

Comox Valley Sustainability Strategy



FINAL PLAN February 18, 2010

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This Study has been produced with the assistance of the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the author(s), and the Government of Canada and the Federation of Canadian Municipalities accept no responsibility for them.

ACKNOWLEDGEMENTS

This plan is a joint initiative of the Comox Valley Regional District, Village of Cumberland, Town of Comox and City of Courtenay. It was funded in part by a Green Municipal Fund (GMF) grant from the Federation of Canadian Municipalities.

GMF grants help communities develop sustainable community plans that consider environmental, social and economic objectives and include specific targets for environmental performance.

The project team would like to thank the working group members, community organizations, local students, regional and local government staff, and individual members of the public for their contributions to the sustainability strategy.

A special acknowledgement to the administrators of the four Comox Valley governments who initiated the development of the strategy and worked in a collective manner to guide the plan to completion:

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Sustainability

WHAT IS IT? IT'S A UNIFYING CONCEPT THAT IN THE MOST SIMPLE TERMS, COMPELS US TO IMPROVE THE QUALITY OF LIFE FOR ALL CITIZENS AND SPECIES WHILE PROTECTING THE ENVIRONMENTAL SYSTEMS AND RESOURCES ON WHICH LIFE DEPENDS. IT'S A GLOBAL JOURNEY THAT DEPENDS ON LOCAL ACTIONS. IT REQUIRES US TO REEXAMINE OUR VALUES, TAKE A DEEPER LOOK AT HOW THE EARTH AND ITS SYSTEMS FUNCTION, AND FIND NEW MODELS FOR COOPERATIVE ACTION.

BEYOND PROTECTING OUR PLANET'S HEALTH, SUSTAINABILITY IS ALSO ABOUT PROMOTING RESILIENCE, ALLOWING US TO EFFECTIVELY RESPOND TO CHANGES OR SEVERE EVENTS THAT MAY IMPACT OUR COMMUNITIES.

INTRODUCTION

WHAT IS THE SUSTAINABILITY STRATEGY?

The Sustainability Strategy is a community plan that creates new knowledge and leading approaches to sustainability for communities in the Comox Valley. It recommends a new level of cooperation between individuals, organizations, and governments in the Comox Valley, focusing our collective efforts on the well-being of both our citizens and our environment.

The Comox Valley Sustainability Strategy is a tool for:

- generating innovative actions
- guiding future policy decisions
- mobilizing community resources
- inspiring collaboration

The broad scope of the strategy will allow it to influence policy making on both the regional and local scale. This plan should serve as a catalyst for collaboration between individuals, governments, agencies, and community organizations both within and outside of the Comox Valley.

HOW WILL THE SUSTAINABILITY STRATEGY BE USED?

The Sustainability Strategy is a strategic document that explores a wide range of issues that are critical to address in order to achieve sustainability goals over the next several decades. Recommendations within the Strategy and its overarching direction will guide the policies and plans of regional and local governments. The Strategy also recommends specific actions to be undertaken by a variety of partners, including community organizations.

Targets for environmental performance in the strategy serve as a focal point for taking action and should be used to guide sustainability planning and decision making in public, private and non-profit sectors.

The key goal of the Strategy is that it becomes an avenue for collaboration and learning between all citizens, organizations and governments that are currently active in the Comox Valley and inspires new programs, policies, partnerships and technologies that will ultimately contribute to a sustainable region.

WHO IS RESPONSIBLE FOR THE SUSTAINABILITY STRATEGY?

To reach our targets for sustainability in the coming decades, the Strategy must be operated and supported by the entire community. In addition to local governments, there are a number of local and provincial partners who are central to the success of the strategy and will take a lead role on various actions.

What can local and regional governments do?

Local governments can use their jurisdiction over the built environment (e.g. land use, infrastructure, building permits) to improve the sustainability of the region. They can ensure that sustainability is integrated into all policies and plans, as budget, technology, and human resources allow. They can also be an advocate for sustainability innovation and funding at the provincial and federal level.

HOW WAS THE SUSTAINABILITY STRATEGY CREATED?

The sustainability strategy is the result of collaboration between four local governments, input by dedicated community members, and review by the public and various government agencies.

Elected Officials

Elected officials from each of the four local governments in the Valley participated at numerous points, both through listening to the ideas proposed by the community on many occasions, as well as by offering their own ideas and input.

Steering Committee

Representatives from Comox Valley's four governments joined forces to address sustainability issues in a collective manner, guiding the sustainability strategy to toward an integrated vision for the region, sound actions for change and ongoing implementation.

Working Groups

A dedicated, knowledgeable, and experienced group of citizens came together to generate ideas, strategies and targets for becoming a more sustainable region.

Youth

Students in the Comox Valley shared their concerns and ideas on the topic of sustainability through surveys, essays, song and art.

Public

Members of the public asked questions, reviewed the plan, and provided their recommendations throughout the planning process.

Local and Regional Government Staff

Local and regional government staff worked to find innovative ways to integrate sustainability into programs and policy, and to discuss challenges and opportunities with staff from neighbouring jurisdictions.

WHY IS INTEGRATION IMPORTANT TO SUSTAINABILITY PLANNING?

There is a growing understanding that a keystone of sustainability is integration. It is necessary to always focus our planning and decision making around the awareness that all aspects of our communities are closely interrelated.

Sustainability is “cross-cutting” and as we look at issues more closely, we see that no issue exists in isolation. For example, consider issues such as global warming or deforestation and reflect on the wide range of disciplines and stakeholders that are connected to these challenges.

The movement to create *Integrated Community Sustainability Plans* was designed to accelerate a shift in municipal planning and decision-making, away from the traditional division of departments and sectors, toward a more long-term, coherent and participatory approach to achieving sustainable communities.

Examples of interconnected sustainability issues include:

- **The relationship between land use and transportation.** The location of land uses determines movement patterns between homes, jobs and services. This in turn, determines the amount of energy we spend on transportation.
- **The relationship between transportation and community health.** Transportation choices have an impact on our health through impacting air quality and our activity levels.
- **The relationship between housing and the environment.** Our homes are where most energy, water and resource consumption takes place. Housing can have a negative, neutral or positive impact on surrounding ecosystems.
- **Rural and urban interdependence.** The majority of residents live in municipal areas, but rely heavily on the rural areas surrounding communities. Rural areas provide food, economic resources and important recreation opportunities that are essential to a good quality of life in any community. In addition, they are the foundation of a region’s ecosystem and wildlife habitat.

HOW IS THE STRATEGY DOCUMENT ORGANIZED?

Section 1: Where are we headed?

Section one provides an overall vision for global and regional sustainability and outlines targets for the year 2050 in globally significant topic areas: climate, energy, water, ecosystems, food, economy, and society.

Section 2: How will we get there?

Section two examines the means by which we can make progress towards global sustainability targets through goals, objectives, phased targets and actions. Section two lays out a preliminary plan for eight community development topics:

1. Housing & Land Use
2. Buildings & Site Development
3. Infrastructure Services
4. Transportation
5. Ecosystems, Natural Areas & Parks
6. Food System
7. Social & Community Well-being
8. Local Economic Development



A SNAPSHOT OF THE SUSTAINABILITY STRATEGY

GLOBAL TARGETS:

GLOBAL TARGETS ARE HIGH-LEVEL, SPECIFIC AND MEASURABLE ASPIRATIONS TO BE ACHIEVED BY THE YEAR 2050.

PHASED TARGETS:

PHASED TARGETS ARE SHORT TO MEDIUM RANGE, SPECIFIC, AND MEASURABLE ASPIRATIONS TO BE ACHIEVED BEFORE THE YEAR 2050. PHASED TARGETS ARE TOPIC SPECIFIC AND ULTIMATELY ASSIST IN ACHIEVING THE GLOBAL TARGETS.

VISION:

A VISION STATEMENT DESCRIBES AN IDEAL FUTURE STATE.

GOALS:

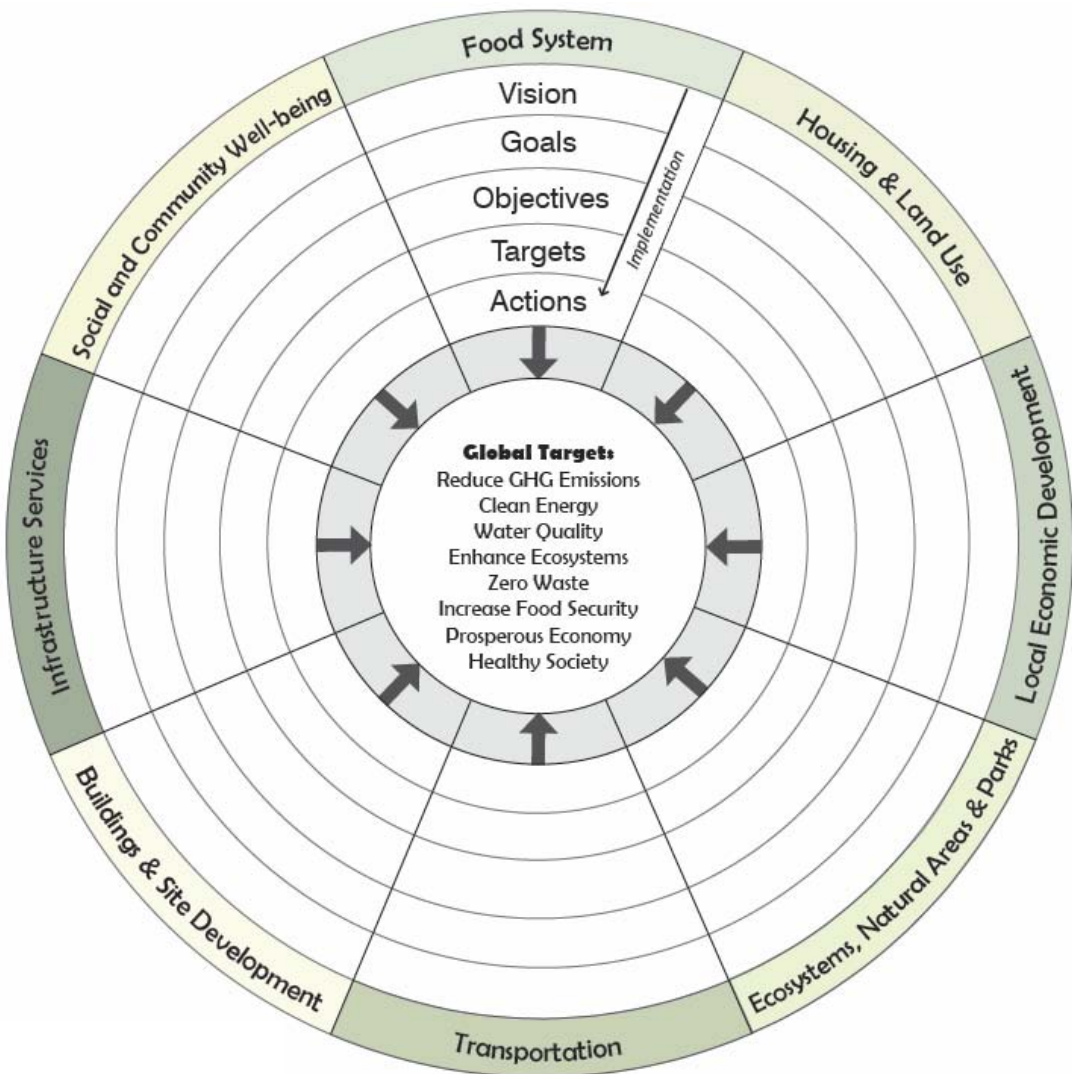
GOALS TRANSFORM A BROAD VISION STATEMENT INTO GENERAL STATEMENTS OF STRATEGIC DIRECTION.

OBJECTIVES:

AN OBJECTIVE DESCRIBES A RANGE OF SPECIFIC STRATEGIES REQUIRED TO ACHIEVE A GOAL.

ACTIONS:

ACTIONS DESCRIBE DETAILED TASKS TO BE CARRIED OUT.



Section 1

A VISION FOR SUSTAINABILITY

Section one provides overall visions for global and regional sustainability and outlines targets for the year 2050 in globally significant topic areas:

Climate

Energy

Water

Ecosystems

Waste

Food

Economy

Society

This section provides overarching direction and vision for a sustainable Comox Valley.

A Global Vision for Sustainability

WE STAND AT A CRITICAL MOMENT IN EARTH'S HISTORY, A TIME WHEN HUMANITY MUST CHOOSE ITS FUTURE. AS THE WORLD BECOMES INCREASINGLY INTERDEPENDENT AND FRAGILE, THE FUTURE AT ONCE HOLDS GREAT PERIL AND GREAT PROMISE. TO MOVE FORWARD WE MUST RECOGNIZE THAT IN THE MIDST OF A MAGNIFICENT DIVERSITY OF CULTURES AND LIFE FORMS WE ARE ONE HUMAN FAMILY AND ONE EARTH COMMUNITY WITH A COMMON DESTINY. WE MUST JOIN TOGETHER TO BRING FORTH A SUSTAINABLE GLOBAL SOCIETY FOUNDED ON RESPECT FOR NATURE, UNIVERSAL HUMAN RIGHTS, ECONOMIC JUSTICE, AND A CULTURE OF PEACE. TOWARDS THIS END, IT IS IMPERATIVE THAT WE, THE PEOPLES OF EARTH, DECLARE OUR RESPONSIBILITY TO ONE ANOTHER, TO THE GREATER COMMUNITY OF LIFE, AND TO FUTURE GENERATIONS.

- FROM THE EARTH CHARTER



A Comox Valley Vision for

THE COMOX VALLEY IS A REGION OF DISTINCT, WELL-CONNECTED AND WELL-DESIGNED URBAN AND RURAL COMMUNITIES WITH A HIGH QUALITY OF LIFE, A VIBRANT, ENTREPRENEURIAL LOCAL ECONOMY, AND A HEALTHY AND SUSTAINABLE BIOREGION. LOCAL GOVERNMENTS, AGENCIES AND RESIDENTS WORK COOPERATIVELY AND COLLABORATIVELY AS STEWARDS TO PROTECT AND ENHANCE THE REGION'S SPECTACULAR NATURAL LANDSCAPES AND MARINE AREAS. DEVELOPMENT IS INTEGRATED WITH THE NATURAL ENVIRONMENT AND DECISION-MAKING IS DRIVEN BY THE SHARED GOALS OF CONSERVING LAND, WATER AND ENERGY RESOURCES. RESIDENTS ENJOY EFFICIENT AND AFFORDABLE SERVICES AND INFRASTRUCTURE THAT SUPPORT COMMUNITY HEALTH AND WELL-BEING, THE LONG-TERM PROSPERITY OF THE REGION, AND ACCOMMODATE EVOLVING DEMOGRAPHICS AND ECONOMIC OPPORTUNITIES. A RANGE OF URBAN AND RURAL HOUSING TYPES, TENURES AND COSTS ARE PROVIDED TO MEET THE NEEDS OF THE REGION'S DIVERSE POPULATION.



GLOBAL SUSTAINABILITY TARGETS

What are global sustainability targets?

Global sustainability targets are high-level, specific, and measurable aspirations to be achieved by the year 2050 in globally significant topic areas: climate, energy, water, ecosystems, waste, food, economy, and society.

Why are targets important to achieving sustainability?

Committing to targets provides direction, focuses efforts, and helps prioritize actions and the allocation of time and resources. Setting targets ensures that visions for the future are supported by action.

What are the criteria for setting appropriate targets?

