

COWICHAN VALLEY REGIONAL DISTRICT

REGIONAL HARMONIZED OFFICIAL COMMUNITY PLAN FOR THE ELECTORAL AREAS BACKGROUND

In 2017, the Cowichan Valley Regional District created a “new regionalism” approach for planning based on governance and process while building cross-sectoral coalitions that support trusting relationships among regional interests. The resulting Cowichan 2050 Regional Collaboration Framework (Cowichan 2050) informs the vision statement guiding this CVRD official community plan (OCP).

Its priorities include building regional resilience, expanding upon existing partnerships tri-regionally with the Capital Regional District and the Regional District of Nanaimo. This regional, collaborative approach helps accommodate change, especially in two priority areas: growth management and climate adaptation. Three additional areas were identified as opportunities for improved collaboration: i) regional ecosystem stewardship ii) biodiversity conservation and iii) watershed protection.

Ten Goals to Implement the OCP Vision

The first step towards implementing the OCP’s vision is to define the broad goals that will bridge it to more detailed objectives and policies. The following ten goals draw upon the initiatives and analyses described in the Cowichan 2050 aspirations and policy area directions. These are the foundation of the OCP’s vision and will be the primary consideration when working to solve regional planning challenges.

- Goal 1: Manage growth holistically
- Goal 2: Improve and expand the range of housing
- Goal 3: Protect and enhance natural areas
- Goal 4: Protect water quality and quantity
- Goal 5: Manage infrastructure sustainably
- Goal 6: Strengthen food and agricultural systems for food security
- Goal 7: Preserve heritage and strengthen arts and culture
- Goal 8: Realize the region’s economic potential
- Goal 9: Mitigate and adapt to climate change
- Goal 10: Strengthen relationships with First Nations communities

Each of these, supported by objectives and policies, is further explored in the official community plan.

Aspirations for the Future Well-being of the Region

The OCP represents the community’s vision for the future and provides the framework and directions, developed in partnership by CVRD municipalities and electoral areas, to guide growth and decision-making around the use and management of land and water resources in the regional OCP plan area. The regional OCP vision and goals build on the four aspirations expressed in the Cowichan 2050 backgrounder, reproduced below.

Resilience: Strengthen our adaptive capacity

Our region is already dealing with chronic stresses such as rising unaffordability, economic volatility and water supply issues. In the coming years, we anticipate seeing these stresses increase and experiencing new stresses such as an aging population and sea-level rise. As climate change accelerates, we also expect to become more exposed to sudden, acute shocks such as coastal flooding and more frequent and intense storms. Regional resilience bridges the gap between disaster risk reduction and climate change adaptation. It moves away from traditional disaster risk management, which is founded on risk assessments that relate to specific hazards. Instead, it accepts the possibility that a wide range of disruptive events—both stress and shocks—may occur but are not necessarily predictable. We must improve our region’s overall resilience by strengthening the adaptive capacity of our communities and supporting systems. This will require us to work together as a region to proactively identify and address our vulnerabilities.

Sustainability: Optimize growth and environmental stewardship

The Cowichan Valley is currently experiencing steady population growth, and we anticipate growth pressures will continue to be a significant factor over the coming decades. This challenge will be exacerbated by climate change impacts that will place further stress on our watersheds, ecosystems, food systems and communities. In this context, supporting sustainable, coordinated growth, while encouraging continued environmental stewardship, is a cornerstone goal for our region.

Liveability: Enhance quality of life and social well-being

Our region is one of the most livable places in Canada. We have a great climate, a vibrant and prosperous economy, incredible outdoor recreation options, high quality community services, great infrastructure and so much more. However, in part because of this appeal, housing and food costs are on the rise, and we’re also experiencing an influx of newcomers. Our challenge is to maintain and improve livability in the face of this growth. Key challenges include tackling housing affordability issues, managing growth so that our communities retain the qualities that make them special and unique (e.g., our rural character and community connectedness), and making sure that our built environment supports the health and well-being of all residents.

Relationships: Build strong, inclusive connections

Social belonging and engagement are key components of community well-being. The Cowichan Valley is home to 350 active volunteer-led organizations, as well as strong arts, culture and heritage sectors committed to making positive change. However, our region’s income gap is growing, housing insecurity is on the rise, and vulnerable populations such as Indigenous Peoples, visible minorities and female lone-parent families face systemic barriers such as poverty, difficulty accessing employment opportunities and pay gaps. To address these challenges, our region must make a collective commitment to improving diversity, inclusivity and social equity in all spheres of community life. Building stronger relationships between Indigenous peoples and non-Indigenous Canadians through the ongoing journey of reconciliation is also key. In turn, these commitments will enable us to continue the hard work of building stronger relationships in the Cowichan Valley, both across and within communities.

