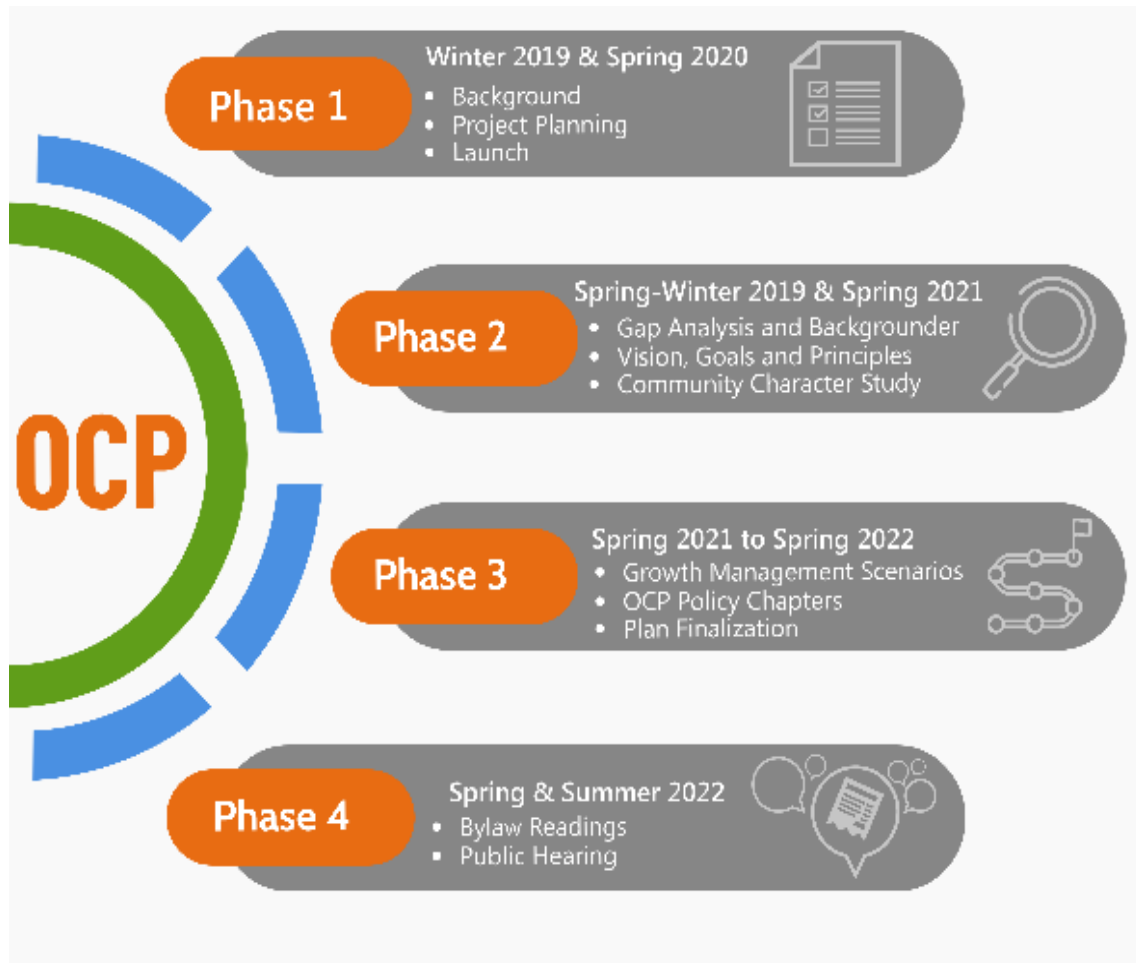


Figure 1.7: Phases of the OCP

SUMMARY OF COMMUNITY ENGAGEMENT

This section sets out how input was gathered from citizens and stakeholders to inform the ongoing development of this OCP. The 'weave diagram' illustrates how all the information is coordinated for the final documented.

1. Initiation

- Project Logo and Branding contest.
- Orientation of OCP Advisory Committee and Community Ambassadors 1-day workshop, with stakeholder mapping exercise.

2. Vision, Goals and Principles

The vision, principles and goals (Chapter 2) and priorities and direction for Chapters 3-9 are informed by:

- Vision, Goals and Priorities Survey conducted with the public with 1201 responses.
- The feedback from staff and Council (via a survey) on gaps in the 2011 OCP.
- Feedback and input from OCP Advisory Committee and Community Ambassadors.
- Feedback and input from Council.

3. Community Characters and Values

The discussion on community character (Chapter 3) is informed by:

- Two Community Dialogues with over 60 participants.
- Community Character, Mapping and Photo Opportunity with 92 responses.
- Feedback and input from Community Ambassadors.
- Feedback and input from Council.

4. Environmental Stakeholders

- Referral to five key environmental stakeholder groups to incorporate environmental management feedback.

5. Growth Scenarios

The land use plan including growth centres and land use designation (Chapter 3) were informed by:

- Public Webinar with over 56 participants.
- Survey with 911 responses.
- Feedback and input from the OCP Advisory Committee.
- Feedback and input from Council.

6. Final OCP Engagement

- Webinar and Draft Review Engagements.
- Inter-governmental referrals to neighbouring and senior government agencies, local First Nations, School District 79, and the Agricultural Land Commission.
- Bylaw Reading and a Public Hearing.

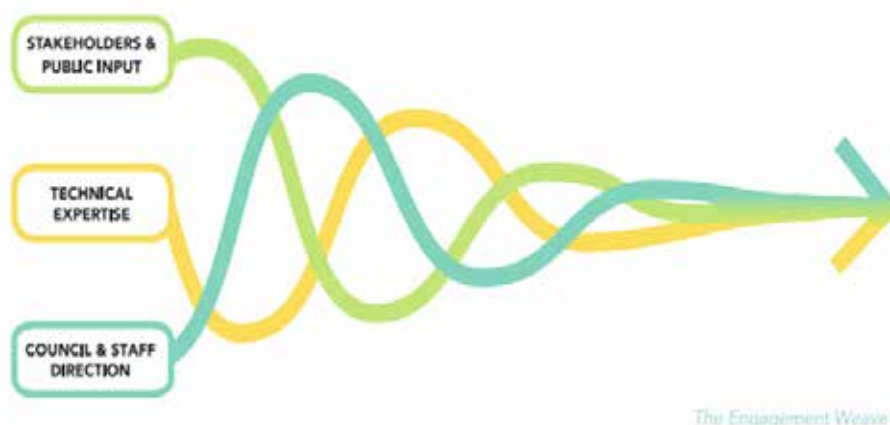


Figure 1.8: The MODUS Engagement Weave

2

VISION, GOALS, PRINCIPLES & FRAMEWORKS





This is a watershed moment in history where all of humanity has come together, whether we realize it or not. The heating planet is our commons. It holds us all. To address and reverse warming requires connection and reciprocity. It calls for moving out of our comfort zones to find a depth of courage we may have never known. It doesn't mean being right in a way that makes others wrong; it means listening intently and respectfully, stitching together the broken strands that separate us from life and each other. It doesn't mean hope or despair; it calls for action that is courageous and fearless. We have created an astonishing moment of truth. The climate crisis is not a science problem. It is a human problem. The ultimate power to change the world does not reside in technologies. It relies on reverence, respect, and compassion - for ourselves, all people, all life. This is regeneration.

- Paul Hawken, American Entrepreneur, Environmentalist & Author



Quote from Paul Hawken's Book Regeneration: Ending the Climate Crisis in One Generation.

2.1 VISION

North Cowichan's unique communities are set in spectacular natural environments defined by forests, rivers, lakes, coastline and farmland. As a steward and leader of environmental and social well-being, we will prioritize the conservation of our natural areas, provide supports for a thriving local economy and foster resilient, welcoming and inclusive communities. Our decisions and relationships will be collaborative, transparent, and demonstrate resilience in the face of future challenges and opportunities.



*Figure 2.1: Artistic rendering of North Cowichan based on vision workshops.
Credit: Athulya Pulimood.*

2.2 PRINCIPLES

REGENERATION AND INTERDEPENDENCE



Building on the concept of sustainability, regeneration is a process that restores, renews and revitalizes the environment, economy and our society. It uses a participatory, iterative approach to create resilient and equitable communities that revitalize human and natural resources, the planet, and society as a whole. Its goal is to develop restorative systems that are dynamic and emergent and are beneficial for humans and other species. It comes from the Latin verb regenerate, meaning "to bring forth again". In the OCP context, we use it to mean "restore to a better state" whether we are talking about our community, social well-being, economy, farmland or the environment.

Regeneration is a fundamental principle to be applied when assessing whether or not a particular course of action is appropriate. It acknowledges that we have inherited the Earth (and this place on it) from our ancestors and must protect it for future generations.

The OCP considers the interdependence of ecological systems, human communities and the natural and built environments. In making land use and other decisions we must consider our goals to conserve and regenerate the natural environment, work to reduce any negative impacts, and enhance the positive effects of urban environments on their surroundings.

HEALTHY AND SAFE COMMUNITY



A healthy, inclusive, safe and resilient community is one where access to community social services, attainable housing, parks, trails and open space, clean air and water, locally grown food promotes positive interaction and healthy (physical and mental) outcomes amongst all its citizens.

ECONOMIC OPPORTUNITY



Economic opportunity means ensuring that a positive setting is in place to foster great talent, promote local, sustainable jobs and businesses that lead to the prosperity of all of our community members, reducing social and economic inequality.

COMMUNITY ENGAGEMENT



Council, staff and citizens communicate with each other in an open and transparent way to ensure that decision-making aligns with the OCP, other plans, policies and bylaws. We actively seek input from quieter community voices so that input is representative of all community members.



RECONCILIATION AND RELATIONSHIP BUILDING

Strengthening cooperation and mutual support by working collaboratively with First Nations towards respective community goals and objectives is vital to fostering more resilient and connected communities. This important work involves a collective journey towards Reconciliation, as well as revisiting and creating new government-to-government protocols and processes based on meaningful consultation respecting matters of mutual interest.

We will continue collaboration with local First Nations and senior governments to implement the OCP's vision, goals and objectives. As a member of the CVRD, North Cowichan is committed to the Regional Collaboration Framework- 2050.



CHANGE, ADAPTATION AND RESILIENCE

A resilient community is able to respond and adapt to emerging issues in a nimble and unified way. It recognizes the accelerating pace of change, the multiple and shifting challenges we face as a community, including health crises, mental health and substance use disorders, housing and food, affordability, and numerous climate change-related impacts. Through planning and action, we will strive for resilient built and natural environments and ensure iterative and adaptive processes that can better respond to change while supporting citizens during challenging times.



CLIMATE ACTION

This OCP ensures all municipal decisions are made through the lens of the climate emergency and ecological overshoot.



RESPONSIBLE GOVERNANCE AND ACTIVE LEADERSHIP

Continually engaging our residents, seeking open and transparent input into decision-making, while demonstrating accountability through prudent management of our shared assets is the mark of a responsible government. We embrace opportunities and address challenges proactively, recognizing the key role of local government in supporting its community. We provide responsive, efficient, transparent service that contributes value to the community.



SOCIAL JUSTICE AND EQUITY

Through this OCP, we acknowledge the challenges and disadvantages facing citizens living on the margins of society and act against chronic inequities in the system.

2.3 GOALS

1 FOCUS GROWTH AND DEVELOPMENT...

in established centres strengthening our communities while maintaining individual character. Liveable, compact, complete communities will preserve natural and rural areas and encourage climate-friendly and active ways to move around. Land development will occur in a low-impact, site adapted manner integrating natural features and ecological systems.

Target: 75% of new residential units will be in growth centres.

2 BUILD RESILIENT, SUPPORTIVE, INCLUSIVE COMMUNITIES...

that enhance health and well-being and provide opportunities in recreation, arts, culture and access to nature.

Target: Increase number of social infrastructure facilities including quality, affordable childcare, recreation centres, and increase amount of accessible public realm, and park space.

Target: Increase the number of resident trips made by active modes or transit.

3 ENCOURAGE AND ENABLE A DIVERSE MIX OF HOUSING TYPES, TENURES AND LEVELS OF AFFORDABILITY...

to accommodate the needs of the community.

Target: Increase the number of purpose-built rental units by 20%.

Target: New housing units approved and built will be a mix of less than 30% detached and more than 70% attached.

4 ENHANCE OUR NATURAL ENVIRONMENT...

by protecting and regenerating our rural countryside, forests, rivers, lakes and ocean.

Target: Increase amount of land under conservation management and active regeneration.

Target: Increase the animal and plant biodiversity in North Cowichan.

5 ENHANCE FOOD SECURITY...

in North Cowichan by encouraging local food production and protecting agricultural land.

Target: Increase the amount of food produced in North Cowichan and the amount of local food consumed by North Cowichan residents.

6 SUPPORT A THRIVING ECONOMY...

that focuses on sustainable jobs and local businesses including green technologies and innovative agriculture which leads to meaningful work and prosperity for all and responds to regional economic change.

Target: Increase the number of local, sustainable businesses and jobs.

7 PRIORITIZE CLIMATE ACTION...

by reducing energy consumption and emissions and adapting to climate change.

Target: Reduce greenhouse gas emissions by 100% and electricity use by 12% by 2050 based on 2007 levels.

2.4 FRAMEWORKS

SOCIAL AND PLANETARY BOUNDARIES

[The Doughnut of Social and Planetary Boundaries](https://doughnuteconomics.org/about-doughnut-economics)¹ model is a useful framework for this OCP. Kate Raworth, creator of the "Doughnut", explains the concept as a compass for human prosperity for the 21st century, whose goal is to meet the needs of all people within the means of the planet. It consists of two concentric rings:

- A social foundation - to ensure that no one is left falling short on life's essentials.
- An ecological ceiling - to ensure that humanity does not collectively overshoot planetary boundaries.

Between these two limits lies a doughnut-shaped space that is both ecologically safe and socially just - a space in which humanity can both survive and thrive and where a regenerative and distributive economy can flourish (see Figure 2.2).

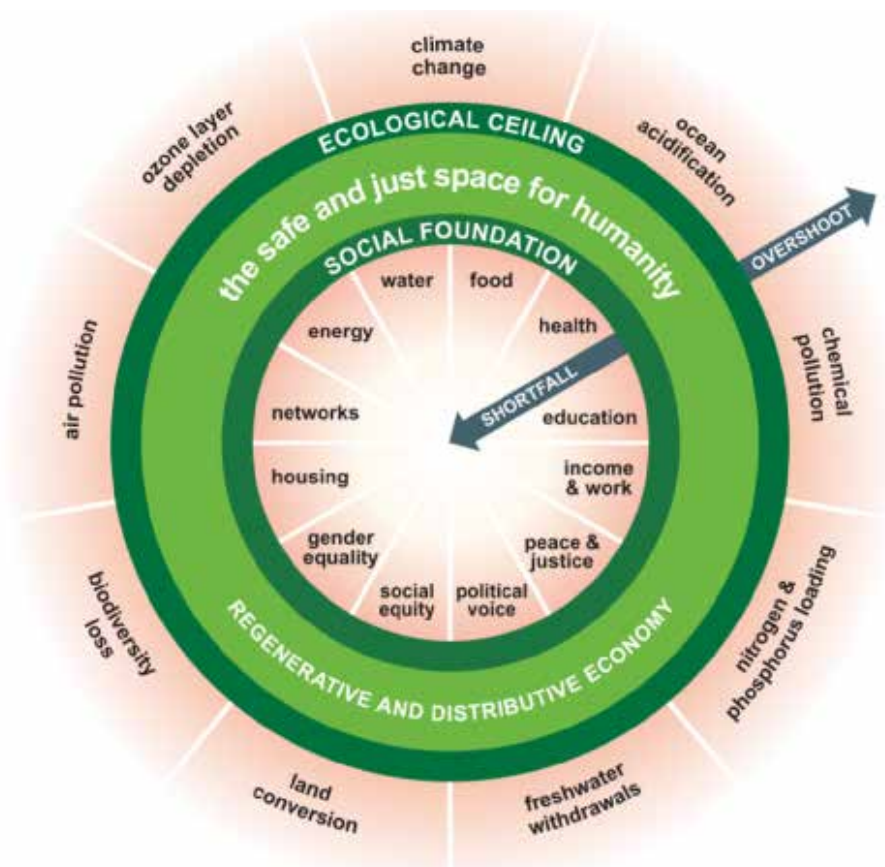


Figure 2.2: Doughnut of Social and Planetary Boundaries.

¹ Doughnut of Social and Planetary Boundaries: <https://doughnuteconomics.org/about-doughnut-economics>
Figure 2.2. Image retrieved from: <https://doughnuteconomics.org/tools-and-stories/11>

Climate change is the most well-known planetary boundary. At the time of writing this OCP, the Intergovernmental Panel on Climate Change Sixth Report was issued documenting the monumental climate crisis facing humanity.² As with the 2018 IPCC Special Report about limiting global warming to 1.5 degree Celsius, this report underscores the critical juncture facing humanity and the need for unprecedented transitions in society and the economy. In addition to climate change, some other planetary boundaries which we need to consider are chemical pollution, biodiversity loss, freshwater use, and ocean acidification among others listed in Figure 2.2. Doughnut of Social and Planetary Boundaries.

Our relationship with this collective set of boundaries is known as "ecological overshoot", since crossing any of the identified boundaries for an extended period of time represents an existential risk. "Ecological overshoot" is defined by human activity stressing a number of essential planetary processes beyond their limits.

Globally we are living as if we have more than one planet, although consumption levels and patterns are highly unevenly distributed. In fact, ecological footprint analysis shows that if everyone consumed as much as the average person in the United States and Canada, we would need over five planets supporting us.³

Although fixing these difficult global problems is well beyond the ability of any single local government, the Doughnut Model goes beyond the lens of climate change to consider a range of human impacts. It provides a useful model of how we can live happy, healthy lives within the non-negotiable physical limits of the planet and reduce the impacts of climate change and ecological overshoot.

This OCP attempts to situate North Cowichan in a planetary context. Our actions affect areas outside our municipal boundaries. Our decisions effect what occurs at a regional, national and planetary health level.

Although fixing these difficult global problems is well beyond the ability of any single local government, North Cowichan has an important role to play.

² See the full report here: <https://www.ipcc.ch/reports/>.

³ See <https://www.footprintnetwork.org/> for data details.

It is important therefore that the OCP promotes and facilitates decreases in overall consumption of energy and resources, to align with our ecological ceiling, as well as ensuring a strong social foundation is in place for residents which includes social equity, access to food, water, housing, and meaningful work opportunities.

This OCP attempts to create the framework for the 'safe and just space' where North Cowichan residents can thrive. In the local context, this means asking the questions posed in Figure 2.4.

Some actions prompted by this matrix are inward-looking (local), which might include such things as:

- Health of our waterways .
- Local biodiversity.
- Amount, type, variety, distribution and quality of park space.
- Range of products and services available locally.
- Ecological and source sustainability of our water supplies.

Other actions in this matrix are outward looking (global) policies speaking to issues such as:

- Greenhouse gas emissions.
- Chemical pollutants, including single-use plastics.
- Solid waste and recycling services.
- Ethical procurement.
- Types of industrial and commercial activity permitted (e.g. "green tech" versus manufacture of high-consumption goods).

The OCP principle of regeneration within this context means considering how we can work to restore planetary health for future generations. This kind of thinking will necessarily prompt significant changes in our values, narratives, and lifestyles if we are to act on it.

To highlight the importance of responding to climate change and creating a socially just community, two critical overarching frameworks have been applied to ensure an integrative focus throughout the OCP:

- Ecology and Climate Action
- Social Justice and Equity

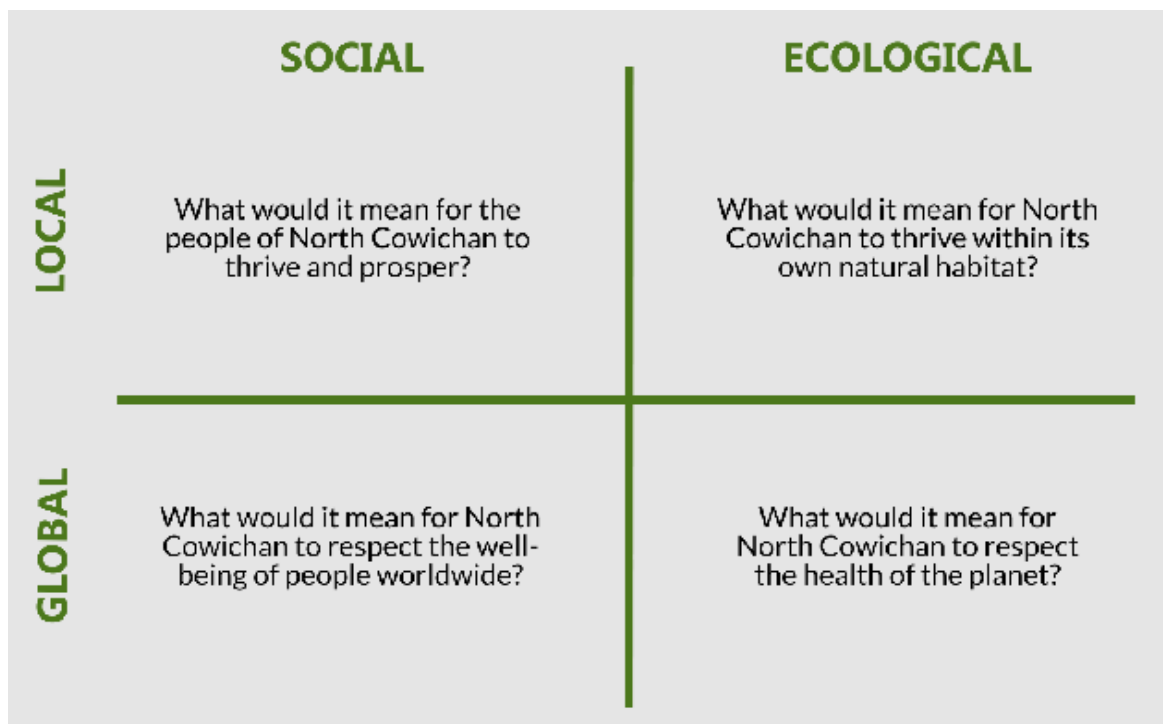


Figure 2.4: Matrix of Social & Ecological Questions at a Global and Local Scale - adapted from Donut Economics

ECOLOGICAL CLIMATE ACTION FRAMEWORK

Ecological overshoot, global warming, and climate change present significant challenges to local ecosystems. They create greater biodiversity loss, too much water when not needed and not enough when needed, temperature extremes, and serious consequences for the health and well-being of humans and animals.

We already feel the immediate effects of climate change in the Municipality in the form of:

- Wetter winters with less snow.
- Increased rain falling less frequently but in more intense storm events.
- Increases in sea level and erosion of land.
- Longer, hotter, drier summers with dangerous heat waves.

These changes in combination will increase the potential for persistent inundation and episodic flooding in the winter and drier, hotter summers with risk of water shortages. As well as creating environmental stress, these climate change effects will also increase demands on emergency services, biodiversity loss, and increase the potential for severe forest fires.

While a warmer climate may also accommodate longer growing seasons and permit the introduction of crops previously not supported by our valley, the decreasing availability of water could limit such benefits. However, changes in the length of the growing season can have both positive and negative effects on the yield and prices of particular crops. Overall, warming is expected to have negative effects on yields of major crops but crops in some individual locations may benefit.⁴

A warmer climate also disrupts the historically-established flora and fauna and can provide opportunities for the spread of pests, invasive species and pathogens.

⁴ Read more about the implications of global warming on growing crops: <https://www.epa.gov/climate-indicators/climate-change-indicators-length-growing-season>

A changing climate does not affect everyone equally. First Nations can be significantly affected due to the locations of their reserve lands. For example, those that cannot afford air conditioned homes will be more likely to suffer the consequences of extreme heat events in the future. The principles of social justice and equity are important to consider within this framework.

Transitioning our communities and regions towards a low-carbon, resilient future requires thinking about climate action from every angle, including:

- Where humans live and how we design our communities.
- How we move around (e.g. private vehicles, public transit and active transportation).
- How we preserve and restore nature and biodiversity, manage natural assets and support green infrastructure.
- How we create, support and sustain health and wellness systems that function well despite the aforementioned increased stresses.

While effective action in reducing human impacts, including (but not limited to) greenhouse gas (GHG) emissions, globally requires agreement and cooperation at the international level, efforts at the local level to mitigate and adapt to climate change offer substantial benefits, including healthier and more livable communities, now and for the future.

In other words, actions we take locally to reduce consumption and increase resilience to climate impacts are often closely aligned with improvements in social conditions. Planning for and monitoring the effects of climate change and ecological overshoot are vital if we are to institute successful adaptation and mitigation strategies.

Adaptation means taking steps to adjust to the present and future effects of climate change.

NORTH COWICHAN'S CLIMATE ACTION COMMITMENTS

North Cowichan is a participant in the provincial Climate Action Charter and a member of the Federation of Canadian Municipalities' Partners for Climate Protection Program. Under the Climate Action Charter, the Municipality has committed to:

1. Becoming carbon neutral in their corporate operations.
2. Measuring and reporting their community's greenhouse gas emissions.
3. Creating complete, compact, more energy-efficient communities.

North Cowichan's climate emergency acknowledgment (2019) and the OCP climate action principle asks us to ensure all municipal decisions are made through the lens of the climate emergency.

The Climate Action Plan (CAP) approved by Council on January, 20 2020 is a strategic approach adopted by North Cowichan Council to guide policy to combat climate change and adapt to new climate patterns. The CAP identifies six strategy areas for North Cowichan to meet and anticipate climate change effects and to reduce greenhouse gas emissions.

1. Transition to electric vehicles and less carbon-intensive transportation.
2. Corporate leadership in lowering emissions.
3. Support ecosystems and promote carbon sequestration.
4. Make buildings more energy efficient
5. Lowering waste.
6. Adapt to new climate patterns.

Mitigation means taking steps to reduce GHG emissions through a variety of options.

North Cowichan completed its original Climate Action and Energy Plan (CAEP) in 2013, which inventoried the community's existing energy use and GHG emissions. It set out 49 specific policies, actions, and opportunities to reduce community emissions from residential, business, industrial, transportation, agricultural and municipal corporate sources. One of its milestone achievements was to establish a CAEP reserve fund.

In January 2022, North Cowichan adopted a revised CAEP, having commenced an update in 2018. The update considered contemporary climate data, improved emissions estimates, and technological developments since 2013. Emissions reductions pathways include reducing the average size of new dwellings, along with fewer single detached dwellings as a proportion of new residential units. The updated CAEP provides a comprehensive range of policy options and actions aimed at reducing per capita energy consumption and overall GHG emissions.

While North Cowichan's updated emissions modelling set its community emissions target at 80% reduction on 2007 levels by 2050, the *Local Government Act* requires that municipalities set out GHG emission targets in their OCP's along with supporting policies and action.

This OCP establishes a net-zero target by 2050. To achieve these emissions reductions, the CAEP has identified strategic opportunities, which reflect the CAP:

- Transportation
- Building efficiency
- Waste and wastewater
- Land use planning
- Increasing energy efficiency / greening energy supply
- Municipal operations

The OCP intersects with these strategy areas in different ways. Land use decisions, and the type, location, quantity and quality of development will impact emissions profiles from buildings and transportation in particular. The OCP can also set the stage for climate adaptation approaches, waste and efficiency through various policies and guidelines, or by containing direction to create new plans or strategies aimed at these specific areas.

This OCP therefore contains a policy to commit to maintaining and implementing its CAEP. More specifically, the OCP includes climate action policy considerations relating to:

- Infill development, which means only allowing new development where people currently live (i.e. redevelopment in growth centres rather than in rural areas).
- Energy efficiency for new development (construction and operating).
- Increasing tree canopy in urban areas.
- Electric vehicle readiness (creating charging stations etc.).

Through its subsequent updates, the CAEP can provide further detailed policies and actions that build on this OCP mandate, along with other future policies and bylaws Council may consider, such as a tree retention bylaw, or new zoning requirements pertaining to accommodating electric vehicles.

Due to the critical and cross cutting nature of climate change, rather than creating a specific chapter, this OCP applies an ecological and climate lens to chapters three to nine. Throughout the document, readers will find the ecology and climate action symbol to denote the integration of both mitigation and adaptation considerations. This icon will help readers and users of the OCP to understand how the municipality is prioritizing the ecological and climate emergencies through the associated policies.



This symbol highlights elements in this OCP and identifies ways North Cowichan can respond to the ecological and climate emergency.

2.4.1 Defining Success | Objectives

Objective: Reduce both territorial (generated with the municipal boundaries) and imported GHG emissions and energy use, and integrate sustainability, regenerative thinking, and climate adaptation into the OCP to influence municipal decision making and municipal operations, as outlined in the Climate Action and Energy Plan.

Progress will be measured by:

- Regular monitoring of community emissions, consistent with the model of the Climate Action and Energy Plan.
- Achieving emissions targets established by the Climate Action Plan.
- Quantification of "outsourced" emissions, i.e. the CO2 emissions associated with products and services that are imported to the community, and track them over time.
- Number and type of climate change adaptation measures undertaken in municipal operations (including green infrastructure projects).

2.4.2 The Municipality will strive to:

- a. Lead the climate change action planning at the local community level and work with and collaborate with regional partners on regional climate action.
- b. Implement low-carbon municipal operations (vehicle fleet, work from home options, building efficiencies etc.).
- c. Collaborate at the regional, provincial and national level on climate action.
- d. Identify opportunities for improvements to the OCP and update the OCP accordingly, following adoption of any Climate Change Risk Management and Adaptation strategies or policies..

More climate-related policy actions can be found in the following chapters of the OCP. Additionally, the CAEP provides further actions building on the OCP direction.

SOCIAL JUSTICE AND EQUITY FRAMEWORK

Many communities in BC, as many other places, are experiencing growing inequities in terms of income gap, child poverty, housing affordability, homelessness etc. Through the update of the OCP, we are making a commitment to be deliberate in decisions to address these inequities where it is in our power to do so and to build inclusive and just communities. This framework builds on the OCP principle to acknowledge the challenges and disadvantages faced by people living on the margins of society and act, wherever possible, against chronic inequities in the system.

Social equity is defined as a collective aspiration that refers to the "just and fair inclusion in a society so that all can participate, prosper, and reach their full potential."⁴ Social justice is achieved when all people "are afforded equal rights and opportunities."⁵ Both concepts go hand in hand and are critical in effective policy solutions.

When considering equity, it is important to acknowledge a historical and present context within which certain groups are underserved, underrepresented, and disadvantaged. This includes identifying and recognizing that different groups of people, including identities such as race, gender, socioeconomic status and ability, face barriers to full participation in society. These barriers were constructed over time through cultural practices, norms and institutional factors and as policy is written and implemented. The Municipality has a continued role in working to decrease and eliminate any such barriers.

This social justice and equity framework provides guidance to each of the following chapters:

- Thoughtful Growth Management
- Resilient, Inclusive Communities
- Attainable Housing: Diverse Housing Mix & Affordability
- Regeneration & Protection of the Natural Environment
- Food Security & Local Agricultural Systems
- Local Regenerative Economy

We can use a social equity lens to reflect and act on the needs of equity-priority groups in municipal decision making, noting that the Municipality cannot alone assume responsibility for ameliorating historical wrongs. Equity-priority groups in the municipality include, but are not limited to:

- Indigenous peoples
- Women
- Racialized people
- People with disabilities
- People living in poverty
- Youth
- Seniors
- Newcomers
- Lone parents
- Lesbian, Gay, Bisexual, Transgender, Queer and/or Questioning, Intersex, Asexual, Two-Spirit (LGBTQIA2S+)

Throughout this OCP, there is a social justice and equity symbol that identifies where and how social equity is met or how the Municipality is working towards enhancing health and well-being of all residents.



This symbol highlights elements in this OCP and identifies ways North Cowichan can acknowledge the challenges and disadvantages faced by people living on the margins of society and offer ways we can act against chronic inequities in the system.

The Municipality understands that a social justice and equity lens is an iterative process that seeks to continuously assess the advancement of social equity across all policy areas. A few general considerations when addressing the various policy areas include:

- Removing barriers so all residents can fully participate in civic and community life.
- Taking measures to ensure that one group is not harmed disproportionately.
- Explicitly supporting equity priority groups.

This is not an exhaustive list, but it offers a glimpse of how equity links to the various policy themes of this OCP.

⁴ American Planning Association. (2019). Planning for equity: Policy guide. Retrieved from <https://planh.ca/sites/default/files/tools-resources/planning-for-equity-policy-guide.pdf>

⁵ Global Affairs Canada. (2017). Statement on World Day of social Justice. Retrieved from https://www.canada.ca/en/global-affairs/news/2017/02/statement_on_worlddayofsocialjustice.html

2.4.3 Defining Success | Objectives

Objective: Embed the principles of social justice and equity into the OCP to influence municipal decision-making.

Progress will be measured by:

- Representation of equity-priority members (i.e. youth, people with disabilities, immigrants facing hardship, refugees etc.) participating in municipal engagement processes.
- Corporate actions that address social equity, such as bylaws, strategies, studies or plans that explicitly represent views of equity-priority groups, and address their needs.
- Number of Cowichan residents living below the poverty line.
- Representativeness of the community's demographic cross-section on elected and appointed bodies.

2.4.4 The Municipality will strive to:

- a. Create a Health and Social Well-Being Strategy that will integrate the social justice and equity lens into all municipal initiatives, plans and projects (See Chapter 4).

Related policy actions can be found in the following chapters of the OCP.

KEY CONCEPTS

The OCP includes a Social Equity Lens. We have aligned some of the key concepts relating to social equity, diversity, and inclusion with the Regional Plan. These definitions and concepts may evolve over time.

- **Assumptions:** Something we presuppose or take for granted without questioning. We accept these beliefs to be true and use them to interpret the world around us.
- **Accessibility:** Accessibility involves removing the barriers faced by individuals with a variety of disabilities (which can include, but is not limited to: physical, sensory, cognitive, learning and mental health) and the various barriers (including attitudinal and systemic) that impede an individual's ability to participate in social, cultural, political and economic life. Disabilities can be temporary or permanent. As we age, our abilities change and therefore an accessible society is one designed to include everybody.
- **Equity:** Refers to both the fair and just distribution of benefits and burdens to all affected parties and communities (distributional equity) along with the fair and inclusive access to decision-making processes that impact community outcomes (process equity). In practice, taking an equitable approach means understanding and deliberately addressing current and historic underrepresentation and disadvantages.
- **Inclusion:** Acknowledging and valuing people's differences so as to enrich social planning, decision-making and quality of life for everyone. In an inclusive municipality, we each have a sense of belonging and acceptance, and are recognized as valued and contributing citizens. Real inclusion takes place when those already included in the "mainstream" learn from those who are excluded and initiate change.
- **Intersectionality:** The intersection, or crossover, of our many identities affects how each of us experiences the region and its communities. These intersections occur within a context of connected systems and structures of power (e.g., laws, policies, senior governments, other political and economic unions, religious institutions, media).
- **Privilege:** The experience of freedoms, rights, benefits, advantages, access and/or opportunities afforded to members of a dominant group in a society or in a given context.
- **Systemic Barriers:** Obstacles that exclude groups or communities of people from full participation in, and the benefits of, social, economic and political life. They may be hidden or unintentional, but are built into the way society operates. Existing policies, practices and procedures, as well as assumptions and stereotypes may reinforce them.

3

THOUGHTFUL GROWTH MANAGEMENT





It is not just the threat of climate change or the depletion of energy resources that will dramatically redirect our patterns of settlement. The lines of pressures are converging from many directions: limits of environmentally rich land and clean water, shifts in family size and the workforce are changing our social structure, issues of environmental and personal health are mounting, costs of capital and time, and, not least, a new search for identity, community and sense of place is motivating many people's lives. It is my thesis that a future that responds to all these pressures will also best address the climate crisis.

*- Peter Calthorpe, American Architect,
Urban Designer and Planner*



3.0 INTRODUCTION AND CONTEXT

GROWTH PROJECTIONS

When we use the term 'growth', we are referring to a combination of increased population and increased development (residential and employment-related). As with most BC communities, North Cowichan is not experiencing natural population increase (more births than deaths). However, many communities in BC, including North Cowichan, are experiencing population growth that results from immigration to Canada and migration from other Canadian communities/regions. The growth in population brings increased demand for housing, services and employment. Increased demand for housing also arises from a change in household size and desire for recreational properties.

Population, Jobs, and Households

The Cowichan Valley Regional District commissioned a report by Rennie Intelligence to forecast anticipated long-term population and employment growth in the Region to 2050. (Long Range Projections of Population, Housing and Employment in the Cowichan Valley Regional District June 12, 2019).¹

According to the baseline projection in the report, North Cowichan might expect its population to increase to 38,612 by 2050, an increase of 29% from the 2017 population, or 4% per five-year interval. This is shown in Figure 3.1 below in blue. However, 2021 census data measured a 7.7% population increase between 2016 and 2021; significantly exceeding the incremental prediction from the 2017 report. Based on the 2011 – 2021 time period, the historical trajectory is a 5.3% increase per five year interval. This trajectory, based on more recent data, is shown in Figure 3.1 below in orange, and results in nearly 12,000 new residents between 2021 and 2051, compared to approximately 8,500 under the 4% growth scenario.

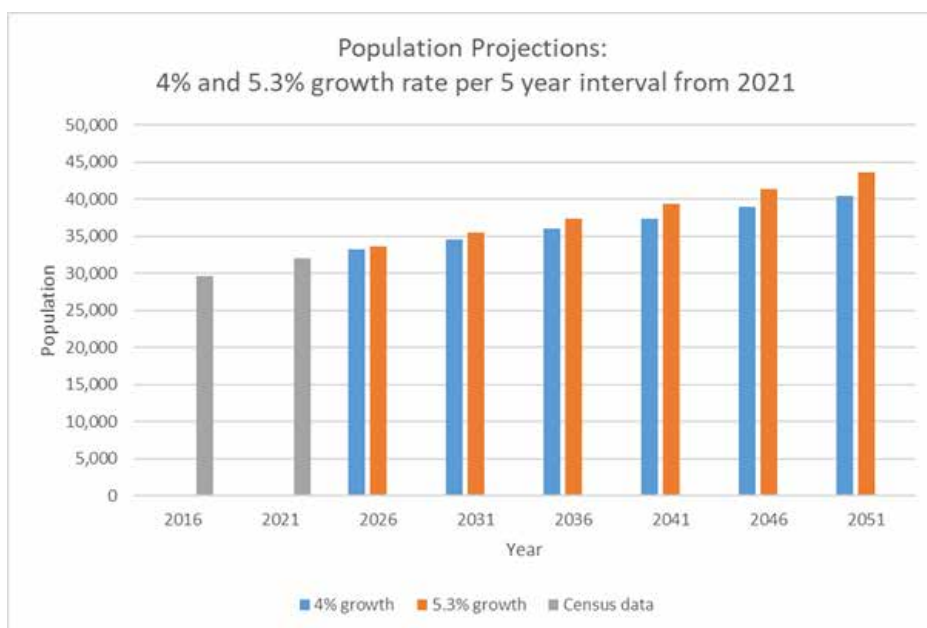


Figure 3.1: Projected Population of North Cowichan, Baseline Scenario (Census, 2021)

¹ See Long Range Projections of Population, Housing and Employment in the Cowichan Valley Regional District (June 12, 2019) here: <https://www.cvrld.ca/DocumentCenter/View/94223/Long-Range-Projections-of-Population-Housing-and-Employment>

HOUSING NEEDS

Housing units are projected to increase from 12,820 (2017) to 16,519 in 2050 (an increase of 3,699 or 29%). Housing needs were projected and broken down by ground-oriented and apartment style. Figure 3.3 shows the anticipated housing needs up to 2050. It indicates there will be a significantly higher demand for ground oriented units, than apartment units. However, the rate of increase for apartments will be higher than those for ground-oriented units; a 27% increase for ground-oriented and a 40% increase for apartment.

The 2021 census recorded 13,741 dwellings in North Cowichan, a 7.3% increase on the 2017 figure, roughly consistent with the 6.9% population increase over the same period.

Given the intensive and sustained pressure on the housing market (local, regional and national) in recent years, housing needs may significantly exceed these projections.



Figure 3.2: High density housing.

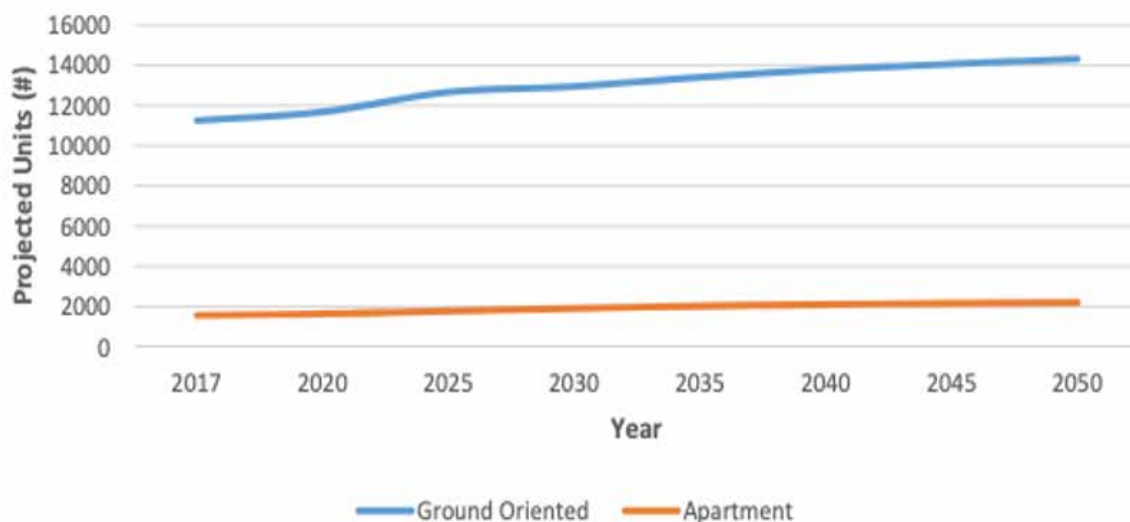


Figure 3.3: Projected Housing Needs.