Targets should help us meet our highest aspirations; however they should also be realistic and achievable. Targets should meet the following criteria:

- Directly support sustainability objectives
- Connected to actions within spheres of influence (i.e. policies, mandate, laws)
- Linked to areas of responsibility (managers, engineers, citizens, etc.)
- Can be measured affordably
- Easily understood



By 2050

THE COMOX VALLEY WILL REDUCE OVERALL GREENHOUSE GAS EMISSIONS BY 80% FROM 2007 LEVELS WITH THE FOLLOWING MILESTONE TARGETS:

- **2020 – 33%** (BC LEGISLATED)
- **2030 – 50%**
- **2040 – 65%**
- **2050 – 80%**

Rationale: This target corresponds to the Intergovernmental Panel on Climate Change (IPCC) recommendation for 2050 for stabilizing atmospheric CO₂ levels & avoiding extreme climate change impacts, as well as to the legislated reductions in BC for 2020. This target calls for action on reducing use of fossil fuels and increasing the use of alternative energy sources.



By 2050

THE COMOX VALLEY WILL REDUCE ENERGY USE PER CAPITA BY 50% AND/OR WILL NOT INCREASE OVERALL ENERGY USE FROM CURRENT LEVELS

Rationale: This target is focused on decreasing the amount of energy we use and on ensuring that the way we use energy is more efficient. The production and consumption of energy requires significant infrastructure which consumes resources and produces waste and emissions.

If the population of the Valley doubled by the year 2050, a 50% reduction of per capita energy use would enable no increase in total energy use. A combination of reducing demand and switching to new efficient technology will assist in meeting this goal.



By 2050

THE COMOX VALLEY WILL REDUCE NON-AGRICULTURAL WATER USE BY 50% PER CAPITA.

Rationale: This target is focused on greatly increasing conscious and efficient water use. As in many jurisdictions in BC, Comox Valley residents use much more water than leading water-efficient communities and many western European countries. To achieve sustainability, we need to significantly change our water use habits, and reduce our demand for fresh water.

ALL WASTEWATER TREATMENT IN THE COMOX VALLEY WILL BE TO TERTIARY OR REUSE LEVEL.

Rationale: Tertiary wastewater treatment provides a higher level of environmental protection and creates opportunities to reuse water rather than further use of the fresh water supply.

ALL NEW DEVELOPMENT AND 50% OF EXISTING DEVELOPMENT IN THE COMOX VALLEY WILL CAPTURE RAINWATER RUNOFF THROUGH SOURCE CONTROL METHODS.

Rationale: Rainwater source control methods techniques for managing runoff close to where it falls as rain thereby protecting water resources from the impacts of excess water flow and associated pollutants. Methods include infiltration swales, rain gardens, green roofs and improved landscape design.



By 2050

100% SENSITIVE ECOSYSTEMS AND RIPARIAN AREAS ARE PROTECTED AND MANAGED TO MAINTAIN STABLE HEALTH AND PRODUCTIVITY.

Rationale: The Courtenay Estuary and the Region's rivers are ecologically significant. This target reflects the importance of protecting green space for habitat and ecosystem services.

70% OF DEGRADED ECOSYSTEMS THAT ARE CRITICAL FOR THE HEALTH OF WATERSHEDS, RIPARIAN AREAS AND ENDANGERED SPECIES HABITATS ARE RESTORED.

Rationale: Humans will have an impact on the habitats of other species through our presence; however, we can also restore and carefully manage degraded ecosystems to an improved level of health and biodiversity.



By 2050

THE COMOX VALLEY WILL USE A ‘ZERO WASTE’ APPROACH AND ACHIEVE A 90% DIVERSION OF WASTE FROM LANDFILLS.

Rationale: Waste reduction and recycling is important for protecting ecosystems from pollution and reducing our use of natural resources. Zero waste encourages the redesign of resource-use systems. However, some waste is inevitable, thus the target is set at 90% diversion of waste from landfills.



By 2050

OF THE FRUITS AND VEGETABLES CONSUMED IN THE COMOX VALLEY, 50% WILL BE PRODUCED ON VANCOUVER ISLAND.

Rationale: Currently, only 10% of our food is grown on Vancouver Island. This target highlights the increased importance of locally grown food for community health, reduced fossil fuel dependence, and economic sustainability.

100% OF THE POPULATION IN THE COMOX VALLEY WILL HAVE SUFFICIENT ACCESS TO FOOD.

Rationale: It's important to strive for a target that eliminates hunger in the Comox Valley. Beyond access to basic food supply, all residents should have access to food that meets all nutritional needs and is culturally appropriate.



By 2050

ALL HOUSEHOLDS IN THE COMOX VALLEY WILL HAVE ACCESS TO EMPLOYMENT OR ASSISTANCE THAT ALLOWS THEM TO MEET THEIR BASIC NEEDS.

Rationale: All workers should have access to a wage that is sufficient to meet their basic needs of food, shelter, clothing and healthcare. The definition of wage should also take barter systems into consideration. For some individuals or households, employment will not be possible and assistance will be necessary.

TO PROMOTE ECONOMIC DIVERSITY IN THE COMOX VALLEY, THE TOP THREE BUSINESS SECTORS WILL EACH ACCOUNT FOR LESS THAN 50% OF THE TOTAL ECONOMIC ACTIVITY IN THE VALLEY.

Rationale: Economic diversity ensures that one sector does not dominate the local economy, as this makes a community more susceptible to global economic shocks and cycles in that sector. Economic diversity also increases opportunities for residents by offer a wider variety of employment choices.



By 2050

ALL RESIDENTS OF THE COMOX VALLEY WILL HAVE ACCESS TO ADEQUATE HOUSING.

Rationale: Housing should be available for residents of all incomes and age groups. In addition to providing basic shelter, “adequate” refers to housing that is clean and safe.

ALL RESIDENTS OF THE COMOX VALLEY WILL HAVE ACCESS TO THE SERVICES, AMENITIES AND CULTURAL ACTIVITIES NECESSARY FOR A HIGH QUALITY OF LIFE.

Rationale: Access to a range of services and amenities, by both public and private suppliers, ensures that residents can maintain health, wellness, and overall quality of life. “Access” refers to the availability of the service to all residents regardless of mobility.

Section 2

SUSTAINABLE COMMUNITY DEVELOPMENT STRATEGIES

Section two examines the means by which we can make progress towards global sustainability targets. This section lays out a plan for sustainable community development in eight areas:

Housing & Land Use

Buildings & Site Development

Infrastructure Services

Transportation

Ecosystems, Natural Areas & Parks

Food System

Social & Community Well-being

Local Economic Development

This section provides detailed targets and recommended actions for achieving a high level of sustainability performance in the Comox Valley by the year 2050.

Actions are prioritized with the following timelines:

Short-term – by 2015

Medium-term – by 2020

Long-term – beyond 2020



1.0 Housing & Land Use

VISION

Residents of the Comox Valley live in sustainable, attractive and diverse neighbourhoods that are walkable, safe, and interconnected.

SUSTAINABILITY PERSPECTIVES

Sustainable neighbourhoods not only aim to minimize their ecological footprint, but are also highly desirable places to live. A range of housing is located within convenient walking distance of or with convenient transit access to local services, activities and jobs. Compact, efficient housing, designed at the human scale and oriented towards public activity, fosters attractive, vibrant and highly livable neighbourhoods and town centres.

Infill development within existing town centre areas supports businesses, transit and a diversity of housing. Development outside of the town centres needs to be transit-oriented, as cycling and walking are not viable commuting modes at those distances. Development in any areas outside town centers needs to preserve rural character by concentrating development (new or infill in existing areas) to create nodes of transit-oriented densities (reference average density of 16 units/acre) to be supportive of convenient transit service.

The Comox Valley Regional Growth Strategy is responsible for establishing where growth is to be located in the region and the Sustainability Strategy is intended to shed light on “how” growth can occur, where it is to be located, as well as explore other considerations regarding development and growth in order to meet the Valley’s sustainability goals.

GOALS, OBJECTIVES, TARGETS, ACTIONS

Goal 1.1: To create a connected network of ‘complete’, walkable, and transit-oriented neighbourhoods and centres throughout the region surrounded by healthy rural areas.

Objective 1.1.1: Direct the majority of future growth into new and existing “Core Settlement Areas” (Town Centres and Neighbourhood Centres) as identified in the Regional Growth Strategy and Official Community Plans, at densities that support transit use and local serving commercial uses in individual neighbourhoods, and/or other strategies identifying improvement and growth areas for housing or jobs.

TARGET: Planning and governance structures in place:

- Regional Growth Strategy that identifies “Core Settlement Areas” and establishes criteria for identifying “Town Centres” within (applicable) member municipalities – by 2011
- Official Community Plans for each community that physically define the locations and extent of Core Settlement Areas and Town Centres, and includes regional context statements that comply with RGS growth strategies and projections– by 2013
- Zoning – New zoning consistent with intent and designations of RGS land use policies should be developed by 2015

TARGET: % of residents in region living in existing or new Designated Settlement Areas (versus rural areas):

- 2020 ~ 66%
- 2030 ~ 70%
- 2040 ~ 75%
- 2050 ~ 80%

TARGET: Unit / acre (hectare) range for new development in the Comox Valley:

Type	Size
High density	Minimum 74 units per hectare (u/ha) (30 units / acre (upa))
Urban	10-30 upa (24-74 u/ha)
Neighbourhood Residential	8 - 10 upa (4 - 24 u/ha)
Rural	1 unit / 4 – 8 ha (1 unit / 10-20 acres)
Agricultural	1 unit / 8 ha minimum (1 unit / 20 acres)
Resource/forest	1 unit / 40 ha (1 unit / 99 acres)

TARGET: # of new master planned neighbourhoods or projects that have achieved a LEED Neighbourhood Development Gold status or equivalent level of performance:

- 2020 ~ 3
- 2030 ~ 8
- 2040 ~ 15
- 2050 ~ 30

These targets are based on focusing the majority of anticipated population growth into planned (existing and new) "Town Centres" with appropriate uses, infrastructure and densities in accordance with the RGS and OCPs. This will relieve growth pressure on green space and rural areas in order to preserve their unique character and valuable rural economic function (e.g. agriculture, forestry). The targets suggest that 80% of the population will live in designated settlement areas and 20% in rural areas.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Complete and adopt the Regional Growth Strategy for the CVRD that includes criteria for identifying Designated Settlement Areas and Town Centres.	Short-term
b. Update OCP's of member municipalities to align with the growth strategy vision. OCP's will include: <ul style="list-style-type: none"> • Mapping and policies that physically define the locations and extent of Designated Settlement Areas and Town Centres • Land Use plans and Designations • Regional Context Statements that demonstrates how member municipalities are implementing the Regional Growth Strategy and the Sustainability Strategy • Development Permit Area Guidelines for (but not limited to): <ul style="list-style-type: none"> i. Environmentally Sensitive Area ii. Form and Character iii. Energy and Water Conservation 	Short-term
c. Promote the use of LEED for Neighbourhood Development wherever appropriate, and identify applications, opportunities and implications to local government policy and regulations for neighbourhood developments.	Short-term

<p>d. Develop appropriate plans at the neighbourhood scale to implement the directions and achieve the targets in the RGS, including:</p> <ul style="list-style-type: none"> • Detailed land use plans and designations consistent with the vision and goals of the Regional Growth Strategy • Development Permit Guidelines for Form and Character where appropriate • Conceptual development and public realm plans including considerations for re-zonings and the development of new zone • Active transportation plans that prioritize walking, cycling and transit use 	Medium-term
<p>e. Update land use policies and designations included in OCPs, along with zoning by-laws, to reflect the strategic land use framework as set out in this plan. Upon adoption of OCP land use policies, zoning updates should be prioritized to ensure the regulatory framework for implementing the goals and strategies of this plan are in place. Comprehensive Land Use Zones based on alternative development standards for individual proposals should be developed on a case by case basis as applications are received.</p>	Medium-term
<p>f. Undertake a study to identify and determine the feasibility of policies and protocols to establish Transferable Development Rights (TDRs) that allow development rights to be transferred within and across properties to permit equitable economic considerations to land owners while supporting a re-location of density within Designated Settlement Areas to achieve regional goals as set out in this plan.</p>	Medium-term
<p>g. Develop a toolkit of strategies, building typologies and incentives to support smaller lot development, sensitive infill and intensification strategies within Designated Settlement Areas. This should include the identification of residential infill and intensification pilot projects in each of the member municipalities, to be carried out in partnership with them, the Regional District and private developers.</p>	Medium-term

<p>h. Develop an educational program on mixed-use neighbourhood centres, sustainability and density, as part of OCP updates, to ensure that community members understand the costs and benefits associated with sustainable community development patterns.</p> <p>This process could include events tailored for a range of stakeholders including residents, social service organizations and other NGO's, the development community, students, and municipal and regional district staff.. Events could include speakers series, workshops and precedents tours, and involve partnerships with North Island College, other private or public educational institutions, local BIA's, development organizations (such as the Urban Development Institute).</p>	Medium-term
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Objective 1.1.2: Preserve and enhance the agricultural and resource use, function, and character of rural areas and to maintain and restore their overall ecological health.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop a rural development strategy that addresses rural economic opportunities, infrastructure, environmental health, and the preservation of rural function and character.	Short-term
b. Explore with the Ministry of Community Services, in Consultation with the Ministry of Transportation, the potential for the transfer of subdivision authority to the CVRD to ensure that subdivision approval processes for rural properties preserve agricultural and resource viability, function and character.	Short-term
c. Continue to develop the ecosystems mapping and inventory work, as well as the promotion of policies and practices for ecosystem protection and stewardship.	Ongoing
d. Continue to work closely with Provincial Ministries to protect the health of the Valley's watersheds as growth occurs and increases the number of wells and septic systems.	Ongoing

Objective 1.1.3: Neighbourhoods within Core Settlement Areas and Town Centres are structured and designed to support a high quality and convenient regional transit service, linking development approaches to the goal of reducing climate emissions.

TARGET: % of residents living within a 400 m walking distance of a transit line that will take them to major work, shopping and school areas:

- 2020 ~ 60%
- 2030 ~ 65%
- 2040 ~ 70%
- 2050 ~ 80%

TARGET: % of residents within 400 m of dedicated bicycle and pedestrian pathways with direct connections to regional transit service:

- 2020 ~ 60%:
- 2030 ~ 70%
- 2040 ~ 80%
- 2050 ~ 100%

TARGET: Average minimum density (units/acre) for new developments within designated Town Centres and within 400 metres of main transit corridors in designated development areas:

- 2020 ~ 13 u/a
- 2030 ~ 14 u/a
- 2040 ~ 16 u/a
- 2050 ~ 18 u/a

Focusing future growth along a major transit line pattern (existing and in future) will connect residents from where they live to where they work, shop, play and go to school. This will result in a regional transit-oriented pattern, permitting everyone on a corridor to conveniently access transit, regardless of where they live in the region. Because transportation choices outside existing town centers make alternatives to transit and vehicles difficult (e.g. too far to cycle or walk), the development locations need to be based around an effective regional transit circuit. This will offer flexibility for regional growth planning regarding where to locate future growth – both in existing and in new areas.

The proposed densities in town centers and new village areas along the transit circuit support nearly 50% of units to be single family, combined with a mix of townhouses and apartments closer to the transit line. The aging demographic projections for the valley suggest a growing demand for multi-residential development that will support this direction.