Sustainability and Resilience: Two Key Terms in Implementing the OCP Vision

Two of the terms used in this OCP's vision statement, sustainability and resilience, are key to its success and merit further elaboration, as they are central to the manner in which the goals, objectives and policies of this OCP are established.

Sustainability

Sustainability and Change

Sustainability refers to the ability to maintain a current state of being indefinitely. In planning terms, that means sustaining our communities, our economy and our environment in something close to their present state. The details will always vary—the components of the economy, the types of communities and the people who inhabit them, the evolution of ecosystems—but the essential quality of life will be consistent from one decade to the next.

The Cowichan Valley's population of the region is projected to grow by more than 20% between 2017 and 2051.¹ A significantly larger population means a greater need for amenities such as housing, employment and reliable supplies of food and water. Logically, that suggests the need for more local food production, yet the amount of land being farmed in the region shrunk by almost half between 1991 and 2011.² Meanwhile, water supplies—both surface water and underground aquifers—are under threat from a combination of increased demand from development and urban population growth.

Although population growth places more demands on a community, it can bring positive effects as well, including cultural diversification, an abundance of new energy and useful skills for an economy in transition. Even with the projected temperature increase, the climate will remain mild by global standards and may result in an influx of climate refugees.³

Forest cover continues to diminish with the harvesting on timber lands of young trees that are cut as soon as they become marketable—and long before they replace the functionality of a natural forest and the rich biological system it supports. Less than 30% of the historic natural levels of old forest remain, and there are no more intact watersheds in the region.⁴ Inevitably, the disappearance of forests brings with it loss of wildlife habitat and travel corridors, as well as diminished biodiversity. Of increasing relevance today, every tree removed results in release of

¹ *Population, Housing & Employment Projections for the Cowichan Valley Regional District's Modernized Official Community Plan*. Rennie, 2019, p. 7.

² *Cowichan Region State of the Environment Report Update 2014: Farm Land and Food Security*, p. 6.

³ Cowichan Valley Regional District (2017). *Climate Projections for the Cowichan Valley Regional District*, p. 46.

⁴ Cowichan Valley Regional District, *Cowichan Region State of the Environment Report Update 2014: Introduction to the Cowichan Region*, p. 4.

carbon dioxide into the atmosphere. Government acquisition of forested lands for protection would be a significant contributor to climate change mitigation.

Changes such as these are largely measurable, and manageable with careful planning. However, the great unknown today is the magnitude and types of impacts we can expect from climate change. It's difficult to plan for eventualities so hard to predict and so dependent on another unknown—the ability of global and local communities to take necessary steps to mitigate climate change and manufacture the political will to do so.

Climate Change: Inevitable but Immeasurable

According to recent projections, the annual average temperature in the Cowichan region will increase by almost 3°C by 2050, and warmer winters will result in a reduction of frost-free days by 63%. Although summer drought will increase, a significant increase of precipitation in other seasons, especially in the fall and with more intense storm events, will result in an overall increase of 5% in annual precipitation.⁵ Adding to the general wetness, sea levels are expected to rise up to a metre by the end of the century,⁶ and more frequent and severe storm surges will magnify ocean intrusion onto land. And then there are the myriad other even less measurable effects of climate change, including species extinctions and the spread of destructive invasive species.

It is imperative that land use planning provisions err on the side of caution in taking account of a wide range of effects including sea level rise, rainfall levels, drought, availability of water supplies for domestic and industrial use, changes in species distribution (both flora and fauna) and size of population, and viability of economically important wild species such as Pacific salmon and of agricultural crop types.

The implications of climate change for environmental, economic and community sustainability should not be underestimated. That means preparing for the worst and transforming risk into opportunities for the region's economy, environment, communities and subsequent generations.

Planning for Sustainability and Climate Change

The development permit area guidelines included in Schedule C of this OCP illustrate how the plan's broad goals translate into specific direction with respect to achieving sustainability and mitigating the impacts of climate change. Some examples:

1. *Water conservation.* The likelihood of reduction in availability of surficial and underground water supplies, already taxed by increasing demands for domestic and commercial uses, speaks to the need to maximize the potential for recharge and to discourage unnecessary waste. The development permit area guidelines attached to this OCP include several examples of how this need will be met, including reducing the area of pavement in developments in order to minimize evaporation, which can result in significant loss of water; promoting landscaping with native, drought-tolerant plants; installing naturalized

⁵ Cowichan Valley Regional District (2017). *Climate Projections for the Cowichan Valley Regional District*, pp. iii-iv.