Jobs are expected to increase from 11,310 to 14,542 (an increase of 3,232 or 29%). Figure 3.4 below shows labor numbers by occupation for 2050 as well as the % difference from 2017. The most significant difference is that the education, health and information sector is expected to increase its percentage of total jobs by 5%.

These projections are based on a number of variables that could change over time. It is worth noting that policies in the OCP can accommodate different rates of growth and that the OCP will be updated and adjusted over the planning period to reflect changing circumstances.

Housing Needs Assessment Report

The [2021 Housing Needs Assessment](#) completed in parallel to this OCP explored both quantitative and qualitative data to help understand the current state of housing and the types of units that will be required in the future.

With an outlook of 5 years, the housing needs report determined 1,208 new units would be required by 2025, although sustained pressure on the housing market may increase this figure.

The Needs Assessment identified a need for more one-bedroom units, subsidized units for those experiencing homelessness, purpose-built rental units and affordable home ownership options. For more information see Chapter 5: Affordable Living and Diverse Housing Mix.

As required by the *Local Government Act*, the Housing Needs Assessment will be updated every five years. North Cowichan will incorporate these updates into land use decisions.

Occupation	Total Labor	% of Total Jobs	Difference from 2017
Primary	515	3%	-1%
Transport, Warehousing, Utilities	445	3%	-
Construction	1106	8%	-
Manufacturing	1729	12%	-2%
Wholesale & Retail Trade	2355	16%	-
Finance, Real Estate, Other Business	1589	11%	+1%
Education, Health, Information	4895	34%	+5%
Accommodation & Food Services	1024	7%	-
Other Food Services	596	4%	-1%
Public Administration	287	2%	-

Figure 3.4: Project occupation numbers by 2050.

GROWTH AND DEVELOPMENT

Growth management is the practice of planning for and guiding the location, density and type of land use and development in a community.

Growth can be an engine for a prosperous community, but unplanned and unfocused development can lead to inefficiencies and sprawl which is wasteful of land. Continuous suburban development is inherently unsustainable since our land base is finite and it is essential to retain significant and connected land areas for agriculture and wildlife. However, affordability problems will result if we do not accommodate local growth to some degree. The compromise is allowing for higher density development in existing centres where people and services are already located that may go more "upwards" instead of "outwards", and allowing for a range of housing types such as suites, carriage houses or ground- entry "plexes" or row house developments and apartments. In particular, creating zoning that allows for fee-simple row housing development in certain areas could provide lower-cost housing purchase options, without bringing significant or harmful character and traffic impacts into those areas.

Despite the focus on higher density and compact development, there is still an environmental cost to developing and constructing new buildings. Construction materials contain embodied or upfront carbon which refers to carbon emissions released before the building is used (i.e. energy consumption in the mining, extraction and manufacturing processes and transportation of the materials). Addressing upfront carbon is a critical and urgent focus and where possible the focus should be on renovating or retrofitting existing buildings and on low-carbon, local low-impact construction materials for new builds and energy efficient buildings.

Focusing development in areas that can absorb growth efficiently has the added benefit of concentrating service delivery and taking maximum advantage of the servicing and facilities we have in place. Development will take place in existing centres and in certain built forms to meet social well-being and environmental goals. Growth, development and land-use decisions should be socially just, and incorporate environmentally regenerative features at every opportunity

According to the World Green Building Council, buildings are currently responsible for 39% of global energy related carbon emissions: 28% from operational emissions, from energy needed to heat, cool and power them, and the remaining 11% from materials, construction and demolition.

('Bringing Embodied Carbon Upfront' report by the World Green Building Council)

This OCP confirms the assertion of the 2011 OCP that a departure from suburban single-family subdivisions to more compact, higher density growth in existing centres close to shops, services and infrastructure is needed. This "focused growth" approach means that more land can be protected and regenerated to provide for food production and protection of natural areas that foster biodiversity and ecological health.

Focused growth provides for a range of tenures (co-ops, co-housing, strata, fee-simples and rentals) in addition to a variety of forms to accommodate all ages and abilities (e.g. young families seeking private yard space, seniors who wish to 'age in place', young people in university or embarking on their career and people needing accessible housing units). See Chapter 5 which includes information on housing.



Meets social justice and equity principle by providing a variety of housing forms close to services to offer more affordable options than single family homes.

3.1 ASSIGNMENT OF GROWTH

This OCP guides growth away from historical patterns of development in North Cowichan. While the communities of Chemainus, Crofton and the University Village/ South End were identified as growth centres in the 2011 OCP, development has not necessarily taken place in those locations. Some significant growth has taken place in other areas still lying within the Urban Containment Boundary (UCB) but outside of these preferred centres. Development in North Cowichan over the past 60 years has largely been car-oriented, suburban/rural residential, and with a high degree of separation between residential uses and shops, services and employment lands, resulting in poor walkability and high servicing and maintenance costs to taxpayers.

Through thoughtful growth management, we can limit environmental impacts, build social connections, build resilience to the climate emergency, and provide a diverse and affordable range of housing options.

Key elements of the new land use plan include:

- A revised UCB which concentrates growth and development in areas with adequate infrastructure capacity for development providing a mix of housing types that meet the needs of residents.
- A policy context for residential and rural residential neighbourhoods (including Maple Bay village) which accommodates site-specific zoning proposals for small commercial or service uses that contribute to liveability and walkability.
- A mix of commercial, employment, industrial lands that contribute to the economic well-being of citizens.
- Parks, open space, civic, agricultural and natural areas that promote social and environmental well-being.
- Well-connected networks that promote active transportation and access to transit.



Concentrating growth can reduce per capita carbon emissions since residents can walk to access services and can promote equity for those who can't afford a car, don't want a car, or aren't able to drive due to health issues.

URBAN CONTAINMENT BOUNDARY

North Cowichan's UCB sets a boundary between developed or serviced urban areas and undeveloped or non-serviced rural and natural areas. Many areas outside of the UCB have access to municipal water service, but further development and fragmentation is either discouraged or restricted. (See also Chapter 9: Infrastructure).

By focusing growth where density can be increased, the UCB assists North Cowichan to guide the community towards actions such as:

- Village core growth and revitalization.
- Creation of mixed-use walkable, complete communities with active transportation and transit options.
- Protection of environment and agricultural areas.
- Improved management and efficiency of municipal infrastructure assets and services such as water, sewer and recycling pickup.
- Protection of areas for First Nations to engage in cultural practices including hunting, fishing, cultural and spiritual uses, and gathering traditional foods and medicines where appropriate.

Urban containment boundaries are lines drawn on a planning map around developable areas showing where urban and suburban lands end and rural and natural lands begin. Generally the areas within the UCB are connected to municipal water and sewer systems and areas outside use septic systems and well water.

3.1.1 Defining Success | Objectives

Focus development to the reduced urban containment boundary to protect rural and natural areas from expanded residential development (See Map 2 - Growth & Land Use) and prevent residential intensification that necessitates extension of road networks and increases automobile dependency.

3.1.2 The Municipality will strive to:

- a. Direct growth inside the UCB, resisting growth elsewhere.
- b. Only support significant UCB alterations as part of a comprehensive OCP review, or implementation of a secondary local area or neighbourhood planning process.
- c. Not support extension of municipal services beyond the UCB to accommodate new residential or commercial development.
- d. Not approve bylaws, works or projects that would facilitate significant densification beyond the UCB.

GROWTH CENTRES

This growth management approach focuses the majority of growth and development in designated Growth Centres lying within the urban containment boundary, taking a more restrictive approach to subdivision and development outside of these areas. These Centres have an adequate supply of serviceable residential land to meet projected housing and community service needs. They are the core areas of the Chemainus, Crofton, University Village, Bell McKinnon and Berkey's Corner communities and contain municipal services, commercial/retail activities, schools and other facilities that are the foundation of community. Key features include:

- A broad range of uses typical of a village and urban centres (e.g. shopping services, financial and business uses, government and institutional uses, clinics, leisure and recreational facilities, cultural and residential uses).
- Residential uses mainly in the form of multi-family units to make efficient use of land.
- Pedestrian-oriented and multi-modal transportation focus.

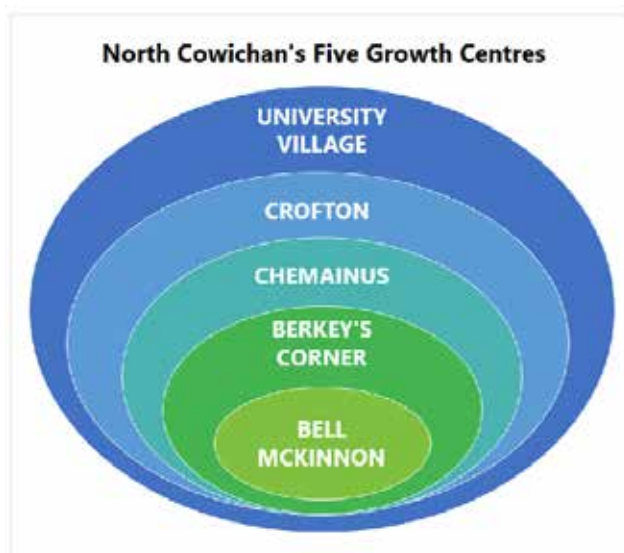


Figure 3.5: The Five Growth Centres.

The Growth Centres are:

- Chemainus
- Crofton
- University Village
- Bell McKinnon
- Berkey's Corner

The Growth Centres are defined by two significant land use designations which may also be supplemented by Local Area Plans:

- Village Core
- Village Residential

These two designations provide the right mixture of uses and the residential densities to support them in meeting the Municipality's housing needs. Other commercial and civic land use designations may also be applied to specific sites within the Growth Centres. Outside of these Centres, the UCB is more tightly-drawn, and further densification is discouraged. However, residential neighbourhoods within the UCB still offer opportunities for "gentle densification" that maintains neighbourhood character through suites, duplexes, carriage houses, and other lower-density housing typologies.

While most Growth Centres are in existing urban locations, the Bell McKinnon Growth Centre is presently undeveloped and will require substantial investments in infrastructure and community amenities. To facilitate its development, a phasing and implementation plan for development in the Bell McKinnon Growth Centre will be prepared to ensure:

- a. The urban design vision promised to the community is realized in each phase and that piecemeal or scattered growth in the plan is avoided.
- b. That growth occurs in a logical, incremental manner respectful of the social, economic, environmental and climate objectives of the District as a whole.
- c. That infrastructure costs are recovered to the greatest extent possible and any future financial burdens associated with infrastructure are minimized.

3.1.3 Defining Success | Objectives

Objective: Manage growth and designate a variety of land and water uses that strengthen our community, maintain individual character, preserve natural and rural areas and foster climate-friendly and active ways to move around.

Progress will be measured by:

- Increase in number of housing units constructed within the UCB and in Growth Centres in particular, as a percentage of total housing units built.

- i. Implement guidelines related to form and character of new buildings.
- j. Encourage integration of water and energy conservation design features, as well as opportunities for small- and micro-scale urban agriculture.
- k. Consider permitting childcare facilities within all residential and commercially zoned parcels.
- l. Require all applications for zoning amendments for increased density to include a walkability assessment.

3.1.4 The Municipality will strive to:

- a. Direct significant growth to identified growth centres inside the urban containment boundary.
- b. Require development in centres to make effective use of land by controlling lot sizes, development types and setting density ranges.
- c. Discourage all low-density auto-dependent subdivisions and make existing areas less auto-dependent by integrating small scale service uses that increase walkability.
- d. Require development within the UCB to have high standards of site-adaptive and urban design.
- e. Encourage development that creates compact communities and provides active climate-friendly ways to move around, social interactions, and a sense of community.
- f. Update the zoning bylaw to contain zones reflective of local plan designation and that align with the OCP land use designations. This may entail creation of new zones and zoning standards to address specific interests or goals that will allow development of a greater variety of residential and commercial services.
- g. Prioritize infrastructure investment and capital projects to Growth Centres where growth and development is expected.
- h. Support efforts to renovate or retrofit existing buildings using only low-carbon, local low-impact (e.g. wood versus concrete) construction materials for new builds and energy efficient buildings and consider creating a Green Building Policy.

3.1.5 Where appropriate the Municipality will ask developers and landowners to:

- a. Develop land in a low-impact, site-adapted manner, integrating natural features and ecological systems.
- b. Make the most effective use of land and provide a variety of housing unit sizes and types within development proposals.
- c. Contribute to improve quality of life in North Cowichan as part of rezoning approval for commercial or higher density residential use (e.g. community amenity contributions as may be beneficial and appropriate).
- d. Incorporate low-carbon, local low-impact construction materials and energy-efficient design into both new and retrofitted development.

3.1.6 The Municipality will work with others to:

- a. Advocate for the development of a regional growth management strategy that complements the growth management strategy of this Official Community Plan.
- b. Include perspectives of First Nations on whose traditional land development lies, by creating referral agreements.

3.2 LAND USE DESIGNATIONS

AREAS INSIDE THE UCB

Village Core Designation

This designation applies to the main gathering and exchange areas in the village centres, with pedestrian-oriented design and a high streetscape standard. These centres will have the greatest amount of walk-in retail and restaurant uses. The larger ones will include cultural uses such as theatres and galleries. Some, such as Chemainus, University Village and Crofton are regional destinations, while others will be smaller scale and provide development primarily aimed at providing a walkable alternative for local residents seeking groceries, coffee, or takeout. Where contextually appropriate or supported by a local area or secondary plans, residential uses may be encouraged above street-level commercial uses.



Figure 3.6: Mixed use development in Crofton.

3.2.1 Defining Success | Objective

This designation provides a range of ground level commercial and retail uses designed to create space for people to move, socialize and access services and amenities along the street. Pedestrians have priority, and shops, restaurants, cafés, galleries and bars all contribute towards animating the street and creating vitality. Above ground floor, offices, clinics, education, professional services and residential apartments provide options for urban living, drawing yet more people to the area, and a creating a pool of people who keep these spaces animated and safe during the evenings. Public space design provides opportunities for programming and gathering, and arts and culture both flourish.

3.2.2 The Municipality will strive to:

- a. Not permit residential uses, or service uses requiring privacy at ground floor level. Ground floor uses should provide opportunity for interaction and aesthetic enhancement of the street and provide animation through extensive fenestration, and a high standard of entrance design, vegetation, signage and lighting.
- b. Prioritize pedestrians over vehicles. Parklets and sidewalk patios may be permitted or facilitated in these areas.
- c. Incorporate a high standard of street design including street furniture, vegetation and decorative elements, and opportunities for public art, including space for transient or performance art.
- d. Consider higher density residential development that is sensitive in scale and appearance to the surrounding residential areas, and does not conflict with use and programming of public areas.
- e. Orient home-based business zoning regulations to those that can be conducted inside a residence and which preserve residential function and amenity.
- f. Consider replacing minimum parking requirements in these areas with parking and transportation demand management assessments to determine the appropriate amount of on- and off-street vehicular and bicycle parking/facilities.
- g. Create Local Area Plans (LAPs) to provide location-specific guidance and additional detail for the development of these centres. The Municipality will give particular priority to developing LAPs for Berkey's Corner and Chemainus.
- h. Discourage street-facing parking lots in new developments, and instead encourage parking to be located underground or at side or rear of buildings, with screening from adjacent streets.
- i. Require new developments in these areas to include housing and offices above commercial space.

Village Residential Designation

This designation applies to urban areas capable of accommodating significant new housing growth, as well as complementary commercial uses that would cater to local resident needs and serve to increase walkability. These uses will be intermittent and ancillary to the residential function, and may include small cafés or corner stores, shared working spaces, daycares, and neighbourhood pubs. A range of residential unit types and sizes is contemplated, but low density subdivisions will not be supported. Some areas may be suitable for rowhouse/townhouse complexes, including those in fee-simple tenure.

3.2.3 Defining Success | Objective

This designation is where the bulk of North Cowichan's new multifamily housing will be located. Apartments or condos coexist with townhouses and commercial uses are dotted throughout, making the areas livable and walkable. A high standard of architectural and street design creates a pleasant and welcoming environment, with social gathering in small parks and plazas.

3.2.4 The Municipality will strive to:

- a. Allow building heights typically between 3-5 stories, although there may be support for development variance applications to allow additional stories in some locations where larger buildings already exist and 6 or more floors would not appear incongruous.
- b. Allow ground floor residential units in this designation.
- c. Not allow low density subdivision and low density forms of housing.
- d. Allow neighbourhood commercial uses such as small retail units, corner stores, cafes, daycares and local pubs, which may also be appropriate to integrate sensitively with residential units.
- e. Implement home-based business zoning regulations and business licensing regulations in these areas in order to preserve residential function and amenity.
- f. Orient street and site design to pedestrian-use, cycling and low-speed vehicle travel.



Figure 3.7: Example of housing type in a village residential designation.

- g. Consider replacing minimum parking requirements in these areas with parking and transportation demand management to determine the appropriate amount of on-and off-street vehicular and bicycle parking/facilities.
- h. Local Area Plans (LAPs) may be created or maintained to provide location-specific guidance and additional detail for development within this designation. The Municipality will give particular priority to developing LAPs for Berkey's Corner and Chemainus.

3.2.5 Where appropriate the Municipality will ask developers and landowners to:

- a. Seek to realize a site's full housing potential to conform with OCP policies and local area or secondary plans.
- b. Incorporate high quality site-adaptive and urban design into new developments that enhance natural ecosystems, human health and wellness.

Residential Neighbourhood Designation

Most of the areas inside the UCB not specifically designated as Village Core or Village Residential are considered neighbourhoods. This designation includes most of the established residential neighbourhoods surrounding local schools, parks, natural areas and community halls. Many of these areas have a good degree of tree canopy cover and mature landscaping.

Small neighbourhood commercial centres will be allowed such as the commercial nodes in 'The Properties' in Quamichan and Maple Bay which will provide opportunity for corner stores, cafes or pubs.



Figure 3.8: Example of housing type in a neighbourhood residential designation.

3.2.6 Defining Success | Objective

This designation is where a range of lower-density residential types create housing options for people with different needs, with sensitive infill development taking place alongside the preservation of single family homes. There are opportunities for "gentle densification" where the impacts would not be significant in terms of parking, noise/disturbance and character, but ample space for trees and landscaping is retained, beneficial to urban wildlife such as birds and pollinators.

3.2.7 The Municipality will strive to:

- a. Encourage development to be predominantly lower-density residential retaining trees and landscaping, although there may be opportunities for zoning to designate individual convenience stores and low-impact service commercial and cultural or public uses that help make neighbourhoods livable and walkable.
- b. Permit secondary suites in single family homes where some of the larger lots may be permitted to have secondary dwellings such as coach houses or garden studios.
- c. Encourage or require retention of tree canopy cover, mature trees and existing topography.
- d. Recognize that vehicle ownership will generally be high in these areas, and design streets that will utilize approaches that reduce speed and prioritize other modes of transport to make walking/rolling to school easy and safe.
- e. Permit on street parking as a way of absorbing parking impacts from gentle densification.
- f. Facilitate home-based business zoning regulations to include a range of low-impact business activities within the interior of a dwelling, but also preserve residential function and amenity.
- g. Develop neighbourhood plans (or consider plans developed by resident groups) for specific areas where particular community or development goals are identified by local residents. These will not necessarily imply significant amounts of new development or housing growth, and may be focused instead on improving a neighbourhood's quality, safety or character.
- h. Consider implementing guidelines related to the form and character of some 'intensive residential areas'.
- i. Allow neighbourhood service commercial developments at a neighbourhood and local scale. Neighbourhood commercial developments are not intended to serve or draw from a broad regional market and should be within safe and convenient walking and cycling distance to nearby residential areas.

Civic Designation

This designation applies mostly to sites with institutional uses such as schools, public works, government services, emergency services and hospitals, parks and open spaces inside and outside the UCB.

3.2.8 Defining Success | Objective

Civic sites are located all around our communities, with schools situated in walking distances of residential areas. Other facilities such as community halls and the Cowichan Exhibition Grounds provide community-building opportunities and may be operated by public or private bodies. Parks and open space provide space for residents to enjoy the outdoors.

3.2.9 The Municipality will strive to:

- a. Recognize uses that serve or benefit a wide range of the community.
- b. Generally, not support redevelopment of civic sites to convert land or buildings into private housing or businesses, unless established through a local area plan or secondary plan that rationalizes the change.
- c. Carry out community consultation and/or site planning processes before considering zoning changes.
- d. Consider urban park development needs alongside development proposals, including enhanced linkages to, and between, parks.



Figure 3.9: Playground.



Figure 3.10: Cowichan Community Centre.



Figure 3.11: Accessible pathway for cycling.

Commercial Designation

This designation applies to a number of areas both inside and outside of the Urban Containment Boundary. They differ from Village Core commercial uses in scale and type of retail uses, need for outdoor display space, and associated parking requirements.

3.2.10 Defining Success | Objective

A network of commercial centres provides larger sites for the location of stores such as hardware and appliance retailers, garden centres or auto dealerships. By providing opportunities for these regional-scale goods retailers, there is less dependency on travel to larger centres such as Nanaimo or Victoria. However, this form of development is highly auto-oriented, and expansion of these areas or the creation of new ones should be proven necessary and limited.

3.2.11 The Municipality will strive to:

- a. Require retail as the primary use, but other complementary commercial, leisure or service uses may also be permitted in this designation.
- b. Generally not support residential development in these areas.
- c. Discourage expansion of these areas if it facilitates auto-oriented uses or development.
- d. Expect a high standard of landscaping, including tree planting and sensitive lighting, to mitigate some of the impacts from large parking areas.
- e. Require new commercial buildings to follow form and character guidelines.



Figure 3.12: Commercial space in Chemainus.



Figure 3.13: Commercial space with day to day amenities.



Figure 3.14: Gibby's Café.

Future Study Area Designation

This designation applies to sites where the optimum future land use is unclear. These may be brownfield sites or sites where development should not proceed until local consultation and possibly local area planning has been undertaken. Some may contain housing potential in line with the growth strategy, but may also suffer from land contamination or other environmental issues. These sites can also contain opportunities for community functions.

3.2.12 Defining Success | Objective

Through technical analysis and public input, sites will be considered carefully for particular uses. Generally the municipality will seek the views of local residents and stakeholders in determining the best role for these kinds of sites in overall community development and placemaking.

3.2.13 The Municipality will strive to:

- a. Consider restrictive site zoning to prevent inappropriate development, or piecemeal development that compromises a site's ability to deliver a more coherent and productive development concept.
- b. Consider initiating a variety of public consultation processes to arrive at a vision for these sites.

AREAS OUTSIDE OF THE UCB

Areas outside of the UCB will be largely protected from any further increased residential development and will continue to be rural, agricultural, natural areas with some industrial employment land designations and commercial areas, which are largely preexisting.

There are pockets of residential development outside the UCB that are neither urban nor rural. Some properties are connected to municipal sewer, and many are municipally serviced with water. This designation includes the village of Maple Bay along with clusters of larger residential parcels in various other locations outside of urban centres. These peaceful neighbourhoods may still provide opportunities for small scale farming, craft-based home businesses, or local and individual commercial uses that contribute to neighbourhood livability.

Very little housing growth is anticipated in these areas, although there may be some limited context-specific opportunities. Many parcels are amenable to personal and market gardening, with roadside produce and craft stalls, small-scale livestock and poultry keeping, and the potential accommodation of individual neighbourhood commercial uses, such as convenience stores, cafes, neighbourhood pubs or community halls. Subdivision and stratification are not encouraged and significant mature tree and vegetation cover is maintained throughout these areas.

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3.2.16 Defining Success | Objective

The undeveloped rural and natural character of these areas remains fundamentally intact, however in addition to farming and forestry, there are opportunities for other rural development activities that provide economic opportunity on the rural land base. These may include roadside produce stands, home-based businesses, or localized commercial and light industrial activities authorized through a temporary use permit or site-specific zoning amendment. Smaller parcels within the designation are well-suited to small scale and part-time farming. Further subdivision of parcels within the Rural designation is strongly discouraged, but opportunities that support agricultural and rural economic activity are supported, as are housing options that allow rural landowners to accommodate family and farm labour, or generate a modest income to support the upkeep of rural land.

3.2.14 Deleted by BL 4029

3.2.15 Deleted by BL 4029



Figure 3.15: Park trail.

Agriculture, Forestry & Conservation (Rural) Designation

This designation applies to Agricultural Land Reserve (ALR) parcels, Municipal Forest Reserve, private forest, conservation lands, parks and other areas of an undeveloped or agricultural nature containing mostly large parcels. Outside of wilderness areas, farming and forestry activities predominate, with limited residential use permitted. Some isolated areas may have mining or quarrying uses. Very few properties are connected to municipal sewer, although some are municipally-serviced with water.



Figure 3.16: Existing rural development activities and residences.

3.2.17 The Municipality will strive to:

- a. Update the subdivision bylaw to align with OCP goals and objectives.
- b. Permit subdivisions only in exceptional circumstances (e.g. those that reconfigure parcel boundaries to improve agricultural viability, conservation, or other objectives of the Rural designation).
- c. Maximize housing options without subdividing or urbanizing land, through zoning agricultural land reserve parcels that allow up to three permanent dwelling units per parcel, within no more than two separate buildings, and subject to servicing criteria or conditions that preserve natural features or agriculture.
- d. Allow small scale neighbourhood commercial uses such as general stores, farm restaurants, pubs, equestrian uses, agricultural support services, community halls, or small tool repair shops consistent with this designation and consistent with ALR regulation (where relevant). Zoning changes may only be permitted where rural character is maintained and the impacts on residents and the natural environment is comparable to other uses and activities permitted within the Rural designation.
- e. Utilize temporary use permits to authorize rural uses, with impacts and benefits evaluated prior to considering renewal or permanent zoning changes.
- f. Create home-based business zoning regulations and business licensing regulations specific to this designation.
- g. Encourage small scale agricultural use and the processing of local agricultural products.
- h. Prioritize retention, protection and regeneration of natural features and wildlife areas.
- i. Protect conservation areas and ecologically important habitat areas such as Somenos Marsh.
- j. Protect and support a full range of park uses, consistent with ALR regulations where relevant.
- k. Retain and protect important rural landscape and seascape views to be experienced and enjoyed from public spaces by residents and visitors.
- l. Consider campgrounds in rural areas where they are seasonal in nature and are not occupied year-round. Campgrounds are intended to serve the tourism industry.



Figure 3.17: Existing agricultural activity.

Rural Residential Designation

This designation applies to areas of lowest density residential development lying outside both the UCB and the ALR. Many of these properties were created before current land use policies that discourage residential development in rural areas. As a result, pockets of residential development exist throughout the Municipality that are neither urban nor rural. Some are connected to municipal sewer, and many to municipal water. This designation includes the village of Maple Bay along with clusters of larger residential parcels in various other locations outside of urban centres. These neighbourhoods may still provide opportunities for small scale farming, craft-based home businesses, or local and individual commercial uses that contribute to neighbourhood livability.

3.2.18 Defining Success | Objective

Very little housing growth is anticipated in these areas, although there may be some limited context-specific opportunities. Many parcels are amenable to personal and commercial gardening, with roadside produce and craft stalls, small scale livestock and poultry keeping. There may also be potential to accommodate neighbourhood commercial uses, such as convenience stores, cafes, neighbourhood pubs or community halls. Subdivision and stratification are not encouraged and significant mature tree and vegetation cover is maintained throughout these areas.

3.2.19 The Municipality will strive to:

- a. Generally not allow subdivision, although it may be permitted where the parcels created are 2 ha or larger.
- b. Only allow subdivision approval, contingent on the applicant entering into a restrictive covenant to limit building sizes, locations and/or certain uses on the parcel.
- c. Configure zoning to maximize housing potential without further subdivision to permit detached accessory dwellings where servicing connections are available, or in the alternative, adequate on-site common septic treatment and water supply can be achieved.
- d. Through the zoning bylaw, consider setting limits on the size of dwellings to prevent egregiously large houses that do little to respond to housing affordability or community development goals, and which foster high consumption lifestyles.
- e. Create home-based business zoning regulations and business licensing regulations specific to this designation that will generally only permit businesses confined to the interior of a dwelling or ancillary building, with no retail other than food or craft products produced on site.
- f. Apply edge planning and buffering principles at the interface with agricultural land and wildfire risk areas.
- g. Develop neighbourhood plans (or consider plans developed by resident groups) for specific areas where particular community or development goals are identified by local residents. These will not necessarily imply significant amounts of new development or housing growth, and may be focused instead on improving a neighbourhood's quality, safety or character.
- h. Require new dwellings or commercial buildings to incorporate rainwater storage systems.



Figure 3.18: Existing rural residence.

Industrial & Employment Designation

This designation encompasses a range of employment activities from light to heavy industry. Light industry may coexist with office, live/work or studio uses, whereas higher impact uses will often have large circulation areas and ancillary storage functions.

3.2.20 Defining Success | Objective

North Cowichan's economic base continues to move towards providing plentiful employment opportunities in industries that take a regenerative approach towards the environment. Opportunities are created for "green" technology development, increasing resource efficiency and reducing overall resource consumption and pollution emission. The focus is on improving the quality and efficiency of economic production while achieving full employment. Circular "industrial ecosystems" develop, where the waste products of one industry are feedstocks for another co-located industry, maximizing resource and energy efficiency.

3.2.21 The Municipality will strive to:

- a. Preserve existing heavy industry and confine it to appropriate sites.
- b. Offer flexibility in appropriate locations to co-locate complementary businesses forming part of an "industrial ecosystem".
- c. Restrict high impact, high consumption industries not serving human or environmental well-being. New industrial uses likely to degrade soil, air or water quality will also not be permitted.
- d. Encourage industrial development to consider employee needs and quality of life, by incorporating design features such as rest areas, benches and picnic tables, shaded spaces. In larger developments or light industrial parks, the creation of small commercial units for cafes, restaurants or daycares may be appropriate.
- e. Allow live/work units in appropriate locations within the UCB.
- f. Allow complementary retail uses accessory to industrial uses.
- g. Acknowledge that industrial activity is important to local economy, yet that consumption of additional lands for this purpose is undesirable. The existing industrial land base should remain largely preserved.
- h. Encourage remediation of contaminated sites.
- i. Provide for appropriate servicing of industrial lands where development will support OCP policy, including the Vision and Goals, as well as economic and environmental policies.
- j. Support attached live/work units and caretaker dwellings in industrial areas on a case-by-case basis where:
 - There is clear evidence that it is required for the industrial use.
 - Servicing is available.
 - The principal land use continues to be industrial and residential use is accessory.
 - The Municipality will identify measurable objectives to encourage sustainable approaches to industrial development and provide direction related to form and character.
- k. Support selective rezoning of vacant heavy industrial lands to light industrial zoning, in some instances.



Figure 3.19: Industrial activity.

3.3 WATER USE DESIGNATIONS

North Cowichan has over 40+ kilometres of coastline and a number of significant freshwater lakes. Parts of the coastline provide access for ships docking to load and unload industrial products, as well as moorage for ferries, commercial fish boats and pleasure craft. Lakes act as important fish habitat, and provide views and recreational opportunities for all residents. Numerous marinas and a full range of related marine commercial enterprises are located on our coast. Preserving and containing these uses in these areas helps us retain the rest of the coast.

Oceans and lakes are also places for leisure, fishing, gathering traditional foods, scuba diving, kayaking and pursuing a wide range of recreational activities. The water's edge contains many important natural features including estuaries, stream mouths, salt-water marshes and intertidal areas, all of which are also fertile places for wildlife.

3.3.1 Defining Success | Objective

With continued human enjoyment and use of the waterfront, ecological indicators show sustained improvement.

3.3.2 The Municipality will strive to:

- a. Not support uses or operations that do not need to be situated at the waterfront or adjacent uplands.
- b. Balance the multiple uses on the waterfront and reduce conflict through zoning consistent with water use designations.
- c. Review water development applications for environmental benefits or impacts; conformance to water use designations; and adequacy of upland facilities to accommodate water lot use.
- d. Review development applications to ensure that provision is made for safe public access and viewing. Options include dedication of property or statutory rights-of-way.
- e. Encourage the phasing of out of water-based log storage and pursue alternative opportunities for log sorts on dry land.



Figure 3.20: Gerald the Swan on Quamichan Lake at dawn.

Marine Commercial Designation

This designation applies to marine areas at the centre of the coastal communities of Chemainus, Crofton, Maple Bay, and Genoa Bay. These communities have historically been the marine access points for tourists, residents and service users and continue to do so today. They provide facilities for marine transportation (including ferries, float-planes, and personal watercraft), restaurants, and marine housing forms such as live-aboards, and float-homes.

3.3.3 Defining Success | Objective

Ensure that use of marine commercial waters adequately service coastal communities and the marine commercial needs of the region.

3.3.4 The Municipality will strive to:

- a. Ensure that development supports marine ecology through habitat protection, restoration, and as a last resort, compensation.
- b. Discourage uses that are not relevant or necessary to upland uses;
- c. Explore opportunities for place-making through both public and private investment.
- d. Support BC Ferries' development and consultation that aim to improve passenger access and manage on-shore transportation and parking issues in Crofton and Chemainus.

Chemainus

- e. Ensure each new development is designed to provide public access and to allow people to travel the length of the waterfront on a public pedestrian walkway.
- f. Ensure that public access does not damage important intertidal or foreshore areas.
- g. Continue to maintain public facilities at Kin Park such as the municipal boat launch.

Maple Bay

- h. Acknowledge and support that Maple Bay's primary land and water base for marine-based tourism, commerce, industry, and recreational boating will focus around the existing marinas and yacht club located at Birds Eye Cove, where adequate upland exists to support the marine activity.

Genoa Bay

- i. Permit limited marina redevelopment as long as there is an adequate upland support area for the marina activity (e.g., adequate water supply and available wastewater treatment), containment on land of fuel and waste products, and public access.



Figure 3.21: One of North Cowichan's coastlines.

Marine Industrial Designation

Two deep-water ports are located in North Cowichan: one at the Crofton mill site and the other at the Chemainus mill site. Both sites are privately owned and used primarily for the shipment of processed goods from the two mills and other forest industry manufacturers. Expansion of the marine industrial designation is neither anticipated nor supported by this OCP.

3.3.5 Defining Success | Objective

Ensure that marine industrial uses support the economic objectives of this OCP, while protecting marine ecology and enjoyment of coastal areas.

3.3.6 The Municipality will strive to:

- a. Not support expansion of the marine industrial designation.
- b. Encourage the owners of the industrial docks or ports to make facilities available to outside users where local area planning supports industrial growth in the area.
- c. Consider redesignating marine industrial waters where future local area planning considers non-industrial use for water lots and upland areas.
- d. Work in partnership with upland industrial users to remediate contaminated sites.
- e. Encourage/require provisions for clean-up of industrial sites when industry moves away from the waterfront.

Recreational Designation

This Recreational designation fronts many waterfront residential areas, including coastal communities and rural areas as well as waterfront parks. Marine-oriented residential upland areas provide water access via boat launches and private moorage. Ongoing development of upland areas puts greater pressure for recreational access on the foreshore.

A future challenge will be maintaining a balance between the character of upland areas enjoyed by residents, the need to protect and restore the marine environment, and the growing demands for water-related activities and access.

3.3.7 Defining Success | Objective

Provide opportunities for access to the ocean for low-impact recreation activities and ensure that recreational waters are protected or restored to good health.

3.3.8 The Municipality will strive to:

- a. Invest in amenities and public spaces for low-impact recreation on or near the ocean such as sea-walks and kayak launches.
- b. Discourage and regulate expansion of private moorage facilities on recreational waters.

Maple Bay

- c. Support the primary use of the Maple Bay Village waterfront primarily for passive recreational beachfront.
- d. Maintain public facilities at Maple Bay such as the government dock and municipal boat launch.
- e. Support the sharing of public and private launch facilities, marinas or clubs and associated parking.

Crofton

- f. Secure the use and development of the Crofton waterfront for public benefit.
- g. Complete the Crofton Sea Walk and other projects.
- h. Maintain public facilities such as the government dock at the Crofton waterfront.
- i. Pursue opportunities to secure the Crofton boat launch for public benefit.
- j. Pursue opportunities to remediate any ecological and contaminant damage done by historic smelter operations to the Crofton Bay waterfront with the secondary aim of restoring the bay to a state where it is safe and appealing for aquatic and beach recreation.

Chemainus

- k. Prioritize the protection and enhancement of upland and marine ecosystems and habitat when contemplating development proposals for moorage and other facilities.
- l. Support connection of the Chemainus Seawalk between Kin Beach and Old Town.
- m. Maintain and enhance complementary public amenities at Kin Beach Park to encourage passive recreational beachfront development.

Near Shore Environmental Designation

Marine areas like Genoa Bay, Sansum Narrows, Maple Bay, Osborne Bay, and the Cowichan and Chemainus River estuaries have significant natural value. Land use beside these areas ranges from parkland to private acreages with restricted road access, and heavy industrial uses. Limited fish farm activity and private moorage are currently the only uses of the foreshore.

3.3.9 Defining Success | Objective

Ensure that marine industrial uses support the economic objectives of this OCP, while protecting marine ecology and enjoyment of coastal areas.

3.3.10 The Municipality will strive to:

- a. Only support foreshore lease applications for private moorage for parcels with limited to no public road access.

Estuary Designation

The Cowichan and Chemainus River Estuaries provide habitat for up to 300 bird species, and rearing habitat for juvenile Chinook, Coho, and Chum Salmon, Steelhead and Cutthroat Trout. They also support forage fish like herring and smelt and, in turn, migrating salmon and trout provide forage for marine mammals like seals, sea lions and Killer Whales. The substrates of the bays and estuaries in North Cowichan have provided an abundance of clams, mussels, and oysters to First Nations people. The ecological richness of the marine environment has made these nearshore waters important to humans as a food source, an aesthetic and recreational joy, and a site of commerce.

Both the Cowichan and Chemainus River Estuaries cover several hundred hectares. Their location and relatively flat expanses have made them subject to significant industrial development since the late 1800s. These industries affect the ecosystem health of these estuaries. In the Cowichan Estuary, the Cowichan Estuary Environmental Management Plan (1987) was developed to balance industrial and residential land use with the goal of restoration of ecological diversity and natural productivity. Development proposals in the estuary are referred to the Cowichan Estuary Environmental Management Committee which includes representatives from North Cowichan, Cowichan Tribes, The Cowichan Valley Regional District and the Province.

3.3.11 Defining Success | Objective

Protect the long-term health of estuaries to promote biodiversity and ecosystem health.

3.3.12 The Municipality will strive to:

Cowichan Bay Estuary

- a. Support the Cowichan Estuary Management Plan (1986, as updated) and Cowichan Estuary Environmental Management Plan (1987) and refer development applications to the Cowichan Estuary Environmental Management Committee for review.
- b. Together with the Ministry of Environment and Climate Change Strategy and the Cowichan Valley Regional District, the Municipality will continue to work towards meeting the objectives of the Cowichan Estuary Management Plan and find joint long-term solutions to ensure ongoing protection of the estuary.
- c. Collaborate with partners in First Nations, CVRD, Duncan and stewardship groups to protect and restore estuary salt marsh habitat, eel grass habitat, kelp forests and tidal flats.
- d. Support the continued operation of the Cowichan Bay sawmill and future on-site investments in new equipment and other upgrades, while engaging industry in the ecological restoration of the estuary.
- e. Promote the need for a new Cowichan Estuary Environmental Management Plan and assume an active role in its development in close collaboration with the Ministry of Environment and Climate Change Strategy, Cowichan Tribes, the CVRD, and key stakeholders.
- f. Encourage the revitalization of the Cowichan Estuary Environmental Management Committee, with representatives from local estuary stewardship groups added.
- g. Advocate for protection of oyster beds and the intertidal seabed from the effects of dragging log booms and for the phasing out of intertidal log boom storage in the Cowichan estuary in favour of deep water storage or dry land log sorts.

Chemainus River Estuary

- h. Support Ducks Unlimited in the development of a public management plan for land holdings in the estuary in partnership with other stakeholders.
- i. Discourage private development and new leases in the estuary unless they are part of a rehabilitation or environmental restoration project.
- j. Collaborate with partners in First Nations, CVRD, Islands Trust and stewardship groups to protect and restore estuary salt marsh habitat, eel grass habitat, kelp forests and tidal flats.
- k. Permit passive, non-invasive recreational activities such as kayaking and ecotourism.

Lake Designation

The lakes of North Cowichan provide opportunity for recreation and passive enjoyment, e.g., Quamichan Lake (313 ha), Somenos Lake (100 ha), Fuller Lake (25 ha), Crofton Lake (20 ha) and Chemainus Lake (5 ha). When in good health, North Cowichan's lakes are natural assets that provide flood mitigation, water storage and replenished groundwater.

Lakes also influence downstream water quality and preserve biodiversity and habitat. Our lakes are subject to varying pressures and inter-related issues from development and land use impacts. Historic clearing of forests for residential and agricultural use, combined with the application of fertilizers on residential and agricultural land, has contributed to prolonged blue-green algae blooms in both Somenos and Quamichan Lakes. The blooms threaten water quality, fish health and the safety of people, pets and livestock. Additional challenges include impacts from invasive plant and animal species, and impacts from climate change.

3.3.13 Defining Success | Objective

Protect lakes from negative impacts of development, ongoing settlement activity, and climate change, to restore them to health.