Rural areas are expected to accommodate 20% of the population and need to offer a rural lifestyle experience with large land parcels to preserve the rural functional (economic) and aesthetic character of the Valley.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop policies and regional growth plans that direct the majority of future growth to designated town centers, neighbourhoods and transit corridors within areas identified for development by the Regional Growth Strategy in order to achieve necessary densities to support transit and local serving commercial activities, and to preserve rural character.	Short-term
b. Develop policies and supportive zoning to encourage mixed-use development, particularly around key transit nodes and/or corridors, that integrates commercial, residential and other uses within a building or defined area.	Short-term
c. Develop policies and incentives to support and prioritize infill and re-development within existing built areas to accommodate future growth in order to support the pedestrian orientation of the Regional Growth Strategy.	Short-term
d. In particular, support the redevelopment of brownfield and greyfield sites (i.e. aging shopping malls and appropriate industrial areas within the Designated Settlement Areas). Explore incentives including, but not limited to, development cost charge reductions and deferrals, parking reductions, tax exemptions, density bonuses and priority application processing.	Short-term
e. Explore opportunities to use form-based design guidelines for compact, mixed-use neighbourhood development, as well as character guidelines for individual town centers that reflect their unique local identity and minimize homogeneity of development.	Short-term
f. Ensure that design guidelines consider provision of and access to amenities such as trails, transit, public space, parks, and community gardens to promote walking, social interaction and safety within neighbourhoods.	Short-term
g. Establish a transit committee within the Regional District to work closely with BC transit to ensure regional transportation planning, infrastructure and investments support the Regional Growth Strategy (see transportation section).	Ongoing
h. Develop policies and guidelines to encourage flexible and adaptable use of buildings over time in appropriate locations.	Medium-term

ACTIONS	
Agency	Priority
i. Continue to partner with the Nanaimo Regional District, BC Transit, SRD and other stakeholders to reinforce existing and establish new future development nodes along the Island Railway Corridor through the development and adoption of supportive policy. (See transportation section)	Medium-term

Objective 1.1.4: Focus the majority of employment or educational destinations (e.g. commercial development, large scale retail development, office uses, large institutions and schools) around major transit hubs located within regional Town Centres (new or existing) or at key locations along a major transit corridor. Locate primary and secondary schools within convenient walking and/or cycling distance of residences within catchment area.

TARGET: % of jobs and school seats located along major transit corridors and in designated employment centers:

- 2020 ~ 35%
- 2030 ~ 50%
- 2040 ~ 65%
- 2050 ~ 80%

Destinations for travel such as large employment generating uses and educational institutions should be in a location that can support efficient infrastructure and transit systems for shifting regional commuting trips (work/school) onto transit over the long term. Combined with housing density goals for Town Centres, along transit corridors and at main transit stations, this target delivers a strong foundation for a sustainable region.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Ensure that policies for land use and economic development focus new commercial and institutional growth along existing or planned transit corridors.	Short-term
b. Ensure that regional context statements demonstrate how OCP policies encourage the location of significant employment generating uses in designated town centers so they can be well-served by multiple transit routes.	Short-term
c. Educate senior governments on the regional growth strategy and lobby for new developments (e.g. hospitals, government buildings, college/university campuses) to be located within the regional, transit-oriented growth structure.	Ongoing
d. Work with the school district and North Island College to develop a strategy for locating neighbourhood schools and other community facilities within convenient walking distance of homes and major transit stops to create more walkable and transit oriented communities that encourage more active life styles.	Ongoing

Goal 1.2.: Housing supports a diversity of lifestyles, ages, incomes, and abilities.

Objective 1.2.1: Increase the diversity, mix and design quality of housing within town centers, and encourage the development of multi-residential housing to balance the existing prevalence of single family homes in the region.

TARGET: % of multi-family residential and attached in housing stock (units):

- 2020 ~ 30%
- 2030 ~ 45%
- 2040 ~ 55%
- 2050 ~ 60%

This target aims at providing a diversity of housing within each community and neighbourhood by increasing the percentage of multi-family and attached forms of housing (duplex, row house, townhouse, apartments, primarily ground oriented). This target is designed to ensure new development will support transit use and local businesses, encourage the use of innovative energy infrastructure, support vibrant, safe streets and open spaces, ensure diverse, inclusive neighbourhoods with housing for all stages of life and preserve the rural character of the Valley by limiting sprawl. This target is also premised on ensuring a high degree of amenity and quality of design for new multi-family housing to foster the creation of liveable, attractive and desirable neighbourhoods.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop a region-wide Housing Task Force and Strategy to promote housing diversity and affordability through market and non-market housing strategies. The Housing Strategy would be completed by the CVRD with input from member municipalities. The Task Force would be made up of staff and council representatives from individual member municipalities and the CVRD along with community housing advocates appointed by the CVRD. ¹	Short-term
b. Work with developers and residents through the OCP process, to identify suitable housing types and locations to encourage a significant amount of multi-family housing is brought to the market in the next 40 years, in a manner that respects market realities and resident concerns/desires.	Medium-term
c. Develop design guidelines that ensure multi-residential and attached residential projects: <ul style="list-style-type: none"> • Address qualitative issues related to the livability of multi-family projects and smaller more compact forms of attached and detached housing • Address accessibility and changing demographic needs • Maximize opportunities for useable outdoor amenity space • Are designed to enhance the safety, vitality and overall design quality of buildings, streets and neighbourhoods 	Medium-term
d. Create an educational program that explores the benefits of smaller housing types, as part of an overall green building strategy.	Medium-term
e. Where there is not a market for multi-residential development in planned transit corridors that connect designated town center areas, consider alternative ways of achieving transit use and emission reduction goals (for example, achieving a high level of green bldg performance, contributing to transit, cycling or pedestrian infrastructure).	Short-term

¹ CMHC defines housing affordability as a ratio of household income to housing cost: affordable housing is adequate shelter whose costs do not exceed 30% of household income.

Objective 1.2.2: Permit and encourage secondary suites and accessory dwelling units in residential areas.

TARGET: % of residentially zoned neighbourhoods that permit suites and coach/carriage (or similar) infill homes:

- 2020 ~ 75%
- 2030 ~ 80%
- 2040 ~ 100%

Providing housing diversity by increasing the number of suites and small secondary units in existing areas addresses sustainability goals (e.g. housing affordability, aging in place, and preservation of valued open spaces, transit viability and a diverse social fabric). It is important to address issues of parking and utility services, as well as to ensure additional units are not a precursor to subdivision when considering suites and carriage houses.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Encourage all local jurisdictions within the region to amend their zoning bylaws to make secondary suites and accessory dwelling units permissible. Require new developments in designated neighbourhoods to be “suite ready” i.e. to build flexibility into new housing to allow for future conversion to a suite as needed.	Short-term
b. Reduce parking requirements for secondary suites and accessory dwellings within Town Centres and within convenient walking distance of main transit lines to support the provision of secondary suites and to help manage demand for automobile travel. (see transportation section)	Short-term
c. As part of the Valley-wide housing strategy, develop a region-wide secondary suite and accessory dwelling policy and design guidelines.	Medium-term
d. Explore issues and opportunities around allowing some multi-family developments in town center areas to have “lock-offs” and “suites within a suite” in appropriate areas in order to increase affordability of multi-residential units and support live-in caretakers for the elderly or disabled.	Medium-term

Objective 1.2.3: Increase the amount of live/work spaces and flex housing².

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop policies that permit and encourage live/work spaces and compatible commercial activities in new development and redevelopment projects where such development will not detract from the livability of residential areas nor undermine the viability of existing commercial/employment centers.	Short-term
b. Develop policies that encourage flex housing in new development and redevelopment projects.	Short-term
c. Undertake the development of a report that documents best practices, policies and guidelines for successful live/work spaces to inform regional and local housing policies. Based on the research, develop policies that allow appropriate live/work opportunities in existing dwellings, where appropriate. Ensure any non-residential activities in established or new residential neighbourhoods do not adversely impact residents.	Medium-term

Goal 1.3: Ensure affordable housing is available within Designated Settlement Areas of the community.

Objective 1.3.1: Increase the amount of market and non-market affordable housing in the region through developing appropriate policies, incentives, regulations and education.

TARGET: The number of households (rental and owner occupied combined) spending more than 30% of pre-tax household income on housing should be no more than:

- 2020 ~ 40%
- 2030 ~ 37%
- 2040 ~ 33%
- 2050 ~ 30%

² Flex Housing: adaptive housing that is responsive to changing needs of residents.

Targets are based on CMHC's established definition of affordable housing i.e. adequate shelter whose costs do not exceed 30% of household income. In 2006, approximately 77% of homes were owned and 23% rented, and of these, 23% of owner households and 43% of tenant households spent over 30% of their income on housing.

Meeting these challenging targets will require establishing a diversity of governance tools to influence the development industry to bring a steady stream of new housing stock on line, including a percentage of rental housing and small to very small units. The continued provision of non-market housing will also be required for those whose housing needs are not being met by the housing market. The regional district and member municipalities have a strong role to play in the provision of non-market housing by forming partnerships with other agencies and levels of government, and through innovative policies that incentivise market housing projects to include a non-market housing component.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Create regional Affordable Housing Guidelines that outline existing policies, programs and tools available to all local jurisdictions. Housing guidelines should include policy recommendations for regional partnerships, policy harmonization, and a full suite of tools for supporting both market and non-market affordable housing including but not limited to: <ul style="list-style-type: none"> • Inclusionary Zoning (including rental) • Secondary Suites and Accessory Dwellings • Density Bonusing Schemes • Resale Price Restrictions • Rental Conversion Restrictions/ Rental Replacement Requirements • Creating of an Affordable Housing Fund • Land Banking / Strategic Land Disposition • Housing Organizations 	Short-term
b. Identify opportunities for greater regional cooperation amongst member municipalities and other agencies and levels of government with regards to Housing Funds, Land Banking, Housing Organizations, and other partnerships for affordable housing.	Ongoing
c. Work with the development community to create policies, guidelines and incentives to: <ul style="list-style-type: none"> • Include (or provide cash-in-lieu for) non-market and/or rental housing in market projects. Policies and incentives to consider include density bonusing, inclusionary zoning, and negotiations associated with the rezoning and sub-division process. 	Medium-term

ACTIONS	
Agency	Priority
<ul style="list-style-type: none"> • Support smaller, compact and more cost effective forms of market housing. • Encourage the development of purpose built rental housing, either as stand-alone projects, or as a component of mixed tenure (owner/rental) projects. • Develop partnerships with development industry organizations and non-profits to preserve existing and develop new purpose built rental housing. 	
d. Develop strategies to maintain an appropriate level of rental units through a range of tools.	Medium-term
e. Develop a pilot project through regional partnership and support from member municipalities for a 'housing first' centre that provides transitional housing for the "chronically homeless."	Medium-term
f. Continue to lobby senior governments for social housing funding and for the re-establishment of a National Affordable Housing Program.	Ongoing

Goal 1.4: Neighbourhoods are designed with a sense of place, character, and high quality public realm to ensure a high level of liveability.

Objective 1.4.1: A sense of unique Comox Valley neighbourhood character exists and is shared.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Undertake a Comox Valley Form and Design Study involving community engagement to establish a set of performance based guidelines addressing form, scale, siting and other fundamental community design elements to inform more detailed form and character guidelines to be developed by member municipalities at the community wide and neighbourhood scale.	Medium-term

ACTIONS	
Agency	Priority
Efforts need to be made to ensure the focus is on overall form and character and on building/open-space relationships. This is to encourage flexible, innovative and unique design responses that ensure a high quality public realm and evoke a “timeless architecture” and not simply “architectural themes.”	
b. Encourage member municipalities to develop performance and form based design guidelines to provide developers with a clear physical/graphic vision of design goals and standards.	Medium-term
c. Explore a region-wide heritage strategy to identify and protect buildings and landscapes with established heritage value. This should include innovative approaches to incentivizing heritage retention such as adaptive re-use and innovative renovations that achieve both heritage preservations and higher density.	Medium-term
d. Ensure that the livability of residential neighbourhoods is preserved through the adoption of regulations for noise pollution from industry and transportation sources.	Medium-term

Goal 1.5: Rural areas meet sustainability objectives in building design, infrastructure systems and transportation, recognizing their unique character and role in regional resource and agricultural economies and environmental performance.

Objective 1.5.1: Preserve rural function and use, such as working farms and woodlots, and emphasize sustainability efforts at the building and site scale in rural areas, by protecting and enhancing the role of rural areas in agriculture, resource industries and environmental protection.

TARGET: Minimum new development densities for rural areas by 2015 include:

Rural	1 unit / 4 – 8 ha (1 unit / 10-20 acres)
Agricultural	1 unit / 8 ha minimum (1 unit / 20 acres)
Resource/forest	1 unit / 40 ha (1 unit / 99 acres)

These targets are focused on preserving rural character and function by maintaining minimum parcel sizes for agricultural function in the rural areas, as defined in the Regional Growth Strategy. While agriculture can be practiced effectively by a few farmers on 2 hectare (5 acre) parcels, this is rare and nearly 50% of the farmers in BC make less than \$10,000/yr. Larger parcels offer much greater agricultural flexibility and earning potential. Eliminating the sub-division of rural properties will preserve both their character and function, although it will increase the average price of a rural property, thereby favouring those who will use the land as a business. The preservation of farm and rural lands for agricultural purposes also functions as a growth management tool for containing growth in designated settlement areas.

A minimum of 4 hectare (10 acre) parcels for new subdivisions and development in rural areas (areas outside of the designated settlement area) will still allow many to live in rural environments and achieve some development potential for larger existing parcels, while minimizing the risks to habitat, watersheds, agricultural land fragmentation, and rural character. Further, it will minimize municipal infrastructure costs in areas with small tax bases.

Existing smaller parcels within rural designated areas can support local agricultural activities such as small scale processing and “gate sales”. (See the Food section for more detailed policies and actions related to promoting and enhancing local agriculture and food security.)

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Establish a working group to advise on rural sustainability and economies to ensure the preservation of rural (agricultural) character and function.	Short-term
b. Develop a rural sustainable development standards strategy, outlining regional and local policies to ensure rural sustainability through alternative approaches such as “natural buildings” and “eco-village” models, and by defining the various types of rural living (e.g. farmland, market/village service areas, protected forest and riparian areas). This strategy should be developed through landowner, community and stakeholder consultation and include a range of models to respond to the diverse rural contexts that exist within the regional district. This will support the development of relevant, useful policy for rural areas and Rural Area Plans (e.g. low density living, agricultural productivity, habitat preservation, community markets) developed by individual member municipalities.	Short-term
c. Establish formal policy for the CVRD regarding agricultural and working rural lands and subdivision standards to maintain a	Short-term

ACTIONS	
Agency	Priority
viable agricultural and rural land base. Natural physical and geographical features and land capability should inform the decisions on where various lands are viable for resource uses (e.g.: flood plains, fertile soil areas, others).	
d. Establish zoning standards to ensure that development patterns on rural properties preserve the land's working potential.	Medium-term
e. Continue to support initiatives for habitat preservation in rural, resource and agricultural areas.	Ongoing
Comox Valley Economic Development Society and North Island College	
f. Explore and promote alternative models of farm and land tenure (e.g. co-ops, farm access agreements, educational and enterprise farms, partnerships with developers) to increase the accessibility of farming to entry-level farmers, exploring partnerships with educational institutions.	Medium-term



2.0 Building & Site Development

VISION

All buildings in the Comox Valley meet a high standard of sustainability objectives and contribute to social, environmental and economic health.