⁶ Cowichan Valley Regional District, *Cowichan Region State of the Environment Update 2014: Climate Action*, p. 3.

ponds, bioswales and rain gardens; and collecting rainwater through other means such as cisterns (DPAs 9 and 10, Form and Character; DPA 11 Water and Energy Conservation and Greenhouse Gas Emission Reduction).

2. *Water quality.* Clean and abundant water supplies are vital not only for human domestic supplies but equally so to sustain wildlife, especially the salmonids and other fish species whose life cycle includes time spent in Cowichan streams. Carelessly contaminated water can be the death knell for fish species that the provincial Riparian Areas Regulation strives to protect. To complement this, the guidelines in DPA 1 (Riparian Area Protection) regulate development in streamside areas, the integrity of which is vital for ensuring the health of waterways and the creatures whose lives depend on the quality and quantity of water in those waterways. Why interfere with a property owner's desire to build a house with a nice view of a babbling brook or rolling river? Several reasons. One is sediment. Sediment produced by construction and carried into streams by runoff may be invisible to the human eye but are efficient at rendering a fish incapable of absorbing oxygen by clogging its gills. Another reason is potential destruction of trees and brush that filter damaging pollutants and shade and cool watercourses, thus protecting habitat vital for fish survival. DPA 4 (Protection of Aquifers) also speaks to the importance of avoiding groundwater contamination.
3. *Food self-sufficiency.* Food self-sufficiency makes sense for a variety of reasons: the climate cost of transporting food hundreds or thousands of miles to market; local employment for growers; the health benefits of fresh produce, not to mention the taste of local food; and community interaction. Although it would be unrealistic to conclude that the Cowichan Valley can be anywhere near 100% self-sufficient, it's reasonable to aim for at least 45% self-sufficiency⁷ instead of the current 10-20%. Only half a century ago Vancouver Island produced 85% of its food needs. Just under 9% (30,895 ha) of the Cowichan region's land base is arable, and more than 60% of this is in the Agricultural Land Reserve. Following significant reductions in the amount of land being farmed in the Cowichan region, only about one-fifth of arable land is being used to produce food.⁸ Protection of farmland is a priority at both the provincial and regional levels, and the regional OCP includes a development permit area for that purpose alone (DPA 8, Protection of Farming). But the most important factor in years to come will be local consumer demand and the ability of small-scale farms to make a living. In recent years, expenses have risen far more than revenues for smaller farms, and the 10% of farms that generate 80% of the revenues include many high output operations that market their products globally rather than locally. A potential cause for optimism is the fact that a milder year-round climate is likely to make feasible a broader variety of crops in addition to reducing energy costs associated with farming. The cost of climate change may provide added incentive for consumer demand in Cowichan for locally sourced food: imported food

⁷Cowichan Region State of the Environment Report Update 2014: Farm Land and Food Security, p. 11.

⁸ Cowichan Region State of the Environment Report Update 2014: Farm Land and Food Security, p. 14.

is transported an average distance of 2,500 kilometres (km), and approximately 3% of fossil fuel use in B.C. is attributable to the growing, packaging and transportation of food.⁹

4. *Protection of rare and fragile species.* Ecosystems are the natural capital for human economies and what makes communities livable. The eastern Cowichan region is one of two areas of B.C. where the greatest loss of ecosystems has occurred and continues to occur. Garry oak meadows are an example of an ecosystem that has been particularly hard hit because the meadows' attractiveness as scenic locations for building sites. There are, of course, good news stories, too—like the return of the western bluebird, a native species that had disappeared from Vancouver Island but has begun to return, thanks to the efforts of Cowichan volunteers installing nesting boxes in favourable locations. Protection of sensitive ecosystems—rare and fragile—is the focus of DPA 3 and of Goal 3, Protect and enhance natural areas.
5. *Energy conservation.* Building orientation can help reduce energy use and greenhouse gas emissions. Positioning and orientation of buildings to take conditions such as sun, wind and natural topography into account can reduce GHG emissions resulting from mechanical heating and cooling. Guidelines in DPA 11 (Energy and Water Conservation and Greenhouse Gas Emission Reduction) speak to the advantages of designs that incorporate innovative, energy-saving features such as green roofs, orienting buildings for maximum sun exposure as well as cooling from prevailing breezes, and maximizing distribution of daylight in building interiors to reduce the need for lighting.

These examples illustrate the level of detail involved in tackling sustainability and climate change issues from a planner's perspective.

The traditional approach to development approval is to assess, among other things, the risk of harm to environmental values. As the risk posed by climate change continues to increase, there may be a need to add an additional measure: the demonstrated ability of a proposed development to reduce rather than increase carbon dioxide emissions.