3.3.14 The Municipality will strive to:

- a. Enforce riparian protection measures mandated for all development in DPA-3, including requirements of the Riparian Areas Protection Act and Riparian Areas Protection Regulation.
- b. Work with partners in federal and provincial agencies to monitor, protect and restore water quality, water quantity, and fish habitat in all lakes, ponds, wetlands, marshes, rivers, streams, and ditches.
- c. Consider arrangements and incentives to convert, purchase, exchange, or create easements on private lands for restoration and protection of riparian zones and wetland ecosystem corridors.
- d. Collaborate with stewardship groups to protect and restore watersheds focusing on riparian health, stormwater management, fish habitat, nutrient control and water quality monitoring.
- e. Collaborate with stewardship groups to secure funding and grants to protect and restore water quantity and quality.
- f. Enforce riparian protection measures mandated for all development.
- g. Encourage riparian area protection and restoration through tax incentives.
- h. Create internal approval processes that ensure all riparian area development requests consider the overall health of the watershed, not just the immediate area, in all riparian area decision making.
- i. Incorporate planning initiatives including increased sewer hookups, bio-swales, storm-water, wetlands, marshes, detention ponds, plantings, green spaces, and developments in the form of small footprint clusters or densely compacted development.
- j. Consider policies and procedures for responsible management of run-off waters in new developments during and after site clearing and preparation.
- k. Consider actively engaging environmental management partners, including First Nations, lake users, stewardship groups, and residents to collaborate and lead improvements to lake health and user experience.
- l. Support riparian area restoration through invasive species removal, native re-plantings and riparian area public education via direct stakeholder volunteer participation, public engagement, educational materials and other networking.
- m. Not permit creation of new private docks.
- n. Allow only uses with low impact on aquatic and terrestrial ecological integrity, through appropriate zoning of water surface and shoreline (upland) areas.

Quamichan

- o. Include the local agricultural community in stakeholder outreach to support environmental farm plans to recycle/reuse some of the nutrients on existing farmland for the benefit of the farmer and prevent nutrients escaping from farmland.
- p. Support biodiversity protection through the creation of ecosystem corridors (green and riparian) to allow interdependent flora, fauna and the associated watershed health to thrive.
- q. Support the creation of interconnected footpaths, where appropriate, alongside ecosystem corridors and Quamichan Lake providing greater public exposure to, and appreciation of the importance of biodiversity and watershed health.
- r. Reduce the amount of phosphorous entering the environment by:
 - Minimizing small lot development in the watershed.
 - Supporting access to municipal sewage systems within the UCB.
 - Promoting a minimum 30m riparian area setback for any development around Quamichan Lake, and the ponds, wetlands, marshes, and streams in the Quamichan watershed.
 - The enforcement of riparian protection measures mandated for all development in DPA3 subject to conditions in the Riparian Areas Protection Act and Riparian Areas Protection Regulation in the Quamichan watershed.
- s. Consider mitigation and management strategies for blue-green algae blooms and anoxia;
- t. Mitigate increasing seasonal drought, by supporting longer term projects for expanding freshwater reservoir storage volumes (Crofton Lake, Maple Mountain, Mt. Prevost etc) and the related potential for increasing water capacity for flushing during the summer months.
- u. Consider a phosphorus syphoning plan and related treatment facility where the principle is to remove higher phosphorus containing waters near the bottom of the lake which contains two-times the phosphorus of surface waters.

Somenos

- v. Consider arrangements and incentives to protect riparian areas in the Somenos Watershed headwaters by establishing protection zones around these areas.
- w. Work to establish 'Cultural Protection Zones' in collaboration with Cowichan Tribes.
- x. Identify and expand natural wetlands and marshes to mitigate stormwater impacts on the Somenos ecosystem.



Figure 3.23: Quamichan Lake at dusk.

3.4 COMMUNITY CHARACTER AND LOCAL AREA PLANNING

North Cowichan is community of communities with several distinct neighbourhoods that add to the diversity and vitality of the municipality. Our Official Community Plan must not only provide an overall land use policy framework for the municipality, but also recognize and address specific needs at the neighbourhood or community level. Each community has its own distinct character and history, and its residents have their own views as to how best to manage housing growth and economic development. Local Area Plans (LAPs) are planning documents that provide detail on growth management, building types, transportation and recreational network needs that reflect local ecology, community make-up, and economies.

LAPs guide growth and change over time in the areas of character, revitalization, housing, and safety at the neighbourhood level. They help shape development in a way that contributes to more place-specific, well-designed and livable neighbourhoods. Priority will normally be given to local area planning where growth pressure is ongoing or expected and infrastructure and amenity planning is needed; however, secondary planning may also be needed in lower growth or no-growth areas.

Communities use these documents to guide change over time, whether that change is economic, character revitalization, or housing growth. These plans help shape development in a way that contributes to more place specific, well-designed and livable neighbourhoods.

Where community infrastructure is unable to accommodate growth pressure, neighbourhood or local area plans may instead speak to change in other ways such as street design, safety, accommodating specific commercial or leisure uses, park development, and the evolution of an area's character.

COMMUNITY CHARACTER

Each community in North Cowichan has its own natural and built elements, history, and values. These define the character of that community and guide how each will evolve over time. The natural setting and context and physical characteristics within each community helps to define uniqueness and sense of place.

Residents greatly value the rural environment, which includes a mix of scenic mountains, forests, farms, rivers, lakes and oceanfront, much of it accessed by narrow, bucolic roads and trails. Over 92% of the municipal land base is classified as rural. Of that, 25% is in the Municipal Forest Reserve and 25% is in the Agricultural Land Reserve. The remaining rural lands are held by private forest companies, farmers and other private landholders, or are designated as parks.

Traditionally, this rural setting was the economic driver for the municipality, through agriculture, forestry, mining and fisheries. Today it continues to be economically important, as well as an important factor in our quality of life, providing a source of food, recreation options, and outdoor pleasure.

Preserving the rural character of North Cowichan requires protecting rural lands which necessarily means containing residential growth within urban boundaries and creating policies that assist the viability of farming activities. Rural character also derives from the types of uses found in an area, along with the design of buildings, roads and landscapes.

OCP policies such as biodiversity regeneration, maintaining scenic roads and vistas, permitting intermittent uses such as produce stores, wineries and agri-tourism, and employing agricultural edge-planning principles help preserve rural character and land uses in the countryside.

Within the settlement areas, North Cowichan's rural character is also evident. Policies such as enacting tree protection regulation and creating development permit design requirements to promote local distinctiveness, along with public art, cultural programming and heritage protection continue to build on that character.

The waterfront is a defining feature for many of North Cowichan's communities. It includes recreational, commercial and environmentally significant areas, yet is the location of its heaviest industry too. The distinct character and/or specific requirements of waterfront areas must be respected through local planning efforts.

Through the OCP update process the following communities have been identified:

- Chemainus
- Crofton
- South End Centre/ University Village
- Bell McKinnon
- Berkey's Corner
- Quamichan Lake Area
- Maple Bay
- 'Rural Areas'

It is important to note that communities are not defined with hard boundaries, and some communities and neighbourhoods have not been separately identified.

This approach helps ensure that rules governing future growth result in development that is respectful of local culture and is rooted in each North Cowichan community's unique values and identity.

Scenic Roads

The network of roads within the Municipality evolved in large part serving farms within the agricultural areas. Many of these roads still maintain a pleasant pastoral character, and the forests and mountains provide a spectacular backdrop. These routes are prized by residents, hikers, cyclists and travelers alike.

Scenic roads fall into three categories, one of which has two sub-categories. These are shown on Map 7 - Steep Slopes & Scenic Character. Any development or works adjacent to, or affecting, these roads should be designed to respond to, maintain and enhance the essential characteristics as defined below.

Class 1 roads offer unparalleled opportunities for travel through scenic landscapes. These roads are characterized by high levels of scenic attractiveness and visual integrity. They are unmistakably rural, with little or no visual evidence of urban/suburban land uses adjacent to the road.



Figure 3.24: Example of Class 1 road.

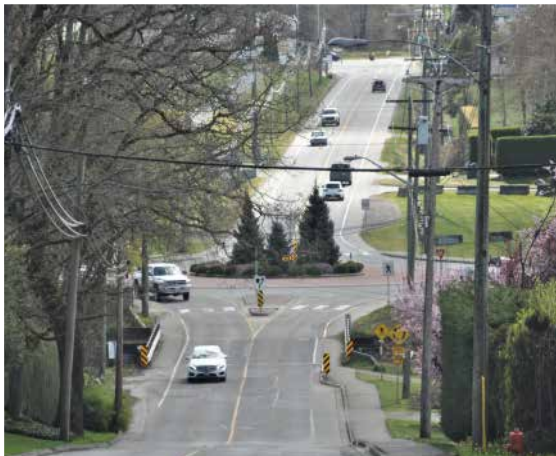


Figure 3.25: Example of Class 3 road.

Class 2 roads offer scenic attractiveness and visual integrity in areas with suburban or rural residential densities. They include rural side roads, with preserved, intact landscapes integrated into developed lands (e.g. forest canopy, meadow, little-to-no grading around building site). In order to balance the need for a high functioning road network while preserving and enhancing character of these roads, Class 2 roads are divided into two sub-categories:

- **Class 2A** roads are intrinsically scenic, similar to Class 1, and offer fewer interruptions such as driveways and intersections. Motorized vehicles are capable to reach higher speeds. Road treatments for safety and operation are more rooted in reflecting the natural elements of the surrounding character and do not incorporate cluttered or urbanized traffic solutions.
- **Class 2B** roads offer scenic experiences, but convey higher volumes of vehicles or contain a higher density of driveways or intersections to access development. Roads are improved and maintained to the standard necessary to encourage safe movement of people and goods through various modes.

Class 3 roads are high-volume roads that convey regional drivers through or beyond character landscapes. The road itself is not necessarily scenic in character, but offers views that are longer-range, often broader and more varied. Roads are improved and maintained to the standard necessary to encourage safe movement of people and goods through various modes. Major changes to the landscape should consider the overall aesthetic impact on Class 3 scenic road landscapes (e.g. forestry operations that alter ridgelines, or heavy industrial development considerations among large, agricultural areas).

The Trans-Canada Highway and the Cowichan Valley Highway provide scenic driving experiences through much of North Cowichan. Their scenic value derives largely from the absence of adjacent development in many sections, and include vistas of farmland and forests, and rivers. These roads respond to their topography to contribute to their character as roads offering a frequently-changing perspective on the surrounding landscape.

Visually Prominent Slopes & Ridgelines

3.4.1 The Municipality will strive to:

- a. Protect short- and long-range views of visually prominent slopes and ridgelines as shown on Map 7 - Steep Slopes & Scenic Character from intrusive development and human alteration.
- b. Preserve the integrity and character of natural ridgelines unbroken by structures, access roads or clear-cuts.

3.4.2 The Municipalities will ask developers and landowners to:

- a. Provide, where appropriate, analysis of the impact of development and subdivision proposals on short- and long-range views of visually prominent slopes and ridgelines as seen from populated areas and scenic roads.

LOCAL AREA PLANNING

3.4.3 Defining Success | Objective

Objective: Update and implement existing and create new Local Area Plans with growth management direction identified in the OCP's land use map and append them as schedules in the OCP.

Progress will be measured by:

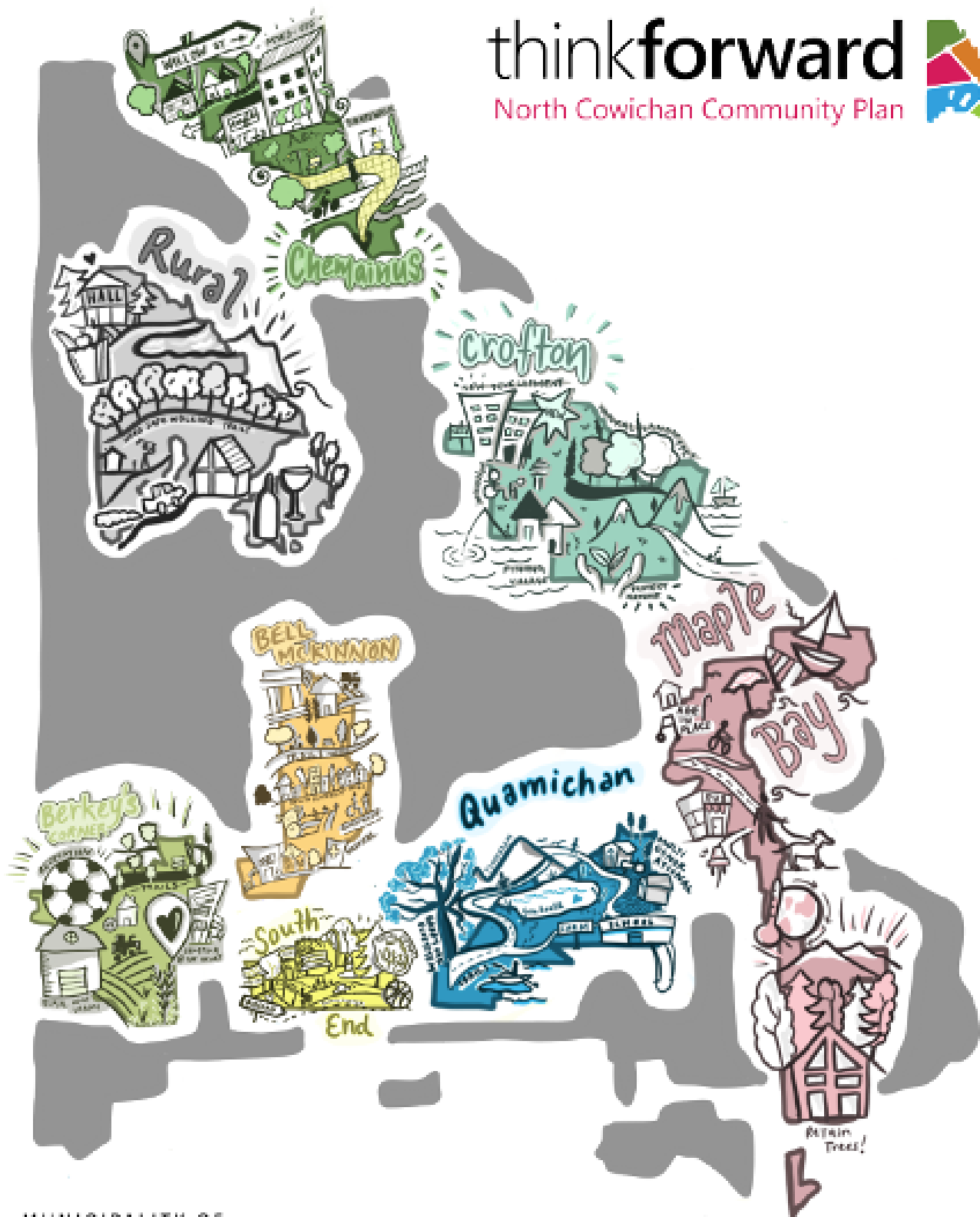
- Number of new and/ or updated LAP's.
- Timely and meaningful execution of LAP implementation plans.

3.4.4 The Municipality will strive to:

- a. Create and update local area plans as needed.
- b. Include 'build out' projections in new and existing local plans.
- c. Consider creation of small-scale neighbourhood plans in other areas as resources allow.
- d. Ensure LAPs are consistent with the goals and objectives in the OCP through policies that respond to local contexts. Where an LAP has been appended to this OCP, the policies therein will take precedence to the extent that those policies are complementary and more specific than the policies of the OCP itself.
- e. Update the Blue-Green Network Mapping in the Bell McKinnon Local Area Plan to better align with the Municipality's commitment to identify and acquire open space in this area to improve connectivity of wildlife habitat corridors.
- f. Update the Bell McKinnon LAP to include a phasing and implementation plan (s.3.1). [BL 4029]

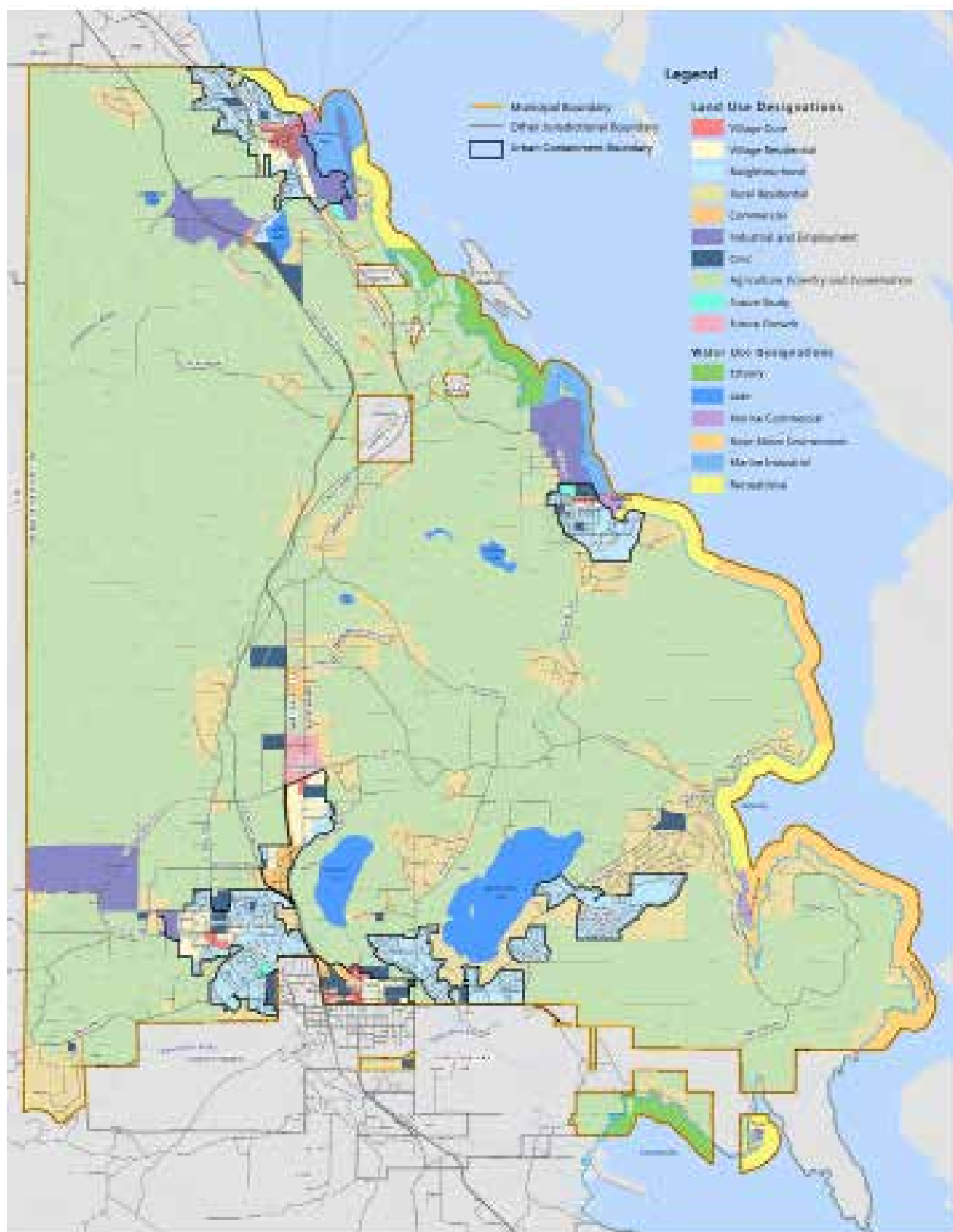
thinkforward

North Cowichan Community Plan



MUNICIPALITY OF
NORTH
Cowichan

COMMUNITY
CHARACTER



Map 2

Growth and Land Use Management

Source: Municipality of North Cowichan

MUNICIPALITY OF
NORTH
Cowichan



1 2 3 4 5 6 7 8 9 10

Scale 1:50,000

4

RESILIENT, INCLUSIVE COMMUNITIES





Promoting healthy communities is at the heart of what local government is about. It means creating places and spaces that cultivate belonging, inclusion, connectedness and engagement. It means creating a well-planned built environment that supports healthy behaviours and choices. It means creating a vibrant social environment in which people can live, work, learn and play. In short, it means striving to create the conditions in which all citizens, no matter where they are in life, can thrive, now and in the future.

- Judy Brownoff

Municipal Councillor, President and Chair, BC Healthy Community Society



Quote by Judy Brownoff, Municipal Councillor, President and Chair, BC Healthy Community Society, retrieved from report, How do Local Governments Improve Health and Well Being (<https://squamish.ca/assets/planH/d0e40f740e/planh-local-government-guide-web.pdf>).

4.0 INTRODUCTION AND CONTEXT

PLANNING FOR ALL AGES AND ABILITIES

To build resilient, supportive, and inclusive communities that enhance the overall health and well-being for all residents, we must provide opportunities for people to connect with others, with nature, and their culture and to be able to 'get around' their community with ease. We must also be able to support those who are vulnerable and need help in certain stages of their life.

Although North Cowichan's population is aging, there are still a significant number of children, youth and working-age adults that reside in the area.¹ Particular challenges facing these groups include:

- The need for greater early childhood development resources.
- Support for youth and families.
- Support for elderly members of the community.

We must recognize older people, children and youth as valuable citizens who contribute toward the quality of community life by approaching their needs and the needs of families through:

- Coordinated amenities and services.
- Public spaces.
- Social infrastructure such as healthcare, education, employment, and housing.

It is important that parents and caregivers feel comfortable, welcomed and accommodated in public spaces with their children (i.e., changing tables in all washrooms, children's play areas, playgrounds, sidewalks that are wide enough

to accommodate multiple people and strollers, benches to sit down on if you need to feed your child etc.).

We must also consider the needs of older adults to promote activity, aging in place, and provide a continuum of care to ensure they remain socially connected, active, and supported in their home and community.

People with disabilities face unique challenges in the community from getting around to where they live. Special consideration should be given to accessibility in the built environment, public realm, transportation, parks and housing design.

Integrated planning for all ages and abilities is key. If we accommodate the needs of eight year olds and 80 year olds in the design of a community then it is likely to work well for everyone².

¹ 2016 Census indicates 25% of the population is aged 65 and over, higher than the provincial average and projected to increase over time

²Read more about the concept of 8 80 cities here: <https://www.880cities.org/>.

RESILIENT COMMUNITY

A resilient community means we are able to respond and adapt to emerging issues in an effective, unified way. Resilient communities provide the foundation individuals and families need to attain well-being. Resiliency means we recognize and respond to change and the multiple and shifting challenges we face as a community such as COVID -19 pandemic, mental health and substance use disorders, affordability, and climate change impact.

In addition to strengthening community and social networks, resiliency also lies in the quality and integrity of our natural ecosystems to support a variety of healthy plant and animal species, and in the capacity of our farmland to produce food, regenerate soil, and resist pests and invasive species. The local economy is also more resilient to supply chain disruptions when an increasing share of goods and services are generated locally and from multiple sources.

With climate change, infrastructure systems, both above and below ground, need to be designed to withstand increased stresses from weather extremes. Long-term asset management planning can help ensure the systems on which we all rely are upgraded in an orderly and timely fashion, and new development be planned and designed in a site-adaptive fashion to maximize infrastructure efficiency and capability. The concept of resilience is therefore fundamental to all aspects of the OCP, whether social or physical.

One of the OCP principles is:

through our planning and actions, we strive for resiliency in built and natural environments and ensure iterative and adaptive processes that can better respond to change and can support residents during challenging times.

SOCIAL DETERMINANTS OF HEALTH

Community structures, land use patterns, housing, transportation and access to public facilities and municipal programs all influence social health and development. While social health is a complex and dynamic process affected by many factors, the decisions made within a municipal jurisdiction influence social well-being and affect the social determinants of health, as described in the diagram, Figure 4.1.



Figure 4.1: Social Determinants of Health
(Image from Comox Valley Health Network).

According to the [World Health Organization](#), the social determinants of health, such as income, education, housing etc. are "mostly responsible for health inequities" and are the "non-medical factors that influence health outcomes" across the spectrum of healthcare delivery. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.



Meets the climate action principle by fostering community resiliency to adapt to the hazards and risks of climate change such as wildfires, extreme heat and flooding.

Municipal actions related to matters such as recreation opportunities, land use and zoning, design of streets, trails and public spaces, housing mix, and program development can (when thoughtfully integrated with the initiatives of the private, non-profit and volunteer sectors) make a significant difference to all citizens' quality of life. Safety and access to community services are especially important.



Many of the policies in this section meet the Social Justice and Equity Principle.

The principles of social justice and equity that provide a framework for the entire OCP are particularly relevant for this chapter. Through our policies and action we must acknowledge the challenges and disadvantages faced by people living on the margins of society and act against chronic inequities in the system.

Our hope is to continue to build communities that:

- Are affordable, safe, inclusive and healthy for citizens of all ages including the most vulnerable.
- Foster social connection and resiliency through the built environment, volunteerism, emergency response planning, neighbourhood events and other ways of enabling residents to engage with each other and in municipal processes.
- Provide opportunities for artistic and cultural expression and ways to acknowledge our heritage, and traditions.
- Offer recreation and transportation opportunities such as walking and biking paths, roads and parks and recreation facilities.
- Offer access to natural and semi-natural areas and promote urban forests within built areas.



Figure 4.2: Place of Worship - Duncan Sikh Temple.

4.1 SAFE AND HEALTHY COMMUNITIES

Local governments have significant potential to affect the health and well-being of citizens at the community level. Local governments have a critical role to play in making communities healthy, vibrant, safe, diverse and inclusive. Adequate policing, fire services and disaster response systems are key components of community safety. Fulfilling this role requires a combination of direct municipal action as well as partnering with various organizations, government agencies and non-profit service providers.

OCP policies related to social well-being contribute to the health and vitality of the Municipality and strive to address the needs of all citizens, including those that are most vulnerable and marginalized. A Health and Social Well-Being Strategy would provide further direction on coordination and implementation of these OCP policies. The [2021 Cowichan Communities Health Profile](#) provides important analyses on the social determinants of health for Cowichan's residents and ways to support children, youth, people with disabilities, Indigenous, racialized people, newcomers, seniors, lone-parents and the 2SLGBTQIA+ community.

One common indicator of a safe and healthy community is how well residents know their neighbours. This has been particularly important during the COVID-19 pandemic when restrictions meant many people did not leave their neighbourhoods. People relied on neighbours for outdoor social interaction, help with various needs, making these connections key to mental and physical health.

In both rural and urban settings, knowing and interacting with neighbours reduces feelings of isolation. Social isolation can be particularly damaging for singles, or seniors, who often face loneliness due to decreasing social connection. Watching out for each other's welfare is important if we are to keep our communities safe and healthy places to live.

A community's social health is also measured by how engaged residents are in the goings-on in the community and with municipal processes. Participation in community and municipal sponsored events and activities contributes to the well-being of all community members.

Providing service to a diverse multi-lingual and multi-cultural population poses service challenges and opportunities for a municipal government committed to serving its residents as best it can.

Many community organizations offer a rich diversity of activities and programs, as well as providing services for our most vulnerable residents, including children, seniors, people with disabilities, and new community members.

While largely outside of local government control, it is important to note the impact the opioid overdose crisis is having in the Cowichan Valley. The Province of BC declared the opioid overdose crisis as a public health emergency in 2016 due to the rise in drug overdoses and deaths in all communities across BC. The opioid crisis has worsened during the COVID-19 pandemic.

Opioids are commonly used for the treatment of pain, and include medicines such as morphine, fentanyl and tramadol. The number of overdoses has increased in recent years in part due to the increased use of opioids in the management of chronic pain and increasing use of highly potent opioids appearing on the illicit drug market. The illegal drugs are highly toxic and often fatal.

North Cowichan is seeing the devastating effects of citizens with substance abuse issues and those who face homelessness. A [recent report](#)³ written by the Provincial Medical Health Officer suggests decriminalizing illicit substances for personal use and providing a safe supply of prescribed alternatives as part of the solution. Though these solutions are outside of local government jurisdiction, the Municipality can advocate to the provincial and federal government do so. We can also advocate to increase investment in substance use disorder treatment, recovery and mental health services. North Cowichan can also provide a welcoming environment for mental health and substance abuse services such as treatment centres and overdose prevention services provided by senior levels of government or non-profit organizations.

The term "opioids" includes compounds that are extracted from the poppy seed as well as semisynthetic and synthetic compounds with similar properties that can interact with opioid receptors in the brain.

³ Read the full report published by the Office of the Provincial Health Officer here: <https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/reports-publications/special-reports/stopping-the-harm-report.pdf>.

4.1.1 Defining Success | Objectives

Objective: Foster a safe, socially inclusive, resilient and supportive community that enhances the health and well-being of its residents.

Progress will be measured by:

- Qualitative and quantitative assessments of health and well-being of residents.
- Type, quality, amount and distribution of social infrastructure.

4.1.2 The Municipality will strive to:

Municipal strategies and policies

- a. Create a Health & Social Well-Being Strategy that will integrate this lens into all municipal initiatives, plans and projects.
- b. Develop a community amenity policy that considers:
 - Public artwork that is accessible at no cost to the public and maintained in good repair for the life of the development.
 - Childcare facilities.
 - Community facilities (e.g., community centres, libraries, and arts facilities).
 - Affordable and/or special needs housing.
 - Public realm improvements.
 - Parks and open spaces.
 - Improvements to buildings or properties with heritage value.
 - Other community amenities identified by Council.

Children, youth, families, and seniors

- c. Encourage a healthy and safe environment for children, youth and families by ensuring new housing, transportation, the public realm, and parks and open space accommodate the needs of these demographics (i.e. park programming/development that is inclusive of teens and/or seniors).
- d. Encourage a healthy and safe environment for older adults, promoting active aging, aging in place, and a continuum of care to ensure they remain socially connected, active, and supported in their home and community.

Community safety and connection

- e. Support community policing to provide education and enforcement to keep the communities safe.
- f. Ensure fire services have the resources and facilities to protect the community.
- g. Educate, involve and support residents on the hazards and risks of climate change and offer support to adapt to the new climate.
- h. Provide assistance and support to neighbourhoods and communities that wish to promote connection, inclusion and community spirit through local events and projects.
- i. Consider CPTED (Crime Prevention Through Environmental Design) principles in assessing design proposals.

Community social service organizations

- j. Consider the acquisition or the designation of land to accommodate the needs of community health and social services facilities.
- k. Collaborate with community organizations that provide mental health and substance use disorder support services.
- l. Support the retention and improvement of community facilities and the potential development of new facilities where there is a need.
- m. Consider permissive tax exemptions for eligible social service and non-profit organizations.

4.1.3 Where appropriate, the Municipality will ask developers and landowners to:

- a. Provide high quality outdoor spaces in their residential or commercial developments for residents, employees, customers, and other users of development projects. The scale, design and location of these spaces will be determined through the approval process but should generally include seating areas, trees and landscaped areas, garden plots, dog relief areas, and children's play areas.
- b. Consider integrated 'social connection' opportunities in developments (shared commons indoor areas, etc.).
- c. Use principles of universal design and ensure accessibility for all ages and abilities.
- d. Consider including space in developments to lease to community social services providers.
- e. If requesting additional density on a property, contribute to community amenities, such as those listed in Section 4.1.2.b.

"Universal Design is the design and structure of an environment so it can be understood, accessed and productively used by all people regardless of age and ability. Generally this means making things as intuitive, simple, flexible, easy and equitable as possible"

4.1.4 The Municipality will work with others to:

- a. Advocate for continued funding and support to manage the opioid overdose crisis.
- b. Encourage the retention and expansion of health care facilities and services to meet the changing needs of citizens.
- c. Collaborate with the School District in supporting, upgrading, and expanding schools to meet the needs of local residents as educational facilities and centres of civic activity in neighbourhoods.
- d. Cooperate and collaborate with agencies providing community services, including those working on diversity and inclusion, with children, youth, families, seniors and people with disabilities.
- e. Support law enforcement initiatives, including crime reduction, traffic safety enforcement, block watch, etc.
- f. Engage with the RCMP in their Community Safety Plan and priority-setting.
- g. Collaborate with the Emergency Management Department at the Cowichan Valley Regional District to support residents affected by climate change hazards (wildfire, flooding etc.), and other natural disasters.
- h. Support the work of volunteers within the community and give recognition to the essential role of the volunteer economy.
- i. Monitor, collect, and measure data to help track progress and identify trends.

CHILDHOOD DEVELOPMENT

Early childhood development (0-6 years) is profoundly important to a person's whole life. Children's experiences and environments influence their lifelong health and well-being. Ensuring that we, as a society, provide the best possible start for all children is an issue of social justice and health equity. Vulnerable children are those who, without additional support and care, are more likely to experience future challenges in their school years and beyond. Many of these challenges create a societal cost.⁴

Childhood vulnerability is captured on a regular basis in B.C. through the [Human Early Learning Partnership's Early Development Instrument \(HELP EDI\)](#). This instrument measures five core domains of early child development and identifies children who are vulnerable in these areas. Thirty-three percent of children in North Cowichan are vulnerable which is the same as the provincial average. HELP considers a rate of 10% to be a "reasonable" benchmark for child vulnerability. The current vulnerability rate of 33% in North Cowichan is over three times higher than what is considered reasonable.

Social supports such as affordable housing, access to nutritious food and childcare can help decrease childhood vulnerability.

The [2020 Cowichan Region Childcare Plan](#) identifies that only 20% of all children 0-12 years old have access to a childcare space. According to the Childcare Plan, the coverage for children aged 0-2 years (infant/toddler group) is lower (15%), qualifying it as a childcare desert for that age group. Increasing evidence demonstrates that childcare is not only important to child well-being and development, but essential to communities and plays a crucial role in the function of the economy. The graphic to the right describes the multiple benefits of early childhood education.



Figure 4.3: Benefits of Early Childhood Education⁵

⁴ Source: Sustainable food systems. Concept and framework. (2018). Retrieved from: <http://www.fao.org/3/ca2079en/CA2079EN.pdf>.

⁵Figure 4.3: THE BENEFITS OF EARLY CHILDHOOD EDUCATION Jenkins, J., Boivin, M., & Akbari, E. (2015). Empowering the Future: Best Evidence for Investing in Early Childhood. Retrieved from https://earlyyearsstudy.ca/wp-content/uploads/2020/02/EYS4-Report_01_15_2020.pdf

In response to this, many municipalities are beginning to develop and incorporate policies geared toward helping families acquire and maintain accessible, affordable and quality childcare. In particular, the need for affordable infant/toddler care is key to helping caregivers, particularly mothers, transition back to the workforce which helps the economy and promotes gender equity. The Cowichan Childcare Plan identified space creation targets for 2030:

- 301 new spaces over ten years.
- 133 for infant-toddler.
- 83 for preschool ages.
- 85 for school-aged children.

However, without a universal childcare system in place, childcare fees are costly, especially for infant/toddler care. Though fees are coming down due to federal and provincial funding the average cost that parents pay in BC for infant/toddler care is \$875/ month.⁶

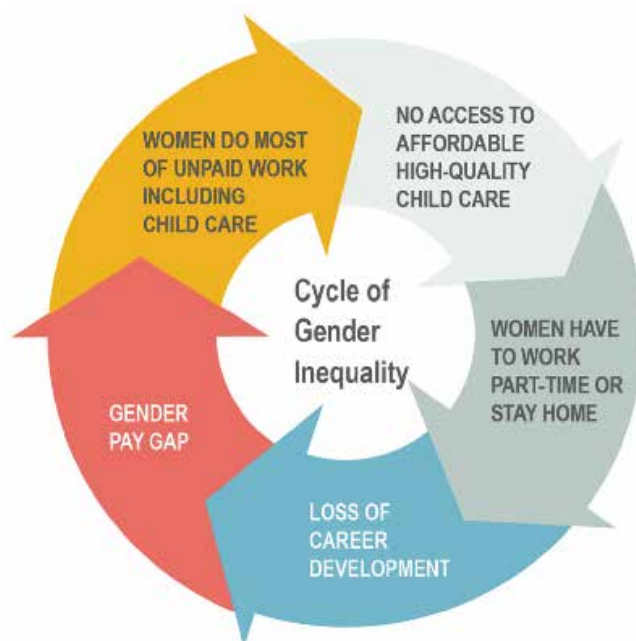


Figure 4.4: Alberta Federation of Labour Childcare Diagram⁸

4.1.5 Defining Success | Objectives

Objective: Support the development of affordable, quality early learning and care programs and spaces.

Progress will be measured by:

- Number of childcare spaces per child.
- Reduction in vulnerability rate of children.

4.1.6 The Municipality will strive to:

- a. Consider leasing Municipal-owned facilities at a nominal rate to non-profit childcare providers.
- b. Allow for childcare (home or group) in a variety of zones.
- c. Cooperate and support community organizations that provide services for children and youth, including vulnerable populations.
- d. Promote childcare centres within or adjacent to seniors facilities and promote interaction between age groups.⁷
- e. Review Municipal zoning and business licence regulations to ensure there are no unnecessary barriers to quality childcare facilities at a range of scales and types.

4.1.7 The Municipality will ask developers and landowners to:

- a. Consider including childcare centres in housing or commercial developments.
- b. If requesting additional density on a property, contribute to community amenities which could include childcare space.

4.1.8 The Municipality will work with others to:

- a. Advocate for a universal \$10/day childcare plan to the provincial and federal government.
- b. Advocate to the school district to provide space for childcare programs.
- c. Consider partnerships with non-profit organizations to develop sites or facilities.

⁶ Read more about infant/toddler care in BC: <https://www.policyalternatives.ca/TheAlarm>

⁷ Read more about Toddler and Seniors together - the Benefits of Intergenerational Care: <https://ifstudies.org/blog/toddlers-and-seniors-together-the-benefits-of-intergenerational-care>

⁸ Retrieved from https://www.afl.org/early_childhood_education_and_care_reduces_gender_inequality.

4.2 ARTS AND CULTURE

Arts and culture play an important role in a healthy and creative community. Vital to the fabric of our community, the arts strengthen our identity. North Cowichan's objective is to support lifelong learning, including cultural and artistic expression. Cultural spaces, libraries and associated services are essential to community health. In addition to providing access to opportunities for learning and cultural expression, these various facilities also act as hubs for socializing and building connections.

North Cowichan has long been - and will continue to be - home to people from a variety of backgrounds. Its long and rich history, along with an increasing diversity of citizens, businesses and community groups continues to be nurtured and celebrated.

The 2021 Cowichan Communities Health Profile advocates for programs that include cultural teachings, song, dance, and food within early childhood and school programs to enhance knowledge of other cultures, which help build an equitable and inclusive community.

Efforts that highlight and share traditional and contemporary stories, food, music, and teachings within organizations throughout the community should be maintained and enhanced.

Opportunities to enhance regional cultural events, activities, and to come together to learn and celebrate differences, are needed. Traditional First Nations language and cultural customs are alive, celebrated, and shared. Protecting and preserving cultural sites, historical buildings and artifacts helps connect people to the richness and diversity of those who were here before us. Collectively, we must continue learning about the colonial history and its effect on local First Nations to better understand the importance and significance of First Nations culture and presence in our region.



Meets the principle of social justice and equity by recognizing and celebrating the diverse cultures and heritage in North Cowichan.

4.2.1 Defining Success | Objectives

Objective: Support lifelong learning, cultural and artistic expression.

Progress will be measured by:

- Increase in number of new public art installations.

4.2.2 The Municipality will strive to:

- a. Consider creation of a public art policy to:
 - Support incorporation of local art and history into the design of public spaces, buildings and landscapes.
 - Foster an environment that promotes creativity and cultural expression and facilitates community access and engagement in arts and cultural experiences.
 - Support development and delivery of creative community events and activities that celebrate the full spectrum of diversity of the District and builds on the District's unique identity and engage local residents, artists and businesses.
 - Consider Indigenous heritage for public art, including elements that support the revival of Coast Salish languages.
 - Prioritize hiring local artists for new public art pieces.
- b. Support the development of arts and cultural facilities.
- c. Consider incorporating local art and history into the design of public spaces, buildings and landscapes, including elements that support the revival of the local First Nation languages.

4.2.3 The Municipality will ask developers and landowners to:

- a. Recognize local culture and context in the design of new buildings and landscapes.
- b. Incorporate public art within development, or at another suitable location as identified by the Municipality.
- c. Collaborate with local Indigenous artists to incorporate Indigenous art into development projects.

4.2.4 The Municipality will work with others to:

- a. Work with Vancouver Island Regional Libraries to provide accessible library services and resources to facilitate lifelong learning for residents of all ages, backgrounds and abilities.

4.3 HERITAGE AND ARCHAEOLOGY

ARCHAEOLOGY

For 98% of the time that people have occupied this area which today is referred to as North Cowichan, no written records were made. Archaeological sites - the physical evidence of how and where people lived in the past - and oral tradition provide links to the rich history of First Nations, a history thought to extend back some 12,000 years. The evidence of this past is a resource highly valued by First Nations, local communities and the general public. We need to protect and conserve this rich yet fragile legacy.

More recent history is also preserved in some non-First Nations archaeological sites.

There remains a vast amount of evidence of human occupation in North Cowichan, mostly beneath the ground. The area contains many documented archaeological sites and potentially many others that are undocumented. Because archaeological sites, by their nature, tend to be hidden, the provincial inventory of archaeological sites is limited to sites that have been discovered, investigated and documented. The current inventory of site locations is largely limited to those found on or near the coastline.

It should also be recognized that First Nations often prefer these sites remain undisclosed in order to prevent theft, defilement, and trespass.

The Province protects all of these sites, whether known or unrecorded, through the *Heritage Conservation Act*. This protection applies to both private and public land. It means that a heritage alteration permit is required to alter or develop within an archaeological site. Under the Act, the provincial Archaeology Branch is responsible for maintaining and distributing archaeological information, overseeing archaeology assessments and deciding whether permits should be issued to allow development within or near known protected sites.