SUSTAINABILITY PERSPECTIVES

Buildings account for a significant amount of our total energy, water, and resource consumption. Through implementing green building strategies, we can maximize both economic and environmental performance. Sustainably constructed buildings and landscapes can protect ecosystems, reduce operating costs, minimize the strain on local infrastructure, and improve occupant comfort. In addition, they have the potential to heighten the overall beauty of our surroundings.

GOALS, OBJECTIVES, TARGETS, ACTIONS

Goal 2.1: Implement green buildings with high sustainability performance in all developments.

Objective 2.1.1: The community has a strong base of expertise in green building design, technology and construction, and will work to make green building knowledge commonplace for everyone.

TARGET: A green development and building education program on green building design, technology and construction is established jointly managed by local governments, North Island College and the development industry, holding training sessions 4-6 times/ year. To commence first sessions in 2010.

This target aims to build capacity for green building design and construction, suited to the Comox Valley context, in the development industry and local government and to establish important relationships around learning together. This approach is credited as a key reason for Portland’s success in building green buildings. The training should include related issues such as how green buildings fit in with community sustainability, incentives and funding, etc.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Create a Green Building and Development Task Force with representation from industry, local government and the public, create a strategy for promoting green development, and make recommendations to local government on how best to approach green building and development issues.	Short-term
b. Expand or create a local government staff position with expertise in green buildings that can support all jurisdictions, as needed. Creative approaches to staffing and resources will be required.	Short-term
c. Create a green development education program to create community champions for green buildings and to educate and possibly certify key staff (e.g. building inspectors), council members, and stakeholders (e.g. local tradesperson, building energy auditors) on worldwide best practices and innovation. This process can bring in expert speakers for informative presentations and workshops on green development issue, including unique issues related to a rural context. Consider the role of educational institutions such as the	Short-term

North Island College trades and technology program in green building education. Collaboration across planning departments could facilitate this action, and it could be supported by information exchange with other leading jurisdictions.	
d. Create a regional forum on green building held at least once a year for local government staff and the development and construction industry (including real estate), generating dialogue on opportunities, expectations, barriers and solutions. Work with professional organizations such as AIBC, educational institutions such as North Island College, and ideally BC building code representatives.	Short-term
e. Integrate green building agendas into the review processes of all local governments (e.g. local planning processes, design review boards) all building types (residential, commercial, institutional, mixed use, industrial, others), and/or explore the creation of new review processes.	Short-term
f. Develop a regionally consistent sustainability checklist for development applications that addresses the unique needs of both town center and rural areas. Hold information workshops for the development and construction industry to discuss, review and refine the checklist.	Short-term
g. Showcase local and regional green building examples as part of educational programs. This may include showcasing various phases such as design, construction and post-occupancy.	Short to Medium-term
h. Develop materials and educate the public on how to go beyond green buildings to reduce energy consumption – e.g. post-occupancy behaviour and choices.	Short to Medium-term
Chambers of Commerce and Development Industry	
i. Create an annual architectural awards program for green buildings to bring new ideas and expertise in the community. The focus of awards would be based on profile, exposure and showcasing. Awards could also be considered for the construction industry.	Short-term

Community Organizations	
j. Identify businesses or industry associations that can take leadership roles in green building initiatives, including green building competitions and awards.	Short-term
k. Form a multi-disciplinary/multi-jurisdictional working group on alternative building technologies, such as cob or straw bale construction and composting toilets. Work with provincial regulatory authorities to request updates to the building code, insurance and/or other regulations.	Short-term
l. Set up a comprehensive hands-on sustainability centre with local community organizations to educate industry and consumers, for both new building and retrofit opportunities. Such a “one-stop” centre should have links to other previously discussed initiatives, such as training opportunities, showcasing of projects and services, incentives, etc.	Medium-term
North Island College	
m. Integrate advanced green building skills and training into trades training programs at North Island College and elsewhere to ensure the building industry is fully trained to implement progressive green development directions.	Short-term

Objective 2.1.2: An increasing level of green building performance is achieved in all new construction.

TARGET: Number of buildings that have achieved Net Zero Energy or Living Building status:

- 2020 ~ 10
- 2030 ~ 25
- 2040 ~ 50
- 2050 ~ 100

Driven by the need to improve energy, emissions and overall sustainability performance of neighbourhoods and buildings, these targets aim to stimulate pilot projects for learning and the establishment of examples of exemplary leadership and performance that go beyond regulatory requirements and can influence all subsequent development. Many residents can afford this for their homes over time, but some will face challenges and as such, financial tools, grants and loans (from all levels of governments or private lenders) need to be provided to assist homeowners in affordably retrofitting homes over time.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop a comprehensive green building, green planning and development strategy for the region, including plans to meet Provincial climate objectives and to respond to the realities of the real estate market. Include all types of buildings in this comprehensive green building strategy. Strategies must build in sufficient flexibility to adapt to the contexts of different jurisdictions in the Comox Valley.	Short-term
b. Establish green building priorities and policies in all OCPs in the Comox Valley potentially including Development Permit Guidelines.	As OCPs are updated
c. Develop design guidelines or standards for all new projects that support green building practices for both new construction and renovations, including passive solar oriented design where appropriate and consider the embodied energy ³ of building materials.	Short-term
d. Develop a set of performance based standards for green development (as alternatives to prescriptive standards), including a system for measurement, reporting and verification. Support this action with exchange of information and research into the experience of leading North American and worldwide jurisdictions in green development.	Short-term
e. Develop a toolkit of green building incentives (e.g. density bonusing, tax incentives and 'fast-tracking') to encourage developers to adopt green building practices, including identification of suitable criteria that will be applied to project proposals.	Short-term
f. Promote and/or facilitate the development of green building information resources such as materials availability and pricing for the development and building industry. Channels may include brochures, forums, sustainability centers, educational programs, etc.	Short-term
g. Work with and lobby the Provincial government with the goal of ensuring the BC Building Code continues to progress in the future in terms of energy and emissions performance.	Short-term

³ Embodied energy is the amount of energy used in the extraction, manufacture, transport, construction and assembly of a material.

h. Create a green building funding guide that outlines resources, strategies and partnerships to fund public and private green buildings (e.g. green loans for energy efficient buildings and renovations). Include consideration of carbon tax implications for building owners/occupants. The guide should include a user-friendly updating process, as funding programs change frequently.	Medium-term
i. Develop a renewable energy requirement for all new buildings to accelerate the uptake of renewable energy technologies (see Infrastructure chapter).	Medium-term
Industry Organizations & Comox Valley Economic Development Society	
j. The development and construction industry needs to participate proactively in promoting green buildings and development and in working with educational institutions (e.g. North Island College) to ensure trades curriculum addresses the new technologies and approaches to green buildings.	Ongoing
k. The Real Estate Industry needs to participate in the promotion of green buildings in the market place and to educate themselves and their clients on the issues and benefits of more sustainable approaches to development, as well as to promote energy home ratings and other green building considerations to be made visible during the sales process for homes.	Ongoing
l. A new organization is needed to promote green development and bring attention to the successes in current and soon to be developed green projects. This work ideally explores/recognizes the broader economic aspects of green development.	Ongoing
m. In conjunction with an award for new green buildings, develop an award/recognition program for retrofitted homes that meet retrofit criteria.	Long-term

Objective 2.1.3: Sustainable practices are used in site planning for new projects and redevelopment projects.

The location of buildings and infrastructure on a site and the manner in which any piece of land is landscaped has significant implications to the site's ecology, habitat and watershed protection implications, as well as to the energy performance of the buildings. In order to achieve better sustainability performance in development, strategic approaches to site planning and landscaping are needed.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Work with the development and design industry to establish a set of site design guidelines that increase performance on sustainability and address: <ul style="list-style-type: none"> ○ Locating development so as to preserve key ecosystem areas and the connections between them (e.g. riparian areas, habitat corridors, others); ○ Tree retention; ○ Strategic solar access to buildings and orientation of buildings to maximize passive lighting and heating / cooling opportunities; ○ Linkages with surrounding greenways and ecosystem areas; ○ Low impact development approaches to managing stormwater; ○ Locations for alternative energy and water management infrastructure; ○ Locations for composting facilities; ○ Community garden locations and management; ○ Accessibility requirements; and ○ Others. 	Short-term
b. Develop sustainable landscape design standards for new development to enhance the ecological performance of new development sites, including addressing: <ul style="list-style-type: none"> ○ Habitat enhancement strategies and strategic planting palette selections; ○ Drought tolerant plant species selection; ○ Stormwater management and rainwater harvesting; ○ Productive / edible landscaping planting considerations; ○ Soil retention and enhancement strategies; ○ Water-wise irrigation management; and ○ Others. 	Short-term

Objective 2.1.4: Existing homes and buildings are retrofitted for increased energy efficiency.

TARGET: % of residential units built in 2008 or earlier that have undertaken an energy retrofit or replacement to achieve a rating of EnerGuide 73 or above, or a 25% reduction in energy use for a given floor area:

- 2020 ~ 30%
- 2030 ~ 60%
- 2040 ~ 85%
- 2050 ~ 95%

TARGET: % of non residential buildings built in 2008 or earlier that have been retrofitted or replaced to achieve at least at 25% reduction in energy use for a given floor area (space heating, electricity, and hot water):

- 2020 ~ 30%
- 2030 ~ 60%
- 2040 ~ 85%
- 2050 ~ 95%

These targets aim to retrofit almost all existing homes and buildings in the region to reduce energy consumption and GHG emissions by approximately 25%. This initiative would trigger significant economic development because the residential target alone would result in the retrofit of approximately 20,000 homes over 40 years (new windows, insulation, better heating systems, etc). EcoEnergy program data suggests that existing retrofit program annual uptake rates vary significantly across communities in BC e.g. from 0.5% to over 10%, with an average of about 3% for single family homes. Building replacement is also included, as some older homes will be replaced with new ones over time.

It is important to note that local governments have very limited jurisdiction or ability to stimulate retrofits at this time, but it is a necessary and important part of energy and climate performance and therefore many stakeholders will need to work together to achieve these targets.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Coordinate between jurisdictions to develop a retrofit initiative that supports increased energy efficiency. Include information on retrofit benefits, costs and incentives currently available (e.g. BC Hydro, Eco-Energy), partnerships with home renovation retailers and contractors, and qualified energy auditors. Promote any local government incentives and policies. Integrate this initiative into a green building education program. Ideally, combine energy retrofit programs and promotion with water efficiency/	Short-term

conservation retrofits and promotion, and with the building permit process. Work with senior governments to maximize present and future financial incentives.	
b. Work with stakeholders to assess existing building stock (statistically) and make recommendations on the most efficient approach to retrofits, including energy usage, code compliance, accessibility and other retrofit issues.	Short-term
c. Investigate incentives such as sustainability-based taxes/tax discounts or other methods to encourage green building practices. Focus initially on deploying information from incentives already available from senior governments.	Medium-term
Development and Real Estate Industry	
d. Investigate the inclusion of energy performance assessment ratings as part of the sales process for every home sold, through collaboration with the Real Estate industry and other potential partners such as BC Hydro.	Short to Medium-term
e. Work with stakeholders to establish a retrofit fund that can supply blower-door tests for energy efficiency at little to no charge to residents.	Medium-term
f. Develop a low cost program for energy retrofits and sustainability audits for businesses, possibly in a partnership with Building Owners and Managers Association's (BOMA) Go Green program, and/or Ecotrust.	Short-term
Schools and Educational Institutions (e.g. North Island College)	
g. Ensure green building and construction practices are taught in all trades training (including North Island College).	Short to Medium-term

Goal 2.2: Become leaders in municipal green building construction and ownership.

Objective 2.2.1: New local government buildings and facilities over 500 sq m meet advanced levels of sustainability performance.

TARGET: All applicable new local government buildings and facilities meet increasing standards of performance:

- 2015 ~ LEED Silver
- 2020 ~ LEED Gold (based on the most up to date version for Canada)
- 2030 ~ LEED Gold / Net Zero energy and carbon

This target aims to stimulate leadership and learning in local governments and the community regarding leading green development certification systems, as well as to reduce long term operating costs to taxpayers for building operations and greenhouse gas offset costs. *Note that the anticipated progression of LEED standards means that a LEED Gold commitment will require ongoing improvements in energy performance as successive versions of LEED are released over time.*

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Create certification requirements, such as LEED Silver or Gold, Net Zero and/or Living Buildings as a phased-in standard for all new government buildings and retrofits. As part of this initiative, undertake staff and council education and engagement on municipal green buildings to increase understanding, buy-in and commitment.	Short-term
b. When siting buildings consider building location and accessibility, including access to transit for the majority of building users, to minimize vehicle transportation (in addition to considering energy sources, solar access, existing vegetation, etc.).	Ongoing
c. Develop a 'Net Zero' building pilot project to showcase a building that has no net draw on external energy sources.	Short-term
d. Explore the opportunity to develop a 'sustainability' civic campus with individual or several government buildings for offices, as a pilot project to showcase innovation and to gain experience in green design and policy. This may involve renovation/conversion of existing facilities from other uses (e.g. a retail complex). Involve partners such as BC Hydro, where possible.	Short to Medium-term

e. Look for opportunities to locate multiple government agencies in the same building(s), and to co-locate with existing infrastructure facilities where appropriate, in a campus type environment.	Short to Medium-term
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Objective 2.2.2: Existing local government buildings and facilities are retrofitted to achieve a 25-30% improvement in energy and water efficiency.

TARGET: % of existing local government buildings and facilities built in 2008 or earlier that have been retrofitted to achieve a 25-30% reduction in energy and water consumption from 2008 levels.

- 2020 ~ 50%
- 2030 ~ 100%

In addition to reducing water and energy use, this target will reduce costs to the taxpayer and stimulate learning and progress on green development in local governments. Reducing energy and water consumption in civic buildings is a way to address Carbon Neutral Local Government commitments and reduce associated costs of GHG offsets. Local governments have a high degree of control over their own buildings, have access to attractive financing rates, and can take a longer term perspective in terms of analysing net financial benefits; these factors can enable progressive retrofit rates to be achieved.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Work with BC Hydro ⁴ to establish an energy manager for civic buildings in all 4 jurisdictions to lead the retrofit process.	Short-term
b. Undertake an education process with elected officials to explore the costs and benefits of municipal green buildings and of retrofitting existing municipal building stock. Link this process to energy efficiency and reduced carbon offset costs for municipal buildings.	Short-term

⁴ BC Hydro has established a Community Energy Manager program, as well as a funding program for a Mayor's Task Force on Energy and Emissions or Community Energy and Emissions Task Force.

<p>c. When financial analysis shows long term benefits and/or when maintenance is required, proceed with phased retrofits of municipal buildings to maximize energy efficiency and reduce emissions. Link this initiative to incentives and promotion for retrofits of private buildings. Within retrofit programs, encourage additional green building features such as green roofs, rainwater collection and reuse, etc.</p>	<p>Ongoing</p>
<p>d. Undertake an educational initiative to educate residents and taxpayers on the benefits of investing in green buildings and retrofitting existing facilities. Channels to deliver this education could include front counters at local government offices, the development and real estate industry, and others.</p>	<p>Short to Medium-term</p>



3.0 Infrastructure Services

VISION

Infrastructure in the Comox Valley is integrated, efficient, cost-effective, and ecologically coordinated. Waste flows are considered to be resources and there is an emphasis on user awareness and participation in more sustainable practices.