The precautionary principle, adopted by the community of nations at the Rio Earth Summit in 1992 and embraced by every level of Canadian government since, has potential implications for how we address not only risk of harm to the environment but also risk of exacerbating rather than mitigating climate change. The precautionary principle states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those proposing the action. Since decisions at the regional level need to be based on an understanding that a healthy natural environment is essential to a healthy living environment for community members and a healthy local economy, the precautionary principle is an integral component of the process of making land use decisions.

Sustainability and First Nations Communities

No discussion of sustainability would be complete without mentioning First Nations communities, whose practices were models of sustainability prior to European contact.

⁹ CVRD, 2010 *State of the Environment Report*.

One of the goals of this OCP is to strengthen relationships with First Nations communities. A measure of success of the reconciliation process with First Nations communities by all levels of Canadian governments will be the degree to which it enables the recipients to attain sustainability in terms meaningful to those communities.

Building Resilience to Support Sustainability

The transition to sustainable economies involves significant shifts in how we live and work, including the application and use of technological advances and alternative transportation methods. Keeping equilibrium while climate change forecasts and technological innovations are rapidly evolving is a growing challenge for planning and policy. Such rapid evolution also creates a 'rate of change' challenge to adapt more quickly that needs to be better understood if governments are to provide leadership and continuous high levels of service to citizens while maintaining strong economies and developing stronger, resilient communities.

Communities that take an integrated approach to planning for rapid and sometimes unpredictable changes will be at the forefront of mitigation and adaptation efforts and, consequently, will be more resilient to potentially negative effects of change. Such an approach will require recognition of major cross-cutting, inter-jurisdictional regional issues that demand coordinated, collaborative and innovative approaches to planning that move beyond conventional means and processes.

This OCP, by taking these realities into account, aspires to improve the Cowichan region's readiness for change and strengthen its resilience in a manner that is

Resourceful
Economically
Sustainable
Innovative
Liveable
Integrated
Ecologically
Natural
Tolerant

Environmental, economic and social objectives and policies in this OCP support the development of resilient systems that reflect the resourcefulness of our people and institutions to flexibly adapt to both present challenges and future events, thus providing a necessary and pragmatic approach to achieving sustainability throughout the region. Increased resilience theoretically results in enhanced sustainability.

Resilient systems withstand, respond to and adapt more readily to shocks and stresses, bounce back stronger after tough times and live better in good times (Rockefeller Foundation, 2015). The resilience index identified for cities by the Rockefeller Foundation can be adapted to a rural/urban interface in the regional context. The index identified the following seven qualities of resilience: reflectiveness, resourcefulness, robustness, redundancy, flexibility, inclusiveness and integration. These qualities are threaded through the electoral area OCP objectives and policies, form the foundation of this harmonized OCP, and may be defined broadly as follows.

Reflectiveness and *resourcefulness* describe the ability to learn from the past and act in times of crisis. Individuals and institutions that are reflective use experience to inform future decisions and to modify their standards and behaviours accordingly. For example, planning processes that are reflective are better able to respond to changing circumstances such as the objectives and policies of harmonized OCPs.

Resourceful people and institutions can recognize alternative ways to use resources at times of crisis in order to meet their needs or achieve their goals. Harmonized OCPs may focus attention regionally on available resources and plan accordingly for a regional approach.

Robustness, *redundancy* and *flexibility* describe the ability to conceive and put into place systems and assets that can withstand shocks and stresses as well as the willingness to use alternative strategies to facilitate rapid recovery. These qualities are reflected in this OCP's natural systems' objectives and policies.

Robust design is well conceived, constructed and managed and includes making provision to ensure failure is predictable, safe and not disproportionate to the cause. The OCP policies aim to direct growth accordingly.

Redundancy refers to spare capacity purposively created to accommodate disruption due to extreme pressures, surges in demand or an external event. It includes diversity where there are multiple ways to achieve a given need and adaptation policies for climate change.

Flexibility refers to the willingness and ability to adopt alternative strategies in response to changing circumstances or sudden crises. OCP policies with flexibility respond to this resilience quality.

Inclusive and *integrated* address the needs of the most vulnerable and collectively aim to create complete communities. The OCP policies are inclusive of all of society. The resilient region is also inclusive and accountable in planning for future generations.

Regional resilience is the adaptive capacity to respond to crises, such as natural disasters including flooding, and to socio-economic challenges such as affordable housing. Regional resilience bridges the gap between disaster risk reduction and climate change adaptation. It moves away from traditional disaster risk management, which is founded on risk assessments that relate to specific hazards. Instead, it accepts the possibility that a wide range of disruptive events—both stress and shocks—may occur but are not necessarily predictable.