Working closely with local First Nations on archaeology assessments is important. Cowichan Tribes has an Archaeological Monitoring Program that provides Cowichan members' expertise to assist archaeologists. The monitors' expertise is drawn from family lines that have had knowledge and skills passed down through generations.

Archaeological potential mapping can broaden understanding of when to activate the provisions of the *Heritage Conservation Act*. A comprehensive study by First Nations of known archaeological and ethnographically important sites, combined with a fully funded and timely provincial referral service would help protect these valuable resources.

The Municipality's role in protecting archaeological resources is to ensure that all precautions are taken to avoid them during the development process, including on their own capital projects. This can mean advising property owners and developers that, as part of their overall development application, they need to have an archaeological assessment completed if they are within proximity of known archaeological sites. It may also mean referring development applications to neighbouring First Nations to review. As development application coordinator, the Municipality must work closely with both the Archaeology Branch and the relevant First Nations to ensure that all archaeological requirements are being addressed. The Municipality has an added duty to protect archaeology sites when conducting their own public works and capital projects.

4.3.1 Defining Success | Objectives

Objective: Support heritage conservation and archaeology sites and resources.

Progress will be measured by:

- Establishment of protocols with First Nations with respect to archaeological protection.
- Increase in the number of North Cowichan archaeological sites documented and protected in the provincial inventory.

4.3.2 The Municipality will strive to:

- a. Consider creating a heritage protection policy to:
 - Support the preservation of pre- and post-contact heritage in a publicly accessible repository.
 - Support the preservation and renewal of historic sites, buildings, districts and landscapes.
 - Protect archaeological and heritage resources.
 - Support programs and services that enable people to understand and appreciate the community's rich and unique history.
- b. Support the revival of local Indigenous languages by using these languages for place names on maps, signage, and wayfinding features in public spaces and in municipal documents, websites, and communication materials.
- c. Support culturally inclusive programming and teachings that honour and respect local Indigenous heritage and knowledge.

4.3.3 The Municipality will ask developers and landowners to:

- a. Recognize heritage in the design of new buildings and landscapes.
- b. If a subject property overlaps with, or is in close proximity to, a documented protected archaeological site or is in a zone of archaeological potential, engage with First Nations and the archaeology branch to ensure protection of archaeological sites.

4.3.4 The Municipality will work with others to:

- a. Support Provincial and Indigenous efforts to improve identification and mapping of lands with high archaeological potential.
- b. Develop protocols with neighbouring First Nations for the protection and identification of archaeological sites, implementation of the Archaeological Monitoring Program and appropriate referral processes related to development applications on such sites.

Since colonization, settlers have erased Indigenous heritage from the built environment. The contemporary dominant understanding of heritage typically emphasizes colonial, euro-centric values. North Cowichan's definition of heritage should also be inclusive of equity priority groups. Any policies relating to heritage and culture should reflect the local Indigenous worldview, and the reclamation of places/ intangible heritage elements connected to Indigenous history should be prioritized. During creation and implementation of heritage policies, the Municipality should partner with, and adequately recognize, local Indigenous Peoples and other equity-priority groups.

4.4 PARKS AND RECREATION

Parks, trails and recreation facilities, as well as access to natural areas, are essential features of a healthy community and environment. North Cowichan residents benefit from the region's many recreational facilities, parks and trails, as well as from ready access to a wide range of outdoor recreational opportunities.

Our parks and Municipal Forest Reserve system is part of something much bigger. In addition to providing outdoor recreation, our parks and trails systems are part of a larger ecological network. These land holdings play an important role in conserving regional biodiversity, providing carbon capture, providing critical ecological connections between larger regional and provincial protected areas (and enabling vital ecosystem services to function).



Meets the climate action principle by promoting ecological biodiversity which plays vital roles in resilience, productivity, biogeochemical cycles, pollution attenuation and carbon capture.

There are many different types of parks in North Cowichan. Some promote and facilitate health and fitness, social interaction and community pride. Some make the community a more vibrant and inviting place to live by providing an oasis of green in the urban landscape. Others protect and preserve environmental values as their primary function, and set aside undisturbed areas for wildlife.

Trails (on road and off road) help to connect the community and provide recreational opportunities as well. For example, the Cowichan Valley Trail (CVT) corridor, along with its many spur trails, provides an important north-south link through North Cowichan, significantly following the E&N rail corridor. It connects communities to each other and offers the potential to attract visitors generating important economic spin-offs. Our coastline also provides opportunities for marine trails used by kayakers and canoeists.

Assessing and responding to requests for increased services is a constant challenge for the Municipality, especially balanced against the need to protect and enhance parks and open space in growth centres as development occurs. Park and trail development can often be accomplished through land development initiatives, partnerships and amenity contributions.



Meets the social justice and equity principle: access to free or low cost trails, parks or recreation facilities fosters health in low-income families.

The 2017 Parks and Trail Master Plan identifies strategies and actions for improving parks and trails amenities, including:

- Expand, diversify the park land supply and enhance the current system of parks and trails.
- Expand diversity and connect the network of off-road trails.
- Expand, diversify and connect on-street multi-modal corridors.
- Ensure the long-term flourishing of nature and enhance biodiversity in parks system.
- Enhance outdoor recreation and tourism in the Municipal Forest Reserve.

The master plan includes a classification structure for parks and trails in our community. The result is consistent direction for the planning, designing and programming of parks, off-road trails, on-road multi modal corridors and associated staging areas. However, updating the plan is required to align with the direction set in this OCP and provide more guidance for park land acquisition strategies.

4.4.1 Defining Success | Objectives

Objectives:

- a. Ensure the community is well serviced with parks and recreation facilities, including a system of trails, greenways, blue ways and open spaces.
- b. Carefully balance recreation users and their associated impacts against the need to maintain the ecological integrity and wilderness characteristics of sensitive areas.
- c. Preserve rare ecosystems, significant habitats supporting biodiversity and areas of habitat connectivity through a park land acquisition strategy.

Progress will be measured by:

- Increase in dedicated municipal parks, by area and type.
- Increase in length, quality, connectivity, and accessibility of greenways and blueways (areas of protected open space that follow natural and human-made linear features for recreation, transportation and conservation purposes, linking ecological, cultural and recreational amenities).
- Increase in recreation participation rates in indoor facilities along with a qualitative assessment of impacts.

4.4.2 The Municipality will strive to:

- a. Provide a range of park and recreational experiences for people of all ages and abilities, including covered spaces and sheltered areas for use during inclement weather.
- b. Provide diverse and low-barrier recreational opportunities for all ages, including financial, physical barriers etc.
- c. Update the 2017 Parks and Trails Master Plan to align with the goals and objectives within this OCP, including establishment of a parkland acquisition, a development strategy and associated fund.
- d. Incorporate acquisition of park land, natural areas protection, and trail development into plans and policies.
- e. Maintain and administer a Subdivision Bylaw provision for the dedication of land adjacent to water bodies for the purposes of public access and ecological preservation.
- f. Continue to improve and upgrade recreation facilities, parks, and green and blue ways based on 2017 Parks and Trails Master Plan, as may be updated.
- g. Evaluate new park and trail acquisition opportunities based on the recommendations in the Parks and Trails Master Plan, as may be updated.
- h. Ensure there is an adequate annual budget for maintenance of facilities, parks and trails, and that reserve funds are allocated for major upgrades and repairs.
- i. Support passive, non-invasive recreation and tourism in areas designated for those uses.
- j. Support the development and implementation of naming policies for parks and facilities that also reflect and consider First Nations culture, historical significance, and language.
- k. Support diversity in the ecosystems which play vital roles in resilience, productivity, biogeochemical cycles, pollution attenuation and carbon capture within urban and natural park land.
- l. Consider local traffic management impacts for new or expanded parks and trail facilities.

Greenways are: areas of protected open space that follow natural and human-made linear features for recreation, transportation and conservation purposes and link ecological, cultural and recreational amenities.

Blueways are: water networks that offer safe access to lakes, rivers or oceans to provide linkage for visitation, ecological, and recreational opportunities.

4.4.3 The Municipality will ask developers and landowners to:

- a. Consider the need and opportunity for creation of new parks and trails as part of land use development applications as per the Parks and Trails Master Plan. Park dedication must be of a nature and location that achieves one or more of the following requirements:
 - i. Be programmable for a variety of public events.
 - ii. Provide or enhance greenway trails and linkages.
 - iii. Provide opportunity for wildlife habitat creation, protection, and enhancement.
 - iv. Preserve public views or other features of natural, geological or cultural interest.
- b. Consider whether land use approval or additional density in exchange for the development of significant parks and recreation facilities would be desirable and feasible.
- c. Retain and protect ecosystems in new developments and consider integration of ecosystem features along with and in addition to any park dedication land.
- d. Ensure that the five percent (5%) park dedication as required under section 510 (1) of the *Local Government Act* (or its successors) does not come from Environmentally Sensitive Areas (although the Municipality may agree to accept and manage these areas in addition to the park dedication).
- e. Prioritize the acquisition of park land over cash-in-lieu payments, except where:
 - i. There are no park land needs in the area.
 - ii. 5% of the subject property is too small to be usable.
 - iii. The subject property does not have suitable land for parks or trails.
 - iv. Doing so would be consistent with the local approach outlined in the Parks and Trails Plan, as updated.

4.4.4 The Municipality will work with others to:

- a. Seek partnership opportunities with federal, provincial, regional agencies and other organizations to acquire park land for its recreational, aesthetic and/or environmental benefits.
- b. Encourage the donation of private lands that support the objectives of the Parks and Trails Master Plan and assist prospective donors in determining their eligibility for charitable donation tax receipts and other tax incentives.
- c. Consider the acquisition of lands for future development areas to ensure connectivity of parks, open spaces, ecosystems and key facilities.
- d. Expect the public to exercise care and courtesy when using North Cowichan's parks and trails.
- e. Consider opportunities to expand and improve regional trail networks, including waterway networks (blueways).
- f. Contribute to protection of critical and red/blue-listed flora and fauna.

4.5 PUBLIC REALM

Public areas and places (the "public realm") serve both a functional purpose and a community-building purpose, helping to draw residents out where they can interact with one another and with the greater community. We move through the public realm every day - along roads, sidewalks and trails, and through town squares, shopping malls, community centres, parks and other public facilities - to reach our homes, schools and jobs and to do our errands. Public access to the ocean, lakes and rivers are an important part of the public realm. The Municipality should endeavour to create public water access points through agreements with developers or landowners and invest in access to public beaches and waterfront areas.

The public realm should be inviting, safe and comfortable. It does not only apply to publicly-owned areas managed by the Municipality, but also includes "quasi public" space such as shopping mall circulation areas, frontage parking, plazas, and court yards as well as the interface between buildings and public streets. These spaces need to be well placed throughout the community, with all types of neighbourhoods having access to them. Designed and developed with care, public realm improvements promote community pride, create value and reduce problems of isolation, crime and vandalism.

Public space design should evoke a sense of belonging for equity priority groups and should avoid 'hostile' designs (i.e. spikes to deter sitting, benches to deter sleeping, surfaces to deter skateboarding, etc.). It needs to be inclusive and feel welcoming to people from all ages and abilities.

The Project for Public Space graphic in *Figure 4.6* outlines four components that makes a great place:



- 1) Sociability
- 2) Uses & Activities
- 3) Access & Linkage
- 4) Comfort & Image

Figure 4.6: Project for Public Spaces Guide to a Great Place⁷

⁷Retrieved from <https://www.pps.org/>.

Tree-lined streets, planted boulevards, and forested urban parks are all important contributors to the quality of the public realm, providing aesthetic benefits, wildlife habitat, traffic calming and enhancing the character of residential areas and properties. Public art also contributes to making places special and memorable. It can inspire, beautify, amuse and contribute to local identity, economy and character.

Chemainus' outdoor murals, for example, exemplify the benefits that public art can bring to a community such as:

- Boosting local economies, through the labour to create the art and attract visitors.
- Contributing to place making - measured by livability and quality of life - that also engender community pride.
- Connecting citizens to their neighbours and their shared history and geography through documentation and celebration.
- Making cultural heritage a tangible community asset.
- Raising public awareness about important community issues, such as environmental stewardship and respect for diversity.



Figure 4.8: Curb Cut with tactile pavers for visually impaired.



Figure 4.7: Tactile Pavers at a bus stop.

Ensuring accessibility in the built environment is an important responsibility for local government. Public realm improvements should include consideration of those with mobility and/or sensory impairment, and families with young children. Design guidelines and engineering standards should reflect best practice for those navigating our streets and sidewalks with wheelchairs, walkers, baby strollers or those with visual and hearing impairments.

The public realm should also include weather-protected street furniture to accommodate nursing mothers, young families, seniors and people with mobility impairments (i.e. space for wheelchairs to fit at a picnic table). Public art that doubles as street furniture and/or a children's play area is especially valuable (such as the bear seats, Figure 4.9).

Public spaces and corridors that connect the diverse parts of our various communities are vital to community liveability and require attention and care in their design and maintenance.

4.5.1 Defining Success | Objectives

Objective: Create attractive, accessible public realm spaces that meet the diverse needs of residents.

Progress will be measured by:

- Number of works of public art, by type and location (community/ neighbourhood), and qualitative assessment of public response to works of public art.
- Increase in public access to various types of waterfront (note that public access should allow for off-street parking unless the access is intended for local use only).
- Modifications to the built environment to remove accessibility barriers for differing levels of mobility, and for visual and/or hearing impairment.
- Increase in tree canopy cover within the UCB.



Figure 4.9: Examples of street furniture and public art.

4.5.2 The Municipality will strive to:

- a. Design public areas to be inviting, secure, comfortable, and distinctive and to include street furniture, area for children to play and accessibility for strollers and wheelchairs.
- b. Develop a public arts strategy including an associated public art fund (see also section 4.2.2).
- c. Incorporate natural elements into the public realm such as street trees, water features, and plants, including those beneficial to pollinators.
- d. Design any new civic buildings or facilities to enhance the physical connectedness of the surrounding community, reflect community identity and meet high standards for environmental protection.
- e. Support the incorporation of public art into public and private projects and consider adopting a policy whereby a minimum of 1% of a Municipal capital project budget is allocated to artistic and aesthetic elements.
- f. Maintain and enhance existing waterfront access and pursue new oceanfront, lake front and river front access as opportunities arise. This may include waterfront land dedication as a condition of subdivision or rezoning or the strategic acquisition of waterfront properties as and when they become available.
- g. Maintain marine and waterfront public lands and facilities at Maple Bay, Genoa Bay, Chemainus, and Crofton in order to facilitate public access and enjoyment of the waterfront.
- h. Secure the use and development of the waterfront for public benefit in Chemainus, Crofton, Maple Bay and elsewhere. This includes completing the Sea Walks, in Chemainus and Crofton in an environmentally sensitive way, and other projects that may also provide economic stimulus to the community.
- i. Encourage installation of wayfinding, information kiosks, signage, and other communication tools to highlight the waterfront's historic and cultural points of interest.
- j. Support the use of parklets for public and/or restaurant seating.
- k. Consider policy to facilitate location of food trucks on public lands to help create activity in appropriate spaces.

4.5.3 The Municipality will ask developers and landowners to:

- a. Incorporate high quality public realm design/improvements including public art in development projects.
- b. Identify key access points and viewing areas and provide waterfront public access and/or viewing areas through the application review and approval process.
- c. Ensure each new development (except industrial) is designed to provide appropriate public access to the shoreline to allow people to travel the length of the ocean waterfront on a sensitive pedestrian trail or walkway where wildlife habitat would not be compromised. Care will be taken to ensure that public access does not damage important intertidal or foreshore areas.
- d. Where access is required, create barrier-free and accessible access, where possible.

4.5.4 The Municipality will work with others to:

- a. Seek partnership opportunities with federal and provincial agencies, First Nations, and other organizations for public realm improvements.
- b. Develop and enhance streetscapes, squares, plazas and similar public spaces with landowners, communities and neighbourhoods.

4.6 TRANSPORTATION

Transportation routes are the arteries of a community. Citizens need to be able to move with both ease and safety throughout their community. One of the greatest challenges for municipal planning is to meet the diverse needs for "getting around" in a way that is safe, efficient and meets climate action goals.

Ensuring that communities are walkable and well-connected no matter people's preferred choice of transportation, means that growth and development must be managed thoughtfully. Particular attention must be paid to the location of new housing developments so that residents have transportation options that provide easy access to recreation, shopping, services, education and employment.

While the automobile is still the predominant mode of transportation in North Cowichan, active transportation options such as walking and cycling (including e-bikes), scooters or wheelchairs and other mobility devices are important to prioritize in the villages and neighbourhoods.

In particular, providing safe routes for school children to walk or roll to school is important to health and education outcomes for children, although trends towards a smaller number of schools with larger catchment areas means not all children have this option. Where schools are not within walking or rolling distance, the use of school buses need to be considered. The option for parents to 'drive to five' (drive to a five minutes walking distance to school), encourages reduced congestion around schools and opportunity for children to be active to/from school.

Rural roads have historically not taken all road users into account. Where space is not allotted for certain road users, it present risks for those users. North Cowichan should upgrade the transportation network where appropriate including protected bike lanes that also allow e-bikes.



Figure 4.10: Active Transportation⁸

⁸ Figure 4.10. Retrieved from <https://www.activeatlantic.ca/about/activetransportation> .

Public transit, particularly on highly populated routes, is a valued transportation resource and provides an alternative to cars. If our communities are designed to provide equal or greater connectivity with less automotive travel, the environment will suffer fewer impacts, and there may be opportunities for localizing economic activities. More compact growth and development relieves traffic congestion and increases ridership potential on public transportation as well as reducing greenhouse gas emissions. Multi-use trails that connect Chemainus, Crofton, Maple Bay and the South End reduce reliance on automobiles and provide recreational opportunities.



Meets climate action principle as fewer people driving means reduced energy use and GHG emissions.

Transportation affects more than the ability to get around. It also affects the health and well-being of our community members. Active transportation means all forms of human powered transportation - the most common forms are walking and cycling. Walking and cycling are strongly linked to positive health outcomes, while time sitting in traffic means less exercise. Air pollution and noise created by increased traffic negatively affects public health. Traffic calming measures can also improve the quality of neighbourhoods in terms of reduced noise and pollution and increased safety.

Our transportation choices have a significant impact on climate change. According to North Cowichan's Climate Action and Energy Plan, vehicular usage accounts for 34% of GHG emissions in North Cowichan, second to light industrial operations. While it is expected that the majority of cars will be replaced by zero-emission vehicles by 2030 (North Cowichan target), reducing tailpipe emissions is far from the whole story. Simply replacing all the world's gas vehicles with EVs still represents an unsustainable ecological and social cost. The manufacturing of electric vehicles produces emissions and the mining of rare earth metals for the batteries sometimes involves the use of child labour and can cause environmental damage. It is therefore important to consider ways to decrease overall private vehicle use and energy consumption, and promote active modes of transportation for health benefits and affordability.

Transportation choices impact both affordability and quality of life. For instance, car ownership, with insurance, and fuel costs can be a high financial burden for some households. Finding more enjoyable, healthy and economical ways to commute can improve the quality of life for citizens.



Meets the social justice and equity principle as some people cannot afford or are not able to drive a car, or may simply not wish to drive or own a vehicle. Providing alternate transportation options fosters equity in transportation and allows people to make lower-consumption choices.

Inter-regional transportation links such as rail, air and water travel remain important for industry and the tourism sector. Deep-seaports at Chemainus, Crofton and Cowichan Bay service much of North Cowichan's industrial transportation needs, while wharf facilities at Chemainus, Crofton and Maple Bay accommodate smaller commercial and recreational vessels. Ferry service is available at Crofton and Chemainus to adjacent Gulf Islands. Air service to Salt-Spring and Vancouver is available from Maple Bay. Regional airport facilities are conveniently located in Nanaimo and Victoria. Regional trail linkages provide attractive connections for residents and tourists alike. As part of this network, the Cowichan Valley Trail, though not 100% complete, is part of the Trans Canada Trail.

The Master Transportation Plan (MTP), which is being developed concurrently with this OCP, will help respond to the various challenges related to establishing an integrated transportation system for the Municipality. There are multiple jurisdictions within this geographic area, each having its own transportation and land use policies and priorities. These will be considered in the MTP. The MTP will be updated regularly to ensure all parts of the comprehensive transportation system adjust as the community grows and changes.

4.6.1 Defining Success | Objectives

Objective: Provide a range of efficient, safe, less carbon intense, healthy, connected transportation options that meet the various mobility needs of citizens.

4.6.2 The Municipality will strive to:

Transportation planning

- a. Incorporate safety, accessibility, and aesthetics into the design of its roads, public parking facilities, sidewalks and trails, including the provision of trees along transportation networks.
- b. Take an integrated approach to transportation planning through the implementation of the Master Transportation Plan.
- c. Shift municipal transportation budgets away from cars to active transportation and transit.
- d. Design transportation networks to accommodate all modes of transportation (walking, cycling, transit and auto) enhancing connectivity throughout the municipality.
- e. Incorporate transit and active transportation planning into local area planning.
- f. Connect transportation planning with land use and growth management to reduce the need for vehicle trips.
- g. Critically review speed limits and lower where possible, in order to preserve rural character, promote neighbourhood livability, increase walkability/rollability, and improve road safety by reducing crash injury and fatality rates.

Active transportation

- h. Design roads to be shared by automobiles, public transit, bicycles and pedestrians, with appropriate segregation of cyclists and pedestrians. In areas where traffic volumes and/or speeds are high, a separate or protected bike lane with non-mountable curb should be accommodated.

Progress will be measured by:

- Increase in active transportation modes of travel people use as they journey to work and school.
 - Increase in kilometres of bicycle lanes that connect neighbourhoods to goods, services and recreation opportunities.
 - Decrease in overall vehicle kilometres travelled.
 - Decrease in transportation-related GHG emissions and other air pollutants.
- i. Plan for a complete pedestrian/cyclist transportation network, developed to appropriate standards. Priority will be given to improvement projects that:
 - connect two existing routes (on road and off-road) and/or fill in missing segments.
 - upgrade a route along a major road corridor where no sidewalk exists.
 - lead to schools, public facilities, transit stops, commercial areas, and recreational areas or trails.
 - promote ecological connectivity.
 - j. Incorporate cycling requirements into road design standards for road improvements and upgrades such as cyclist-activated light controls at intersections, clearly defined bike lanes and visual separation.
 - k. Prioritize walking, cycling, and public transit over automobile transportation in policy, design, and capital investment decision-making.
 - l. Encourage the transition firstly away from private vehicles altogether, and secondly from gas to electric vehicles.

Electric vehicles

- m. Transition municipal vehicle fleet to low-carbon alternatives as fleet ages and suitable vehicles are available (e.g. medium duty trucks)
- n. Support the establishment of electric vehicle ready infrastructure, which may include the provision of charging stations.
- o. Seek increased infrastructure for use of e-bikes/scooters and encourage transitions from vehicles to active transportation, including e-bikes/scooters.

Road networks

- p. Continue long-term planning and prioritization for road network and intersection improvements, as directed by the Master Transportation Plan.
- q. Protect, preserve and work to enhance the character of lands along the Trans-Canada Highway, and facilitate improvements to access across the barrier presented by the Highway. Provide residents with information and opportunities for input when new connecting roads are required.
- r. Support service roads along the transition corridor designation of the Trans Canada Highway.
- s. Recognize visually prominent and scenic roads as identified in Map 7 -Steep Slopes and Scenic Character and ensure that works on these routes, including adjacent development, preserves and enhances their particular character features according to the classification set out in s.4.6.1 above.
- t. Design right-of-way widths for roads in the urban containment boundary to include space for street trees, rain gardens, sidewalks, multi-use pathways, trails, and other infrastructure as appropriate.
- u. Institute measures to minimize hazards between pedestrians and automobiles along roadways.
- v. Avoid development that could restrict the construction of a future transit connection, greenway, active transportation corridor or road unless first identifying practical alternatives and/or amending the OCP.
- w. Develop and maintain roads in rural areas to appropriate standards which consider all modes of transportation and manage them for safety, while working to preserve their scenic character. Road side vegetation will be retained to the greatest extent possible unless it is a safety hazard (e.g. visibility) or interferes with utilities. Trees and shrubs may be allowed to encroach within the right-of-way where they do not interfere with public safety, services or utility poles.

- x. Update the street lighting specifications in the Engineering Standards and provide street lighting on rural roads only in specific and limited areas where it may be required for safety in order to minimize light pollution and the effect on the environment in rural areas.⁵
- y. Review and update subdivision bylaw requirements and road standards to reflect specific locational context and accommodate design solutions that respond to other objectives in this OCP.

Parking

- z. Ensure that parking for bikes and other alternative modes of transportation is provided in public spaces and facilities, and within private development.
- aa. Prioritize human needs over vehicle needs, recognizing that making parking easy, cheap and convenient tends to increase vehicle use, reliance and dependence.
- ab. Prioritize accessible parking as it is essential for those who cannot walk, bike or easily take transit.
- ac. Provide a range of parking management and parking demand strategies that balance secure parking supply, parking infrastructure costs, and parking management for a wide range of vehicle types as appropriate for each commercial area.
- ad. Consider parking relaxation for affordable housing projects, innovative development projects, projects close to transit or where ample street parking exists.
- ae. Collaborate with First Nations to implement naming policies for streets that reflect the local First Nations' culture and language.

⁵ Further information on light pollution and its effect on the environment:
<https://www.bbc.com/news/science-environment-5833233> .

4.6.3 The Municipality will ask developers and landowners to

- a. Maximize opportunities for transit by locating denser development projects along transit corridors.
- b. Prioritize design that supports active transportation uses, providing convenient and secure facilities.
- c. Incorporate bike parking, charging for e-bikes and storage in new multi-family and commercial developments, including opportunities for public use where appropriate e.g. within a courtyard, parking or common use areas associated with multiple commercial uses.
- d. Incorporate electric car charging infrastructure and capacity in new developments including opportunities for public use where appropriate (e.g. parking or common use areas associated with multiple commercial uses).

4.6.4 The Municipality will work with others on:

- a. Working with other jurisdictions and agencies, including BC Transit and the CVRD, to maintain existing public transit service delivery, and focus service improvements in growth areas.
- b. Working with provincial agencies, the CVRD as well as neighbouring municipalities and First Nations on the development and implementation of transportation plans and initiatives including a pedestrian/cyclist transportation network.
- c. Working with Cowichan Tribes to coordinate transportation routes near and through their lands.
- d. Supporting inter-regional transit and service (private or public).
- e. Advocating for improvements to provincially managed roads in North Cowichan to enhance pedestrian, cyclist and driver safety.
- f. Working collaboratively with the City of Duncan, Cowichan Tribes, the CVRD, and the Province to improve the function of the Trans-Canada Highway through Duncan and North Cowichan's South End.
- g. Working to utilize and improve sections of the Trans-Canada Highway to augment active transportation networks, including the Trans-Canada Trail.
- h. Advocating to maintain the integrity of transportation corridors for current and future use, including the E&N Railway line and the abandoned CPR right-of-way. The Municipality will not, in general, support any subdivision or proposed land use changes that would fragment or otherwise interrupt a corridor's continuity.
- i. Partnering with the school district to promote walking or rolling to school and identify 'safe routes to school'.
- j. Collaborating with BC Ferries on efforts to improve passenger and vehicle access near the Crofton and Chemainus terminals.
- k. Advocating for the establishment of a network of Level 3 electric vehicle charging stations along arterial routes to facilitate the use of electric vehicles on longer haul trips.

5

ATTAINABLE HOUSING: DIVERSE HOUSING MIX & AFFORDABILITY





Housing is the basis of stability and security for an individual or family. The centre of our social, emotional and sometimes economic lives, a home should be a sanctuary - a place to live in peace, security and dignity.

- United Nations



5.0 INTRODUCTION AND CONTEXT

Housing is a key pillar of community health and liveability. Creating a diverse, affordable mix of housing forms for all residents to call home is a growing challenge for municipalities across British Columbia, including North Cowichan.

All levels of government have an important role in providing housing. Municipalities are granted planning and development tools through the *Local Government Act* to influence the location and type of housing built in their communities.

Land and housing prices have been driven higher by several factors including:

- Local demand outpacing supply as a result of increased demand for recreational or rural living opportunities.
- Increased relocation rates to Vancouver Island, particularly from BC's Lower Mainland.
- Loss of stable rental options and prices to new forms of short-term (vacation) rentals.
- Global factors including land speculation and investment, and economic shocks.
- Commodification of housing.

Like many communities in BC, local household incomes are not keeping up with housing prices making it difficult for some North Cowichan citizens to find homes to buy or rent.

Housing choice and diversity is hampered by the perception (and sometimes the reality) that higher density forms of housing are less desirable and less profitable (or more risky and challenging) for developers. However, recent housing studies cited in this section point to the importance of providing a diversity of housing forms to accommodate the needs of all North Cowichan residents.

According to the 2016 census, the majority of homes in North Cowichan are single detached dwelling followed by ground-oriented multi-family (duplex/ triplex/ townhouses, apartments) and moveable dwellings (see Figure 5.1). Of these households, 75% own their homes and 25% are renters.

Attainable housing is defined as non-market (subsidized by government) and affordable market housing.

Housing Types of North Cowichan	Single Detached	Apartments	Ground Oriented Multi-Family	Moveable	Total
Quantity	8,200 64%	1,535 12%	2,580 20%	505 4%	12,820

Figure 5.1: Housing Units in North Cowichan.

RECENT HOUSING DEVELOPMENT

The number of new units of each housing type built since 2009 shows a remarkably consistent pattern of development in North Cowichan over the last ten years. On average:

- 103 single-family units per year (66% of total);
- 18 semi-detached/duplexes per year (11% of total);
- 10 row/town houses (7% of total); and
- 25 apartments (16% of total).

Apartment construction is the only type of construction that has changed considerably over the ten-year period. From 2009 to 2014, an average of 6 apartment units were built each year. From 2015 to 2019, an average of 43 apartments units were built each year with 126 completed in 2018 and 92 in 2019.

The 2019 Cowichan Attainable Housing Strategy, which addresses non-market and market housing affordability identified the following trends over the past five years:

- An aging population overall, which will result in seniors being a much higher proportion of the population in the future.
- Aging rental housing buildings.
- Declining vacancy rates and increasing costs.
- Increasing numbers of households in core housing need.
- Significant and increasing gap between housing prices and household incomes.

HOUSING NEEDS ASSESSMENT

The Cowichan Valley Regional District's (CVRD) Housing Needs Assessment report was completed in early 2021 and explored both quantitative and qualitative data to help understand the current state of housing and the types of units that will be required in the future. As a basis for determining current and projected housing needs, the assessment assembled 50 kinds of data about current and projected population, household income, significant economic sectors, and currently available and anticipated housing units. This information has been collected at a municipality level for North Cowichan and is incorporated with the 2021 Housing Needs Assessment Data Report.¹

Given the projected population growth and household size, this report's analysis estimates that there is a need for 1,208 units of new housing in North Cowichan in the next five years with a particular need for one-bedroom units. Map 2 - Growth & Land Use Management identifies the location, amount, type and density required to meet the anticipated housing needs.

A household is said to be in 'core housing need' if its housing falls below at least one of the adequacy, affordability or suitability standards and it would have to spend 30% or more of its total before-tax income to pay the median rent of alternative local housing that is acceptable.

¹2021 Housing Needs Assessment Data Report

HOUSING SPECTRUM

A housing spectrum is a tool used to illustrate common types of housing (non-market, market, rental, ownership) and forms of housing (apartment, duplex, row house, single-detached house, etc.). The purpose of the spectrum is to show how important multiple types and forms of housing are in maintaining a healthy, attainable and adaptive housing system. Used globally, a housing spectrum typically displays housing as a linear progression from homelessness to homeownership based on the assumption that people will move from left to right with homeownership as the ultimate goal. A limitation is that it appears to suggest single-family home ownership is the desired end goal for everyone, which is not always the case, as individuals and families have different housing type preferences and those preferences can change over time.

Regardless of the model, the housing spectrum reflects the fact that a healthy housing stock needs to include a variety of housing forms and tenures to meet the diverse needs of residents from different socio-economic backgrounds and at every stage of their lives.

Figure 5.2 is a housing spectrum adapted from the Canada Mortgage and Housing Corporation (CMHC) spectrum specifically for the CVRD's Housing Needs Assessment Report. This spectrum includes typical income ranges for each housing type. The income ranges in each segment are based on the historic incomes of households of those tenures in the CVRD from the 2016 Census. The income ranges capture 75% of the population for each tenure type.



Figure 5.2: CVRD Housing Spectrum

5.1 DIVERSE HOUSING MIX

Although the detached single-family house is the predominant housing form in North Cowichan, demand is increasing for smaller homes on smaller lots, ground-oriented attached dwelling units, and apartments. A mix of housing types and tenures can better provide appropriate housing that responds to the various needs of a diverse population, including those looking for a more affordable option to a single family home.

More housing units close to the village centres can add to the vibrancy and walkability of the villages and create more opportunities for local businesses.

Providing for a greater range of housing, such as 3-4 bedroom units in apartments, provides appropriate housing options for varying household compositions such as families with children.

Smaller units and attached units are typically more energy efficient and increasing these as a proportion of overall housing supports North Cowichan's climate action goals.



Figure 5.3: Apartment. Credit: Cal Srigley



Figure 5.4: Row Houses. Credit: Cal Srigley

A variety of housing types, such as duplexes, townhomes, row homes, and co-op housing makes it easier for residents to stay in their neighbourhood as their housing needs and preferences change.

Homes in urban and rural neighbourhoods may have ancillary accommodation in the form of basement suites and secondary dwellings including coach houses, cottages, or laneway homes which can provide an affordable option for tenants, as well as making housing more affordable for homeowners.

Finally, there is scope for exploring regulatory options for non-traditional housing options such as vehicle living, boat live-aboards, float homes and tiny homes.

The demand for seniors-oriented housing is anticipated to increase as the population ages. Seniors often require a central location, assistance with everyday tasks such as meal preparation, and easy access to public transit and medical and social services. Companionships, safety and security are also increasingly important to older residents. Co-locating child daycare with seniors' facilities sometimes brings mutual benefits.²

Rural housing is an important component of the housing spectrum in North Cowichan. It provides for who seek a rural lifestyle and require only limited municipal services. It also provides accommodation for those who are actively farming the land. Generally, rural housing is serviced by wells and septic fields since municipal services do not extend to rural areas and extending municipal servicing in low density areas increases costs for all residents.



Figure 5.5: Row Houses



Smaller units close to commercial centres meet the climate action principle as residents are more likely to walk to shops and services and they are more energy efficient.

² See https://ssir.org/articles/entry/the_power_of_proximity_co_locating_childcare_and_eldercare_programs

5.1.1 Defining Success | Objectives

Objective: Encourage a variety of housing types (by size, type, tenure, density) integrated into villages, neighbourhoods, and rural areas that meet the anticipated needs of the whole community in quality and quantity.

Progress will be measured by: Increase in percentage of non-single family dwelling housing types (e.g., apartment, townhouse, semi-detached, coach house) as a percentage of total housing units created.

5.1.2 The Municipality will strive to:

- a. Secure commitments for housing types through appropriate and enforceable legal instruments, such as development agreements and housing agreements.
- b. Assess and consider how proposals for new housing meet the needs identified in the most recent Housing Needs Assessment Report.
- c. Update the Housing Needs Assessment Report at least every five years in collaboration with the Cowichan Valley Regional District.
- d. Direct residential development as shown on the land use map with the highest densities in the Village Centres, decreasing density in the neighbourhoods with a gradual transition to the low density in the rural areas outside the UCB.
- e. Support multi-unit residential development in areas identified as Village Centres on Land Use Maps where full services exist. Applications will be reviewed with particular attention to their accessibility to amenities, impact on the surrounding community, proximity to transportation, and public benefits offered.
- f. Encourage mixed-use development (residential and commercial) in Village Centres, where appropriate.
- g. Encourage a range of ground-oriented housing opportunities in neighbourhood areas. Residential development in these areas may include small lot single-detached houses, semi-detached houses, duplexes, cluster housing, townhouses, fee-simple row housing, multi-unit development in a single-detached form and garden suites/cottages.
- h. Explore and encourage different housing types that are suitable to aging in place, including smaller multi-unit residential and townhomes and supportive housing for seniors.
- i. Encourage and create zoning provisions for fee-simple rowhouses.
- j. Preserve and maintain older housing available in neighbourhoods.
- k. Investigate use of minimum densities and/or maximum lot sizes in the zoning bylaw to ensure effective use is made of scarce land within the UCB.
- l. Investigate use of zoning requirements fixing limits to buildable area and floor area ratios to prevent creation of excessively large houses that are out of keeping with local character and reflective of unsustainable high-consumption lifestyles.
- m. Encourage and incentivize water and energy efficient construction, including retrofits to existing housing.
- n. Establish policy to encourage legalization and authorization of previously unapproved secondary suites.
- o. Permit secondary suites in all single family and rural residential zones.
- p. Encourage housing solutions to support agriculture.
- q. Consider ways to streamline development approval processes for projects that align with the Municipality's affordable housing and environmental policies.

5.1.3 Where appropriate, the Municipality will ask developers and landowners to:

- a. Include a mix of unit sizes, including some family-size units (3-4 bedrooms) in multi-family buildings and that provision is made for common play areas and, ideally, childcare facilities.
- b. Provide residents of existing affordable housing with more notice and more compensation than provincial legislation requires, whenever redevelopment of such housing is proposed.
- c. Maintain a high standard of building and adaptive site design, ensuring there is proper integration with surrounding uses, providing for landscaping and improving the general visual appearance.
- d. Provide residents of rental housing with property in good condition through proactive property management, maintenance and investment so as to maximize safety and ensure a good quality stock of rental units throughout the community.
- e. Provide opportunities for residents with accessibility issues housing designed to meet universal accessibility standards.
- f. Avoid gated communities. Any strata roads in new subdivisions will require unimpeded access to and from municipal roads. Registration of a statutory rights of way including provisions for public access will be required as a condition of subdivision and/or zoning change.

5.1.4 The Municipality will work with others to:

- a. Work with local housing providers (e.g. Cowichan Housing Association), regional and provincial governments to encourage development of a variety of housing types.

5.2 AFFORDABLE AND RENTAL HOUSING

Solutions for increasing affordable housing require a housing mix that includes attainable market and non-market rental and ownership options. These can take a number of forms, from affordable home ownership to formal and informal rental, and from transitional housing and non-market rental (also known as social or subsidized housing) to emergency shelters. Encouraging a strong, local economy with employment opportunities and living wage can help people afford housing.

The Canadian Mortgage and Housing Corporation defines affordable housing as shelter costs equal to less than 30% of total before-tax household income. It is also linked to the ability to find housing that is in good condition and of adequate size. Different households experience housing affordability challenges in different ways. Affordability pressures affect low to moderate income earners, vulnerable groups, young professionals and local businesses that are struggling to maintain and attract employees. Locating affordable housing near transit and services ensures that those who cannot afford a vehicle have access to their daily needs.

Clear policies for the retention of affordable housing stock and the development of new affordable housing units built on the social justice and equity framework are needed. Policies should include support for young families, the elderly and the youngest, poorest and most vulnerable members of our community.

The 2019 Cowichan Attainable Housing Strategy is an important resource on this topic. The report outlines the following benefits of affordable housing:

- Support for the economy by providing workers and residents with local affordable housing options.
- Opportunities for households to live and work in their community.
- Sustainable, resilient neighbourhoods.
- Social diversity and inclusion.
- A healthy environment for individuals, families with children, seniors and other vulnerable households to live and thrive.

The report identified the priority groups in need of affordable housing:

- Families (including lone-parent families and multi-generational families).
- Low- and moderate-income earners.
- Low- and moderate-income seniors.
- Persons with disabilities.
- Vulnerable populations (women and children fleeing violence, people suffering with mental health and addiction issues, homeless people and people on fixed incomes).
- Indigenous people living off-reserve.

RENTAL HOUSING

Rental housing generally meets the needs of people with lower incomes, but it can also be a practical or lifestyle choice by people regardless of income level due to the relative flexibility. Many tenants, such as young working people and seniors, require housing to be located close to shopping, services, public transit and other amenities.

The need for more purpose-built rental housing is clear in North Cowichan. Based on the inventory of purpose-built rental units, there are 58% of households renting units from the condo strata market. While the strata market plays a valuable role in providing housing for renter households, purpose-built units provide greater security to tenants with long term secured tenure and more stable rents.

The bulk of the purpose-built rental unit supply was built prior to 1979 (65%). There is also limited supply of purpose-built rental bachelor units (5% of all units) and 3 bedroom units (7% of all units). There was historically low vacancy in 2019 across all rental unit types, particularly in bachelor units (0% vacancy). Policies which support the development of purpose-built rental projects are important to meet this need. This includes increasing density in growth centres and considering other development incentives to make these projects financially viable.

NON-MARKET HOUSING

There is a significant portion of affordable housing that will need to be provided at below-market rates for those with incomes that are insufficient to access market housing. This type of housing is typically funded or operated by the provincial government or non-profit housing operators. North Cowichan may partner with BC Housing and local non-profit housing operators to encourage a range of non-market units. It may also consider formalizing a land acquisition strategy to provide sites for non-market supportive housing. Finding suitable locations for non-market housing is one of the biggest obstacles. Providing pre-zoned 'shovel-ready' land is one of the biggest supports municipalities can provide.

BC Housing breaks down the types of housing support it provides into four high-level categories (see Figure 5.6): emergency shelter and housing for the homeless, transitional supported and assisted living, independent social housing, and rent assistance in the private market. North Cowichan can provide a welcoming environment for these types of housing and partner with BC Housing and other non-profit organizations by providing land at a nominal rate if available and/or development incentives such as fee waivers, parking relaxation and facilitating development approvals.