SUSTAINABILITY PERSPECTIVES

Integrated sustainable infrastructure systems can provide multiple benefits for our communities. Efficient services maintain public health and welfare, are cost-effective, use the least amount of resources, and reduce negative environmental impacts. Through exploring new approaches to infrastructure, we can identify which solutions will maximize sustainability benefits (economic, environmental, and social), minimize investment cost, and be practical to implement. For example, a stormwater retention pond can provide a public greenspace amenity and support wildlife habitat while ensuring that toxins from roadways don't enter our water supply.

GOALS, OBJECTIVES, TARGETS, ACTIONS

Goal 3.1: Reduce energy consumption and greenhouse gas emissions in municipal infrastructure.

Objective 3.1.1: Increase energy efficiency in public works infrastructure systems and equipment.

TARGET: % decrease in net energy intensity⁵ of infrastructure systems and equipment including water, wastewater, and street lighting, from 2008 levels:

- 2020 ~ 10%
- 2030 ~ 20%
- 2040 ~ 30%
- 2050 ~ 40%

As new systems are required to address growth and existing systems and equipment require replacement, more efficient designs and technology can be utilized. Because municipal infrastructure systems have relatively long lifetimes and often require large investments, the rate of efficiency increases will be incremental over time and will vary between different types of infrastructure systems. Increasing service levels, such as providing a higher level of wastewater treatment, can increase energy consumption. Lifecycle cost/benefit analysis will support infrastructure decision-making.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Create a baseline energy (and emissions) inventory of infrastructure systems.	Short-term
b. Develop an energy and emissions plan that addresses energy efficiency, renewable energy, including the emissions of all four local governments (see www.communityenergy.bc.ca). Include a baseline inventory of infrastructure energy consumption and GHG emissions. This will be required for meeting provincial climate change target commitments.	Short-term (Planned for 2010)

⁵ Net energy intensity is the energy consumption per unit of service (e.g. energy used to treat one cubic metre of water) and is therefore not directly affected by growth in capacity. It can also take into account energy recovered from the process or facility (e.g. heat recovery).

c. Develop an inter-jurisdictional carbon offset plan for all jurisdictions that have signed the Climate Action Charter to assist in the most strategic investment of carbon credit purchase in meeting the carbon neutral local government commitment for 2012.	Short-term
d. Assess existing efficiency and opportunities for improvement in current local government infrastructure systems as part of ongoing operations. This could include more efficient designs and technology such as VFD-controlled motors, efficient process control technology, and high efficiency street lighting such as LED and CFL, for new or replacement equipment and systems. Consider energy performance contracts as part of this work.	Short-term (assessment) & Ongoing
e. Incorporate energy and emissions objectives in local government equipment procurement policies; this should include equipment sharing and group purchasing. The costs for expertise to assist in developing this policy can be shared across all local governments. Consider opportunities for inter-jurisdictional group purchasing and equipment sharing.	Short-term
f. In all infrastructure management plans and studies, include assessment of energy and emissions and the potential effect of service level increases on energy and emissions; identify opportunities to reduce or offset these impacts. Consider infrastructure efficiencies in settlement planning – e.g. don't locate subdivisions up hill of pumping facilities.	Ongoing
g. Create an “energy engineering or energy manager” position or role to coordinate energy and emissions work across all local governments in the Valley and to assist in acquiring grants and other funding to support increased efficiency and innovative infrastructure. Partner with BC Hydro where possible to help fund this position. Begin with a consultant, if appropriate, as a first step.	Short to Medium-term

Goal 3.2: Establish a diverse network of clean and renewable local energy supply systems.

Objective 3.2.1: Promote wide-spread use of “micro green energy” systems in the Comox Valley (on-site renewable energy systems such as solar thermal and geoexchange).

TARGET: % of energy supplied by clean, renewable energy sources such as solar thermal or geoexchange generated on site (or at a district scale) for new building energy demand.

- 2020 ~ 20%
- 2030 ~ 30%
- 2040 ~ 40%
- 2050 ~ 50%

This target supports a growing economy in renewable energy and reduced energy and carbon costs in the future, particularly for lower density building forms that may not be connected to district systems. The key goal is to displace fossil fuels (such as natural gas) for heating. The rate of implementation will be dependent on the economic competitiveness of renewable energy sources. Overall reductions in GHG emissions will result from a combination of reduced energy consumption and increased renewable energy reliance.

ACTIONS	
Agency	Priority
Comox Regional District and Municipal Governments	
a. Create and promote an information package on micro green energy systems for homeowners and developers that could be adapted by municipalities as part of the building permitting process, or approach senior governments to provide this.	Short-term
b. Review land use (OCP/zoning) and Subdivision and Development Servicing bylaws to ensure they support sustainable infrastructure systems including on-site energy production (such as solar, wind, biomass, etc.), and include all building sectors (residential, industrial, commercial and institutional). Integrate recommendations into environmental or sustainability checklists for projects.	Short-term (review) & Ongoing
c. Include on-site renewable energy systems in sustainability checklists or consider a requirement for building permit submissions to demonstrate how renewable energy is being considered in building designs in new development. Consider potential unintended consequences of these systems.	Medium-term

d. Explore implementing a local energy supply requirement to stimulate the development of various levels of on-site energy production e.g. heat pumps, solar hot water (i.e. see new developments in Merton UK).	Short-term
e. Develop and promote incentives for homeowners and developers to implement on-site energy systems, especially where these systems reduce fossil fuel consumption - for example, solar thermal hot water heating. Incentives to promote would include senior government, utility or other third party financial incentives. Municipal incentives could include fee rebates, local improvement charges or other measures.	Medium-term
f. As part of green building education and training initiatives (see Objective 2.1.1) develop a “micro green energy” training program for construction trades. If possible work with the Federal and Provincial government to fund and facilitate this training.	Short to Medium-term
g. Investigate the challenges and opportunities around promoting wood heating in rural areas as it is a renewable and carbon neutral heating source. Consider ways to mitigate air pollution issues, particularly in areas with higher density populations (e.g. requiring clean burning units through bylaws).	Medium-term
Development and Real Estate Industry	
h. Organize educational sessions on renewable and alternative energy systems and tenure/management options for a range of development types.	Short-term
i. Develop an information package and educational opportunities on energy efficiency and renewable energy for Real Estate Agents to distribute during the sale/purchase process of homes.	Short-term
j. Explore the creation of private green energy utilities that could install and operate alternative energy systems for existing and new buildings.	Short-term

Objective 3.2.2: A network of Neighbourhood Energy Utilities (NEUs) is established in town centers and new development areas to provide renewable energy systems to neighbourhoods (for example, utilities owned by local governments and possibly managed under contract by others).

DRAFT TARGET: % of building energy needs supplied by renewable-based NEU energy for heating and cooling of new buildings in the higher density and town centre areas:

- 2020 ~ 10%
- 2030 ~ 25%
- 2040 ~ 40%
- 2050 ~ 60%

This target primarily addresses higher density areas where district energy is typically more economically viable.⁶ To effect GHG reductions, district systems must be supplied primarily from renewable sources such as geo-exchange, waste heat recovery, or biomass. Rollout of district systems will take many years, due to the challenge of connecting to existing buildings and the substantial infrastructure required. To meet this target, a significant amount of new construction would need to be connected to district energy systems.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Establish a district/green energy task force to investigate utility models and make recommendations to local governments. One of the first steps in this process should be to research and hold a workshop with leaders from the other cities currently successfully pursuing NEUs (City of North Vancouver, Revelstoke, City of Vancouver, Whistler, Victoria (Dockside), others).	Short-term
b. Develop a district energy supply strategy to guide the approach and development of district systems, including pre-feasibility and feasibility studies, ⁷ and assessment of sustainability benefits. Consider where demographic changes in the Valley over the next several decades will drive more multi-residential housing demand as part of prioritizing locations for district systems.	Short to Medium-term

⁶ Examples of NEU's include Lonsdale Energy Corp. in the City of North Vancouver and the Revelstoke Community Energy Corporation.

⁷ The BC Hydro Power Smart Sustainable Communities Program will be offering funding for district energy in early 2010, for pre-feasibility and feasibility energy studies and capital incentives.

c. Develop policy and guidelines to enable future development to support rollout of district energy systems, potentially including financing mechanisms such as Development Cost Charges (DCCs) and local service areas, and Development Permits. Work with the provincial government to enable local action through changes to the local government act.	Short to Medium-term
d. Investigate the opportunity for a district energy system as a pilot project to showcase innovation and to gain experience in Neighbourhood Energy Utilities as early as possible, considering the developments currently planned.	Short-term
e. Identify opportunities to connect local government buildings and facilities to district systems, including centralizing local government buildings where possible to reduce redundancy and increase efficiency.	Short-term
f. Facilitate capacity-building (e.g. education, training, design guidelines) within the development industry to build district-supportive developments.	Short-term
Comox Valley Economic Development Society and Chamber of Commerce	
g. Implement an economic development initiative to bring innovative and district energy companies to the Valley to develop this sector of investment and employment.	Long-term
h. Use carbon offset spending to invest in regional green energy initiatives and companies.	Medium-term

Objective 3.2.3: Energy is harnessed from waste sources in the community.

TARGETS:

- All new landfills are designed to maximize methane capture and reuse.
- All existing landfills are reviewed for viability of landfill gas capture and reuse by 2012.

Methane capture can reduce landfill emissions; however reuse of captured gas, for example for production of heat and power, can further reduce overall emissions through displacement of fossil fuel use. Note that there are new requirements for landfill gas management in the BC Landfill Gas Management Regulation.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Establish a policy to maximize gas capture from future landfills where feasible.	Short-term (Required by 2010)
b. Review existing landfill facilities for feasibility of capturing and reusing methane for heat and/or power.	Short to Medium-term
c. Establish a land use policy to ensure land uses that can utilize methane or electricity, heat and/or CO2 from an associated cogeneration system (e.g., industrial, greenhouse, etc.) are located near landfills. Cogeneration (production of both heat and electricity) typically maximizes the energy recovery from landfill gas combustion.	Short to Medium-term
d. Where biosolids are not already being beneficially utilized, investigate the possibility for biogas and heat/power production from wastewater biosolids.	Medium-term
e. Initiate a biofuels program with local farms, sawmills and other industries with organic waste by-products to explore turning organic wastes into useable energy resources.	Medium-term
f. Explore the feasibility of harnessing methane from livestock.	Medium-term

Goal 3.3: Waste diversion and recycling programs approach zero waste targets.

Objective 3.3.1: Develop a regional Zero Waste strategy, including promotion of recycling that is aimed at waste reduction and diversion from landfill disposal.

TARGET: % reduction in landfill waste disposal on a per-capita basis:

- 2010 ~ 48% *Current Level*
- 2020 ~ 55%
- 2030 ~ 65%
- 2040 ~ 75%
- 2050 ~ 90%

Progressively reducing landfill waste disposal will involve incrementally building on existing waste reduction and management programs over the coming years. The current waste diversion rate across the CVRD is about 48%. For reference, the Regional District of Nanaimo and Metro Vancouver have achieved overall diversion rates between 50 and 60%; some communities in the USA and Europe have reached 80% diversion. Recognized waste management “hierarchies” provide guiding principles and priorities for Zero Waste initiatives: e.g. reduce, reuse, recycle, recovery, and residuals.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop an updated solid waste management strategy (e.g. as part of Solid Waste Management Plan updates currently scheduled for 2010) driven by Zero Waste principles that will meet the proposed waste disposal targets and links local recycling efforts to the regional system. Strategies needed will likely include enhancement of recycling, organics composting, construction waste management and corporate product stewardship and packaging take back programs. Support this initiative with lifecycle energy/GHG emissions analysis (that includes “upstream” emissions) that are done on a materials-specific basis to inform decisions on waste management options such as waste-to-energy.	Short-term

b. Review waste disposal bylaws and fines and consider additional regulation to prohibit disposal of additional materials and dumping, in coordination with the development of supporting recycling and product stewardship services with the private sector.	Short-term
c. Ensure Zero-waste principles and other sustainability objectives, practices and systems are considered when tendering solid waste management contracts.	Short-term
d. Research tipping fees and their impact on behaviour and develop a strategy to more closely align fees with the full costs associated with waste (land, servicing, and impacts), recognizing that if the fees are too great, illegal dumping will occur. Consider tipping fee incentives for sorted vs. unsorted waste, and explore alternatives to tipping fees such as reducing weight and volume of curb side pick up.	Short to Medium-term
e. Explore establishing/ increasing stewardship fees with senior levels of government.	Medium-term
f. Explore opportunities for phasing in pickup of waste and recycleables in rural areas where any problems with waste disposal exist.	Short to Medium-term
g. Promote the use of backyard composters in lower density residential areas, particularly where curbside organics pickup programs are not feasible. This may include offering partly subsidized composters to residents.	Short term
h. Develop a kitchen waste/commercial organics collection strategy for appropriate areas (particularly where backyard composters are not practical), possibly starting with a small scale curbside composting pilot project and encouraging development of local composting businesses. Additional supportive work may include source separated organics composition studies. Integrate with biosolids composting where appropriate.	Short to Medium-term
i. Enhance education programs and utilize Community Based Social Marketing (CBSM) to support waste reduction and recycling, including linkage of recycling to greenhouse gas emissions.	Ongoing (already started)
j. Undertake a pilot program to build small greenhouses attached to residential homes, using single pane glass from discarded windows. Incorporate rainwater harvesting from the greenhouse rooftop.	Long-term

Community Organizations	
k. Engage community groups with interest and capacity in organics recycling (e.g. community gardening groups or local farmers) to educate residents. Utilize contracts and other measures to ensure long term sustainability.	Short-term & Ongoing (already started)
School Board and North Island College	
l. Incorporate a full range of waste diversion activities into the operations and facilities for all schools and education facilities. Continue to support existing pilot projects with school boards for composting and other initiatives.	Short-term (underway in Comox)
m. Incorporate cradle-to-cradle ⁸ and zero waste systems into the education in schools wherever applicable (e.g. teaching waste diversion for construction sites in a trades school).	Short-term (already started by CVRD)

Objective 3.3.2: Product stewardship practices are supported and promoted by businesses.

TARGET: % of businesses producing and selling products that implement product and material stewardship programs to reduce waste:

- 2020 ~ 10%
- 2030 ~ 30%
- 2040 ~ 55%
- 2050 ~ 80%

Presently, product stewardship programs have limited penetration except in specific sectors; however, much higher rates will be needed to support large reductions in waste disposal. Increasing diversion rates above 50% typically requires developing significant product stewardship programs. At the same time, these programs require significant time and coordination between governments (including the provincial government and industries) to develop.

⁸ Cradle-to-cradle design ensures that a product is virtually waste free, composed of “biological nutrients” that safely reenter the environment or “technical nutrients” that can be recycled.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Hold workshops with businesses to discuss the long term goals of sustainability and waste management, including waste reduction, product stewardship and zero waste practices.	Short-term
b. Lobby/work with senior levels of government to improve product stewardship programs.	Medium-term
Comox Valley Economic Development Society and Chamber of Commerce	
c. Create a leadership group of businesses to work together to lead the development of a product stewardship initiative, including the Chamber of Commerce, Rotary Clubs and other groups in its development and implementation.	Short-term
d. Develop a resource package of information for businesses on zero waste management and product stewardship systems and deploy throughout the business community.	Short-term
e. Bring in business leaders with special expertise in zero waste, cradle-to-cradle and product stewardship strategies to offer educational events to the industrial, commercial and institutional sector on best practices and approach.	Short to Medium-term
Provincial Government	
f. Promote education, incentives and programs that enhance product stewardship in businesses.	Short-term

Objective 3.3.3: Zero waste principles are applied in civic facilities and operations.