BC Housing Non-Market Housing Categories	
EMERGENCY SHELTER & HOUSING FOR THE HOMELESS	
Homeless housed	
Homeless rent supplements	
Homeless shelters	
TRANSITIONAL SUPPORTED & ASSISTED LIVING	
Frail seniors	
Special needs	
Women and Children fleeing violence	
INDEPENDENT SOCIAL HOUSING	
Low income families	
Low income seniors	
RENT ASSISTANCE IN PRIVATE MARKET	
Rent assistance for families	
Rent assistance for seniors	



Providing non-market housing meets the social justice and equity principle by supporting our vulnerable citizens.

Figure 5.6: BC Housing Non-Market Housing Categories.

5.2.1 Defining Success | Objectives

Objective: Recognize the importance of housing as a fundamental part of individual and community health and ensure that all residents have an affordable and adequate place to live.

Progress can be measured by:

- An increase in number of non-market housing units created, as a percentage of total units.
- A healthy and stable vacancy rate.

5.2.2 The Municipality will strive to:

- a. Create an Affordable Housing Strategy and include specific targets for rental and non-market units.
- b. Protect existing affordable rental housing stock.
- c. Consider including a Tenant Relocation Policy in the Strategy.
- d. Require any affordable housing amenity to be supported by appropriate legal and enforceable instruments, such as Housing Agreements.
- e. Direct affordable housing developments to Village Core and Village Residential areas close to transit, services and employment opportunities to reduce transportation costs of residents.
- f. Use Municipal land and/or consider purchasing land for non-market housing and provide at a nominal rate to non-profit housing developers for non-market housing.
- g. Investigate use of inclusionary zoning to require any potential density increase to incorporate a proportion of affordable units.
- h. Investigate pre-zoning land for affordable housing and explore options for accommodating non-traditional housing options such as vehicle living, boat live-aboards, float homes and small homes.
- i. Investigate zoning bylaw amendments to apply residential rental tenure zoning in appropriate locations.
- j. Amend the zoning on parcels to provide for additional density for purpose-built rental and affordable housing.
- k. Consider opportunities to incentivize new affordable housing (e.g. reduced or waived parking requirements, waiving amenity contributions).
- l. Only consider supporting applications for strata conversion of existing rental units in accordance with provincial legislation and MNC strata conversion policy.
- m. Where appropriate, Council may consider effectually waiving development cost charges and building permit fees by offsetting those fees through grants.
- n. Consider implications on housing costs and affordability when developing or amending land use and development policy and regulation.
- o. Support subsidized housing, supportive housing, homeless shelters and non-market housing for vulnerable populations such as seniors, low-income families and people with disabilities.

5.2.3 Where appropriate the Municipality will ask developers and landowners to:

- a. Prohibit stratas from enacting a 'No Rental' bylaw.
- b. In the case of a redevelopment project that demolishes existing rental units, motels or mobile home parks, the new project must include a similar number of rental units, and the developer must be willing to enter into a housing agreement to ensure the long-term security of the rental units. The Municipality may consider some benefit to the developer, such as increased development densities.
- c. Offer housing agreements or other legally binding instruments to maintain the affordability of the housing as a condition of rezoning or density bonus.
- d. Consider strategies for providing affordable housing when preparing development applications along with mechanisms for ensuring it remains affordable in the future.

5.2.4 The Municipality will work with others to:

- a. Partner with other government agencies, the private sector, non-profit organizations and service agencies to pursue affordable housing opportunities.
- b. Partner with regional First Nations to create housing developments.
- c. Explore governance options for delivering and managing affordable housing (i.e. housing authority).
- d. Identify and engage key stakeholders and service providers in the delivery of affordable housing.
- e. Partner with BC Housing and non-profit organizations to develop homeless shelters.

6

REGENERATION & PROTECTION OF THE NATURAL ENVIRONMENT





Life is divided into three terms – that which was, which is, and which will be. Let us learn from the past to profit by the present, and from the present, to live better in the future.

- William Wordsworth - English Poet



6.0 INTRODUCTION AND CONTEXT

North Cowichan's natural environment and biodiversity are a significant part of what citizens value about the area. Many also recognize that the ecosystems and watersheds we occupy and on which we depend, are under considerable strain from urban development, land use changes, recreation, and climate change. Healthy, biodiverse ecosystems provide important benefits to our community and the larger world, making it important to take the actions necessary to protect these assets against further loss or degradation. Protecting natural ecosystems as well as fostering our relationship and connections to nature also promotes human health and well-being.¹

Our community is intrinsically connected with its natural environment. North Cowichan features natural forests, lakes, wetlands, large rivers, and a rich foreshore that connect to large natural areas within the region. The community has been built along a series of dynamic foreshore intertidal ecosystems that include rocky shorelines, low lying beaches, mudflats, and salt marshes. This variety of natural features supports a high level of biodiversity and habitat for many species at risk.

Climate change represents a significant threat to the natural environment with a range of impacts already being felt across the entire region: winters are milder and wetter with more frequent flooding and increased erosion; summer drought frequency is higher contributing to increased plant mortality and wildfire risk; and the aggregate changes (and increased variability) result in greater disruption to natural systems overall. Climate change is expected to continue to increase the stressors on the health of our ecosystems in the coming decades. The increased pressure on local ecosystems from climate change further reinforces the importance of our actions to protect and restore these ecosystems.

Loss, fragmentation, and degradation of habitat - primarily associated with urbanization - is the greatest stress to the overall health of natural systems. Erosion and sedimentation of wetlands, waterways and the marine foreshore are key factors in the degradation of these most valuable habitat types. Additionally, point-source and nonpoint-source pollution from roadway runoff (including heavy metals, fuel, disintegrating rubber, and plastic) and agricultural runoff (including fertilizers, organics, pesticides, and herbicides) further degrade water quality and ecosystem health.

Protecting and restoring ecosystems in and around our growth centres as well as across North Cowichan is important because of their contribution to the well-being of both our natural and human communities. The benefits of these natural assets are multifaceted as they:

- Improve mental and physical health.
- Provide water storage in summer.
- Increase biodiversity.
- Enhance stormwater regulation.
- Remediate both water and air quality.
- Reduce the urban heat island effect.
- Reduce the need for gray infrastructure, (traditional or constructed, usually water tight and designed to avoid any type of ecosystem to grow on it).
- Increase carbon sequestration (storage).
- Help communities adapt to the impacts of climate change by increasing our resilience to extreme heat, drought, and rain events.²

The urban forest and other green infrastructure within our urban growth centres are also significant components of North Cowichan's natural environment. Trees, vegetation, and green space along our streets, in backyards, and municipal parks form an important part of the connected network of natural areas found throughout North Cowichan.

¹ Toronto Public Health. (2015). Green City: Why nature matters to health - An Evidence Review. Toronto, Ontario.

² Davies, H., Doick, K., Handley, P., O'Brien, L., and Wilson, J. (2017). Delivery of ecosystem services by urban forests. Forestry Commission Research Report. Forestry Commission, Edinburgh. i-iv + 1-28pp.

The Municipality aims to protect and restore North Cowichan's natural environment using policies that promote the health of natural ecosystems, improve water and air quality and reduce noise pollution. This OCP, supplemented by other policies and strategies, seeks to protect and restore natural areas and reduce and mitigate the impacts of development on our ecosystems. Development permits are the primary tool through which the Municipality can achieve this, although it is able to take more direct action on lands that it owns, as well as supporting voluntary stewardship by other landowners. In certain circumstances, the Municipality may also seek acquisition of environmentally sensitive areas to ensure long-term protection.

Other policies that are effective at protecting the environment focus on trees. Trees are a fundamental element of most terrestrial natural areas. Protecting and planting them helps to ensure that natural ecosystems are also protected. The protection of trees is usually enforced through a tree bylaw and tree protection and replacement requirements within subdivision and zoning bylaws when development takes place.

Protecting and restoring the natural environment will require that North Cowichan continue to strengthen partnerships with First Nations. First peoples have been stewards of the natural resources in North Cowichan for millennia and are intrinsic to their continued stewardship. Working closely with the Cowichan Tribes, the Halalt First Nation, the Lyackson First Nation, the Stz'uminus First Nation, the Penelakut Tribe and Snuneymuxw First Nation to protect our lands is vital to regeneration.

6.1 ECOSYSTEM HEALTH, BIODIVERSITY & CRITICAL HABITATS

North Cowichan's ecosystems include Coastal Douglas Fir forests, Hemlock forests, Garry Oak groves, grasslands, salt marshes, marine foreshore, estuaries, lakes, rivers, streams and wetlands. These ecosystems support a wide variety of plants, fungi, insects, and vertebrates. This variety of life is referred to as biodiversity. Higher biodiversity in an ecosystem is a good indicator that it is more resilient and productive.

Terrestrial Ecosystems

Various plant and animal species are found in North Cowichan's terrestrial ecosystem. Soil quality is key to ecosystem health and biodiversity. Soil sustains plants, animals, and humans by filtering and regulating water, sustaining plant and animal life, cycling nutrients and providing physical stability and support for plant roots and human structures.

The health of our ecosystems, particularly riparian areas and much of the Coastal Douglas Fir forests, are under significant stress. British Columbia's Conservation Data Centre identifies many Red- and Blue-listed species and plant communities at risk within these ecosystems, including the Coastal Douglas-fir forests and Garry Oak groves.

The second-growth stands in North Cowichan must be managed to sustain biodiversity and protect species at risk that inhabit them. Furthermore, the preservation and regeneration of our forest ecosystems will enhance the capture and storing of carbon dioxide and thus contribute to climate change mitigation.

In BC, it is estimated that 25% of our endangered species are negatively impacted by invasive species that are a threat to biodiversity. Once introduced, invasive species out-compete and displace local species and impact natural assets by:

- Degrading soil.
- Increasing erosion and impacting water quality.
- Choking out habitat and food sources for native wildlife.
- Potentially increasing the risk of wildfire.

Aquatic Ecosystems

North Cowichan includes freshwater ecosystems such as streams, marshes, wetlands, lakes, estuaries, riparian areas and marine ecosystems. Aquatic ecosystems perform many important environmental functions such as recycling nutrients, purifying water, attenuating floods, recharging ground waters and providing habitat for wildlife.

North Cowichan is home to many streams, rivers and lakes and special consideration needs to be given to the protection of their watersheds. [Somenos Lake and Quamichan Lake](#) are sibling lakes in the Cowichan Watershed. Both lakes were formed when glaciers receded 11,000 years ago; both are shallow and bowl-shaped; and would be likely to fill in and disappear in the next few thousand years without human intervention.

North Cowichan contains an extensive marine foreshore that is extremely sensitive to land use effects, especially in the face of rising sea levels. Dynamic processes like wind, waves, tides and currents affect the marine foreshore and the natural cycles of its marine life. These marine areas are profoundly influenced by the recreational, residential, industrial and commercial land uses on or adjacent to them. Climate change is increasing the stress on these areas as sea level rises and storm surges increase in both intensity and frequency. Intertidal marine life is also threatened by events like the June 2021 heat dome which destroyed sea creatures en masse, demonstrating the level of harm our changing climate is causing.

Natural assets are ecosystems that provide (or could be restored to provide) services such as stormwater attenuation and filtration previously performed by engineered human-made infrastructure. These natural assets are increasingly being included in municipal asset management plans. The [Municipal Natural Assets Initiative](#) recommends inventorying these assets as they play a valuable role in community health and resiliency. Quantifying the economic and social services provided by natural assets (e.g., flood mitigation, pollution control, and air quality remediation), provides a human valuation to the significant intangible and intrinsic value of ecosystems, and does not imply that ecosystems are substitutable or tradeable.³

³ Spash, C. 2008 "How Much is That Ecosystem in the Window?".

6.1.1 Defining Success | Objectives

Objective: Protect and regenerate local ecosystems and the connections between them and restore the environment to maintain and improve biodiversity, ecological health, and integrity.

Progress can be measured by:

- Increase in the amount, type and diversity of protected natural areas.
- Increase in tree canopy cover inside and outside urban containment boundary.

6.1.2 The Municipality will strive to:

Protect, connect, and regenerate ecosystems and mitigate threats to biodiversity

- a. Encourage and promote development plans and site layouts that incorporate Conservation Design and Site-Adaptive Planning principles to cluster housing while allowing for the preservation and acquisition of open space, sensitive ecosystems, and natural features
- b. Prohibit the disturbance of environmentally sensitive areas and seek to protect areas with high biodiversity and ecosystem value, as identified in the Municipality's environmentally sensitive areas mapping.
- c. Create and implement a biodiversity protection policy aimed at preserving environmentally sensitive areas, supporting green infrastructure networks and regeneration of degraded sensitive areas.
- d. Identify opportunities for improvements to the OCP and update the OCP accordingly, following adoption of a biodiversity protection policy.
- e. Continue to support the identification and mapping of environmentally sensitive areas to ensure that environmental protection action is effective.
- f. Recognize the need for the designation of ecological reserves and environmental management areas. The Municipality will continue to recognize additional areas like these in future.
- g. Protect and improve the carbon sequestration and ecosystem values of natural systems, including forested lands, agricultural lands, and wetlands.
- h. Integrate natural capital to the Municipality's asset management system with the help of programs such as the Municipal Natural Asset Initiative.
- i. Recognize the value of and promote the use of green infrastructure (e.g. bio swales, wetlands, storm water detention).
- j. Continue to pursue control measures on municipal lands to limit the introduction and spread of invasive species as resources allow.

- k. Consider the creation of restoration and regeneration guidelines that would help homeowners and developers understand what is expected of them to maintain the integrity of natural forested and riparian areas that are within or adjacent to their properties. This includes the removal of non-compliant structures, unauthorized fill, invasive species, and garbage, and replanting with native trees and understory vegetation.
- l. Consider developing an Invasive Species Management Plan.

Recognize and protect the special characteristics of marine areas

- m. Consider establishing pre-determined protection setbacks from parts of the ocean foreshore. These setbacks should consider the type of foreshore and the predicted impacts of climate change on sea level rise and storm surges.
- n. Promote and encourage environmental protection and restoration as the two priorities in all land and water use decisions in marine areas.
- o. Protect and restore the natural values of the Chemainus River estuary, Cowichan/Koksilah River estuary and Cowichan Bay foreshore.
- p. When an opportunity arises to review the Crofton causeway to the Shoal Islands (e.g. lease renewal), encourage appropriate agencies to restore natural tidal flows for Osborne Bay and replace the causeway with a footbridge to permit pedestrian access to the island from Crofton.
- q. Support increased public access to the foreshore and work to acquire new public access points through development approval processes and landowner negotiation.
- r. Prohibit the placement of fill in foreshore areas, except where it is required for environmental or public safety reasons, or for projects that create a significant public benefit. Where supported, appropriate mitigation and/or compensation measures are expected to be completed.
- s. Concentrate marine commercial and industrial uses in the appropriate waterfront use designation areas, as identified on the Growth and Land Use Map. The Municipality does not anticipate any additional lands or water being designated for these purposes with the exception of minor alterations or expansion of existing facilities.

- t. Support applications for private moorage only where there is limited or no public road access to the upland residential property, or where correct zoning is in place and supported by the local First Nations who have jurisdiction over the area. Where permitted, private moorage shall only be used for private purposes.
- u. Consider banning new private moorage along Sansum Narrows.

Identify and connect ecologically sensitive lands and natural areas

- v. Pursue opportunities to connect ecologically sensitive natural areas to facilitate the movement of species and maintain high levels of biodiversity throughout North Cowichan.
- w. Develop a Biodiversity Protection Strategy that provides a framework for preserving a network of connected ecologically sensitive lands and natural areas reducing pollutants, and other measures to protect and promote increases in quality and quantity of ecological systems and species.

6.1.3 The Municipality will ask developers and landowners to:

Protect, connect, and restore ecosystems and mitigate threats to biodiversity

- a. Protect and restore greenways and degraded natural areas as a condition of development approvals.
- b. Provide appropriate buffers between development and environmentally sensitive areas, including forests, watercourses, the marine foreshore and riparian setbacks, and known wildlife corridors.
- c. Prioritize avoiding negative environmental impacts, followed by minimizing or mitigating impacts, restoration, and compensation as a last resort approach.
- d. Consider submitting the spatial data of the location of confirmed species at risk collected as part of the development approval process.
- e. Leave nesting birds undisturbed by development during the nesting season (or as directed by advice from a qualified environmental professional to understand when a nesting bird will finish nesting or how to manage development near bird nests).
- f. Undertake projects that are unavoidably within watercourses only within the recognized periods of low risk for salmonid fish species and with the proper provincial approvals.
- g. Hire (or fund) qualified environmental professionals to monitor work close to environmentally sensitive areas.
- h. Use natural assets such as trees and vegetation through the development process to mitigate the impacts of climate change.
- i. Provide performance securities to ensure environmentally sensitive areas and trees are protected and enhance through the development process, including post construction monitoring.

6.1.4 The Municipality will work with others to:

Protect, connect, and regenerate ecosystems and mitigate threats to biodiversity

- a. Collaborate with Cowichan Tribes, the Halalt First Nation, the Lyackson First Nation, the Stz'uminus First Nation, the Penelakut Tribe and Snuneymuxw First Nation to identify and protect culturally important ecosystems and natural areas.
- b. Partner with land trusts or environmental non-governmental organizations, to acquire environmentally sensitive areas to ensure they are protected and enhanced in perpetuity.
- c. Partner with senior government and non-profit agencies to support the development and monitoring of initiatives aimed at ensuring that there is sufficient quantity and quality of water to sustain healthy natural systems.
- d. Reduce the impact of invasive species through enhanced management, education, and partnerships.
- e. Prioritize the use of native plant species, climate adapted, and drought-resistant plants and trees on both public and private lands.
- f. Support initiatives to assess ecosystem health changes, provide baseline assessments, obtain indicators, and restore natural areas.
- g. Support the rehabilitation of damaged natural aquatic spawning and rearing areas in consultation with First Nations, local and senior levels of government, community groups and property owners.

Recognize and protect the special characteristics of marine areas

- h. Review land use and development applications in the Cowichan Estuary Management Plan Area for consistency with the Plan. Together with the Ministry of Environment and Climate Change Strategy and the CVRD, the Municipality will continue to work towards meeting the objectives of the Plan.
- i. Support Ducks Unlimited in the development of a public management plan for its land holdings in the Chemainus estuary in partnership with other stakeholders.
- j. Advocate for cooperation and coordination among agencies responsible for the marine foreshore and inland resources on issues like establishing a 'no dumping zone' for boat and marine waste, and support appropriately-located pump-outs along the Municipality's waterfront and in particular Bird Eye Cove and Genoa Bay.
- k. Encourage federal and provincial governments to participate in remediation efforts along the Crofton waterfront.
- l. Support the 'Shoreline Clean Up' conservation efforts to address the issue of shoreline litter and plastic pollution.

6.2 LIMITING HUMAN IMPACTS: SOIL AND WATER QUALITY AIR, NOISE & LIGHT POLLUTION

SOIL

Soil is one of the primary sources of productivity, both for wildlife and agriculture. Preserving and increasing the quality of North Cowichan's soils is therefore an important aim. Overloading soils with pesticides, herbicides and fertilizer may temporarily increase short-term crop yields, but leads to long-term deterioration in soil and water quality. The Municipality can encourage regenerative agriculture practices and regulate soil deposition and removal through its bylaws. Soil and water quality are closely linked, with storm/flood waters mediating chemical exchanges between the land and the lakes and watercourses.

WATER

At present, Somenos Lake and Quamichan Lake share a common set of conditions and threats:

- Excessive nutrient loading from the farms and homes that surround the lakes (eutrophication).
- Historic nutrient loading, contained and released from the sediments.
- Insufficient "flushing" in summer due to reduced inflows and truncated outflows.
- Increased algae growth (blue-green algae blooms from phosphorous).
- Hypoxia (reduced oxygen levels as the vegetation decomposes).
- Intensified warming.

The combination of oxygen reduction at the bottom and temperature increases at the surface forces indigenous fish into the middle layer, where there is still some oxygen and temperatures are not too warm. In most recent summers, even that habitable middle layer has disappeared, resulting in fish-kills. Both lakes are now embraced by stewardship organizations, the Somenos Marsh Wildlife Society and the Quamichan Watershed Stewardship Society. Both are governed by watershed management plans.

AIR

Poor air quality has detrimental impacts on the health of residents and the natural environment. While North Cowichan's air quality is generally excellent, it sometimes falls below acceptable levels.

During periods with stable high pressure air cells, smoke and other pollutants can be trapped in valley lowlands. Because North Cowichan is part of a larger air shed, air quality concerns in neighbouring jurisdictions also affect us. In recent years, the vast majority of North Cowichan's poorest air quality days occur in the summer due to the movement of air from forest fires on the mainland. Changing our practices to reduce emissions is a responsible approach to minimize the impacts of air pollution on human and ecological health.

Trees and vegetation improve air quality and remove particulate matter. Managing for healthy ecosystems and tree canopy cover will help to improve long term air quality. Wildfires can also be a significant source of fine particulate matter. Managing for the risk of wildfires will be important not only for North Cowichan but also for neighbouring communities to maintain good air quality during the wildfire season.



Meets the social justice and equity principle by ensuring access for clean air for all means that those who don't have temperature controlled homes with air filters are still able to breathe healthy air.

SOUND

Another environmental irritant of concern to North Cowichan residents is noise pollution. Loud discordant sound (and vibration) emitted on a regular, repetitive basis can adversely affect the health and well-being of humans and animals (on land and in water) and are even capable of damaging physical structures over time. Efforts will be made to prevent the creation of new sources of noise pollution and to identify and mitigate the impact of current sources.

LIGHT & VISUAL

There also exist concerns about other effects of development such as:

- Light pollution which reduces the visibility of the stars in the night sky and can be disruptive to nocturnal and migratory species.
- Visual interruptions in forested mountain ridgelines resulting from development, forest operations and other human activity.

SOIL AND WATER QUALITY

6.2.1 Defining Success | Objectives

Objective: Pursue policies and practices that lead to long-term regeneration and improvements in soil and water quality, including reductions in contaminants and invasive species.

Progress can be measured by:

- Improvements in water quality, particularly in Quamichan and Somenos Lakes.
- Improvements in soil quality and productivity.

6.2.2 The Municipality will strive to:

- a. Retain native soils when possible and continue to implement and update regulations as necessary to reduce negative impacts from soil removal and deposit. Soil deposits should be free of invasive species and covered when not in use.
- b. Protect surface water, aquifers, groundwater quality and quantity through the Natural Environment Development Permit approval process.
- c. Ensure land use and growth consider the limits of water supply.
- d. Ensure that development and land use activities support the natural hydrologic cycle, including groundwater recharge.
- e. Work to retain the historic natural water balance by:
 - Protecting and restoring watercourses, waterbodies, wetlands and aquifers.
 - Preserving and restoring riparian plant communities.
 - Encouraging rainwater infiltration, including the use of green infrastructure
 - "Daylighting" (opening, to expose natural light) and restoring creeks and waterways that have been channelized, piped, or buried.
 - Designing developments to allow flooding, stream-bank erosion and other natural ecological processes to continue unimpeded while considering the expected impacts of climate change.

- f. Work to eliminate algae bloom and fish kills by restoring water quality in Quamichan and Somenos Lake. Reduce phosphorus levels in the lake by managing the watersheds and the streams that drain agricultural/rural and residential lands, and addressing internal loading of phosphorous.
- g. Apply a systems approach to watersheds, and explore options to map protected riparian area setbacks from creeks, foreshore and other waterbodies. These setbacks should consider the size and shape of the watercourse, bank characteristics, and use by fish and other aquatic species and should meet, or exceed, provincial and federal protection requirements.
- h. Recognize the benefits and impacts of seasonally flooded agricultural lands. These lands can play an important role managing stormwater flows. They can, however, also be significant sources of nutrients that contribute to eutrophication of our water bodies.
- i. Recognize the value of and promote the use of green infrastructure (e.g. bio swales, rain gardens, wetlands, tree trenches, and storm detention ponds).
- j. Adopt roadside maintenance procedures that preserve the treatment function of verges and ditches leading to natural areas.

6.2.3 The Municipality will ask developers and landowners to:

- a. Utilize best practices to mitigate surface water run-off entering natural surface and groundwater from projects requiring municipal approval and prohibit discharge of unmanaged rainwater into watercourses. Measures will include the use of green infrastructure.

6.2.4 The Municipality will work with others to:

- a. Support societies and neighbourhood associations that have tractable plans for work within watersheds that regenerate sensitive ecosystems and lead to improved water quality.
- b. Work with landowners, the regional district and provincial agencies on watershed management plans designed to protect the integrity of fishery and agricultural use, while ensuring that environmental values are not unduly compromised.
- c. Discourage or ban the use of cosmetic pesticides within North Cowichan.
- d. Support 'green shore' initiatives to restore physical processes such as the natural actions of water, enhance habitat function and diversity and reduce pollutants entering the aquatic environments.

Manage risk to public health from noise pollution and reduce impact from light pollution

- e. Acknowledge that noise can be an environmental health issue and/or a nuisance and seek to reduce noise pollution wherever possible.
- f. Advocate for provincial regulations and enforcement clamping down on vehicles designed or modified to be intentionally noisy.
- g. Consider the development of more comprehensive regulations related to the management of noise on private property.
- h. Work to protect night sky values by minimizing sources and effects of light pollution, implementing dark sky principles in development and capital projects, and avoiding shining bright lights on habitat areas.
- i. Create standards for roadway and area lighting combining CPTED (Crime Prevention Through Environmental Design) and dark skies approaches.

AIR, NOISE AND LIGHT POLLUTION

6.2.5 Defining Success | Objectives

Objective: Pursue practices that sustain good air quality to reduce the immediate and long-term health impacts to residents. Identify and mitigate sources of noise and light pollution.

Progress can be measured by:

- Improvement in air and water quality.
- Reduction in litter and plastic waste.
- Reduction in light pollution in the rural areas.

6.2.7 The Municipality will ask developers and landowners to:

Manage risk to public health from noise pollution and reduce impact from light pollution

- a. Take into consideration the potential for noise pollution posed by an applicant's operation or activity and accept additional requirements to ensure that any potential disturbances are minimized.
- b. Submit lighting plans as part of site design, demonstrating measures to minimize light spill into natural areas or the night sky.

6.2.6 The Municipality will strive to:

Manage risk to public health from air pollution

- a. Recognize the importance of clean air to the health and well-being of residents and work to protect clean air in North Cowichan.
- b. Monitor regulations related to the management of outdoor burning.
- c. Implement a wildfire development permit area policy to reduce the risk from wildfires.
- d. Provide public information and education regarding the health hazards associated with particulate matter in the air.

6.2.8 The Municipality will work with others to:

Minimize the risk to public health from air pollution

- a. Support initiatives to reduce vehicle emissions, such as discouraging idling, electrifying the municipal fleet where possible, and promoting alternative forms of transportation.
- b. Address impacts of wood stoves and backyard burning in collaboration with the CVRD.

6.3 TREES AND FORESTS

TREES, PUBLIC AREAS AND PRIVATE FORESTS

Maintaining healthy forests and tree canopy is essential if the Municipality is to achieve its goals of preserving its biodiversity while providing for economic activity. Forests and trees provide multiple values, including ecological, recreational, and economic values. Forest lands are essential for conserving water and soil quality, air quality, biodiversity, and wildlife habitat. Forests also have a role in the sequestration of carbon and contribute to climate change mitigation.

In North Cowichan, our forests provide a wide range of environmental, social and economic benefits. Trees replace carbon dioxide in the atmosphere with oxygen, improve water quality, reduce stormwater management infrastructure and costs, provide wildlife habitat, and reduce heating and cooling costs. Policies to sustain and restore functional natural forests should seek to maximize these benefits, while mitigating risks from forests such as wildfires and hazard trees.

About 25% of the North Cowichan land base is the Municipal Forest Reserve while other forests are either owned by private forest companies, or leased to them by the provincial government. The remaining forests, trees, vegetation, and green space along our streets, in backyards, and municipal parks form an important part of the connected network of natural areas found throughout North Cowichan.

North Cowichan lies in the Coastal Douglas-fir biogeoclimatic zone. This zone includes a variety of rare ecosystems (e.g., Garry Oak meadows), as well as many provincially identified rare and endangered species. Much of the Coastal Douglas-Fir Zone has been destroyed, damaged, or fragmented over the past century by logging activity, urban, residential and agricultural development, along with the spread of invasive species such as Scotch Broom. As the human population continues to grow, the important older, second-growth forests that remain are at significant risk. The health of the Coastal Douglas-Fir Zone in this region depends on wise stewardship, conservation, and rehabilitation.

6.3.1 Defining Success | Objectives

Objective: Maintain healthy forests and tree canopy across North Cowichan within natural, rural, and urban areas.

Progress will be measured by:

- Increase in canopy cover inside and outside the urban containment boundary.
- Qualitative assessments of forest health and biodiversity.

6.3.2 The Municipality will strive to:

- a. Recognize the importance of Garry Oak meadows and Arbutus groves as locally important ecosystems that provide high biodiversity values and work to retain stands of greatest value.
- b. Prevent preemptive land clearing by updating subdivision bylaw.
- c. Consider creating a tree protection bylaw and/or updating the subdivision and zoning bylaws to:
 - Manage removals.
 - Articulate protection.
 - Prevent unnecessary tree clearing.
 - Prescribe lot coverage standards, and
 - Ensure adequate replacements particularly during development.
- d. Support the retention of areas of mature tree cover and preservation of other natural features for all development, particularly in environmentally sensitive areas and areas of steep slopes.
- e. Consider developing an urban forest strategy or integrating guidance for the protection, retention, and replacement of tree canopy in the Biodiversity Protection Strategy.
- f. Consider setting urban forest canopy cover targets for existing and future residential and commercial areas and developing a retro-fit canopy cover plan for deficient areas.
- g. Provide guidance for the planting of tree species that are suitable to the local climate, site conditions (particularly for moisture and soil volume available), and climate change.
- h. Encourage the use of natural forests and native shrubs as roadside vegetation in rural areas.

6.3.3 The Municipality will ask developers and landowners to:

- a. Retain and protect healthy trees growing outside of the proposed development footprint. Where trees cannot be retained, establish suitable replacement trees on site. Recognize the importance the Douglas Fir bio-geoclimatic zone ecosystems and work with the Province to identify opportunities to protect them.

6.3.4 The Municipality will work with others to:

- a. Support and encourage stewardship of trees on public and private land.
- b. Recognize the importance of the Douglas Fir Bio-Geoclimatic Zone ecosystems and work with the Province to identify opportunities to protect them.
- c. Encourage innovation and integration of best practices in private forestry operations to ensure the long-term sustainability of the forestry industry, including considerations of visual impacts from logging.
- d. Support mutual aid agreements and cooperative practices between forest land holders, particularly for fire monitoring and the prevention of vandalism, theft, and general crime.

MUNICIPAL FOREST RESERVE

The Municipality of North Cowichan is one of the few communities in North America that owns and manages forest lands for the benefit of residents.

Approximately 25 per cent of North Cowichan's land base is in the Municipal Forest Reserve. This managed forest – 5,000+ hectares – has been a Municipally owned working forest since 1946. The forest serves as a significant recreational area for the community and visitors. It has also provided revenue for the municipality, which offset residential and business property taxes.

In 2021, a Memorandum of Understanding was signed between North Cowichan and the Quw'utsun Nation to establish a Working Group. The Municipality and the Nation agreed to exchange information in relation to the stewardship and use of the Municipal Forest Reserve for the benefit of the community.

The role of the Municipal forest is being considered through a review in parallel with this OCP update.

6.3.5 The Municipality will strive to:

North Cowichan is guided in its forestry management decision-making by the principles of sustainable forest management and environmental protection.

- a. Protect the forestry resource for the benefit of future generations.
- b. Sustainably manage North Cowichan's Municipal Forest Reserve to ensure a healthy forest is protected in the long term.
- c. Periodically review the role, function and management of the Municipal Forest Reserve.
- d. Consider opportunities to expand the Municipal Forest Reserve.
- e. Support and regulate the sustainable harvesting of non-timber resources (e.g. salal, mushrooms, berries).
- f. Support responsible, recreational uses of municipal forest lands in accordance with the Parks and Trails Master Plan.
- g. Plan harvesting to help reduce the risk of wildfires.

6.3.4 Defining Success | Objectives

Objective: Retain and conserve the Municipal Forest Reserve through sustainable harvesting practices (if harvesting is to be undertaken at all), wildfire prevention and fuel reduction; encourage sustainable forestry best practices; and protect other non-timber forest functions such as recreation.

Progress will be measured by:

- Increase in area of stocked forested land within the Municipal Forest Reserve lands.
- Increase in number of trees planted on Municipal Forest Reserve lands.
- Qualitative assessments of forest health and biodiversity.

6.4 NATURAL HAZARD AREAS

Natural hazards, including floods, wildfires, windstorms, sea level rise, earthquakes and landslides, put life and property at risk, but if planned appropriately, that risk can be reduced. These are natural events that occur within the normal functioning of our geophysical and biological environment. However, they are becoming more frequent and extreme as our climate continues to change. They become hazards when they adversely impact human lives, property, or ecosystems. The risk of these impacts increases as people build their homes closer to forests, steep slopes, and floodplains. While the best approach is to avoid development in these areas, doing so is not always possible. Map 6 - Natural Hazard Areas identifies a number of these natural hazard areas.

As new development encroaches into forested interface areas, the risk from wildfires and trees falling becomes greater. Climate change is causing longer and drier summer drought periods that are increasing the wildfire threat. Development in these areas must be planned and constructed to be as resilient as possible. There is also an increasing threat of trees dying as they are stressed by pests and diseases, drought, and higher intensity windstorms.

Steep slopes are areas with a grade of 20% or greater. These areas are sometimes considered desirable for housing development because of the views they afford, and because they focus development away from land that has other, more productive uses. However, there are risks to development on steep slopes, including landslides and other forms of erosion and the potential for greater instability during an earthquake.

Low lying areas can often be at risk to flooding, particularly in areas that are adjacent to rivers or lakes. Home and infrastructure development can alter the natural hydrology in a watershed. As climate change causes rainstorms to increase in intensity, frequency and duration, stormwater systems can become overwhelmed and cause flooding in developed areas.

Climate change is anticipated to result in dramatically rising sea levels over the coming years. This will have implications for the placement of new developments along the waterfront, and it may have implications for the safety of existing structures.

A number of studies have been undertaken in North Cowichan to assess the risks posed by natural hazards and to recommend mitigation measures to reduce those risks; however as climate change progresses, the Municipality will need to carry out further Climate Change Risk and Vulnerability Assessments on its natural areas and physical infrastructure systems.

6.4.1 Defining Success | Objectives

Objective: Minimize the risk to life and property within natural hazard areas.

Progress will be measured by:

- Completed response plans for various types of emergencies.
- Emergency response preparedness as measured by number of practice or training sessions offered or attended.
- The adoption and implementation of a Community Wildfire Protection Plan and Wildfire Development Permit Area.
- Multi-hazard risk analysis, with a focus on flooding (including coastline flooding) and steep slopes.

6.4.2 The Municipality will strive to:

- a. Coordinate land use and environmental management policies to protect people and property from natural hazards.
- b. Require appropriate consideration of all natural hazards for proposed developments in areas with known hazards including sea level rise, floods, landslides and wildfires.
- c. Where possible, leave lands subject to flooding in a natural state or use for parks, open space recreation or agricultural use.
- d. Determine flood risk by referring to existing flood mapping, where available, and/or require site-specific elevation information to determine if there is a risk of flooding prior to development approval.
- e. Consider the potential impact of flooding on agricultural land when developing future water management and flood control policies.
- f. Require commercial and industrial uses of land subject to flooding to be flood-proofed to the flood level prescribed by the Ministry of Environment and Climate Change Strategy and with appropriate setbacks put in place.
- g. Prohibit any works within designated floodplains that may significantly alter hydrological patterns because of the cumulative impact that such works may have. Where works cannot be avoided, the Municipality will permit those works only if there is evidence that the works can be done in such a way so as to minimize downstream effects, maintaining the principle of no net water level rise at other locations.
- h. Encourage the use of natural forests and native shrubs as roadside vegetation in rural areas.
- i. Consider reductions in prescribed setbacks where a floodplain setback from a watercourse renders an existing lot undevelopable, only if the following criteria are met, together with any other requirements determined by the Municipality to be necessary:
 - i. A geotechnical report from a professional engineer certifying that the land may be used safely for the intended use.
 - ii. Environment-related factors such as building siting, placement of fill, and the planting and maintenance of vegetation have been considered, along with potential impacts and risks.
- iii. A "Save Harmless" covenant is registered in favour of the Municipality.
- iv. Ensure flood hazard mitigation measures, including land use restrictions, within the Cowichan estuary are carried out in accordance with the Cowichan Estuary Environmental Management Plan (1987).
- j. Strongly discourage development on slopes 30% or greater, except where the property would otherwise be rendered useless and it can be demonstrated (by a Qualified Professional) that the lands may be used safely for the intended purpose.
- k. Require development on or adjacent to steep slopes be designed in accordance with natural profiles, sensitive to natural grade, and to minimize visual impacts, impacts on environmentally sensitive areas and be assessed by a geotechnical engineer.
- l. Seek to manage steep slope systems as single real estate entities. Subdivisions creating private lot lines bisecting slopes 30% or greater will not generally be permitted.
- m. Require proposed development within wildfire interface areas to be located and constructed in a way that makes them resilient to wildfires through use of "Fire Smart" design principles, including potential creation of a wildfire development permit area.
- n. Require that all trees adjacent to new development be assessed for structural stability and health.
- o. Require that new development on the coast considers implications of sea level rise.

6.4.3 The Municipality will ask developers and landowners to:

- a. Avoid locating new (greenfield) development within designated floodplains. Where no alternative exists the Municipality will require structures to be flood-proofed to standards specified by the Ministry of Environment and Climate Change Strategy or existing flood mapping.
- b. Incorporate design measures in relation to flooding for redevelopment of (brownfield) sites lying within the floodplain and improve flood resilience wherever possible.
- c. Use best practice on-site storm-water management systems and facilities to reduce potential flood impacts.
- d. Avoid new development on or adjacent to steep slopes whenever possible.
- e. Complete a risk assessment for wildfire and trees when developing properties adjacent to forest areas.
- f. Support the protection and restoration of natural areas to provide flood relief where appropriate.

6.4.4 The Municipality will work with others to:

- a. Continue to work with appropriate agencies and jurisdictions to:
 - i. Participate in the preparation of emergency response plans.
 - ii. Participate in emergency response exercises.
 - iii. Coordinate response with other local agencies.
 - iv. Assist with community recovery.
 - v. Provide leadership in reducing risks through the assessment of hazards and their potential impacts and the development of mitigation strategies.

7

FOOD SECURITY & LOCAL AGRICULTURAL SYSTEMS





...the care of the earth is our most ancient and most worthy and, after all, our most pleasing responsibility. To cherish what remains of it, and to foster its renewal, is our only legitimate hope.

For the true measure of agriculture is not the sophistication of its equipment the size of its income or even the statistics of its productivity but the good health of the land.

-Wendell Berry



Quote by Wendell Berry from his book, 'The Art of the Commonplace: Agrarian Essays'.

7.0 INTRODUCTION AND CONTEXT

North Cowichan has a very long tradition of farming, both pre-contact and post-contact, due to its fertile soils and mild climate. In addition, the land and shoreline provides for First Nations food and medicine gathering throughout the seasons. Careful stewardship of our agricultural lands and a thriving local food system are vital for North Cowichan's social well-being, culture, economy, and environment. Agricultural lands and productive soils are defining features of North Cowichan, and its associated industries form an important sector of our local economy.

North Cowichan's character and identity are defined in part by the agricultural landscape and reputation for producing good quality food and other agricultural products. Supporting agriculture has been and continues to be a strategic priority for the Municipality. Food production is not necessarily limited to the rural areas. Urban agriculture is also an important component of North Cowichan's food systems.

The policies of this section support local agriculture and the protection of agricultural land. However, local government's limited jurisdiction over food and farming means that it cannot achieve these goals and objectives alone. It will be necessary for the Municipality to work with farmers, food processors, other government agencies, businesses, non-profit organizations, and the community.

Urban agriculture, urban farming, or urban gardening is the practice of cultivating, processing, and distributing food and natural materials in or around urban areas. This includes the use of land, buildings, structures, roof-top and balcony gardening, vertical farming, community gardening in vacant lots and parks. This use excludes the keeping of farm animals and poultry, but may include aquaculture, "urban beekeeping" and insect production with conditions.



Figure 7.1: Farmland in North Cowichan.

7.1 FOOD SECURITY

North Cowichan is a signatory to the 2009 [Food Charter](#) which defines food security as the state when all members of the community have access to nutritious, safe, ecologically sustainable and culturally appropriate food at all times. Food security is a growing concern globally. Our supply of food depends increasingly on international systems of production and distribution at a time when strains in these systems are becoming more evident, and the environmental and health consequences of such systems are becoming better understood.

Facilitating increased local production and access could help address concerns about the security of our food supply, its quality, and the environmental and human costs of a global food distribution system. By encouraging local agricultural production, addressing issues related to hunger in our community and to the relationship between low-cost housing and food access, North Cowichan has a role to play locally in promoting greater food self-sufficiency and ensuring food security.



Ensuring access to food for all residents meets the principles of social justice and equity.

7.1.1 Defining Success | Objectives

Objectives: Enhance access to healthy, affordable, locally grown, high quality, nutritionally dense food, especially for vulnerable populations. Sustain and increase local agricultural activity, especially of food systems that can improve the food security for the local population.

Progress can be measured by:

- An estimate of how much of the community's food needs are produced locally.
- The number of people who rely on food bank/food donations to meet their needs.
- Economic analyses of local farming sector.

7.1.2 The Municipality will strive to:

- a. Support local food initiatives and strive to reduce regulatory barriers to increase local agricultural activity and food production, as part of its commitment to food security.
- b. Consider creating a community garden strategy to guide the development and management of community gardens in a variety of appropriate locations throughout the municipality.
- c. Allow urban agriculture as a principal permitted use in all designations and zones.
- d. Allow for the use of fresh food trucks (selling veggies, poultry meat, eggs, cheese etc.) to park within neighbourhoods to provide access to residents for fresh local produce.

7.1.3 The Municipality will ask developers and landowners to:

- a. Provide (within the Urban Containment Boundary (UCB)), space and supportive infrastructure (e.g. irrigation, storage) so that residents who do not have access to their own land have capacity to grow some of their own food in the urban context (community gardens, common garden areas in multi-family buildings, etc.).

7.1.4 The Municipality will work with others to:

- a. Provide support for an expanded Farmer's Market, including street closures, parking and loading/unloading areas for vendors (City of Duncan).
- b. Encourage and support the initiatives of food businesses and organizations that provide access to healthy, high quality, nutritionally dense food, especially for vulnerable populations.
- c. Collaborate with the Cowichan Food Security Coalition and Cowichan Green Communities to implement and/or update the [Cowichan Food Security Plan 2010 Edition](#).
- d. Support food equity and food security initiatives by Non-Governmental Organizations, community members and other levels of government.
- e. Support initiatives to reduce the amount of food waste.

7.2 LOCAL AGRICULTURAL SYSTEMS

Food and agricultural systems encompass the interlinked value-adding activities of production, aggregation, processing, distribution and disposal of products that originate from agriculture, forestry and fisheries. They are part of the broader economic, societal and natural environments in which they are embedded.¹

Agriculture is a core sector of North Cowichan's economy.

This OCP establishes clear priorities and high-level policies to strengthen local food and agriculture systems beyond farmland protection to include the full spectrum of agricultural activities. Key documents that support these initiatives include the [Strategic Agricultural Plan](#) (2001), [Cowichan Food Charter](#) (2009) and the [Agricultural Advisory Committee Work & Implementation Plan](#) (2013).

¹ Sustainable food systems. Concept and framework. (2018). Retrieved from: <http://www.fao.org/3/ca2079en/CA2079EN.pdf> Accessed Nov 2020.

OPPORTUNITIES AND CHALLENGES

North Cowichan envisions an agricultural sector that is economically, socially, and environmentally healthy and sustainable. Key challenges to agriculture include the low rate of return on investment (driven partly by being forced to compete in a globalized food production system), the high price of land (driven in part by land speculation and demand for housing), lack of access to water, and inadequate agricultural drainage on potentially productive valley bottom soils.

Sustainable food means food produced without degrading soil quality or depleting water sources. It also means little-to-no use of fertilizers, herbicides, and pesticides. It is possible to maintain land for agricultural production while also preserving adjoining natural assets and ecosystems. Agricultural land itself can also provide valuable habitat. For example, if native plants and flowers are allowed to grow in field edges, hedgerows and around crops, pollinators, birds, bats, and other creatures, can also thrive.

Agriculture can be viewed from a climate change perspective as both a part of the complex climate change problem as well as a potential part of the solution. Agriculture and food processing generate greenhouse gas emissions through disturbance of the soil, methane from livestock, use of fuels and chemicals in crop production and the energy used in processing and transporting food. The CAEP Economic and Emissions Modelling Overview (February 9, 2021) assumes GHG emissions from agriculture will remain relatively stable until 2050. However, innovative farming techniques may create opportunities for the soil itself to be a significant carbon sink.^{2 3} Conventional farming techniques tend to unlock and release carbon from the soil.



Regenerative agriculture practices meet the climate action principle.

Recent developments in regenerative farming techniques that strive to minimize soil disturbance can restore soil health and its ability to lock in carbon. Opportunities for employing these practices in North Cowichan could be explored with partners in the agricultural community.

6 Core Principles of REGENERATIVE AGRICULTURE



Figure 7.2: Principles of Regenerative Agriculture, retrieved from <https://www.generalmills.com/en/Responsibility/Sustainability/Regenerative-agriculture>

³ Read more about carbon release from soil here: <https://soilhealthinstitute.org/>

⁴ Read more about soil health and its ability to lock in carbon here: <https://soilhealthinstitute.org/>.

7.2.1 Defining Success | Objectives

Encouraging local food production reduces our carbon footprint from food transportation and also enhances local community resilience due to reduced risk of supply chain disruption. Farmers will need to adapt to new climate norms to be able to grow food in new climate conditions.

Urban agriculture practices such as growing food in backyards or on balconies, in community gardens, in common areas in apartments and in parks can be an important contribution to local food production. Backyard chickens and beekeeping have become increasingly common in urban areas. Policies that support these initiatives such as allowing urban agriculture in a variety of land use designations will help strengthen North Cowichan's food system.

The Municipality recognizes the great value that its farmers and agricultural lands bring to North Cowichan's economy, community, and environment. The Municipality recognizes its role in reducing barriers to farming through maintaining consistency with provincial ministry guidelines for supporting agriculture. It also recognizes it has limited ability to support and regulate farming on private lands, therefore we must collaborate with farmers, food producers, land-owners and non-governmental associations, and other levels of government to achieve these objectives. Residents play an important role in supporting a thriving local food system. As food consumers, their daily choices can help support viable local farms, markets and food processors as well as support greater food security for the whole community.

Because of these trends and challenges, the Municipality must stay flexible in order to support agriculture as a future economic engine for the region, and to ensure the agricultural land base is maintained.

Objectives:

- a. Protect the agricultural and farmland base.
- b. Strengthen the economic vitality of farming by encouraging farming and food processing as a viable business enterprise, employment opportunity and way of life.
- c. Diversify and expand the local sustainable food system.
- d. Reduce greenhouse gas emissions from the food system and increase carbon storage in soils.
- e. Enhance biodiversity by preserving, connecting and enhancing habitat on agricultural lands.
- f. Work towards a "circular" - low waste - food system.
- g. Support educative, commercial and cultural initiatives pertaining to food production and processing (e.g. safe canning workshops or establishment of local food hubs).
- h. Support initiatives that promote "urban farming", including small and micro-scale production activities.

Progress will be measured by:

- Increase in the percentage of properties that are producing food.
- Reduction in annual GHG emissions from agriculture.
- Qualitative assessment on farms using organic and/or regenerative farming techniques.
- Total farm sales.

7.2.2 The Municipality will strive to:

Protect farming and the agricultural land base

- a. Protect land within the Agricultural Land Reserve (ALR) and other agriculturally-productive lands from inappropriate development.
- b. Not support exclusion of agricultural lands from the ALR and subdivision of ALR lands (including homesite severances) unless there is no net loss of ALR lands, and a net benefit to agriculture can be clearly demonstrated.
- c. Require all ALC applications for exclusions, subdivision, soil and fill operations, and non-farm use to provide documentation prepared by a qualified registered professional (e.g., soil suitability analysis results, environmental farm management plan) to demonstrate why the application is necessary and appropriate.
- d. Where non-farm use, subdivision, or exclusion from the ALR can be supported and results in materially increased development potential accruing to the landowner, the Municipality may require the landowner to contribute to the Municipal Agriculture Reserve Fund.
- e. Update the Strategic Agricultural Plan, and develop a policy or strategy for use of the Municipal Agriculture Reserve Fund and potential use of Municipally-owned property for farming activity.
- f. Minimize the footprint of housing and farm buildings on agricultural lands.
- g. Consider up to three dwelling units per parcel, within no more than two separate buildings on farmland where:
 - It supports the agricultural use of the property.
 - It will preserve and/or protect an environmental feature.
 - Driveway access, parking areas and utilities are generally shared.
 - The positioning and design complement the rural character of the immediate area.
 - The ALC has granted approval, or the housing is permitted by ALC policy and regulation.

- h. Where proposed development abuts the ALR along the Urban Containment Boundary (UCB), agricultural activity must be protected from negative urban influences through the use of buffers, restrictive covenants, and development permits.
- i. Consider supporting proposals for bio-gas systems.
- j. Review options to engage with the agricultural community on decisions and policy development regarding agricultural issues.
- k. Prevent new development, both within and outside the ALR, from impacting downstream agricultural land in watersheds, increasing run-off, compromising farmland drainage, or otherwise disrupting hydrology.

Strengthen the economic vitality of farming

- l. Update and maintain the 2001 Strategic Agricultural Plan.
- m. With the approval of the ALC, and where appropriate, agricultural soils removed as part of municipal operations and capital programs and screened for contamination and invasive species will be offered to operating farms in North Cowichan.
- n. Consider assisting organizations or initiatives that connect potential farmers to agricultural land, including farmable land owned by the Municipality.
- o. Support urban farm operations within non-agricultural commercial, industrial and residential zones.
- p. Advocate to provincial and federal governments to promote economic viability of localized food production systems.
- q. Support the establishment and expansion of farmer's markets.

Diversify and expand local sustainable food system

- r. Encourage sustainable aquaculture systems such as land-based aquaponic systems.
- s. Encourage the development of local food processing and distribution facilities that support Vancouver Island producers.
- t. Support the development of farmers' markets, community supported fisheries, cooperatives, produce box programs, and similar innovations that promote access to local food.
- u. Encourage the development of a regional food hub, including an aggregation and distribution facility to ship products to consumers in the region.
- v. Support the development of an Agricultural Development Centre that includes training and research into regenerative techniques applicable to North Cowichan's soils and climate.
- w. Support innovations in agriculture to maintain and enhance the viability of the agricultural sector.
- x. Support limited non-agricultural activities (which may or may not require ALC non-farm use application) that do not have a substantive impact on farm operations and help to supplement and maintain the viability of the farm operations as the continued primary purpose.
- y. Encourage and promote agri-tourism.
- z. Consider purchasing or leasing farmland for the purposes of a regenerative agriculture demonstration project.
- aa. Promote biological diversity and ecosystem health on farmland.
- ab. Consider cosmetic pesticide restrictions, along with restrictions on other potentially harmful substances.
- ac. Promote water conservation by restricting the use of domestic lawn watering in order to preserve the water supply and aquifers for agricultural use and ecosystems.

Work towards a "circular" (low waste) food system

- ad. Support initiatives and organizations that reduce food waste and food packaging. Single use containers, packaging, and utensils will be phased out of municipal operations wherever practical.
- ae. Consider implementation of initiatives such as plastic bag or styrofoam food container bans and install water bottle fillings stations at municipal parks and facilities.

7.2.3 Where appropriate the Municipality will ask developers and landowners to:

- a. Where conversion of agricultural land to non-agricultural uses occurs, require contribution to an Agricultural Reserve Fund.
- b. Look for ways to support local food security and farming initiatives.
- c. Provide opportunities for residents to have food producing gardens in urban areas.
- d. Provide appropriate buffers where residential land abuts agricultural lands.

7.2.4 The Municipality will work with others to:

Farmers and Agricultural Landowners

Significantly lower greenhouse gas emissions and greater carbon storage

- a. Use and promote farming methods and techniques that reduce GHG emissions, and sequester carbon in the soil.
- b. Limit the amount of water used.
- c. Minimize the use of fossil-fuel based energy and chemicals (pesticides and fertilizers).
- d. Work towards a "circular economy" and reduce food related wastes.
- e. Focus on improving the resilience and equity of the local food system.
- f. Gear production towards local markets to increase local food self-reliance.

Enhance biodiversity by preserving, connecting and enhancing habitat on and between agricultural lands

- g. Set aside and steward marginal or unused farmland for ecological purposes.
- h. Adopt and promote sustainable, regenerative farming techniques that enhance soil health, landscape complexity and farm biodiversity.
- i. Protect, preserve, and enhance biodiversity by enhancing and introducing hedgerows, copses, wetlands and irrigation ponds into the farm system.

Community Members

- j. Support local farmers, especially those using organic, regenerative techniques.
- k. Support food producers/harvesters, food processors and markets by buying locally produced and processed foods.
- l. Support farm neighbours by recognizing and understanding that farming sometimes requires the use of techniques that may impact residential quality of life.
- m. Support food equity and food security initiatives.

Other Jurisdictions

- n. Work with the Agricultural Land Commission (ALC) and the Ministry of Agriculture and Food on agricultural planning, policy, and enforcement issues and on reviewing applications for land use change within the ALR to ensure consistency with agricultural policy.
- o. Collaborate with local First Nations to strengthen indigenous food systems; and as appropriate, support sustainable wild harvesting of traditional food and medicine from municipal forest lands.
- p. Protect shorelines for food harvesting.
- q. Take a regional approach to protecting, enhancing, and supporting agriculture, working with other jurisdictions to resolve common issues that interfere with the economic vitality of farming. Such issues include drainage problems, water supply for crops, marketing and promotion, and community education. Advocate for appropriate federal and provincial resourcing of supply-managed and regulatory systems, including:
 - Licensing and inspection of facilities such as abattoirs and meat processing operations.
 - Education and enforcement relating to hunting and fishing.
 - Equitable administration of fishery quotas and ability to sell dockside to individuals and local markets.
- r. Work with Department of Fisheries and Oceans (DFO) and Island Health to improve monitoring of shellfish contamination with a view to open more areas to shellfish harvesting.
- s. Advocate to Agriculture and Agri-Food Canada to further restrict the use of pesticides and herbicides that are harmful to insect, animal, and human populations.
- t. Advocate to all levels of government to provide support for approaches to agriculture that contribute to healthy ecosystems and people.

8

LOCAL REGENERATIVE ECONOMY





To repair the failing ecosystems and life-support functions upon which we all depend, steady-state thinking emphasizes investment and conservation over spending and consumption. It also must work to restore trust in government as needed to mend our social safety nets and cultivate mutually supportive relationships among social groups.

Urban designers and planners should begin now to rethink cities - or rather urban regions - so they function as complete quasi-independent human ecosystems. Less dependent on imports for the necessities of life, bio-regionally focused populations would be partly insulated from external climate vagaries, resource shortages and distant conflicts.

- William Rees, UBC Professor Emeritus, Population Ecologist



8.0 INTRODUCTION AND CONTEXT

Like many communities, North Cowichan aspires to create a thriving local economy that offers high quality employment opportunities, supports a diverse range of successful and sustainable businesses, provides a solid base of tax revenues to support community services and amenities, and makes it possible for all residents to enjoy a decent standard of living.

There has been substantial progress made towards these objectives since the last OCP was adopted, namely:

- Some business sectors have expanded including food and agriculture (including food processing, agri-tech, and wine/beer/spirits), biomedical, and boutique manufacturing firms;
- The unemployment rate dropped from 6.9% to 4.6% from 2012 to 2018;
- North Cowichan has a higher percentage of employees than the provincial average in the following sectors: manufacturing, waste management and remediation, health care, and accommodation/ food.
- Net financial assets of the Municipality have increased from \$7.5 million to \$26 million between 2012 and 2018.

However, additional goals that are very important to North Cowichan include an economy that reduces pressure on (and even enhances) local and global environmental systems and improves equity. At the time of writing this OCP, the Intergovernmental Panel on Climate Change Sixth Report was issued documenting the monumental climate crisis facing humanity. As with the 2018 IPCC Special Report¹ about limiting Global Warming to 1.5 degree Celsius, this report underscores the critical juncture facing humanity and the need for unprecedented transitions in society and the economy. In addition, North Cowichan set its community emissions target at that time to 80% less than 2017 levels by 2050 and committed to having a 'net zero' OCP. To respond to this direction, this chapter sets the objectives and policies for creating a local, regenerative economy.

A community plan (like this one) that prioritizes sustainability and regeneration must re-think its approach to economic development to fit the biophysical realities of our shared human predicament. The purpose of a regenerative economy is to have as many positive impacts as possible, not just mitigate negative impacts. The regenerative economy is based on cooperation rather than competition, re-use of goods and materials that are available to us (rather than manufacturing new ones) and focusing on local supply.

With climate change and biodiversity at critical thresholds, our community (like every other) should be re-considering the core assumptions about the economy and how to re-purpose it for long-term health, well-being, social justice, and the regeneration of natural systems.

¹ See the full 2018 IPCC report here: <https://www.ipcc.ch/reports/>.

As described in Chapter 2, Figure 8.1, The Doughnut model is useful to frame the discussion on the economy. It consists of two concentric rings:

- A social foundation - to ensure that no one is left falling short on life's essentials.
- An ecological ceiling - to ensure that humanity does not collectively overshoot planetary boundaries.

Between these two limits lies a doughnut-shaped space that is both ecologically safe and socially just - a space in which humanity can both survive and thrive and where a regenerative and distributive economy can flourish (see Figure 8.1).

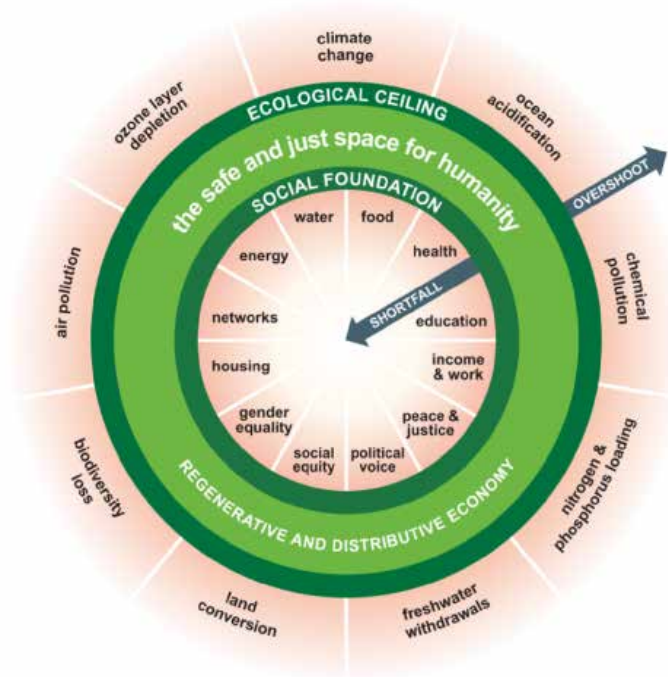


Figure 8.1: Doughnut of Social and Planetary Boundaries.¹

OPPORTUNITIES AND CHALLENGES

Given these twin imperatives of creating a thriving, successful local economy while also addressing local and global environmental challenges, North Cowichan requires new economic thinking as well as creative and strategic approaches that aligns with this goal. North Cowichan's economic development approach should address the following questions:

- How can the local economy become more diverse and successful?
- How can the local economy grow in quality/diversity?
- How can the local economy improve equity and serve the needs of all community members to thrive and prosper?
- How can economic development reduce the negative impacts on ecosystems and support the restoration and regeneration of local ecosystems while providing a living to citizens?
- How can the local economy move from a "take, make, waste" linear model to a more efficient "circular economy"?
- How can our local economy exist in a fair and sustainable relationship with other countries and global systems, including dealing with competition from imported products produced cheaply through human and environmental exploitation?

¹ Image taken from: <https://doughnuteconomics.org/tools-and-stories/11>

8.1 LOCALIZED, LOW CONSUMPTION ECONOMY

To address these significant challenges, this OCP utilizes a fundamentally different economic philosophy from its predecessor. This philosophy is outlined below and informs the policies that follow.

Re-thinking growth

The Plan rejects the notion that economic growth (especially increased consumption) is the primary purpose of economic development and inherently beneficial for society. It recognizes that growth for growth's sake is undermining the delicate natural systems that we rely on for all life and therefore, antithetical to a sustainable/regenerative economy.

Instead, our aim should be to increase the quality, resilience and fairness of the economy while reducing its negative impacts on the climate and environment.

Regeneration

Recognizing that we have already vastly depleted a number of local and global resources, such as fish stocks and old growth forests, taking us far beyond sustainable limits of consumption, the Plan recognizes it is no longer sufficient to "do less harm", especially as Canada and the US use in excess of 8 Global Hectares to support each person.² Instead, we must adopt a "regenerative" approach to the economy. i.e. one where, business and the economy are a force of restoration, regeneration and increasing equity.

Carbon Neutral

Like all other communities, it is our responsibility and moral imperative to dramatically decrease our Greenhouse Gas (GHG) emissions and work quickly and decisively to achieve this OCP's target of carbon neutrality (i.e. net zero emissions) by 2050. The 2021 Climate Action and Energy Plan (CAEP) update includes establishment of regular ongoing emissions monitoring. Similar reductions are necessary worldwide to have any hope of keeping global temperature increases within 1.5 degrees Celsius. It is unrealistic to expect this to be achieved without profound changes in current thinking and patterns of behaviour.

² See <https://data.footprintnetwork.org> for further details on biocapacity.

Self-Reliance and Resilience

We must move towards greater self-reliance and vastly reduce our dependence on and exploitation of distant resources and ecological wealth. Instead, we should look towards opportunities for increasing local self-reliance even when this may not be the most economically advantageous direction under the current system. We must build an economy resilient to stressors and shocks such as the COVID-19 pandemic.

Regenerative Business & The Greening of Industry

A great variety of businesses are required to support a local community and region, and we must work towards the greening of all businesses (i.e. reduce GHG emissions, material/water consumption and ecological impacts of existing businesses) while also supporting new, regenerative businesses having a fundamentally different relationship to community and the natural world. Currently, small scale industrial emissions account for almost 40% of North Cowichan's emissions. Working with these businesses to reduce emissions is key to meeting our targets.

Technology and Remote Work Options

Technology and the COVID-19 pandemic have changed the way many businesses are conducted. Given trends in remote workplaces and the ability for businesses to move their offices online, North Cowichan is increasingly attractive for professionals looking to relocate from cities and settle in an area with a more direct connection to the natural environment and excellent recreational opportunities.



Meets the climate action principle by encouraging businesses to reduce their GHG emissions.

The emerging tech industry is expanding across the province bringing high paying jobs, which helps provide good living standards and greater economic opportunities in North Cowichan. A significant quantity of carbon emissions arise from workers commuting to jobs in Nanaimo and Victoria. Promoting telecommuting and WiFi infrastructure will help reduce GHG emissions as commuting frequency is reduced.

8.1.1 Defining Success | Objectives

Objectives:

- a. Increase community economic self-reliance where the local economy increasingly substitutes goods/products/materials that are currently imported.
- b. Work towards a "circular" economy where flows of materials, energy and water are reused to the maximum extent possible.
- c. Create 15 minute communities so individuals can readily access most services and amenities (daily needs met) without the use of a vehicle.
- d. Maximize volunteer and sharing economies, e.g. promote and facilitate initiatives such as tool libraries, repair cafés, seed exchanges and mentor or "buddy" programs.
- e. Enable a local economy where the average per capita ecological footprint of citizens decreases over time.

"15 Minute Communities" is an aspirational concept whereby wherever someone lives in an urban area, they are within a 15 minute walk or cycle of most essential or day-to-day services. This is a reason to encourage a network of small service commercial and retail units throughout the urban area, not just confined to village centres.

Progress can be measured by:

- Qualitative analysis of whether we are progressing towards a localized, low-consumption economy.
- Reduction of ecological footprint per capita (e.g. eco footprint calculator).
- Reduction of waste generated per capita.

8.1.2 The Municipality will strive to:

- a. Support sustainable & regenerative businesses focused on the well-being of residents, including through business license and zoning regulations.
- b. Support the expansion of small scale, sustainable food/aquaculture production and processing and a regional food hub and link with agri-tourism opportunities (See also Chapter 9)
- c. Consider leveraging or acquiring Municipal land holdings to strategically encourage the type of businesses and economic environment that fits with the philosophy of this OCP.
- d. Encourage the development of local sustainable 'green' technology businesses and discourage growth of high-consumption industries that offer little to improve human well-being relative to their direct and indirect environmental costs.
- e. Explore the development of business parks and clusters geared towards innovation and sustainable technology.
- f. Provide a showcase of green technologies/demonstration projects that enhance the environmental brand of North Cowichan drawing green entrepreneurs to the District and creating new green jobs.

8.1.3 Where appropriate the Municipality will ask developers and landowners to:

- a. Consider industrial lands to sell/lease for light industrial activity related to green technologies, specialty food processing, aquaculture, and other uses that fit with the philosophy of the plan.

8.1.4 The Municipality will work with others to:

- a. Support infrastructure for reliable internet connectivity throughout North Cowichan.
- b. Promote North Cowichan as a regional trades education node that provides technical and business training to people interested in working in small scale ventures in areas such as agriculture, aquaculture, food processing, viticulture, specialty health services, light industry, the environmental industry, value-added wood manufacturing and wood product design.
- c. Support innovation and entrepreneurship incubators and educational programs for new local businesses and entrepreneurs. Forge potential partnerships with VIU, UVic, Royal Roads and others.
- d. Collaborate with Economic Development Cowichan to seek out opportunities to develop and enhance the technology sector in the Cowichan Valley.
- e. Work with telecommunication companies to ensure good infrastructure to support technological innovation in the information economy and support remote work options.
- f. Partner to create possibilities for establishing eco-industrial parks that promote a circular model, including synergies and efficiencies from co-locating compatible industries producing products that serve human and environmental well-being.
- g. Conduct data-gathering and baseline assessments against which to measure progress.

8.2 SERVING WELL-BEING

BC Healthy Community Society identifies income/poverty as one of the most prominent social and structural factors that affect health and well-being. Income levels below a certain threshold have been shown to negatively affect health outcomes in all ages to a much higher degree than smoking or body weight.³ Healthy economic environments address this income/poverty determinant by ensuring "work for everyone capable of working, that workers are paid a living wage, and where those who can't work are supported".



Meets the social justice and equity principle by highlighting the link between income levels and health outcomes.

A living wage reflecting the actual cost of living in a given community benefits the local community through increased discretionary spending, reduced staff turnover, increased capacity to pursue cultural, volunteer and leisure activities, better health outcomes and increased worker productivity. A healthy work environment supports community health and well-being by offering safe and humane places for people to work. Workers who are protected by safety precautions, anti-harassment and bullying policies and fair wage legislation are more likely to be healthy individuals who can actively participate in creating healthy and sociable communities.⁴



'The strength of a society is measured not by the wealth of its most affluent members but how well its most vulnerable citizens are able to cope. The question we need to ask ourselves is whether everyone has the chance to lead a good and dignified life.'

-Sanna Martin, Prime Minister of Finland



Transforming our economics is by no means easy. But we've known about holistic approaches based on progress and collective well-being since time immemorial. All are based on the real world, rather than flawed assumptions about people and an idea that infinite material growth on a finite planet is possible.

Yannick Beaudoin, Director General for Ontario and Northern Canada



³ Read more about the relationship between economics and health here: <http://bchealthycommunities.ca/the-issue-economic-equality>

⁴ See <http://bchealthycommunities.ca/the-issue-economic-equality/> for further details on BC healthy communities.

8.2.1 Defining Success | Objectives

Objectives:

- a. Increase equity amongst community members and improve community health, well-being and happiness.
- b. Create meaningful employment in sustainable employment sectors that contributes to individual and community well-being.
- c. Increase participation in the local economy by community members to improve personal financial security and support for community services.

Progress will be measured by:

- Qualitative assessments of residents' well-being.
- Range of household incomes and decrease in degree of disparity.
- Decrease in the number of households below the poverty line.

Natural Resources Canada defines a "just transition" as: "an approach to economic, environmental and social policy that aims to create an equitable and prosperous future for workers and communities as the world builds a low-carbon economy. No worker or community can be left behind, so government climate action must be focused on those workers."

8.2.2 The Municipality will strive to:

- a. Work towards ensuring that all community members have access to the basic needs of food, shelter, water, and education.
- b. Support an early learning and childcare strategy to support working families and contribute to a healthy economy.
- c. Consider offering onsite childcare at the Municipal Hall and/or other civic facilities, or leasing land to childcare providers.
- d. Adopt an ethical procurement policy that addresses financial, social and environmental sustainability.

8.2.3 The Municipality will work with others to:

- a. Look for opportunities to support businesses and social entrepreneurs that are providing opportunities for marginalized and equity-seeking groups and individuals.
- b. Strengthen partnerships with local First Nations and Indigenous community members and look for opportunities to develop mutually beneficial economic (development) projects and initiatives.
- c. Advocate for a living wage for all employees.
- d. Support initiatives that encourage employers to prioritize worker well-being and facilitate a "just transition" to a regenerative economy.

8.3 LOCAL ECONOMIC DEVELOPMENT ENVIRONMENT

North Cowichan has a clear role to play in creating a climate to retain, nurture and attract new businesses that fit with its economic goals. This can be achieved through planning for an attractive, livable, amenity-rich community, and creating administrative, tax and investment policies that support and encourage the types of businesses that are needed. An important component is the recognition that economic "development" does not necessarily mean getting bigger but can mean getting better.

Examples include:

- Support initiatives that focus on attraction and retention of people and skills, rather than on sector-specific attraction.
- Avoid policies (such as tax exemptions and fee waivers) that dilute the social contract to sustain social infrastructure.
- Diversify commercial activities.
- Transition from limiting and repetitive jobs to meaningful skilled jobs.
- Increase skills training, education and apprenticeship opportunities.
- Foster appropriate technology development and a "just transition" away from a fossil fuel-dependent economy.
- Shift towards products and services that help well-being, environmental restoration and cultural creativity.
- Shift to a wider range of products and services generated locally.

The supply of commercially and industrially zoned lands in North Cowichan can likely accommodate demand for the foreseeable future (although at a regional scale this may not be the case). Land use efficiencies could be increased by combining mixed-use development with light industry and infill.

To support economic development within North Cowichan and the Cowichan Region overall, the Municipality should enhance and market the attributes of its livable communities and the advantages for desirable industrial and commercial enterprises to locate here. It is also important for the Municipality to work closely and effectively with the various economic development authorities and business organizations in the region.

Not all technological innovations or products provide clear benefits to human wellbeing. Some industries have questionable benefits and create significant waste and harm. Predatory financial lending, energy-intensive cryptocurrency "mining", arms manufacture, or cosmetic vivisection are all examples of industries that are unlikely to be welcomed by citizens in their midst. The Municipality can ensure that its zoning bylaw takes a discerning approach to the types of industrial and commercial uses it permits.

8.3.1 Defining Success | Objectives

Objective: Establish a business environment that supports sustainable, local economic development in North Cowichan while maintaining a high quality of life and high environmental integrity.

Progress will be measured by:

- Increase in numbers of business licenses for sustainable, local businesses.
- Qualitative assessment of "fit" of businesses with the Municipality's economic development goals.

"Good enough to approve, not bad enough to refuse"

This idea represents a mindset whereby only development that actively adds value to North Cowichan's urban and rural environments in terms of design features such as architecture, urban form, retention of natural features, landscaping and amenities. Lower standards of design merely seeking to avoid harmful impacts are not sufficient.

8.3.2 The Municipality will strive to:

- a. Exercise leadership for economic development in North Cowichan, clearly communicating its economic development approach and encourage other partners.
- b. Support the development and retention of local sustainable businesses, including supporting existing businesses in reducing impacts.
- c. Consider creating a sustainable economic development corporation, owned by the Municipality but managed by an arm's length board of directors.
- d. Consider addressing any gaps in the local business ecosystem by pursuing strategic business attraction and development opportunities to strengthen and diversify the local economy.
- e. Consider facilitating development proposals for creation of live-work units.
- f. Administer a permitting process that is transparent, timely and solution-oriented in order to meet both developer and community objectives for new development. This should be based on the premise that development is "good enough to approve", rather than "not bad enough to refuse".
- g. Examine how to leverage taxes and other financial tools to support and promote businesses aligned with its economic development objectives.
- h. Promote high quality urban design and make strategic investments in public amenities and the public realm to create healthy, livable, amenity-rich communities that are paramount for attracting desirable, sustainable businesses.
- i. Use its planning, taxation and investment powers to revitalize commercial and mixed-use areas that have declined.
- j. Look for opportunities to support local, sustainable businesses through its procurement processes and consider adopting associated policies.
- k. Critically review types of commercial and industrial uses and update the zoning and business licensing bylaws accordingly.

8.3.3 The Municipality will ask developers and business owners to:

- a. Share their approaches to "living wage", community contribution, climate action, and reducing environmental impact when applying for a business licence.
- b. Demonstrate, if they are applying to re-zone lands for the purpose of significant new business or new employment centres, that the childcare needs of employees can be met in the community or else provide appropriate space within their business premises that can be leased to providers.

8.3.4 The Municipality will work with others to:

- a. Take a regional approach to economic development including partnership with First Nations and other local governments.
- b. Look for ways to work with others to support and encourage innovation in regenerative business practices.

8.4 RURAL-BASED ECONOMIC OPPORTUNITIES

Beyond the traditional activities associated with farming and forestry, the rural and natural areas of the municipality provide opportunities for other economic activity. The extensive oceanfront, large municipal forests, and a beautiful natural setting close to major urban centres are all important attractions. See also Chapter 7: Food Security and Local Agriculture.

The outdoor setting amid forests, lakes, ocean and mountains sets the stage for a strong and responsible local tourism sector. Access to these areas is provided by trailheads, boat launches and marinas, enabling sports such as biking, fishing, kayaking and hiking. The attraction of the natural setting is complemented by local arts and culture, history, agriculture and viticulture.

In keeping with the economic development goals of this OCP, themed tourism (e.g. bike, ecological, food/agricultural) and value-added forest products all present opportunities for locally owned, low-impact business creation. These have to be balanced against the unique qualities, characteristics and fragilities of the associated environments to ensure that those features are not compromised by excessive tourism levels, activities and traffic.

8.4.1 Defining Success | Objectives

Objective: Encourage and promote economic activities that fit with the values of rural communities and a thriving natural environment.

Progress will be measured by:

- Increase in number of rural business licenses that fit with the values of rural communities.

8.4.2 The Municipality will strive to:

- a. Allow some commercial uses and home-based businesses in rural areas, consistent with maintaining rural character. Focus on local products and small-scale services (including childcare facilities) and carefully assess proposals for assembly uses (such as wedding venues and fêtes) on a case-by-case basis to ensure acceptable levels of noise, disturbance and traffic are maintained.
- b. Establish appropriate standards for home-based businesses in rural areas, recognizing that with some flexibility, home-based businesses will be small-scale in nature, creating minimal impact to neighbouring properties.

8.4.3 The Municipality will work with others to:

- a. Support and encourage the development of rural businesses, especially those that enhance the productivity of the natural environment and link climate change strategies to economic opportunities.
- b. Support business and tourism development that sensitively celebrates our natural assets and rural character including agri-tourism, sports-tourism and eco-tourism at levels that do not compromise those assets.

8.5 COMMERCIAL OPPORTUNITY

Commerce is the day-to-day business that occurs within the community. Commerce provides residents with the goods and services they require and provides income for business owners and employees.

Commercial activity has a huge impact on a region, its communities, and neighbourhoods. Commerce influences traffic patterns, and through their signage, storefronts and publicly accessible spaces, businesses significantly influence our visual environment.

Accessibility, safety and parking are important issues for many commercial enterprises and their customers. In recent years, some commercial businesses have faced challenges because of the shift to on-line shopping. Commercial opportunities are changing rapidly, particularly with technological development, and regulation is sometimes slow to “catch up” with innovative ideas. Temporary Use Permits are a good way of authorizing a new use at a given site to allow the Municipality to assess potential impacts before considering any permanent changes to the zoning.

The location and vitality of commercial retail largely determines a community’s character and well-planned commercial services can make neighbourhoods and communities more livable, affordable and resilient. The Municipality supports a variety of commercial types: local, neighbourhood, commercial cores, service commercial, and regional shopping centre. It also supports a mix of uses in a building such as ground floor commercial with residential units above.

Together with the City of Duncan and Cowichan Tribes, North Cowichan’s South End area provides significant commercial services to the region. The implementation of the University Village Local Plan through regional cooperation, and coordination of commercial and public realm development are vital for creating successful commercial areas. Commercial services are also concentrated in the communities of Chemainus and Crofton and are essential components of those communities that need to be nurtured.

8.5.1 Defining Success | Objectives

Objective: Protect and promote the economic viability of existing commercial enterprises in North Cowichan, attract local, new and emerging service, retail and other commercial businesses, and encourage diverse types of commercial activity focusing on sustainable, regenerative practices.

Progress will be measured by:

- Increase in percentage of homes within an approximate 15-minute walk of a commercial area/node.
- Qualitative assessment of the types of commercial businesses in North Cowichan.

8.5.2 The Municipality will strive to:

- a. Encourage infill of existing commercial areas and incentivize the redevelopment or intensification of use on existing commercial sites.
- b. Include mixed use buildings in commercial areas.
- c. Encourage a full range of commercial land uses to serve both the local and regional markets.
- d. Consider the use of Temporary Use Permits to facilitate a range of uses not permitted under existing zoning to capitalize on unique and/or short-term development opportunities.
- e. Carefully consider parking needs in core / town centre areas to ensure that adequate (but not excessive) parking is available to service new and existing developments. The Municipality may support applications to reduce parking requirements where sufficient infrastructure exists and/or can be provided to support alternative modes of transportation (e.g. transit, cycling, pedestrian, car share etc.).
- f. Not permit additional drive-throughs as they are typically associated with fast food stores that are often visually unappealing and promote vehicle use and increased GHG emissions.

8.6 INDUSTRIAL ACTIVITY

Historically, industry has played a formative role in North Cowichan. Activities range from light manufacturing and specialized crafts through to heavy industry involved in primary processing. The needs of industry are unique: siting and operational requirements, such as access to material inputs and shipping facilities, demand careful consideration. Factors such as noise, air quality, hours of operation and traffic can influence the quality of life far beyond the industrial site. Some industries require buffering to mute their impact, while others can function side-by-side with their neighbours.

The Municipality has a key role to play in assisting the right industries to find a welcoming home. Policies that support industry and allow business to confidently invest in the community can be a catalyst to attract new investment and good-quality jobs. The designation and servicing of sufficient industrial land is a basic requirement. Equally important are clarity, consistency and timely decisions about how industry fits with other community values and aspirations.

8.6.1 Defining Success | Objectives

Objective: Promote a healthy industrial sector and encourage sustained and diverse industrial activity within North Cowichan.

Progress will be measured by:

- Qualitative assessment of industries that fit within the goals of this OCP.

8.6.2 The Municipality will strive to:

Promote a healthy industrial sector

- a. Support existing heavy industrial uses making efforts to reduce their environmental footprint and improve social conditions for employees and community.
- b. Support diversification and intensification of uses on underutilized portions of industrial properties recognizing that redevelopment of brownfield and greyfield industrial sites is preferred over greenfield development.
- c. Encourage shared use and potential expansion of existing waterfront infrastructure, including deep seaports and dock facilities.
- d. Support the development of light industrial sites suitable to small-scale food processing in rural or industrial areas, as appropriate.
- e. Support legal cannabis production and processing in the industrial designation.
- f. Support establishment of "eco-industrial" parks that promote synergies and efficiencies by co-locating compatible industries producing products that serve human and environmental well-being.

Reduce the potential for conflicts between industrial and other lands uses

- g. Ensure new heavy industrial development, consistent with the zoning bylaw and goals of this OCP, are located away from and buffered from urban residential and other sensitive areas.
- h. Require screening and other interface treatments adjacent to non-industrial uses or scenic roads.
- i. Manage noise, pollution, and nuisance in industrial areas (see also Chapter 8: Regeneration and Protection of the Natural Environment).
- j. Consider selective down-zoning of vacant heavy industrial lands to light industrial zoning, where the resumption of heavy industrial uses would negatively impact the local community.
- k. Not support expansion of industrial lands or uses into non-industrial areas.
- l. Review the zoning bylaw to prevent additional high-emissions, or other polluting industrial and commercial uses being established in locations.
- m. Manage the impact of heavy truck traffic on municipal roads by designating truck routes and restrictions on location and time-of-day use where warranted.

8.6.3 The Municipality will ask businesses, developers, and landowners to:

- a. Continually seek ways to reduce their GHG emissions and environmental impacts of their operations.
- b. Use light industrial business sites efficiently and look for synergistic relationships with adjacent businesses and communities, such as live-work units and childcare facilities.
- c. Consider introducing programs and initiatives to increase equity such as "living wage" policies and community contributions.
- d. Secure appropriate funding for the planning, remediation and redevelopment of brownfield and greyfield sites.
- e. Remediate any contaminated sites or vacated industrial sites at the waterfront in Chemainus, Crofton or Cowichan Bay, and include a waterfront planning process as part of any land use change or redevelopment application.

8.6.4 The Municipality will work with others to:

- a. Collaborate with the Cowichan Valley Regional District to recruit and retain new forms of industry that fit with the goals of this OCP.
- b. Maintain an inventory of vacant and developed industrially zoned land in partnership with the CVRD, in order to monitor the industrial land supply and facilitate location of appropriate industries in North Cowichan.
- c. Work with CVRD on a regional economic strategy, industrial strategy and related initiatives.
- d. Look for opportunities to partner with First Nations and other Indigenous organizations on sustainable local business initiatives.

8.6.5 Mining And Gravel Extraction

While provincial legislation assigns provincial and municipal governments shared jurisdiction over aggregate extraction operations, the fundamental authority with respect to aggregate extraction and mining resides in the provincial *Mines Act* and the permits issued under it. The *Mines Act* focuses on mining activities, worker health and safety, environmental impacts, and reclamation of the mine site. It does not, however, clearly address questions of where mines should or should not be located, nor does it adequately address the full range of off-site impacts.

If mining and gravel extraction is to be undertaken in North Cowichan, it must be done responsibly at all stages: exploration, mine development and extraction, closure and reclamation. Responsible mining would be that which considers a wide range of factors including employment, First Nations interests, environmental protection and compensation, management of impacts on adjacent properties, and impacts on other aspects of the North Cowichan economy (e.g., tourism, construction). In recent years, mine planning, mine closure practices, and the conduct of mining operations have evolved, these are intended to reduce the negative environmental and social impacts of mining. The manner in which a mine is planned can greatly reduce the magnitude and duration of impacts over the life of the mine and after its closure.