TARGET: % waste diversion from landfills for civic facilities and operations:

- 2010 ~ 60%
- 2015 ~ 70%
- 2020 ~ 80%
- 2025 ~ 90%

Providing a separate set of waste targets for local government operations helps build capacity and knowledge in zero waste methods, and also provides an example for industry and the public. Local governments have significant control over their own waste management practices, and can therefore develop leading management programs with high diversion rates.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Hold a Zero Waste workshop with the public, community organizations, and local governments to coordinate and develop ideas and new initiatives – with local governments taking leadership in addressing issues around reducing waste in public and community facilities.	Short-term (Part of RSWMP update – public feedback)
b. Develop a Zero Waste strategy for local governments, facilities and operations (i.e. a corporate rather than community strategy) to support the waste diversion target, including developing plans and policies for each jurisdiction to ensure innovative waste reduction and zero waste principles are applied in civic facilities and operations. These may include recycled content requirements in corporate purchasing policy.	Short-term

Goal 3.4: The waste stream associated with construction, demolition and land clearing (DLC waste) is reduced.

Objective 3.4.1: Develop and implement a regional construction waste management program. (In conjunction with the 2010 Solid Waste Management Plan Update).

TARGET: % of construction waste diverted from landfill:

- 2020 ~ 60%
- 2025 ~ 70%
- 2030 ~ 80%
- 2035 ~ 90%

This target aims to stimulate programs for construction waste recycling, which can account for around 30-40% of municipal waste if not recycled. For reference, in Metro Vancouver (GVRD) the recycling rate for DLC waste reached 66% in 2004.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Consider implementing a landfill ban on construction waste.	Short-term
b. Develop construction waste guidelines to divert construction waste from landfills.	Ongoing
c. Develop guidelines, incentives and standards to encourage the use of salvaged materials in new buildings, where possible, within building code requirements and without compromising energy efficiency.	Short to Medium-term
d. Pursue bans on land-clearing waste for development projects in all jurisdictions and channel that stream of organic waste to beneficial uses. Pursue bans on burning land-clearing and landscaping waste.	Medium-term
Development Industry and Chambers of Commerce	
e. Develop an industry and government partnership to promote the market for used building materials and construction waste. This could include creation of materials exchanges (physical, and/or web-based). Support and partner with existing initiatives - such as the Re-store.	Short to Medium-term
f. Develop and deploy educational materials on recycled building materials for the construction industry.	Medium-term

Objective 3.4.2: New multi-residential (i.e. developments without curb-side pickup) and commercial buildings have 3-stream separation supportive design (garbage, recycling, organic compostables).

TARGET: % of new multi-residential and commercial buildings designed to handle multi-stream separation (garbage, recyclables, compostables):

- 2015 ~ 100%

Ensuring that buildings are designed to provide adequately sized, convenient facilities for recyclable materials collection and storage is an important condition for maximizing recycling as additional recycling services are implemented over the coming years. Staged targets may accommodate phased implementation by building type.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Work with the development industry to review and amend building design guidelines in all local governments to ensure that multi-stream separation (recyclables, organic waste, garbage) is required in all new multi-family buildings. This should be done in conjunction with other green building initiatives and coordinated with organics collection services.	Short-term
Development Industry	
b. Develop an educational initiative for the development industry on 3-stream separation – design, construction and operation.	Short to Medium-term

Goal 3.5: Liquid waste is handled to minimize negative impacts and to turn wastes into resources.

Objective 3.5.1: All wastewater is treated to standards that protect the environment and facilitate non-potable reuse where appropriate.

TARGET: % of new or upgraded wastewater treatment plants that provide reclaimed water for non-potable uses.

- 2050 ~ 100%

New municipal treatment plants are generally constructed infrequently, though with the possibility of more decentralized plants, this could be more frequent than historically. In some cases existing plants may be upgraded with improved treatment performance and reuse capability. As new or upgraded facilities come online, treatment and reuse capabilities can increasingly be pursued and integrated with non-potable water demand. Non-potable reuse opportunities could include industrial uses, landscape irrigation, street cleaning, toilet flushing, and others, as approved by regulations.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Consider amending approach to Sewer Master Plan to make it a comprehensive Liquid Waste Management Plan that addresses all aspects of sustainable wastewater management. Ensure any update to sewer/liquid waste management plans are aligned with sustainability objectives and targets.	Short-term
b. Work to coordinate infrastructure Development Cost Charges across the developed areas of the region, including addressing costs of developing in rural areas near existing municipalities.	Short-term
c. Review land use plans and wastewater infrastructure options to ensure the treated water from new or upgraded plants has adjacent and nearby land uses to that can use the treated water (industry, some agriculture, others) and possibly waste heat that can be harvested from the waste water systems.	Medium-term
d. For un-serviced areas adjacent municipalities or in more densely populated areas, develop servicing strategies based on review of land characteristics and considering lot sizes and sustainability objectives. Consider developing pilot projects for water conservation and alternative systems and monitor the results using an Integrated Resource Recovery approach ⁹ .	Medium-term
e. Pursue separation of storm and sanitary sewers to reduce the burden on wastewater collection and treatment systems. Integrate progressive stormwater management plans across jurisdictions to assist in reducing wastewater flows and protecting aquifers.	Medium to Long-term
f. Explore and develop a public education initiative regarding the issues around the re-use of waste water for irrigation, industrial uses, flushing toilets and other uses.	Medium-term
g. In rural areas with on-site management of wastewater, ensure adequate groundwater protection and other environmental considerations are addressed.	Ongoing
h. Encourage infill development that takes advantage of existing sewer infrastructure, reducing impacts and costs of building new infrastructure.	Ongoing

⁹ An Integrated Resource Recovery approach ensures that waste is viewed as a resource.

Development Industry	
i. Develop an educational initiative for the development industry on opportunities and issues related to the recycling and re-use of waste water – design, construction and operation. This ideally involves provincial government.	Short to Medium-term

Goal 3.6: The community promotes water conservation and efficiency.

Objective 3.6.1: Water conservation is practiced throughout the community, reducing per capita consumption.

TARGET: Average “household” reduction of per capita water consumption over 2008 levels (agriculture is exempt):

- 2020 ~ 30%
- 2030 ~ 40%
- 2040 ~ 45%
- 2050 ~ 50%

30% reduction by 2020 is consistent with the BC Living Water Smart goals; 50% per capita reduction from today's consumption in the Valley (about 500-600 litres per day per person for all water use combined) is comparable with present day consumption of many Western European nations. To accomplish this, a multi-pronged approach would be needed that includes a wide range of strategies, likely including universal metering over the long term. This level of reduction would roughly offset increased demand from growth, reducing the size and operating costs of water infrastructure required to accommodate growth and minimize the development of new water sources. Reducing water consumption can also reduce greenhouse gas emissions associated with water heating. Also, a per-capita target isolates water efficiency and demand management performance from population growth. Under the CVRD Water Efficiency Plan (2009), most of the reduction targeted by 2020 would be achieved by 2014 (27%) through rapid introduction of water efficiency measures.

Agriculture will be an increasing draw on the water supplies of the region as the food industry grows. Agriculture needs to take all efforts possible to reduce water consumption; including using treated water where appropriate in place of potable sources.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Ensure sufficient measures are in place to protect the integrity of community water supplies.	Short to Medium-term
b. Enhance monitoring of water use and reporting to the public e.g. through a community sustainability report.	Short to Medium-term
c. Implement a water conservation initiative in partnership with the development industry to increase the efficiency of all new construction.	Short-term
d. Develop incentives and rebate programs to reduce consumption from existing buildings (e.g. low flush toilet rebates). Ideally, combine water efficiency/conservation retrofits and promotion with energy retrofit programs and promotion.	Short-term
e. Investigate the use of Water Conservation Development Permit Areas to address water conservation (and stormwater reuse if possible) in new development, particularly for outdoor uses which are not currently regulated in the building code.	Medium-term
f. Create landscape design and management guidelines for new developments to encourage low/no irrigation landscapes (except where growing food is a high priority) and work to have them implemented in all four local jurisdictions. Outdoor water conservation strategies will help reduce peak water demand, which drives supply infrastructure sizing.	Short-term
g. Expand education and communications campaigns to provide education and information to the public and stakeholders on ways to increase water efficiency in their homes, lifestyle, businesses and landscapes, including retrofits for existing homes and buildings.	Short-term

h. In conjunction with the municipalities, continue to monitor the cost/benefit realities of water metering and block pricing structures as effective tools to reduce water consumption in both new and existing homes, and explore the expansion of water metering programs over the long term.	Short-term
Development Industry	
i. Develop an educational initiative for the development industry on opportunities and issues related to water conservation.	Short to Medium-term

Goal 3.7: Stormwater (rainwater) is managed to maintain the performance of watershed systems, preserve ecosystem health and protect groundwater.

Objective 3.7.1: Buildings and sites are designed to manage stormwater in an ecologically sensitive manner.

TARGET: % of new development that incorporates stormwater source controls, including ecologically-based stormwater management principles in its design to address both water quality and quantity:

- 2015 ~ 100% of low density residential development where site conditions permit
- 2020 ~ 100% of med-high density residential and commercial development where site conditions permit

Ecologically-based developments integrate living systems and landscaping with stormwater management, such as rain gardens or bioswales. The targets recognize that with appropriate regulations, policies and capacity building, development practices can evolve to meet new standards over a reasonable timeframe. Priority may be given to lower density development that dominates residential land use in the Valley. Site conditions that can limit the use of source controls include high water tables or impermeable soils.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop a series of “integrated watershed management plans” for settlement areas to establish the appropriate performance standards for rainwater capture, stormwater detention and groundwater recharge.	Short to Medium-term

b. Work with the development community to establish and adopt progressive stormwater/rainwater management practices, based on integrated watershed management plans, including source controls and treatment systems in all new development, where appropriate, including use of the Water Balance Model (www.waterbalance.ca).	Short to Medium-term
c. Pursue the creation of stormwater performance targets, based on BC Ministry of Water, Land and Air Protection stormwater guidelines and adapted for local/regional use. Department of Fisheries and Oceans land development guidelines (in the process of being updated) may also be considered.	Short to Medium-term
d. Develop regional Low Impact Development standards to be appropriately integrated into policy and approvals processes in all jurisdictions.	Medium-term
e. Investigate the potential to retrofit existing development with progressive stormwater/rainwater management practices, including source controls where appropriate.	Medium to Long-term
Community Organizations	
f. Continue to engage local streamkeepers or other stewardship groups in urban stormwater and watershed protection activities.	Short to Medium-term
Development Industry	
g. Continue to provide educational for the development industry on emerging opportunities and issues related to progressive stormwater/rainwater management.	Short to Medium-term
North Island College	
h. Develop a rainwater and watershed research and education initiative to monitor the health of rural and urban watersheds and to develop and train students in innovative approaches to managing runoff.	Short to Medium-term

Objective 3.7.2: Public streets, plazas, parks and other public open spaces are designed to utilize stormwater source controls and manage stormwater (rainwater) in an ecologically sensitive manner, as well as to provide public (and possibly artistic) amenity where possible.

TARGET: % of streets (by length) in town centers and residential areas that are designed or retrofitted to utilize source control and ecologically-based stormwater management principles and strategies in its design:

- 2020 ~ 5%
- 2030 ~ 15%
- 2040 ~ 30%
- 2050 ~ 50%

Streets and public open spaces present opportunities to both manage stormwater effectively and develop multiple benefits by creating new public amenity value. Examples of best practices include rain gardens and detention ponds. It is also recognized that changing street and public open space designs is a long term process. The restructuring of streets would likely occur during their regular resurfacing or scheduled addition of sidewalks, approximately every 15-30 years.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Continue to educate and train municipal staff on innovative stormwater design principles, standards, and effective implementation in planning and engineering of public streets and infrastructure.	Ongoing
b. Develop new public open space and street design standards, including updated Subdivision and Development Servicing bylaws, that both manage runoff in an ecologically sensitive manner, as well as offer public (and artistic) amenity. Integrate these into the rewriting process of subdivision standards where appropriate.	Short-term
c. Ensure adequate protection of existing streams and riparian areas and explore opportunities to “daylight” culvert-enclosed underground water-courses where appropriate and affordable.	Medium to Long-term
Community Organizations	
d. Continue to engage local streamkeepers or other stewardship groups for projects involving watercourses.	Short to Medium-term

Objective 3.7.3: Rainwater/stormwater reuse opportunities are maximized.

TARGET: % of new development that implements some level of rainwater/stormwater reuse (eg: rainwater harvesting):

- 2020 ~ 50%
- 2030 ~ 100%

As new development moves toward new approaches for stormwater management, utilizing captured rainwater for uses such as toilet flushing and irrigation can be applied to a portion of developments where it is appropriate. Reuse must be balanced with groundwater recharge or other stormwater management best practices. Stormwater reuse will further reduce the burden on municipal water supply and infrastructure.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop guidelines and protocols for addressing stormwater management and reuse opportunities in new developments to benefit ecosystem health and reduce potable water consumption. Existing work with the Water Balance Model is an excellent start to this strategy. These guidelines should address overall watershed management goals and site specific issues.	Short to Medium-term
b. Permit all buildings to collect rainwater and help to facilitate regulatory changes that support rainwater reuse.	Short to Medium-term
c. Develop incentives for rainwater collection, storage and reuse.	Short to Medium-term

Goal 3.8: Principles of industrial or business ecology networks are integrated into mixed-use and industrial areas through planning and infrastructure design as a way of turning wastes into resources.

Objective 3.8.1: Promote eco-industrial development that turns wastes into resources and builds cooperative relationships amongst businesses and industrial and other land uses.

TARGET: % of new industrial developments that incorporate eco-industrial/business ecology design principles:

- 2020 ~ 50%
- 2030 ~ 100%

Industrial developments are less prevalent than residential and commercial development, and include a wide variety of businesses with associated environmental impacts. However industries play a critical role in sustainable communities, particularly in terms of energy consumption and GHG emissions. Eco-industrial development has the potential to significantly contribute to industrial sustainability performance through practices such as developing local networks that share energy and heat between buildings and facilities, locally utilize waste as resources, and share expertise and knowledge between businesses.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Incorporate support for eco-industrial/business ecology based approaches to development into planning documents to ensure they are addressed during approvals processes.	Medium-term
b. Address eco-industrial/business ecology systems when planning infrastructure in mixed-use or industrial areas.	Medium-term
Comox Valley Economic Development Society, Chambers of Commerce and Development Industry	
c. Hold a workshop on the opportunities that eco-industrial/business ecology development approaches could offer the Valley's economy.	Short-term
d. Support a developer wanting to embrace ecological design principles in an industrial or commercial area and work with them to create a leading edge pilot project of an eco-industrial/commercial park.	Medium-term

e. Develop a program to recognize and award businesses and industries that are utilizing eco-industrial/business ecology principles and minimizing waste.	Medium-term
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Objective 3.8.2: Advance the integrated management of infrastructure systems and resources.

TARGET: % of new infrastructure systems (water, wastewater, solid waste, etc) that incorporate integrated resource management/recovery principles:

- 2020 ~ 75%
- 2030 ~ 100%

Integrated infrastructure and integrated resource recovery are based on designs that recover resources such as energy and other materials from waste, and interconnect different systems to gain efficiencies.