Sand and gravel (aggregate) deposits are also an important resource in North Cowichan. Gravel extraction greater than 500 m³ per parcel is not a permitted use within the Agricultural Land Reserve (ALR) unless the Agricultural Land Commission (ALC) grants approval. Removal of aggregate resources from lands within the ALR requires prior approval from both the Provincial Agricultural Land Commission and the Municipality. Gravel-processing operations (within or outside of the ALR) are industrial land uses and are subject to municipal zoning and other municipal regulations.

8.6.5.1 Defining Success | Objectives

Objective: Ensure environmental stewardship and responsible approaches in aggregate and mineral resource extraction.

Progress will be measured by:

- Qualitative assessment of environmental stewardship and responsible approaches to resource extraction.

8.6.5.3 The Municipality will ask landowners and resource extractors to:

- a. Provide detailed (and independent) social, economic and environmental impact studies and management plans that align with community goals, when the Municipality is asked to comment on mining proposals by agencies having jurisdiction.
- b. Provide operational plans that address potential impacts on neighbours, the environment and community infrastructure, when the Municipality is asked to comment on mining proposals by agencies having jurisdiction.

8.6.5.2 The Municipality will strive to:

- a. Consider support for mining and aggregate activities in appropriate locations, that minimize environmental impacts, protect local views, protect local views, minimize conflicts with adjacent land uses, and make appropriate provisions for reclamation after the mining operations have ceased.
- b. Encourage best management practices for mineral and aggregate resource extraction activities.

8.6.5.4 The Municipality will work with others to:

- a. Encourage the Province to undertake public engagement and consultation on proposed mining or aggregate operations.
- b. Encourage the Union of British Columbia Municipalities to lobby the Province for greater local government input and control over decisions about the extraction of surface and subsurface resources within their boundaries.
- c. Work with other agencies, stakeholders and the Agricultural Land Commission to encourage the reclamation of mineral and gravel extraction operations on lands in the ALR to a high standard for agriculture.

SUSTAINABLE INFRASTRUCTURE





By weaving natural features into the built environment, green infrastructure can not only provide stormwater management, but also a number of other environmental, social, and economic benefits not typically provided by gray infrastructure. Green infrastructure increases exposure to the natural environment, reduces exposure to harmful substances and conditions, provides opportunity for recreation and physical activity, improves safety, promotes community identity and a sense of well-being, and provides economic benefits at both the community and household level.

- U.S. Environmental Protection Agency



9.0 INTRODUCTION AND CONTEXT

This section addresses community infrastructure for water, wastewater, storm water, solid waste systems and other related services. Providing these services is a core function of local government.

Objective: Provide responsible infrastructure management through long-range plans that address growth demands, operational efficiency and financial and environmental sustainability by:

- Ensuring safe high quality drinking water.
- Reducing water consumption to conserve groundwater supplies.
- Planning and administering effective wastewater treatment.
- Increasing the level of groundwater recharge and not increasing peak runoff flow rates; particularly where erosion and/or environmental degradation may result, or where flood risk is increased.
- Utilizing green infrastructure.

Progress will be measured by:

- Decreased water consumption (total and per capita).
- Decreased solid waste production (total and per capita) collected.
- Effluent compliance rate for wastewater.

9.1 WATER SYSTEMS

Protection of our water sources and the delivery of clean, safe water to citizens are core functions of municipal government. Future land use decisions and development practices must consider the vital role of water in sustaining all life. Access to clean, reliable water supply supports our environment, our health, and our economy.

Over recent decades, the region's water resources have been strained by a range of factors including drier summers due to climate change. Because some of the watersheds that provide the municipality with drinking water are outside of municipal boundaries, cooperation with adjacent jurisdictions and landowners is essential.

North Cowichan operates three potable water systems: Chemainus, Crofton and the South End. Part of the South End community is also serviced by the City of Duncan Water System. Each system is described below.

In general, parts of each distribution system need to be upgraded as growth occurs. Where there is increased densification and higher fire flow demands, additional upgrades to the distribution system may be required. Infrastructure upgrades triggered by growth can be partially funded through the collection of Development Cost Charges (DCCs). If rezoning is required, the Municipality can negotiate a full or partial recovery of infrastructure upgrade costs as a community amenity contribution.

Chemainus

Historically Chemainus was serviced from a surface water supply. New wells were drilled near to the Chemainus River a number of years ago. Chemainus is now mainly supplied from the well source and the Holyoak Lake supply during the summer when needed. For both supplies, chlorine is used to treat the water and to ensure chlorine is present in the water throughout the distribution system.

Crofton

Crofton is supplied with water from the Cowichan River. The water is pumped by Paper Excellence, through their water treatment plant, where it is put through settlement tanks and filters prior to chlorination. The water is then pumped into the Crofton Water System where it is dosed with chlorine again to provide further treatment and to ensure that there is chlorine present in the water throughout the distribution system. Crofton also has a backup water supply at Crofton Lake. In addition, a new force main and pump station has been constructed that will enable the South End Water System to supply Crofton should the need arise.

South End

The South End system supplies the local areas of Berkey's Corner, Bell McKinnon, Quamichan, Maple Bay, plus portions of South End Centre, Rural West and Rural East. As stated above, a new force main and pump station will enable the South End Water System to supply Crofton should the need arise.

The South End is supplied with water from the Cowichan aquifer via a well field located on the south side of the Cowichan River. Parts of the South End of North Cowichan are also supplied by the City of Duncan from a similar well field south of the Cowichan River operated by the City of Duncan. The water from the North Cowichan well field is disinfected using ultraviolet light and chlorine to ensure chlorine is present in the water throughout the distribution system.

9.1.1 The Municipality will strive to:

Protect drinking water supply

- a. Maintain a master plan and bylaws that identify future capital improvements necessary to provide water to residents within water service areas.
- b. Seek to better understand and consider impacts of wells on local aquifers.
- c. Promote and incentivize water conservation policies and practices, which may include:
 - Continue implementing asset management strategies to reduce water system leakage.
 - Continue water metering for all housing units, including stratas.
 - Further restrictions and controls on water use during high water use periods (summer).
 - Provide community education about water conservation.
 - Promote use of water conservation measures such as low-flow appliances and low water landscaping.
 - Monitor and update water consumption pricing.

Preserve fire flow capacity

- d. Consider the requirements and impacts of development proposals on fire flows within the water system. Developments exceeding available capacity will not be approved unless the developer funds all necessary capacity upgrades. Any such upgrades must be completed prior to building occupation.
- e. Work with developers to identify fire flow capacities at an early stage and achieve site and building designs that remain within available capacity.
- f. Periodically update its water system models and identify future capacity upgrades and works.
- g. Review the Development Cost Charges bylaw to ensure any capacity upgrades needed to facilitate new development are adequately reflected.

9.1.2 The Municipality will ask developers and landowners to:

- a. Provide, for all development types, a report setting out how fire flows have been calculated.

9.2 SANITARY SEWER SYSTEMS

The Municipality operates four sanitary treatment plants (STP) and sanitary sewer collection systems:

1. Chemainus STP and sewer system.
2. Crofton STP and sewer system.
3. The Joint Utility Board (JUB) STP and South End sewer system.
4. Maple Bay STP and sewer system.

In general, some parts of each collection system may need to be upgraded as growth occurs. Where there is increased densification, additional upgrades to the collection system may be required. Infrastructure upgrades triggered by growth can be partially funded through the collection of Development Cost Charges (DCCs). If the application requires a rezoning, the Municipality can negotiate a full or partial recovery of infrastructure upgrade costs as a community amenity contribution.

Chemainus

Wastewater in Chemainus is collected and treated at the Chemainus STP. The Chemainus STP is an extended aeration treatment plant that provides secondary level treatment. The treated effluent is discharged to Stuart Channel through an outfall pipe. The effluent discharged from the STP is regulated by the Province through a permit. The Chemainus STP is in the process of being registered under the Municipal Waste Regulation (MWR) after which it will be regulated under that legislation.

The Chemainus STP treats sludges generated at the plant plus those generated at the Crofton STP. These sludges are digested and dewatered prior to being hauled away for land fertilization at a biosolids land application site.

The Chemainus STP has a very high compliance level, and it is not anticipated that registration will be problematic, although some minor upgrades may be required in the near term. A capacity assessment study completed in

2017 concluded that once minor upgrades are implemented, this facility is expected to have capacity to accommodate growth out to 2053 based on historical growth rates within the Chemainus Sanitary Sewer Service Area.

Crofton

Wastewater in Crofton is collected and treated at the Crofton STP. Crofton also treats sewage from the Tussie Reserve (Penelekut) and Halalt Reserve (Halalt) First Nations.

Treated effluent is discharged to Osborne Bay/Stuart Channel through an outfall pipe/diffuser. The effluent discharged from the STP is regulated by the Province through a permit. In the near future, as flows to the treatment plant increase, the Province will require that the Crofton STP be registered under the Municipal Waste Regulation (MWR) after which it will be regulated under that legislation.

The Crofton STP has a very high compliance level. It is not anticipated that future registration under the MWR will be problematic although some minor upgrades may be required to meet regulations once the treatment plant is registered. A capacity assessment study completed in 2017 concluded that once the said upgrades are implemented, this facility is expected to have capacity to accommodate growth out to 2053 based on historical growth rates within the Crofton Sanitary Sewer Service Area.

South End

Wastewater in the South End is collected and treated at the Joint Utilities Board (JUB) STP. The JUB STP also serves the City of Duncan, Cowichan Tribes First Nation, and CVRD Electoral Areas D (Cowichan Bay) and E (Eagle Heights). North Cowichan and Duncan jointly own the facility with Cowichan Tribes and the CVRD being users of the facility. The facility is located on Cowichan Tribes' Reserve and is secured until 2060 via a lease agreement.

The JUB STP is a complete mix aerated lagoon treatment plant that provides secondary level treatment, along with some tertiary treatment for phosphorus removal during the summer months. The treated effluent is discharged to Cowichan River through an outfall pipe/diffuser. The JUB is currently in the process of relocating the outfall from the Cowichan River to the embayment line of Cowichan Bay. The effluent discharged from the STP is regulated by the Province through an operating certificate. It is not anticipated that the JUB STP will have to register under the MWR because it is currently part of a liquid waste management plan. Once the outfall is relocated, it is likely that some of the compliance limits will be increased.

The JUB STP currently has a very high compliance level. With the relocation of the outfall it is expected that it will continue to have a very high compliance level.

Due to the fact the JUB STP serves five jurisdictions, the capacity of the facility is allocated amongst the five jurisdictions using an equivalent residential unit (ERU) system. There are a total of 17,300 ERUs of capacity, of which North Cowichan holds 9,288 ERUs or 53.69% of the total capacity of the facility. North Cowichan is currently using 7,102 ERUs (as of Dec 31, 2021) or 77.57% of the ERUs it holds. Based on the average growth rate over the last 10 years it is estimated North Cowichan has ERU capacity out to 2040. However, if growth is focused in the serviced areas of the South End more than has traditionally been the case, then North Cowichan will tend to consume its units more rapidly than what is projected based on the growth patterns occurring over the last 10 years.

Based on the aggregate 10 year historical growth rates of ALL of the jurisdictions using the JUB STP, the JUB STP has capacity out to approximately 2043. However, because some jurisdictions will need units sooner than others, efforts are underway to implement upgrades to the facility. More specifically:

1. A capacity re-assessment study, much like the study conducted in 2014, is being undertaken to determine if the relatively good performance of the treatment facility will permit the JUB to increase the ERU capacity of the facility.
2. Relocating the outfall to Cowichan Bay has the potential to further increase the capacity of the facility as the treated effluent will be discharging into a marine environment with very high dilution ratios compared to a freshwater environment (the Cowichan River) with a very low dilution ratio; particularly in the summer months. This could result in an additional increase to the facility's capacity.
3. Additional aeration units (equivalent to 50% more than what is currently installed) can be added to provide further increase in the facility's capacity.
4. The facility redesign in 1998 contemplated further upgrades beyond the installation of additional diffusers. The facility can be upgraded to a modified Sequencing Batch Reactor facility that will result in another increase in the facility's capacity beyond what can be achieved via the improvements listed in item 3.

Maple Bay

Wastewater in a small area of Maple Bay near the Maple Bay marina is collected and treated at a STP. Designed primarily to deal with discharges from the Marina and for some growth in the Shorepine Close area, the owners of the Maple Bay Marina constructed the Maple Bay STP and subsequently handed it over to the Municipality to own and operate.

Like the JUB STP, the Maple Bay Marina system is managed through ERUs where approximately 50% of the 117 ERUs are owned by the Marina while the rest are allocated to the surrounding properties within the sewer service area. There are some lots that did not connect when the treatment was built but have been assigned ERUs during design. Those properties must petition to come into the sewer service area to connect and must pay latecomer fees to the Maple Bay Marina. The sewer service area for the Maple Bay Marina is fixed to the boundary currently established for the service area and there are no "spare" ERUs available for growth.

The Maple Bay STP provides a secondary level of treatment, with the potential to provide tertiary level treatment (phosphorus removal) in the future. The treated effluent is discharged to Maple Bay through an outfall pipe/diffuser. The effluent discharged from the STP is regulated by the Province through the Municipal Wastewater Regulation (MWR).

The Maple Bay STP has a very high compliance level. As the service area is established, and is fixed, growth is not an issue for this facility.

The collection system has not been included in current sanitary models but will be captured in the next model update. Much of the collection system is owned by the Shore Pine Close strata except for the downstream sections prior to discharge to the treatment plant.

9.2.1 The Municipality will strive to:

Provide wastewater disposal and treatment services

- a. Continue working to upgrade the Joint Utilities Board wastewater treatment facility.
- b. Continue to implement asset management strategies to reduce storm-water infiltration in order to maintain the capacity and efficiency of wastewater treatment systems.
- c. Pursue strategies to reduce excess water consumption.
- d. Consider shared package treatment plants to service industrial or commercial uses where connection to the municipal system is impractical.
- e. Not support use of shared private treatment systems for servicing residential properties.
- f. Not support the extension of Municipal sanitary sewer service to rural areas.
- g. Not expand the Maple Bay wastewater treatment plant to facilitate additional development beyond the current boundaries.

9.2.2 The Municipality will work with others to:

- a. Pursue strategies to reduce the impacts of septic systems on the receiving environment.
- b. Continue to collaborate with the City of Duncan, Cowichan Tribes and CVRD Electoral Areas D and E to manage the JUB STP and South End wastewater treatment system.

9.3 STORM WATER MANAGEMENT

The Municipality has a master drainage plan that identifies significant drainage courses, their catchment areas, and estimates flows at key locations within and at the boundaries of those catchment areas.

The Municipality also has storm water and drainage design standards within its Engineering Standards that set out how drainage system elements are to be sized and designed. The drainage design standards also contain provisions for the implementation of green infrastructure to encourage aquifer recharge and treatment of more frequent, lower intensity, rainfall events. The Municipality's drainage design standards also have provisions for the management of larger storm events by requiring, where downstream impacts occur, for developers to limit post-development peak flows to no more than pre-development peak flows. The Municipality has been working with the CVRD on new flood plain modelling for the Cowichan River Basin. That modelling has been completed and the requisite flood protection works for the South End and Duncan have been completed. The current flood modelling and flood plain mapping does include allowances for climate change (sea level rise and more intense winter rainfall events). The Municipality is also working on a similar plan for the Chemainus River Basin. That process is starting in 2022.

Cowichan Tribes encourages the municipality to manage not only storm water on-site in new developments, but to revise and improve storm water management in existing developments, particularly those adjacent to and uphill or upstream of Cowichan Tribes' reserve lands. Cowichan Tribes reserve lands are largely situated at the lower end of the two major rivers in the territory and therefore excess winter rainwater run-off eventually makes its way to areas where most of the membership resides.

In addition to 'grey' infrastructure systems which uses pipes, storm drains, treatment facilities to manage stormwater, green infrastructure systems can also be effective at managing storm and rainwater at several scales. Examples at the community scale include:

- A rain barrel up against a house.
- A row of trees along a major street.
- Open park space.
- Rain gardens.
- Constructed wetlands near a residential housing complex.



Green Infrastructure can help communities mitigate the effects of climate change in an environmentally friendly way.

At the landscape or watershed scale, examples could include protecting large open natural spaces, riparian areas, wetlands and re-vegetating steep hillsides. When green infrastructure systems are installed throughout a community or across a regional watershed, they can provide cleaner air and water as well as significant value for the community with flood protection, diverse habitat, and attractive green spaces. Green infrastructure can help communities mitigate the effects of climate change.¹

¹See <https://www.epa.gov/green-infrastructure/what-green-infrastructure> for further information on green infrastructure and its mitigation effects on the environment.

9.3.1 The Municipality will strive to:

Manage storm water effectively

- a. Update and implement master drainage plan and drainage design standards that incorporates green infrastructure (e.g. bio swales, wetlands, storm detention).
- b. Encourage rainwater management systems through site-adaptive design that enables natural infiltration of rainwater.
- c. Consider drainage implications of development projects with the goal of maximizing on-site rainwater treatment and preventing flooding in the local and downstream areas.

9.3.2 The Municipality will work with others to:

- a. Maintain and improve water quality in all watersheds within North Cowichan including cooperating with watershed management groups to ensure that local expertise and interests are reflected in policy development.
- b. Encourage neighbourhoods and residents to play a stewardship role in enhancing the natural function of drainage and watercourse systems.
- c. Continue to collaborate with Cowichan Tribes to reduce impact of storm water on its lands.

9.4 SOLID WASTE MANAGEMENT

The Municipality is responsible for garbage and organics pickup and contracts out the collection of recycling. Garbage, organics and recycling are hauled to the CVRD's Bing's Creek Solid Waste Management Complex for disposal/reuse.

Strata and businesses are responsible for their own waste, organics and recycling collection.

The CVRD recently updated its Solid Waste Management Plan (SWMP). The Municipality participated in the updating of this OCP and North Cowichan will continue to work with the CVRD to reduce the overall waste stream.

9.4.1 The Municipality will work with others to:

- a. Continue to work together with the CVRD to reduce the volume of solid waste entering landfills and improve the capture of recyclables and organics.
- b. Support the adaptive re-use of buildings and diversion of construction waste away from landfills.

10

DEVELOPMENT PERMIT AREAS





Every place is given its character by certain patterns of events that keep on happening there. These patterns of events are locked in with certain geometric patterns in the space. Indeed, each building and each town is ultimately made out of these patterns in the space, and out of nothing else; they are the atoms and molecules from which a building or a town is made.

- Christopher Alexander, Architect & Author



Christopher Alexander from his 1979 book, *The Timeless Way of Building*.

10.0 INTRODUCTION AND CONTEXT

DEVELOPMENT PERMITS:

Development permits are one of the tools available to achieve the vision and objectives of this OCP. Where a property is included in a development permit area, a development permit is required and applications for development permits are expected to comply with applicable guidelines and regulations before a permit is issued and development proceeds.

[Part 14, Division 7 of the Local Government Act¹](#) authorizes local governments to establish Development Permit Areas for one or more of the following purposes:

- Protection of the natural environment, its ecosystems and biological diversity.
- Protection of development from hazardous conditions.
- Protection of farming.
- Revitalization of an area in which a commercial use is permitted.
- Establish objectives for the form and character of intensive residential development, and/or commercial, industrial or multi-family residential development.
- Establish objectives to promote energy conservation, water conservation and reduce greenhouse gases.

Unless exempted by the 'General Exceptions' or specific exemptions in the development permit guidelines, the following forms of development within designated DPAs require a development permit:

- a. Alteration of land, including, excavation, deposition of soil or other material, and blasting.
- b. Construction and erection of buildings and other structures.
- c. Creation of non-structural impervious or semi-pervious surfaces.
- d. Subdivision of land.

GENERAL EXEMPTIONS:

Development generally excluded from the requirement for a development permit includes:

- Subdivisions for park, lot line adjustment or parcel consolidation.
- Planting of trees, shrubs or ground cover for slope and soil stabilization, habitat improvement, erosion control and beautification.
- Construction within a building that does not require exterior alteration.
- Structural alterations to legal or legal non-conforming buildings and structures within the existing footprint and building envelope.
- Building envelope remediation and/or replacement of exterior finishes where the exterior appearance is maintained;
- Temporary works authorized by a temporary use permit.
- The replacement or alteration of existing signs that are in full compliance with the Sign Bylaw.

DEVELOPMENT PERMIT AREA DESIGNATIONS:

Development Permit Areas established under this Official Community Plan are:

- DPA-1: Multi-Unit and Intensive Residential Development
- DPA -2: Commercial and Industrial Development
- DPA-3: Natural Environment
- DPA-4: Hazard Lands
- DPA-5: Farm Land Protection
- DPA-6: GHG Emissions and Energy Reduction

Where land is subject to more than one Development Permit Area (DPA) designation, development will be subject to the guidelines and requirements of all applicable DPAs.

¹Read the full Act here: https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/r15001_14

10.1 DPA-1 MULTI-UNIT AND INTENSIVE RESIDENTIAL DEVELOPMENT

PURPOSE

This development permit area is intended to achieve walkable, vibrant, attractive and safe residential neighbourhoods and communities at various scales and densities. The guidelines are intended to provide direction for housing and associated development that meets the needs of residents and integrates new housing into the larger community.

DESIGNATION

In accordance with the provision of [Section 488 \(1\)\(e\)&\(f\)](#) of the *Local Government Act*, all lands within the boundaries of Municipality of North Cowichan, and shown on Map 1 - North Cowichan and Area are designated a development permit area for the form and character of multi-family, multi-unit, and intensive residential development.

The Multi-Unit and Intensive Residential Development Permit Area (DPA-1) applies to:

- Construction of new buildings with three or more attached dwelling units.
- Additions to or alteration of existing buildings with one or more new dwelling units that increases the number of dwellings beyond two.
- The subdivision of land for residential use where lots (fee simple or bare land strata) are less than 350 square metres.
- Building strata housing projects with three or more dwelling units.
- Mobile home parks with three or more dwelling units.

OBJECTIVES

The objectives of DPA-1 are:

- a. Establish guidelines for multi-unit housing that supports liveability, accessibility and a high quality of life for residents.
- b. Promote a high standard of building, site, and landscape design.
- c. Encourage new forms of housing that meet current and emerging housing needs that also integrate sensitively into the surrounding environment.
- d. Integrate higher density housing into the Village Residential and Village Core designations.
- e. Recognize and promote the distinctive character of communities and neighbourhoods.
- f. Promote pedestrian connectivity, alternative transportation modes and transit use.
- g. Integrate new and creative housing types into existing neighbourhoods and communities.

GUIDELINES

"Form, Character, & Performance DP Guidelines A1" within Zoning Bylaw 2950 are associated with and applicable to DPA-1.

10.2 DPA-2 COMMERCIAL AND INDUSTRIAL DEVELOPMENT

PURPOSE

To establish objectives and form and character guidelines for commercial and industrial development that respect the operational requirements of business and industry while promoting safety, efficient land use, building and site aesthetics and the integration of mixed uses at the site, neighbourhood and community level.

DESIGNATION

In accordance with the provision of [Section 488 \(1\)\(d\)&\(f\)](#) of the *Local Government Act*, all lands within the boundaries of Municipality of North Cowichan, and shown on Map 1 - North Cowichan and Area are designated a development permit area for the form and character of commercial and industrial development and the revitalization of an area in which a commercial use is permitted.

The Commercial and Industrial Development Permit Area (DPA-2) applies to:

- Development on land or water that is designated as Village Core, Commercial, Industrial, Marine Commercial or Marine Industrial use on Map 2 – Growth and Land Use Management.
- Development on land or water zoned for commercial, industrial, marine commercial or marine industrial use.

OBJECTIVES

The objectives of DPA-2 are:

- a. Achieve a high standard of building, site and landscape design.
- b. Minimize potential conflicts with adjacent non-commercial and industrial uses.
- c. Promote development that fosters vibrant public spaces in Village Cores and other locations frequented by the public.
- d. Support local business through cohesive and high quality urban design.
- e. Promote safe and efficient movement of vehicles, pedestrians and cyclists.
- f. Enable residents to meet more of their daily needs within their neighbourhoods.
- g. Promote social interactions and strengthen neighbourhood cohesion.
- h. Encourage active lifestyles and equitable access to amenities and services.

GUIDELINES

"Form, Character, & Performance DP Guidelines A1" within Zoning Bylaw 2950 are associated with and applicable to DPA-1.

10.3 DPA-3 NATURAL ENVIRONMENT

PURPOSE

The purpose of the Natural Environment Development Permit Area (DPA-3) is to establish objectives and guidelines to protect and enhance environmentally sensitive areas, ecosystems and biological diversity, and to ensure development has a positive impact on natural features and functions.

DESIGNATION

In accordance with the provision of [Section 488 \(1\)\(a\)](#) of the *Local Government Act*, all lands within the boundaries of Municipality of North Cowichan are designated a development permit area for the protection of the natural environment, its ecosystems and biodiversity.

The Natural Environment Development Permit Area (DPA-3) applies to:

- a. **Streams and Watercourses:**
 - Any development within 30 metres of a stream, as defined by the Riparian Area Protection Regulation.
 - Any development within a Riparian Assessment Area, as defined by the Riparian Area Protection Regulation.
- b. **Environmentally Sensitive Areas:**
 - Development within 15 metres of any environmentally sensitive area shown on Map 4 – Environmentally Sensitive Areas or identified as environmentally sensitive by a qualified environmental professional.
 - Development within 25 metres of a raptor nest tree.
- c. **Marine Riparian Areas:**
 - Any development within a 30 metre horizontal distance of the high water mark of the ocean.
- d. **Aquifer Protection:**
 - Any land with a high vulnerability rating as shown on Map 5 – Water Source Protection.

OBJECTIVES

The objectives for DPA-3 are:

- a. Protect the natural environment, its ecosystems, habitat and biological diversity from potential development impacts.
- b. Restore lost or degraded ecosystems and ecosystem functions.
- c. Promote and encourage ecological resilience in the natural environment to respond to climate change.
- d. Protect against flooding, erosion and sea level rise in ways that preserve environmental, cultural and recreational values.
- e. Establish procedures and guidelines for restoring environmentally sensitive lands damaged by unauthorized development.
- f. Protect shallow and vulnerable aquifers from risk of groundwater contamination.

GUIDELINES

"Environment DP Guidelines B" within Zoning Bylaw 2950 are associated with and applicable to DPA-3.

10.4 DPA-4 HAZARD LANDS

PURPOSE

To establish a process for hazard assessment over those areas of the Municipality susceptible to land slippage, erosion, wildfires and flood. Control over development in these areas protects people and property from hazardous conditions.

DESIGNATION

In accordance with the provision of [Section 488 \(1\)\(b\)](#) of the *Local Government Act*, lands shown on Map 6 – Natural Hazard Area and Map 7 - Steep Slopes (& Scenic Character) are designated a development permit area for protection from hazardous conditions.

The Hazard Lands Development Permit Area (DPA-4) applies to:

- Steep slopes over 20%, measured over a minimum horizontal distance of 10 metres as identified on Map 7 - Steep Slopes (& Scenic Character).
- Lands vulnerable to wildfire hazard risk and identified as having a "high" or "extreme" fire hazard rating on Map 6 - Natural Hazard Areas.
- Lands on flood plains.
- Coastal lands vulnerable to flooding and sea level rise.

OBJECTIVES

The objectives for DPA-4 are:

- a. Protect people, property and the natural environment from the consequences of development on land that is potentially hazardous.
- b. Identify and mitigate hazards while protecting and enhancing environmentally sensitive areas.
- c. Confirm stable and accessible building sites.
- d. Promote development that is appropriate for steep slope areas by respecting terrain, maintaining natural vegetation and drainage patterns.
- e. Inform landowners of potential hazards and require development and property maintenance that is resilient to hazard risk.
- f. Protect the Municipality from liability associated with development on and near hazard lands.

GUIDELINES

"Hazard Lands DP Guidelines C" within Zoning Bylaw 2950 are associated with and applicable to DPA-4.

10.5 DPA-5 FARM LAND PROTECTION

PURPOSE

To protect agricultural lands and operations from conflicts with adjacent non-agricultural uses in urban interface areas.

DESIGNATION

In accordance with the provision of [Section 488 \(1\)\(c\)](#) of the *Local Government Act*, all lands outside the Urban Containment Boundary, as shown on Map 2 – Growth and Land Use Management, and any land within 30 metres of the Agricultural Land Reserve boundary, are designated a development permit area for the protection of farming.

OBJECTIVES

The objectives for DPA-5 are:

- a. To protect farms and farm operations from nuisances, complaints and land use conflicts from adjacent or nearby non-agriculture land uses.
- b. To reduce impacts of farming activities on residents and businesses in agricultural interface areas by establishing separation and buffer requirements adjacent to agricultural land.

GUIDELINES

"Farm Land DP Guidelines D" within Zoning Bylaw 2950 are associated with and applicable to DPA-5.

10.6 DPA-6 GHG REDUCTION, ENERGY AND WATER CONSERVATION

PURPOSE

To establish objectives and guidelines for new development that reduce GHG emissions and energy consumption in the Municipality of North Cowichan and help meet the Official Community Plan target of net-zero GHG emissions by 2050.

DESIGNATION

In accordance with the provision of [Section 488 \(1\)\(h\)\(i\)&\(j\)](#) of the *Local Government Act*, all lands within the boundaries of Municipality of North Cowichan, as shown on Map 1- North Cowichan and Area, are designated a development permit area for the purpose of GHG reduction and energy and water conservation.

The GHG Reduction, Energy and Water Conservation DPA (DPA-6) applies to:

- Multi-unit and intensive residential development that is in DPA-1 and requires a development permit.
- Commercial and industrial development that is in DPA-2 and requires a development permit.
- The construction of buildings for institutional use that exceed a gross floor area of 100 square metres.

OBJECTIVES

The objectives for DPA-6 are:

- a. Promote GHG reduction and energy efficiency through thoughtful site, building and landscape design.
- b. Move towards a net-zero emissions target by improving efficiency of new buildings.
- c. Reduce the volume of embodied carbon in new construction.
- d. Encourage the design and construction of new buildings that are resilient and responsive to climate change.
- e. Reduce water consumption demands from new development.

GUIDELINES

"Energy & Emissions DP Guidelines E" within Zoning Bylaw 2950 are associated with and applicable to DPA-6.

11

DEVELOPMENT APPROVAL INFORMATION AREA & TEMPORARY USE PERMITS



11.1 DEVELOPMENT APPROVAL INFORMATION AREA

PURPOSE

The establishment of a Development Approval Information Area (DAIA) gives local government the authority to require information about the potential impacts a proposed land use or development may have on the environment and municipal infrastructure before approval is considered.

To use the DAIA authority the Municipality must, by bylaw, establish procedures and policies governing when it can require development approval information and what information may be required. The bylaw will also set out procedures for requesting reconsideration of DAIA requirements and circumstances where a public information meeting may be required.

DESIGNATION

Pursuant to Section 485(1)(b) of the [Local Government Act](#), all lands within the boundaries of the Municipality of North Cowichan, as shown on Map 1 – North Cowichan and Area, are designated a Development Approval Information Area (DAIA).

Development Approval Information may be required for:

- Zoning Bylaw amendment Applications.
- Development permit applications.
- Temporary use permit applications.

DEVELOPMENT APPROVAL INFORMATION AREA OBJECTIVES

- a. To ensure potential impacts of proposed development are identified and documented as part of the development review process.
- b. To ensure the Municipality has relevant and reliable information to properly assess and mitigate conditions resulting from proposed development.

Where potential negative impacts are identified, the Municipality may require the applicant to address and mitigate the impacts before development approval is granted.

DEVELOPMENT APPROVAL INFORMATION AREA REQUIREMENTS

Development applicants may be required to submit reports certified by a qualified professional with the application that assesses potential impacts and provides mitigation recommendations. Although not an exhaustive list, the following professional requirements may be required.

- Geotechnical assessment.
- Environmental overview and impact assessment.
- Shadow study.
- Visual impact assessment/view corridor assessment.
- Storm water management plan/master drainage plan.
- Sewer and water capacity analysis.
- Archaeological impact assessment.
- Traffic impact assessment.
- Wildfire hazard assessment.
- Fire Underwriter Survey (FUS) fire flows calculations and sealed report.

11.2 TEMPORARY USE PERMITS

DESIGNATION

Pursuant to [Section 492](#) of the *Local Government Act*, all lands within the boundaries of the Municipality of North Cowichan, as shown on Map 1 – North Cowichan and Area, are designated as an area where temporary uses may be permitted. This designation allows a use of land that is not otherwise permitted in the Zoning Bylaw to be authorized on a temporary basis through the issuance of a temporary use permit. Council (or Council's delegate) may issue a temporary use permit for a period of up to three years, renewable only once. Upon expiry of the permit, the temporary use must cease.

TEMPORARY USE PERMITS MAY BE ISSUED TO ALLOW

- Commercial uses in an industrial area or an industrial use in a commercial area on a temporary basis.
- Seasonal or occasional uses on land zoned for institutional use.
- Seasonal or occasional uses in rural, rural residential, and residential areas where adjacent properties will not be impacted by smoke, noise, vibration, dust, glare, odour or other negative impacts.
- Temporary housing for farm labour or construction labour.
- Temporary non-agricultural uses on agricultural land as a means of supplementing farm incomes.
- Temporary industrial uses in rural/resource areas (e.g. gravel and mineral processing, small scale saw milling).
- Any other temporary use not otherwise permitted by the Zoning Bylaw.

PRIOR TO ISSUING A TEMPORARY USE PERMIT

Council or Council's delegate must be satisfied the temporary use:

- Qualifies under one of the above criteria.
- Potential adverse impacts on adjacent and surrounding properties will be appropriately managed.
- Will not give the permit holder a competitive advantage over similar businesses operating in locations zoned for the use.
- Will not result in permanent facilities and land alterations that will encourage noncompliance with the Zoning Bylaw once the temporary use permit has expired.
- Will return the land to a condition conducive to the uses it is zoned for.

Temporary use permits may include terms and conditions related to the temporary use and security may be required to ensure any structures and facilities established for the temporary use are removed upon expiry of the permit.

OCP APPENDICES

Appendix 1: Maps

Appendix 2: Local Area Plans

Appendix 3: Comprehensive Development Plans

Appendix 4: Acronyms

Appendix 5: Glossary

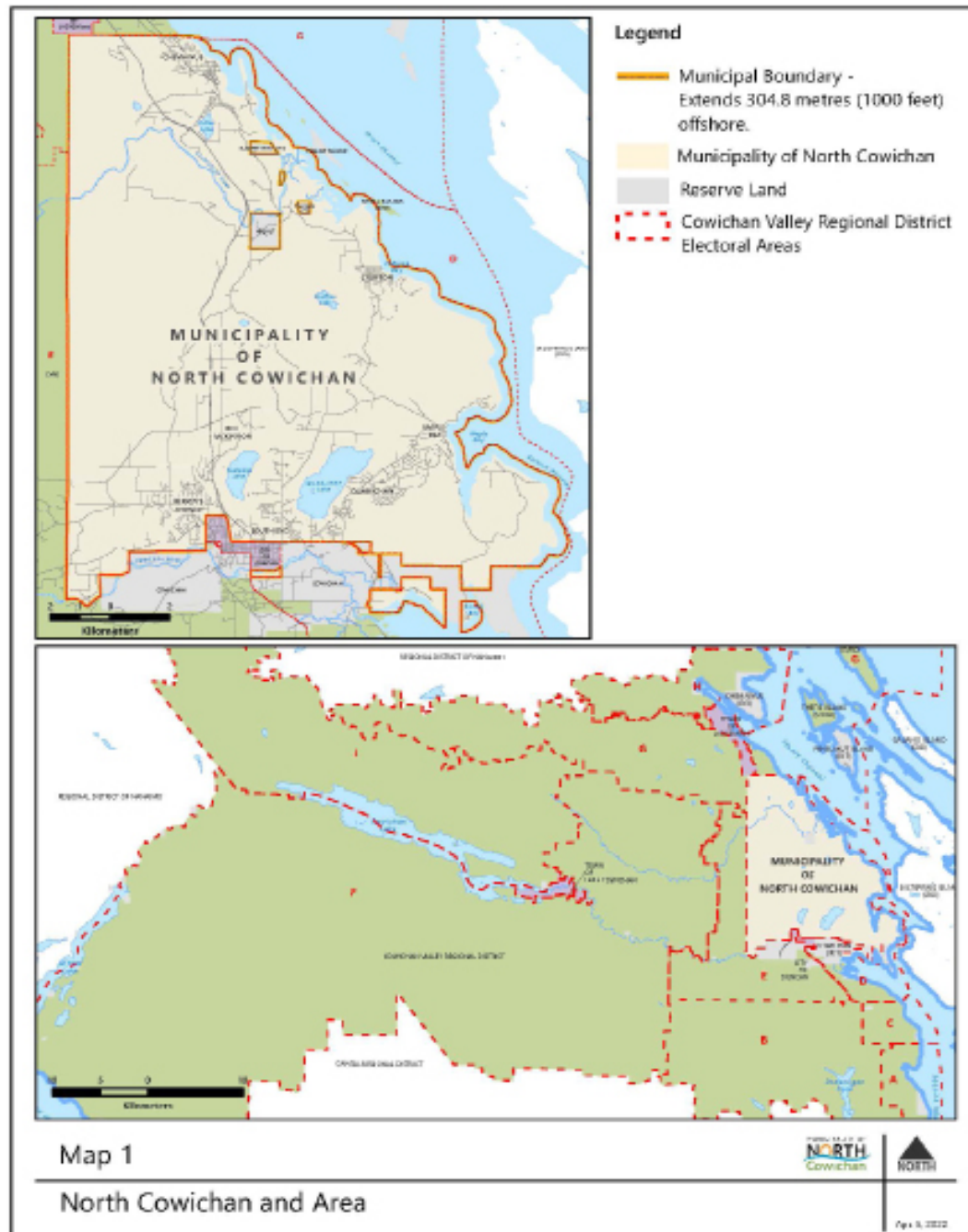


APPENDIX 1 TO SCHEDULE "A", BYLAW 3900, 2022: MAPS

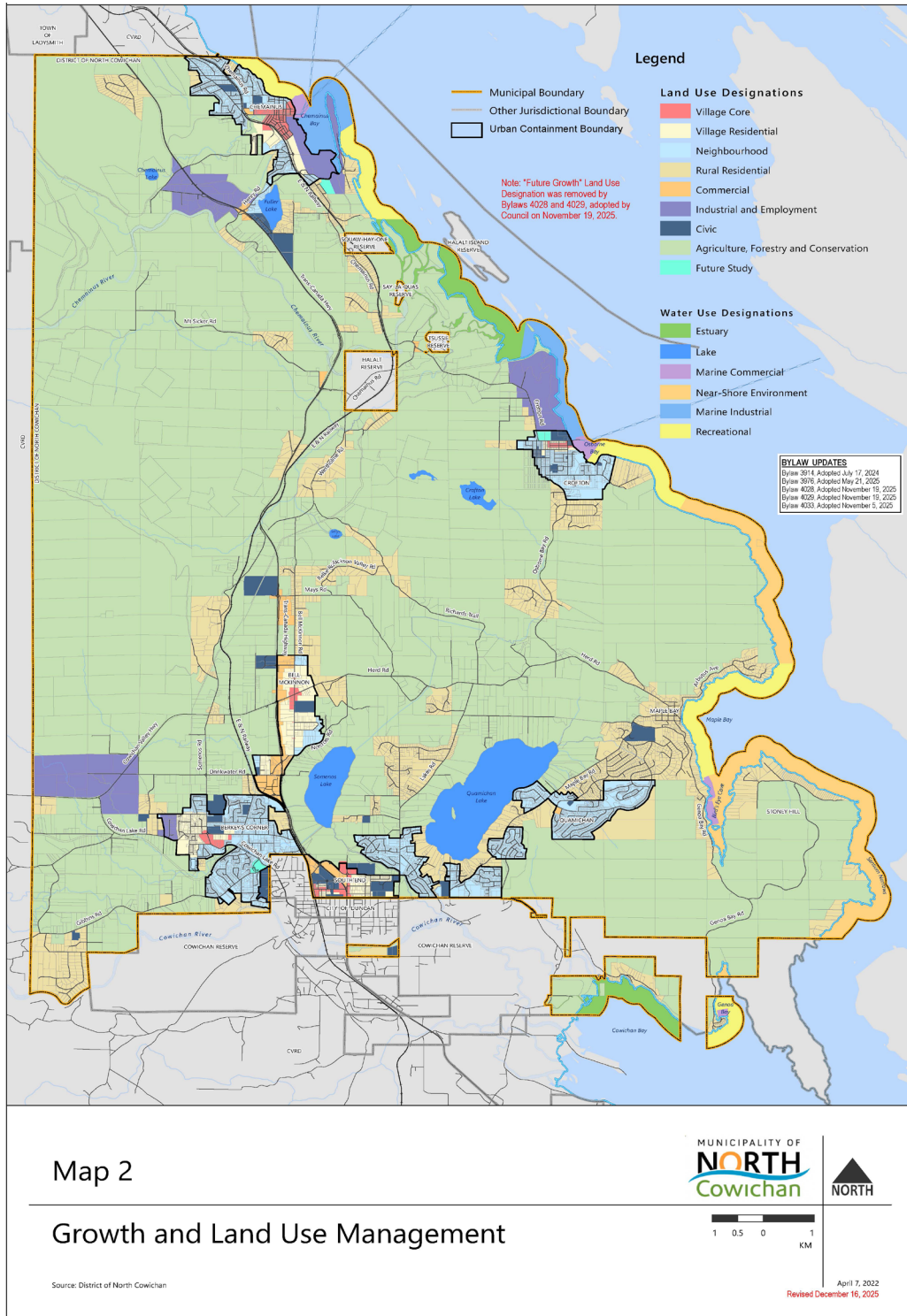
OCP Maps:

- MAP 1: North Cowichan and Area
- MAP 2: Growth and Land Use Management
- MAP 3: Aggregate, Agriculture, and Forestry
- MAP 4: Environmentally Sensitive Areas
- MAP 5: Water Source Protection
- MAP 6: Natural Hazard Areas
- MAP 7: Steep Slopes and Scenic Character
- MAP 8: Road Classification
- MAP 9: Public Utilities and Facilities
- MAP 10: Water System Infrastructure
- MAP 11: Sanitary Sewer System Infrastructure

1. North Cowichan and Area



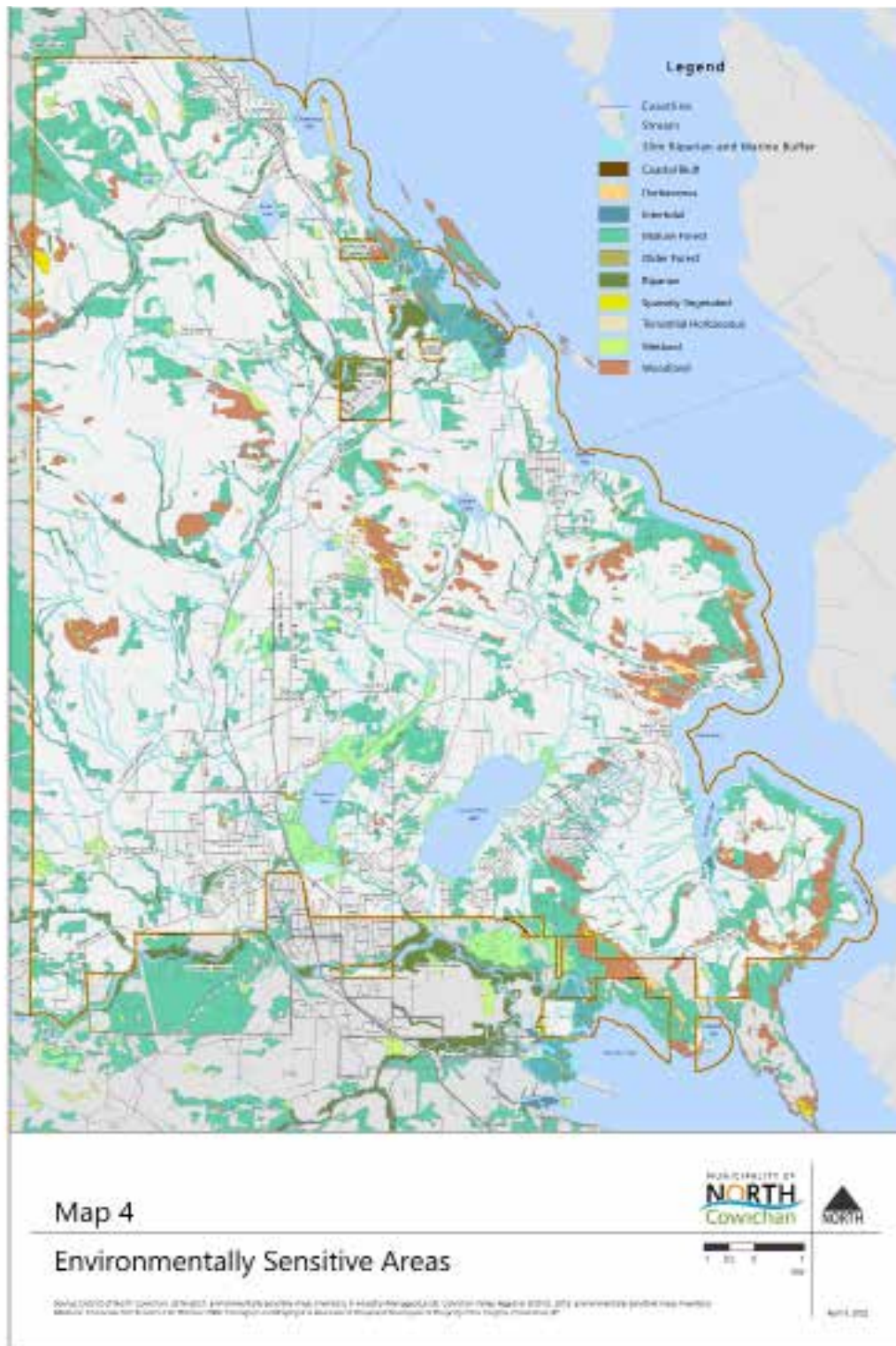
2. Growth and Land Use Management



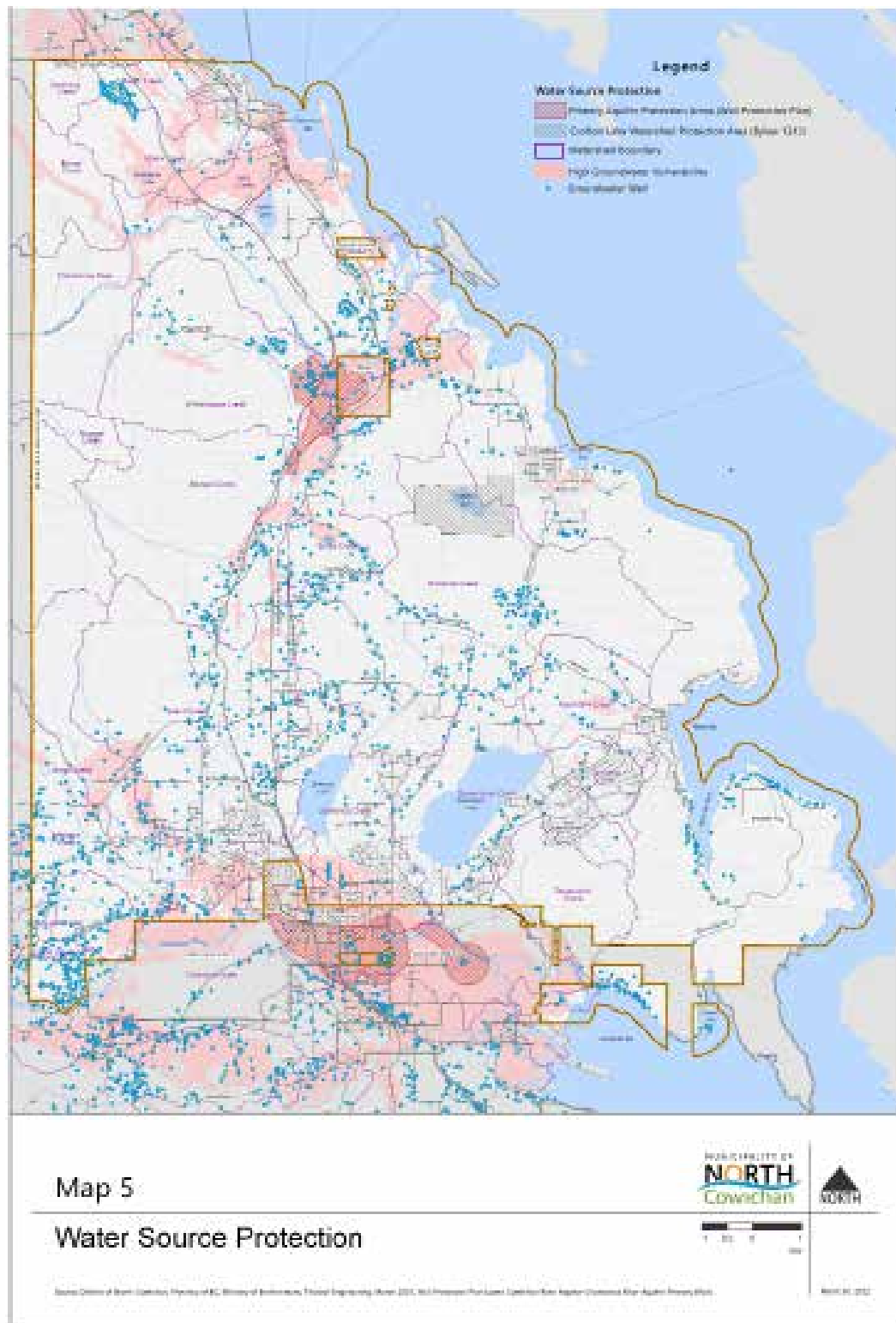
3. Aggregate, Agriculture and Forestry



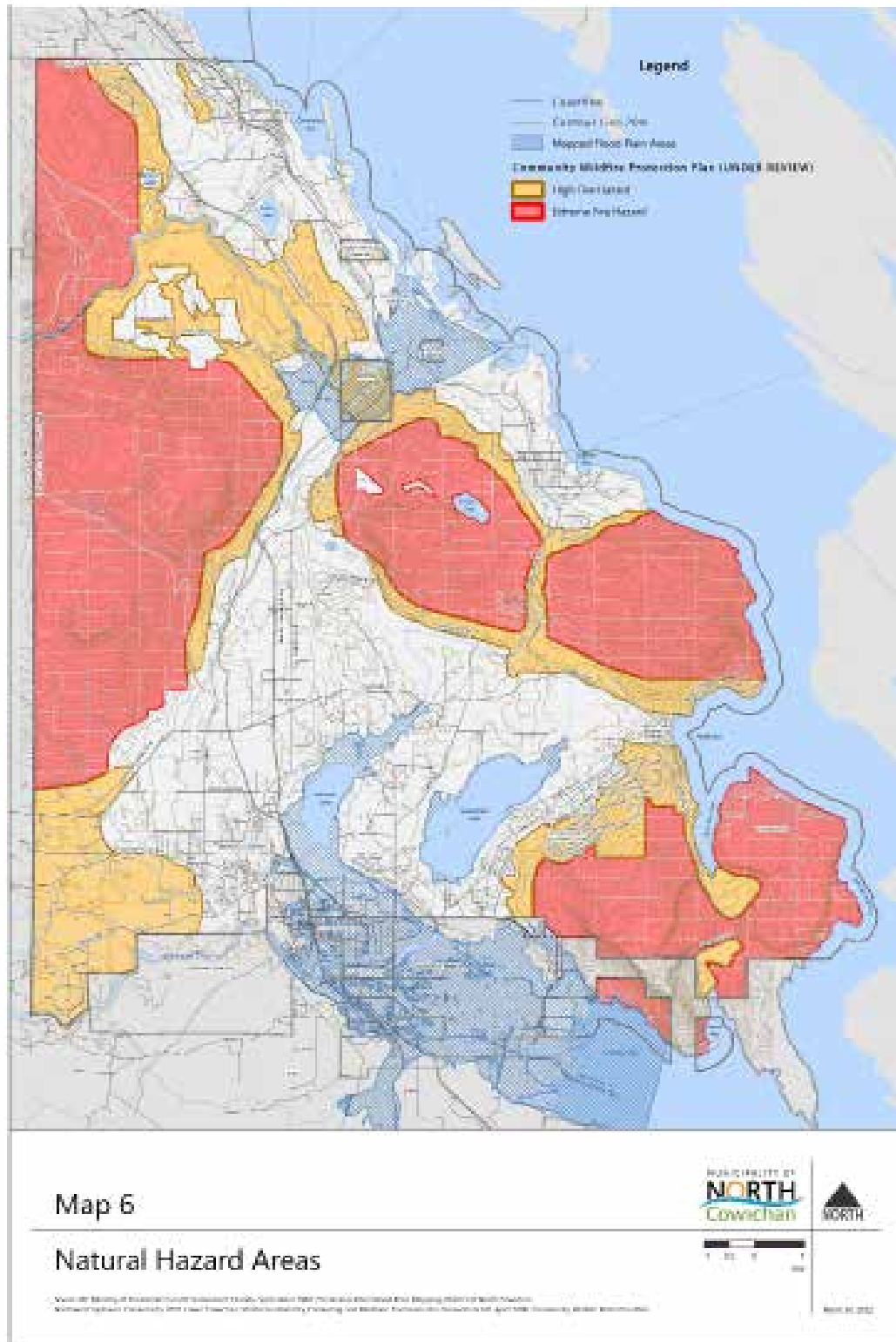
4. Environmentally Sensitive Areas



5. Water Source Protection



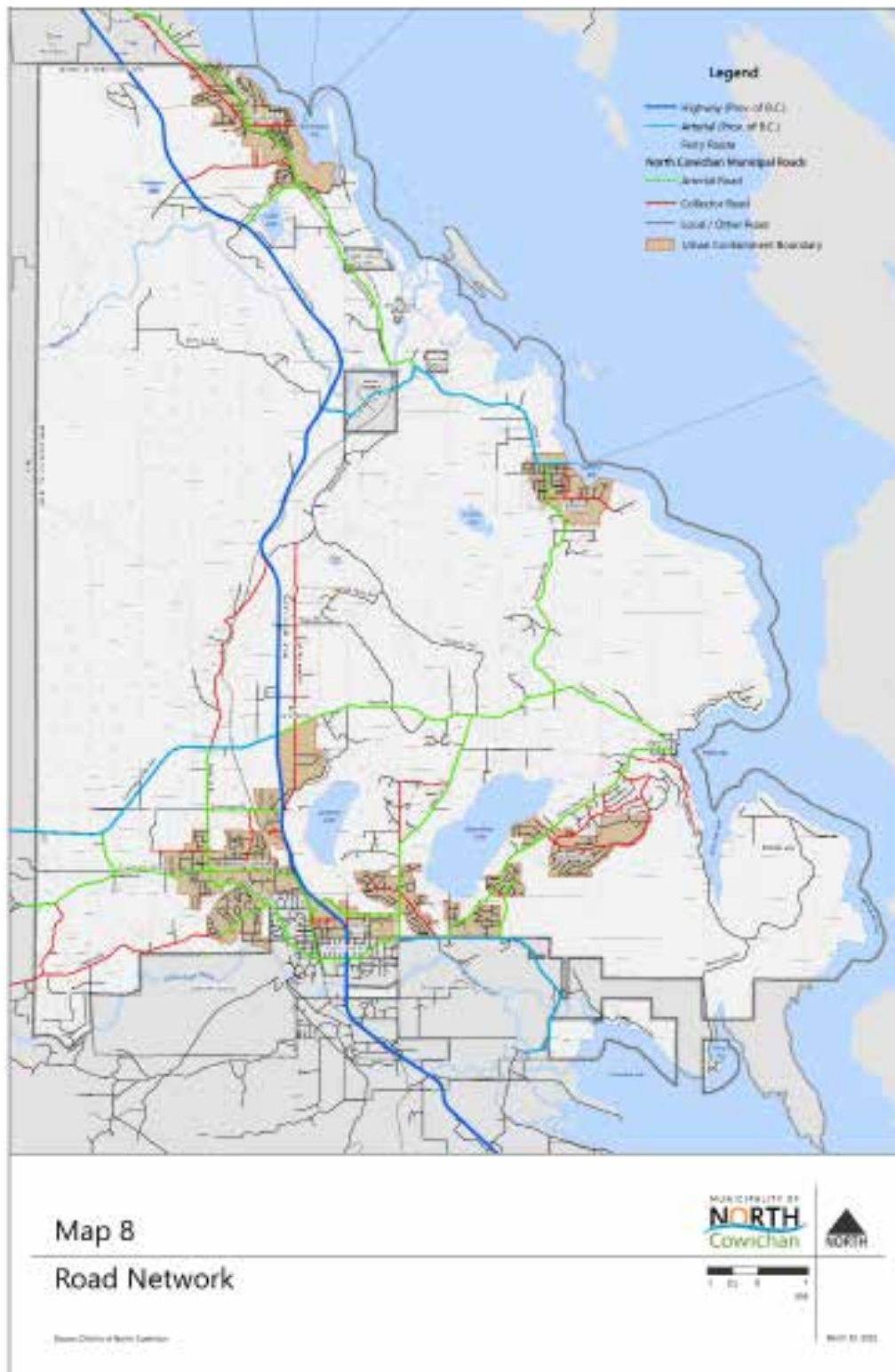
6. Natural Hazard Areas



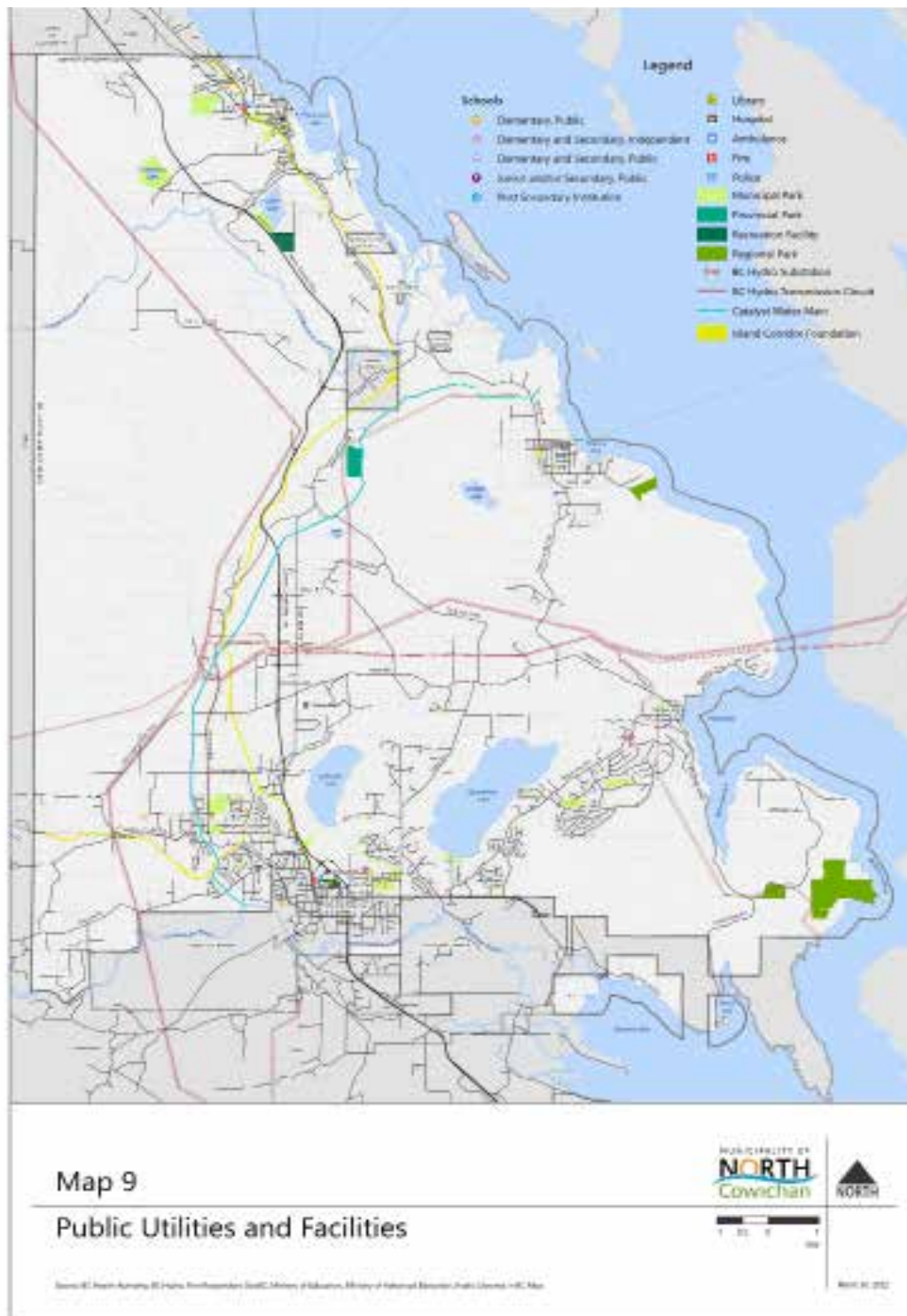
7. Steep Slopes & Scenic Character



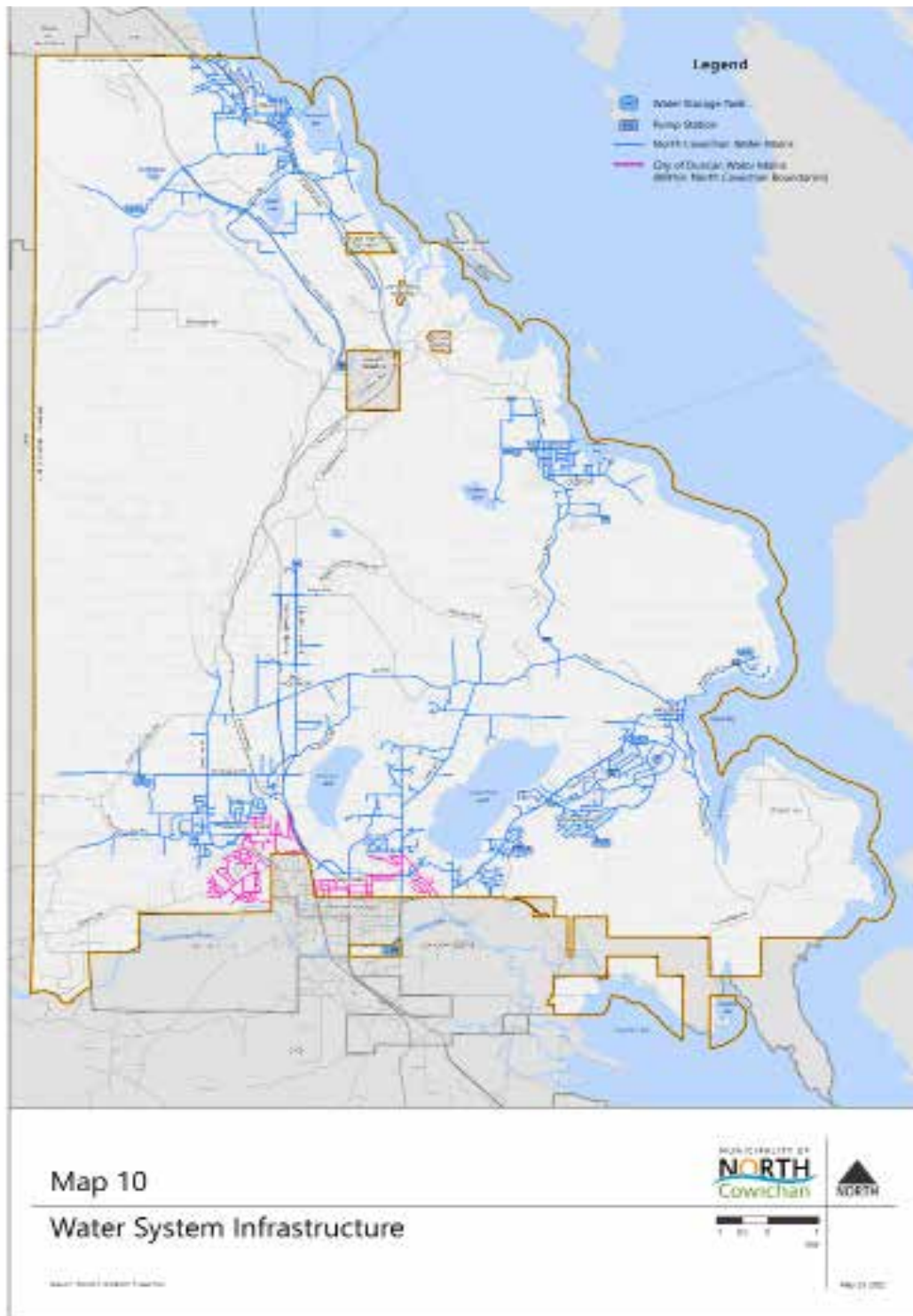
8. Road Classification



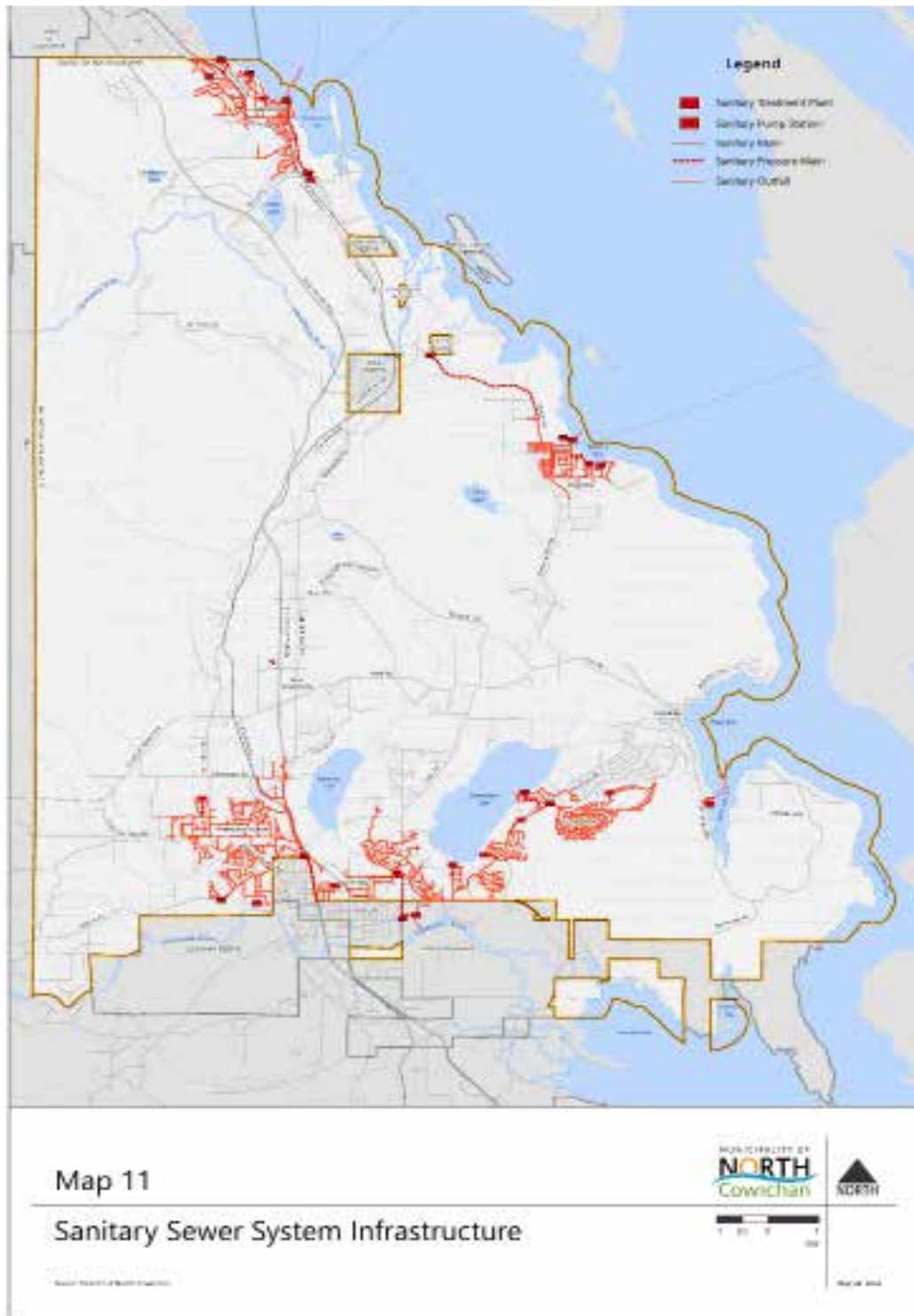
9. Public Utilities and Facilities



10. Water System Infrastructure



11. Sanitary Sewer System Infrastructure



APPENDIX 2 TO SCHEDULE "A", BYLAW 3900, 2022: LOCAL AREA PLANS

Local Area Plans:

1. [Bell McKinnon Local Area Plan](#) [BL 4028, 4029]
2. [Crofton Local Area Plan](#)

The Crofton Local Area Plan provides a detailed policy framework and implementation strategy for future development in Crofton. The Plan is a conceptual document intended to work as a guide for citizens, developers and municipal staff when contemplating development proposals and community initiatives.

3. [University Village Local Area Plan](#)

The University Village Local Area Plan (LAP) provides a detailed policy framework and implementation strategy for the neighbourhood in and around the institutional facilities concentrated in the North Cowichan/City of Duncan core. The Plan is future-oriented and illustrates how the area should be developed over a long period through a series of public and private sector initiatives.

4. [Chemainus Revitalization Plan](#)

Chemainus' Downtown Revitalization Plan is a tool for citizens, community leaders and the Municipality to shape the future of Chemainus in a complex, but unified, initiative.

APPENDIX 3 TO SCHEDULE "A", BYLAW 3900, 2022: COMPREHENSIVE DEVELOPMENT PLANS

Comprehensive Development Plans:

1. [Chemainus Artisan Village](#)

This OCP has been prepared to guide the development of Artisan Village, a mixed-use neighbourhood located in Chemainus. The intent of this Comprehensive Development Plan is to:

- a. Provide residents, landowners, and Council with assurance about the future development of the lands.
- b. Identify how protected areas will be conserved and enhanced.
- c. Identify the parkland, green space, and trail amenities for public use.
- d. Identify how the site will be integrated with the surrounding areas.
- e. Identify future land uses and densities within the development area.
- f. Identify the urban design principles to use during subdivision and development approvals.
- g. Outline an appropriate project phasing.

2. [Kingsview](#)

The purpose of this Comprehensive Development Plan is to:

- a. Offer current residents assurance about the future development of adjacent lands.
- b. Provide Council with objective guidelines for making land use decisions for the development of the lands.
- c. Inform transportation management relating to the project, including planning for vehicles and active transportation and pathways.
- d. Identify public amenities, such as green space, trails, and recreational facilities.
- e. Highlight future land uses and densities within the development area.
- f. Outline project phasing.

APPENDIX 4 TO SCHEDULE "A", BYLAW 3900, 2022: ACRONYMS

List of Acronyms:

ALC:	Agricultural Land Commission
ALR:	Agricultural Land Reserve
BC:	British Columbia
CAEP:	Climate Action and Energy Plan
CAP:	Climate Action Plan
CD:	Comprehensive Development
CMHC:	Canada Mortgage and Housing Corporation
CO ₂ :	Carbon Dioxide
CPR:	Canadian Pacific Railway
CPTED:	Crime Prevention through Environmental Design
CVRD:	Cowichan Valley Regional District
CVT:	Cowichan Valley Trail
DAIA:	Development Approval Information Area
DCC:	Development Cost Charges
DFO:	Department of Fisheries and Oceans Canada
DPA:	Development Permit Area
DRIPA:	Declaration on the Rights of Indigenous Peoples Act
E&N:	Esquimalt and Nanaimo rail corridor
ERU:	Equivalent Residential Unit
ESA:	Environmental Sensitive Area
FUS:	Fire Underwriter Survey
GHG:	Greenhouse Gas
Ha:	Hectare
IPCC:	Intergovernmental Panel on Climate Change
JUB:	Joint Utility Board
LAP:	Local Area Plan
MNC:	Municipality of North Cowichan
MTP:	Master Transportation Plan
MWR:	Municipal Waste Regulation
OCP:	Official Community Plan
RAPA:	Riparian Area Protection Act
RCMP:	Royal Canadian Mounted Police
STP:	Sanitary Treatment Plant
SWMP:	Solid Waste Management Plan
TRC:	Truth and Reconciliation Commission
UBCM:	Union of British Columbia Municipalities
UCB:	Urban Containment Boundary
UNDRIP:	United Nations Declaration on the Rights of Indigenous Peoples
UVic:	University of Victoria
VIU:	Vancouver Island University

APPENDIX 5 TO SCHEDULE "A", BYLAW 3900, 2022: GLOSSARY

Glossary Terms:

15 minute community:	A 'complete' and compact community designed to be interconnected with a mix of land-uses that may include diverse housing types, shops, services, food, schools and day care facilities, employment, greenspaces, parks and pathways, all within a 15 minute walking, cycling, or transit distance.
Accessory dwelling:	A detached dwelling unit (coach house, garden suite, carriage house, laneway house) subordinate to and associated with the principal use in a residential area.
Affordable Housing:	Housing that costs less than 30% of a household's before-tax income and includes all forms of housing tenure: rental, ownership and co-operative ownership, as well as temporary and permanent housing. Other documents or strategies may define this differently according to context and need.
Aging in place:	The ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level.
Agricultural Edge Planning:	Land use design techniques that reduce the potential for conflict at the interface between agricultural and other land uses.
Agri-tourism:	A tourist activity, service, or facility accessory to agricultural land classified as a farm under the Assessment Act.
Bare land strata:	The subdivision of land into strata lots and common property whereby a bare land strata lot can be developed and sold independently.
Biodiversity:	The variety of living organisms at the genetic, species, and ecosystem level, and the ecological complexes of which they are a part.
Bio-swales:	Vegetated open channels specifically designed to attenuate and treat stormwater runoff for a defined water volume while removing debris and pollution.
Blueways:	Water networks that offer safe access to lakes, rivers or oceans to provide linkage for visitation, ecological, and recreational opportunities.
Brownfield:	A vacant or underutilized commercial, institutional or industrial property where past actions may have resulted in contamination, and where there is an active potential for redevelopment.
Community Amenity Contribution (CACs):	A negotiated contribution from a developer that facilitates the provision of public amenities or benefits.
Community garden:	Plots of land, usually in urban areas, that are rented by individuals or groups for private gardens or are for the benefit of the people caring for the garden.
Conservative design:	The practice of concentrating new development on one part of a property while leaving the remainder largely undisturbed or rehabilitated.
Co-op housing:	An alternate form of ownership in which the property is owned by an organization and then sold as shares to the residents of the community.

APPENDIX 5 TO SCHEDULE "A", BYLAW 3900, 2022: GLOSSARY

Glossary Terms:

Core housing need:	If a household falls below at least one of the adequacy, affordability or suitability standards, spending 30% or more of its total before-tax income on rent.
CPTED principles:	"Crime Prevention Through Environmental Design" (CPTED) views the design of buildings, landscaping and outdoor environments from a behaviour standpoint, seeking to reduce opportunities for criminal or antisocial activity.
Dark sky principles:	The reduction of light pollution based on minimizing the amount, direction, time, and type of light used while ensuring adequate illumination.
Daylighting creeks:	Projects that uncover and restore creeks, streams, and rivers previously buried in underground pipes and culverts, covered by decks, or otherwise removed from view.
Density bonus:	A zoning tool that permits developers to build additional units or floor area in exchange for providing certain amenities such as affordable housing.
Development cost charges (DCCs):	A one-time charge prescribed by bylaw that local governments can levy at the time of development approval in order to finance growth-related infrastructure.
Ecosystem functions:	The ecological processes that control the fluxes of energy, nutrients and organic matter through an environment.
Embodied carbon:	The carbon dioxide (CO ₂) emissions associated with materials and construction processes throughout the whole life-cycle of a product, building or infrastructure.
Environmental footprint:	The effect that a person, company, or activity has on the environment, including the amount of natural resources used and the amount of harmful gases produced.
Equity priority groups:	Identified underserved populations of people that have been historically disadvantaged and encounter barriers to full participation in society.
Equity seeking groups:	Those that identify barriers to equal access, opportunities and resources due to discrimination. Historically, they have been denied equal access to employment, education, and other opportunities due to visible and invisible differences. Often these groups are actively seeking social justice.
Equivalent residential unit system:	The system in which the Joint Utilities Board Sewage Treatment Plant distributes sewage treatment plant capacity to the five jurisdictions it serves.
Fee simple:	A form of property ownership where the owner of the property is not restricted in the use of their property, except by usual laws, bylaws and/or building codes.
Fire smart design principles:	Guidelines on how to mitigate a home's vulnerability to wildfire, set out by FireSmart Canada.

APPENDIX 5 TO SCHEDULE "A", BYLAW 3900, 2022: GLOSSARY

Glossary Terms:

Food equity:	A philosophy that all people should have access to sufficient healthy and culturally appropriate food, and no person or community should suffer disproportionately from the burden of food production impacts such as wages and working conditions, access to food production means, and food production-related environmental contamination.
Food security:	A situation where all people, at all times, have physical, social, and economic access to sufficient, safe, nutritious, and culturally appropriate food that meets their food preferences and dietary needs for an active and healthy life.
Green infrastructure:	The natural vegetative systems and green technologies that collectively provide society with a multitude of economic, environmental, health and social benefits. They provide equivalent infrastructure services to the community as would human engineered infrastructure. Some examples are urban forests, bio-swales, green roofs and walls, parks and open space, and urban agriculture.
Green shore:	An initiative by the Stewardship Centre for B.C. which provides science based tools and best practices to help people minimize impacts of new developments and restore shoreline ecosystem function of previously developed sites.
Greenfield:	Land which has not been previously developed or built on for industrial or urban uses. Although agricultural or forest lands are highly productive and managed, they would be included in this definition.
Greenways:	Areas of protected open space that follow natural and human-made linear features for recreation, transportation and conservation purposes and link ecological, cultural and recreational amenities.
Grey infrastructure:	Human engineered systems that provide the day-to-day services for humans such as water, sewer, gas, electricity, etc.
Greyfield:	The carbon dioxide (CO ₂) emissions associated with materials and construction processes throughout the whole life-cycle of a product, building or infrastructure.
Housing agreements:	A contract that is voluntarily entered into by a purchaser or property owner with a local government which specifies certain terms and conditions for housing on that property, usually helping facilitate non-market housing and securing affordable or special-needs housing.
Industrial ecosystem:	An interconnected system of industrial activities acting like a natural system where waste or by-product of one process is used as an input into another process.
Infiltration:	The process by which water on the ground surface enters the soil.

APPENDIX 5 TO SCHEDULE "A", BYLAW 3900, 2022: GLOSSARY

Glossary Terms:

Legal non-conforming or non-compliant structures:	Structures that complied with zoning and regulations at the time they were built but due to changes to legislation would no longer comply.
Live work units:	A unit in a building having both permanent residential accommodation and space for commercial activity, such as an artisan studio.
Local Area Plan (LAP):	A planning document that provides direction for how a specified area will grow and change over time. They typically include detailed guidelines and policies to direct urban design, transportation (including cycling, walking, and transit), land use, parks and open spaces, and other planning elements in the area.
Municipal forest reserve:	Municipally owned, fee simple land which is approximately 25% of the municipality's land area and is managed by the municipal forestry staff. It is not a park but is often used for recreation.
Natural assets:	The stock of natural resources and ecosystems that yield, or could be restored to yield, a flow of benefits to people, which are services that were previously performed by engineered human-made infrastructure.
Non-market housing:	Housing that is owned or controlled by a government or a non-profit entity and is rented to low and moderate income households at less than market rent, or made available for purchase at less than market value.
Ocean acidification:	The reduction in the pH of the ocean over an extended period of time, caused primarily by uptake of carbon dioxide (CO ₂) from the atmosphere.
Package treatment plants:	A pre-manufactured, completely self-contained system for sewage treatment that does not require any extra tanks or equipment to operate. Can be used in small communities, individual properties or places with low volumes of wastewater.
Peak flow:	The maximum rate of discharge during the period of runoff caused by a storm event.
Private Moorage:	Docking facilities owned by individuals or corporations either for personal use or to rent to other boaters.
Public amenities:	Facilities such as washrooms, play equipment, seating areas and public art, available to all.
Public realm:	Areas open to the public, such as streets and parks, but also includes "quasi public space" such as shopping malls or forecourts.
Qualified Environmental Professional:	An applied scientist or technologist who is registered and in good standing with an appropriate BC professional organization constituted under an Act.
Regenerative agriculture:	Agricultural practices that work over the long term to improve biodiversity, soil and water quality and health.

APPENDIX 5 TO SCHEDULE "A", BYLAW 3900, 2022: GLOSSARY

Glossary Terms:

Restrictive covenants:	Enforceable legal agreements between the Municipality and a landowner under section 219 of the Land Title Act which impose restrictions of some kind on the use of land.
Save harmless covenant:	A provision within a Restrictive Covenant that indemnifies the Municipality from liability in certain circumstances.
Secondary treatment/ tertiary treatment:	Removal of small solid particles from effluent/removal of dissolved substances from effluent.
Securities:	Financial payments submitted to the Municipality to ensure completion of certain works such as landscaping. These are returned once work is complete.
Setbacks:	Spaces between buildings and lot lines that are generally free of development.
Shadow study:	An analysis of the impact proposed buildings would have in terms of casting shadows onto surrounding areas at different times of the day and year.
Site adaptive design:	Site design that works with the natural contours and features of the land rather than grading and clear-cutting
Social equity:	A concern for fairness in access to different social services, opportunities and amenities.
Social justice:	A focus on specific needs of different groups and allocating resources to create equal outcomes.
Statutory rights of way:	A legal agreement granting the Municipality (or utility agency) the right to install, maintain and access infrastructure (including public access) over private land.
Strata conversion:	Turning rental units into condo units by creating strata titles allowing separate ownership of units within the same building.
Stratification:	Creating different strata units or lots for separate ownership within one "parent parcel".
Subdivision:	The division of a land parcel into two or more smaller parcels, or a change in the position of lot lines.
Supportive housing:	Subsidized housing with on-site support staff for individuals with disabilities or experiencing homelessness.
Temporary Use Permit:	A time-limited permit granted by Council for a land use not otherwise permitted in a zone.
Transitional housing:	A temporary type of supportive housing designed to help people move towards independent living and permanent housing.

APPENDIX 5 TO SCHEDULE "A", BYLAW 3900, 2022: GLOSSARY

Glossary Terms:

Universal accessibility standards:	Specific design standards that result in Universal Design outcomes for uses.
Universal design:	Urban and building design that is equitable, flexible and simple for people of all ages and abilities to use.
Urban agriculture:	Production and harvest of food from in and around developed urban areas.
Urban Containment Boundary (UCB):	A boundary drawn around developed areas distinguishing where "urban" and "rural" types of land use policy will be applied.
Viticulture:	The cultivation of grapes, particularly for wine-making.
Watershed:	The geographical area draining naturally into an identified river, stream or other water body.