Infrastructure systems have relatively long lifetimes and are expanded and upgraded incrementally; larger facilities are constructed at relatively infrequent intervals. To maximize future sustainability performance, it is therefore important to ensure that new infrastructure systems are designed with integrated resource recovery (IRR) principles in mind. As IRR principles become more proven over the coming years, its role in infrastructure planning and design can be strengthened.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Hold a workshop to explore opportunities to integrate infrastructure systems and resources. Examples of integrated systems include heat recovery from wastewater, biogas production/heat and power production from municipal biosolids and/or organic waste.	Short-term
b. Undertake a multi-jurisdictional review of infrastructure systems across the region to identify where growth can be focused to support existing infrastructure investments.	Short-term
c. Hold discussions and educational sessions with the development and business sectors to outline an approach to development that supports integrated infrastructure systems.	Medium-term
d. Review the application of Development Cost Charges (DCCs) and other related fees and charges across municipal and regional jurisdictions, and application of regional water and sewer DCC's across all relevant areas.	Ongoing



4.0 Transportation

VISION

The Comox Valley has a safe, efficient, integrated and multi-modal transportation system that provides for convenient mobility with low environmental impact for all residents.

SUSTAINABILITY PERSPECTIVES

Sustainable transportation systems aim to reduce emissions, water and land pollution, fossil fuel consumption and fragmentation of greenspace while enhancing our ability to move throughout our communities freely and efficiently. Reducing our dependence on the private automobile and shifting towards other modes of transportation such as transit, cycling, and walking allows us to minimize our environmental impact, protect our climate, enhance our physical health and improve social networks.

GOALS, OBJECTIVES, TARGETS, ACTIONS

Goal 4.1: Reduce the need for single occupant vehicles.

Objective 4.1.1: Refine transportation infrastructure standards and requirements to support a sustainable, low-emission transportation system.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Create a Sustainable Transportation Task Force on sustainable transportation with stakeholders from many sectors (including CVRD, BC Transit, Ministry of Transportation BC Ferries, and citizens) with a mandate for rapid progress on sustainable transportation innovations and finding creative solutions to shift behaviours and choices.	Short-term
b. Formally establish a transportation hierarchy: pedestrians, cycling, small electric modes, transit, goods movement, car co-ops, taxis and private automobiles – for planning, design and capital spending. Create necessary tools, checklists and protocols within local governments to ensure this priority is referenced for all key transportation decisions.	Short-term
c. Connect the Valley's climate change emission reduction targets to the transportation planning process to ensure plans and capital spending is targeted at achieving an 80% reduction in emissions by 2050 in the Valley's transportation system performance.	Short-term
d. Hold working group sessions with the BC Ministry of Transportation, planning staff and Council members to identify ways to work together on sustainable innovations and provide funding opportunities.	Short to Long-term
e. Develop new standards for roads within settlement areas to enable multi-modal transportation alternatives (e.g., bike lanes, room for small electric modes, bus lanes, HOV lanes, and others). Ensure collaboration between all jurisdictions and the Ministry of Transportation.	Short-term

f. Continue work to develop and implement Low Impact Development (LID) standards for roads and development to reduce impermeability and impact on ecosystems.	Short-term
g. Develop a typology of “green streets” and a program to retrofit streets to be more sustainable during resurfacing or utility work.	Short-term
h. Work to harmonize Development Cost Charges across the region and address appropriate DCC pricing for developments in rural areas near municipal boundaries.	Medium-term

Objective 4.1.2: Shift transportation choices toward alternative modes of transportation to achieve the following modal share percentage¹⁰ by the year 2050: 24% private vehicles, 30% small, low-speed mobility vehicles, 16% pedestrian, 15% cycling, and 15% transit.

TARGET: % of automobile emissions reduced (to meet GHG reduction targets)

- 2020 ~ 33%
- 2030 ~ 50%
- 2040 ~ 60%
- 2050 ~ 80%

TARGET: % of mode share of private conventional vehicles (current mode share is 90%):

- 2020 ~ 80%
- 2030 ~ 50%
- 2040 ~ 35%
- 2050 ~ 24%

These targets recognize that in order to meet overall climate emissions goals, transportation-related emissions will need to drop by 80% by 2050 and this reduction will primarily be achieved by shifting transportation modes away from the automobile to other modes, since predicted increases in fuel efficiency for regular vehicles will not have a significant impact (e.g. only 5-15% predicted increase in efficiency by 2030).¹¹

¹⁰ Modal share is a term that describes the percentage of residents using a particular type of transportation.

¹¹ Handbook of Energy Efficiency and Renewable Energy - by Frank Kreith, D. Yogi Goswami 2007

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Prioritize new capital spending on alternative modes of transportation and related infrastructure, such as bike racks, bike lanes, public transit, and pedestrian walkways, over vehicle infrastructure.	Ongoing
b. Expand implementation of traffic calming initiatives including speed humps, one way streets, roundabouts and traffic circles for traffic calming and flow controls to improve safety for pedestrians and cyclists.	Ongoing
c. Continue to designate car free days on selected streets for holding community events (in partnership with community groups). For example, consider a weekly market day on which Fifth Street is closed every Saturday or Sunday. Encourage people to walk, cycle, or take transit to the market, exploring opportunities to reduce transit fares on Sundays, offer courtesy bike storage at Market or other incentives.	Ongoing
d. Establish a pedestrian street pilot project in selected downtown areas that focus on cycling, sidewalk gardens, stormwater design and children's play areas.	Mid term
e. Implement a communications strategy to promote a sustainable transportation system throughout the region. This may include brochures, media releases, video and others.	Ongoing
f. Work with the development industry to create incentives, policies and opportunities for alternative and innovative transportation infrastructure for all new developments.	Short-term
g. Partner with local businesses, employers, and the provincial government to implement a GHG reduction community challenge and education program to encourage residents to make green, healthy transportation choices.	Medium-term
h. "Green" all local governments fleets and develop a multi-jurisdictional purchasing arrangement for green fleet products and services including addressing right sizing fleet vehicles, driver training, clean fuels, anti-idling measures, and many others. (Consider using the E3 Green Fleets program - E3Fleet.com).	Short-term (carbon neutral requirements by 2012)

i. Review and revise existing transportation practices within local government (including air travel, fleet operations, car pooling) to align them with sustainable development objectives and meet provincial carbon emission reduction goals. Explore options to reduce air travel, such as video conferencing, webinars and others as a standard practice.	Short-term & Ongoing
Ministry of Transportation	
j. Make pedestrian and cycling access a priority in the design or retrofits of existing or future bridge and road infrastructure, ensuring that road surfaces are designed and maintained to support cycling and pedestrians.	Short-term
k. Ensure that any road or bridge designs enhance and protect ecological sensitive areas.	Short-term
Chamber of Commerce and Comox Valley Economic Development Society	
l. Undertake an initiative to promote sustainable transportation practices (fleets, employee travel, delivery options, supply chain) to all businesses.	Short-term

Objective 4.1.3: Implement strategic approaches to parking to assist in reducing vehicle trips and to reduce the environmental impact of parking areas.

TARGET: # of parking stalls per unit required for multi-residential units along transit corridors:

- 2020 ~ 1.5
- 2030 ~ 1.25
- 2040 ~ 1.00
- 2050 ~ 0.75

Reducing the supply of parking associated with multi-family units encourages alternative transportation choices and reduces the cost of housing. Parking reductions are controversial, yet also one of the most effective ways of encouraging residents to seriously consider an alternative to taking their car. In addition, parking reductions assist in increasing housing affordability (e.g. an underground parking stall costs \$20,000-40,000). Parking reductions are also needed for commercial and institutional developments (where transit and other alternative transportation options exist so as not to undermine business success).

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Create regional parking strategies to support sustainable transportation goals, including: <ul style="list-style-type: none"> a. reducing parking requirements; b. separating parking spaces from multi-residential units at the point of sale; c. on-street parking; d. pay parking; e. lot coverage for new developments; f. reducing parking requirements when Demand Side Management programs are implemented; g. smaller spaces for micro vehicles; h. parking maximums; i. ecological design of parking areas to filter runoff; and j. re-charging infrastructure for electric scooters. 	Short-term
b. Implement pilot projects for parking innovations (e.g. reduced supply and parking surface designs such as permeable paving).	Short-term
c. Through a multi-jurisdiction initiative, hold a workshop for staff and the development community on alternative parking strategies with an expert in innovative approaches to parking and develop a database of progressive parking options for staff and the development community.	Short-term
d. Support car pooling and car co-op programs, including parking relaxations in exchange for the provision of car-sharing spaces and employee ridesharing.	Ongoing
e. Implement tools such as an anti-idling bylaw to reduce emissions from idling cars, especially close to schools.	Short-term
Development Industry	
f. Promote sustainable transportation goals and practices in new development projects.	Ongoing

Goal 4.2: Adopt high-efficiency, low emission/no-emission vehicles and alternative fuels.

Objective 4.2.1: Increase the use of alternative vehicles¹².

TARGET: % of mode share of alternative vehicles (e.g. electric wheelchairs, scooters, golf carts, small or slow speed electric vehicles (< 50km)):

- 2020 ~ 5%
- 2030 ~ 10%
- 2040 ~ 15%
- 2050 ~ 30%

This target aims at establishing policy, education and capital spending direction to supporting a steady shift to micro transportation modes (motorized, clean, electric, and smaller than the conventional vehicle) for commuting and other local trips. While emissions are associated with the making of electricity, the “carbon intensity” of BC electricity is quite low (due to hydropower) and BC Hydro intends to meet future needs with carbon neutral sources.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop an electric mobility strategy that addresses issues of accessibility, liability, linkages and profile of small electric mobility options. Determine which areas are most suitable for electric use.	Short-term
b. Research and develop strategies for infrastructure, sidewalk widths, road profiles and other issues that may have to be addressed to support alternative vehicles.	Short-term
c. Develop guidelines for the development industry to promote and support small, micro and electric vehicles and modes of travel, including electric scooters and options for the elderly and physically challenged.	Short-term
d. Develop a pilot project for electric scooter support, including street design, secure parking and infrastructure (e.g. charging stations).	Short-term
e. Educate the public on alternative ‘clean energy’ transportation modes.	Ongoing

¹² Alternative vehicles: automobiles that use electric/clean fuel.

f. Consider a bio-fuel procurement requirement for local government fleets.	Short-term
Development Industry	
g. Plan for future growth of electric mobility, ensuring appropriate infrastructure sizing and facilities are available (e.g. charging stations).	Short-term
CV Economic Development Society and Chamber of Commerce	
h. Explore opportunities to bring the electric mobility industry to the Comox Valley.	Short-term
i. Develop a bio-fuels strategy in partnership with technology providers and stakeholders who have access to organic waste streams as part of a zero waste or organic waste reuse strategy.	Medium-term

Goal 4.3: Increase walking, cycling, transit use and other forms of alternative transportation.

Objective 4.3.1: Contribute to pedestrian access and opportunities at all scales of planning and development.

TARGET: % of mode share of walking:

- 2020 ~ 6%
- 2030 ~ 10%
- 2040 ~ 13%
- 2050 ~ 16%

This target aims to promote efforts to support the viability, quality and appeal of the pedestrian experience as a key form of mobility.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Coordinate within transportation groups on promoting walking, cycling and other active transportation modes. Develop a regional strategy with local governments to ensure that existing and new pedestrian and cycling pathways connect neighbourhoods in Comox Valley to major arterial networks and transportation links.	Short-term
b. Create development guidelines to promote pedestrian-oriented design in all new development projects. For areas outside of the urban containment boundary, focus on linking greenways and bike paths to urban areas, including city bike paths along arterials and sidewalks.	Short-term
c. Revise design and maintenance standards to ensure universal access to sidewalk, pathways, and trails where possible (e.g. wheelchair accessible curbs and spring gravel sweeping) including snow and ice removal standards.	Short-term
d. Increase the safety for pedestrian crossings on major roads.	Short-term
e. Educate the public about alternative transportation modes, such as scooters, bicycles, rollerblades, and others by setting up low speed “green” mobility events to popularize these and raise their profile in the community.	Short-term
School Board and North Island College	
f. Establish walk-to-school programs, car pooling, bike-to-school week, U-Pass and other initiatives to promote sustainable, healthy transportation. Continue to encourage alternative transportation modes through parking fees and explore the possibility of implementing this practice across the region.	Short-term & Ongoing

Objective 4.3.2: A regional network of greenways is created including dedicated pedestrian and cycling commuter routes that connect people to services, neighbourhoods and each other across jurisdictional boundaries.

TARGET: % of residents that live within 400 metres (5 minute walk) of a greenway or walkway and a dedicated cycling route that connects them to town centres, jobs and community services:

- 2020 ~ 60%
- 2030 ~ 70%
- 2040 ~ 80%
- 2050 ~ 90%

Developing a network of greenways can create an improved pedestrian and cyclist experience. In addition, greenways can enhance ecosystem services i.e. stormwater infiltration, habitat, and air filtration. Greenways can also support small electric transportation modes.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Municipal Governments	
a. Work with parks staff and other stakeholders (e.g. environmental, nature, running and bike clubs) to create a map of existing pedestrian and bike trails. Develop a database of existing trails, describing trail conditions and restoration projects as well as newly developed or future trails. Provide a current trails map for the public with a link on local government websites.	Short-term
b. Ensure that regional parks and greenways planning integrates greenway connectivity between all jurisdictions and new development projects.	Short-term
c. Establish greenway design guidelines for new developments to ensure new projects support and contribute to the regional greenways network.	Short term

Objective 4.3.3: Increase cycling infrastructure throughout the Comox Valley.

TARGET: % of mode share for cycling:

- 2020 ~ 5%
- 2030 ~ 10%
- 2040 ~ 12%
- 2050 ~ 15%

This target aims to greatly increase the mode share of cycling using high-quality and convenient cycling routes and facilities, recognizing that cycling is a choice of a specific percentage of the population and will have a seasonal fluctuation.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Continue to work with the Public Advisory Committee for cycling and the CV Cycling Task Force with a goal of making the Comox Valley one of the most desirable cycling areas in BC.	Ongoing
b. Establish a connected network of bike lanes throughout the region for cyclist safety. Require bike lanes and signage in new developments, wherever appropriate. Work with the CV Cycling Task Force to improve the usefulness and accuracy of the existing regional cycling map. Develop an interactive on-line map of cycling routes (link to 4.3.2 action a).	Short-term
c. Implement bicycle and scooter services such as secure bike and scooter storage in neighbourhood centers (civic-owned and/or partnerships with institutions and businesses).	Medium-term
d. Require developers, institutions and large employers to provide bicycle facilities such as showers, change rooms, and secure storage space.	Medium-term
e. Explore viability of a community bike share program.	Long-term
Ministry of Transportation	
f. Implement a rural roads safety program for cyclists, considering safety issues such as road markings, road sweeping and shoulder width.	Medium-term

g. Include a high level of cycling-friendly road maintenance requirements (e.g. road sweeping, chip sealing, snow and ice removal) in Ministry Procurement requirements for road maintenance contractors.	Short-term
School Board	
h. Engage and support grassroots “cycle-to-school” programs that encourage children to use active transportation and reduce school car trips. Work to develop a model that can be applied across the region with support from the school district and local regional governments.	Medium-term
i. Set up an education program with the help of ICBC and local government on cycling and trail etiquette, encouraging safety and awareness (e.g. mandatory use of bike bells, reflectors and lights).	Long-term

Objective 4.3.4: Increase the viability, extent and convenience of transit service.

TARGET: % of mode share for public transit (regular buses, community shuttles, other):

- 2020 ~ 2%
- 2030 ~ 5%
- 2040 ~ 10%
- 2050 ~ 15%

TARGET: Frequency of transit service along transit corridors during peak hours:

Primary routes:

- 2020 ~ every 20 minutes
- 2030 ~ every 15 minutes
- 2040 ~ every 12 minutes
- 2050 ~ every 10 minutes

Secondary routes:

- 2020 ~ every 60 minutes
- 2030 ~ every 45 minutes
- 2040 ~ every 30 minutes
- 2050 ~ every 15 minutes

Frequency of transit service is a key element in increasing transit usage. Transit use in the Comox Valley has grown by over 200% since 2001; however, currently transit mode share is relatively low for the Comox Valley and a concerted effort to increase ridership is required. Meeting these targets for transit

use will require significant investment and behaviour change from the current level of approximately 1% of the modal share. It is expected that early progress will be slow but will increase significantly closer to 2050 as more service is available and the costs of fuel are higher due to peak oil impacts and increases in carbon pricing.

ACTIONS	
Agency	Priority
BC Transit and Ministry of Transportation	
a. Develop a regional, inter-jurisdictional transit strategy to encourage transit oriented development through harmonizing land use and transit planning. (BC Transit is expected to complete a new transit master plan in the Comox Valley within the next 5 years).	Short to Medium-term
b. As part of the transit strategy, include policies on inter-modal connections to address optimal interconnectivity of bus, rail, ferry, airport, etc, including connections to and service frequency in rural areas.	Short-term
c. Explore the possibility of partial contributions of a local transit service funded by new developments, major institutions and large employers (e.g. bus passes for occupants of residential buildings). Coordinate transit subsidies with possible reductions in parking requirements.	Medium-term
d. Develop a network of park & ride linkages in rural areas to support transit access outside of urban settlement areas.	Medium-term
e. Explore a feasibility study on community shuttle systems using smaller micro-buses.	Medium-term
f. Co-ordinate schedules between transit systems and the timing of institutions at their destinations (e.g. work/school start and finish times) and post transit schedules at all bus stops.	Short-term
g. Implement an on-line and call-in transit service for residents to easily find the most efficient transit linkages to their destinations.	Medium-term
Comox Valley Regional District and Local Municipal Governments	
h. Continue to work with the transit advisory committee to help develop practical options for transit system improvements and to coordinate with BC Transit on increasing service and convenience in the Valley.	Short-term
i. Establish an initiative to finance and build more bus shelters.	Short-term

Chamber of Commerce and CV Economic Development Society	
j. Build a leadership group of corporations to work with BC Transit to promote high levels of transit use in their companies (e.g. employee bus passes).	Medium-term

Goal 4.4: Promote the development of rail infrastructure and use in the Comox Valley for commuter and freight connections to the rest of Vancouver Island.

The Comox Valley is connected to communities and key economic areas through the E+N rail corridor and other linkages. Rail is a highly efficient way to move people and freight. Support for this mode is an important aspect of future transportation networks.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Support efforts to increase commuter rail service on Vancouver Island, including upgrades to the rail line to support freight travel. In addition, provide education to local government, businesses and the public on the long-term economic and environmental benefits of passenger and freight service by train.	Ongoing
b. Work with the Island Corridor Foundation to connect the E+N Rail Corridor to the Valley's greenway and bicycle network and continue to support the "Rails to Trails" initiative.	Ongoing
c. As developments grow in areas along the railway corridor, ensure appropriate stations and rail oriented infrastructure are established to support future passenger rail use, while preserving the viability of the railway to function for other uses.	Medium-term
BC Transit and Ministry of Transportation	
d. Explore a feasibility study on commuter travel by train in the Comox Valley, including intermodal connections to other transportation hubs and modes to maximize its potential.	Medium-term
e. Promote the use of the rail corridor as a freight corridor to reduce impacts of trucking on Comox Valley and other Vancouver Island communities.	Medium term

Goal 4.5: Develop a sustainable transportation system for rural areas in the Valley.

The rural areas of the Comox Valley are extensive and will typically include at least 20% of the Valley's population. Lower densities and larger properties make transit and other alternative modes of transportation more typical of sustainable urban communities challenging to implement; however, many opportunities exist to promote sustainable mobility within a rural context.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Municipal Governments	
a. Develop a Sustainable Rural Transportation Opportunities White Paper to inform the overall regional transportation strategy, addressing key opportunities for reducing emissions and increasing safety and convenience of transportation alternatives to the personal automobile.	Short-term
b. Work with developers of large projects currently in rural areas to ensure significant attention is paid to sustainable transportation approaches, including providing necessary transit support to establish transit as a viable transportation option very early in the project.	Ongoing
c. Work with stakeholders to explore opportunities for an internet-based ride sharing program where rural residents can connect for sharing rides and car pooling. Continue to support the expansion of ride sharing and car pooling initiatives and standards for convenient parking and other incentives.	Short-term
d. Work with BC Transit and Ministry of Transportation to establish a network of "Park and Ride" facilities to connect rural residents to transit lines.	Short-term
BC Transit and Ministry of Transportation	
e. Develop road standards and maintenance requirements that ensure cycling safety on rural roads, including shoulder width, signage, surfacing, road sweeping and others.	Ongoing



5.0 Ecosystems, Natural Areas, & Parks

VISION

The Comox Valley is a region that values, at every level of activity, a conservation ethic supporting joyful human existence in harmony with the natural world. The region has an open space network that preserves natural areas, sensitive ecosystems, agricultural capacity and key recreation areas.

SUSTAINABILITY PERSPECTIVES

Our forests, meadows, wetlands, and water bodies are the foundation of both our health and wealth. Protecting green space provides us with all of the basic fundamentals of life such as clean water, air and soil, as well as resources such as food, timber and minerals. Our care of ecosystems acknowledges a respect for all species and the psychological and spiritual values of natural areas.

GOALS, OBJECTIVES, TARGETS, ACTIONS

Goal 5.1: Planning and development is in balance with primary environmental systems (i.e. coastal long shore, watershed, groundwater, energy, climate, ecosystems) such that their carrying capacity is not exceeded.

Objective 5.1.1: Achieve a clear understanding of the formative environmental systems that shape soils, landforms, habitat and hydrology.

It is important that we shift to a systems approach to ecosystem protection and that our level of understanding leads to performance standards that are maintained to sustain ecosystems (forests, wetlands, estuaries, sand beaches, endangered ecosystems, rare species, etc), as valued for both functional and social goals.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Set up education programs for a wide range of stakeholders on the function of environmental systems.	Short-term
b. Establish a multi-stakeholder Open Space and Ecosystems Task Force (including conservation organizations, developers, landowners, and local government representatives) to develop strategies for ecosystem protection, overseeing and coordinating local and regional work on parks, trails, ecosystem protection and restoration. Harmonize this task force with existing groups as needed.	Short-term
c. Review planning and development regulations to ensure formative environmental system throughout the region are protected.	Medium-term
d. Establish a Valley-wide set of goals for regional open space to inform all planning and development, including ecological preservation, ecological restoration, recreation, agriculture, food production, appropriate economic development and others.	Medium-term

North Island College	
e. Develop and circulate educational material on primary environmental systems that shape the landscape and systems in the Comox Valley.	Medium-term

Objective 5.1.2: Achieve a clear understanding of the Valley's ecosystems through inventory and mapping.

TARGET: % of ecosystems mapped and inventoried:

- 2010 ~ 80%
- 2015 ~ 100%

Currently, there are gaps in ecosystem data, such as a lack of detail in Sensitive Ecosystem Inventory mapping and lack of data for marine ecosystems. Obtaining more detailed and complete information on ecosystem location and function will facilitate improved management decisions for ecosystem protection.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop clarity on definitions and preferred design and management guidelines for greenways.	Short-term
b. Continue to work to maintain a central resource for Comox Valley sensitive ecosystem data. Address accuracy and availability of GIS resources to support this initiative.	Medium-term
Community Organizations	
c. Identify gaps in science based information pertaining to watercourse, sensitive ecosystems inventories and wildlife corridor studies and complete the inventory and mapping process in the Valley (increasing the level of detail through field checking).	Short-term
d. Hold a workshop with environmental organizations, potential funders, local government representatives and landowners to outline an effective action plan for completing sensitive ecosystem mapping, including roles, responsibilities and timelines for completion.	Short-term
Provincial and Federal Governments	
e. Continue to work with and support local governments in the Valley on ecological stewardship with funding, refinements of legislation, and others.	Ongoing

Goal 5.2: Conserve and restore ecosystems.

Objective 5.2.1: Conserve currently unprotected sensitive ecosystems.

TARGET: % of currently unprotected sensitive ecosystems (baseline 2009) that have an appropriate level of protection:

- 2020 ~ 60%
- 2030 ~ 75%
- 2040 ~ 90%
- 2050 ~ 100%

Clarity is required on definitions and implications of sensitive ecosystem classifications in the Comox Valley. The concept of “protection” includes identification of the area, its sensitive features and species, best practices for protection and management, and a commitment or assurance that those who own/have jurisdiction over the area will follow best practices.

Implementing adequate ecosystem protection relies on improvements in sensitive ecosystem mapping. Due to the considerable amount of sensitive ecosystems lands that have been lost, fragmented, or reduced over the last decade, it is fundamental that targets aim to protect 100% of remaining ecosystems that are classified as sensitive by 2050.

ACTIONS	
Agency	Priority
Community Organizations	
a. Set up a landowner contact and environmental best practices program to encourage conservation practices and educational resources. Link this program to the Environmental Farm Plan program (see 6.1.2 action e.).	Medium-term
School Board and North Island College	
b. Work to protect and restore sensitive ecosystems within or adjacent to school grounds and to integrate ecosystem literacy into the curriculum. Explore access to free mapping software (e.g. ESRI GIS) to support education on ecosystem protection.	Short-term
c. Work to connect students to ecosystem stewardship initiatives and organization as part of school environment courses or electives.	Medium-term
d. Integrate sustainability and ecosystem stewardship into the curriculum of the Valley's schools and expand their leadership roles in stewardship.	Short-term

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
e. Develop educational programs and resources on ecosystem protection for all stakeholders.	Medium-term
f. Reactivate a CVRD website for easy access to information on environmental protection, regulations and education.	
g. Build on the work of local ecosystem stewardship organizations to develop a Regional Ecosystem Conservation Strategy that includes local recommendations that consider the context of each jurisdiction. Promote widespread public awareness of this strategy.	Ongoing
h. Designate all sensitive ecosystems as development permit areas in all jurisdictions.	Ongoing
i. As part of a conservation and enhancement strategy, develop a classification system for development and ecosystem areas with a range of protection and enhancement policies and best practices. Integrate this system into policies and practices for planning and approvals throughout the region.	Ongoing
j. Work to support consistency of sensitive ecosystem protection terms, guidelines and regulations between all jurisdictions.	Short-term
k. Inventory and assess conservation funding initiatives that are currently in use by local governments. Based on this assessment, identify opportunities for additional conservation funding strategies.	Short-term
l. Consider opportunities for land acquisitions to support the protection of key areas (possibly through a local government park acquisition fund or through a partnership with a local conservation organization).	Short-term
m. Undertake a study of the potential implications of climate change to the region's shorelines. Explore the potential of using tools such as the Green Shores rating system as part of the development approvals process for new development along shorelines.	Medium-term
n. Explore the possibilities of using regulatory tools for the protection of critical watersheds, groundwater recharge and all riparian zones, water courses, estuaries and sensitive ecosystems (e.g. Brown and Tsable Rivers and their estuaries).	Medium-term

ACTIONS	
Agency	Priority
o. Explore opportunities to tax incentives to support private property owners' efforts to preserve and protect environmentally sensitive areas. (See Islands Trust examples).	Medium-term
p. Continue to work with senior government agencies to reduce the inappropriate use of pesticides.	Medium-term
Comox Valley Economic Development Society and Chamber of Commerce	
q. Develop educational resources for key industry sectors to use for educating clients and stakeholders on how to protect ecosystems when doing business or pursuing tourism and recreation.	Short-term

Objective 5.2.2: Increase the productivity and biodiversity of ecosystems.

TARGET: % of significantly degraded sensitive ecosystem areas that have an appropriate level of ecological function restored:

- 2020 ~ 20%
- 2030 ~ 30%
- 2040 ~ 40%
- 2050 ~ 70%

TARGET: % of new developments that incorporate habitat-supportive landscape design:

- 2015 ~ 80%
- 2020 ~ 100%

Increasing the health of formerly degraded ecosystems suggests a greater challenge than protecting existing ecosystems, as designating land for restoration competes with many other preferred land uses. These targets recommend that biodiversity is prioritized and recognizes that restoration provides opportunities for innovation, new technology, community beautification, and increased ecological resiliency.

ACTIONS	
Agency	Priority
Community Organizations	
a. Establish a working group on habitat stewardship and restoration to support habitat-oriented design and management, including hydrology.	Short-term
b. Partner with new and existing environmental groups and educational institutions to create an overall, coordinated network of ecosystem stewardship volunteers to assist in monitoring and advocating for ecosystem health.	Medium-term
Comox Valley Regional District and Local Municipal Governments	
c. Develop tools and guidelines for native plant habitat-oriented landscape design in new developments (e.g. songbird habitat plant lists, swales, education on invasive plants, permeable surfaces), including prioritizing the use of native plants in public and private landscapes.	Short-term
d. Develop a pilot project for songbird habitat landscape design in a public area or through negotiations with a private developer.	Medium-term
e. Ensure existing urban streams are sufficiently protected, work to restore urban streams where needed, and identify culverted waterways that may be appropriate for daylighting. ¹³ In addition, undertake a stream daylighting pilot project.	Short-term
f. Work with provincial and federal governments to fund and manage larger scale habitat restoration projects.	Ongoing
g. Work with stakeholders to develop an ecosystem network plan for the Comox Valley to inform regional, OCP and local area planning processes, to ensure adequate considerations are given to habitat and sensitive ecosystem areas.	Short-term

¹³ Daylighting refers to the process of restoring a waterway that was previously diverted into a culvert, pipe, or a drainage system back to a natural state in an above ground channel.

Objective 5.2.3: As a significant regional sensitive ecosystem, protect and enhance the Courtenay River Estuary.

As a community located in a river valley, the Courtenay River Estuary is at the heart of the Comox Valley and should be recognized for its extremely important contributions to bird habitat, fish spawning, and flood protection.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Hold an inter-jurisdictional workshop with First Nations, local government staff, environmental professionals and NGOs to develop a long-term plan (that includes short-term programs) to restore the estuary's ecological health and to protect it over the long term.	Short-term
b. Revise development regulations and zoning for the estuary to reflect the ecological sensitivity of the area.	Short-term
c. Work with provincial and federal governments to fund and manage restoration of the estuary.	Ongoing
Community Organizations	
d. Develop educational programs about the estuary to educate all residents about its ecological importance.	Medium-term

Goal 5.3: Sustainable working lands enhance and are connected to natural systems.

Objective 5.3.1: Support and protect working lands.¹⁴

TARGET: % of net loss per decade of viable agricultural landscapes (including agricultural land reserve):

- 2010 ~ <2%
- 2020 ~ <1%
- 2030 and beyond ~ 0%

¹⁴ Working lands are lands used for resource industries such as agriculture, woodlots, nurseries, or aquaculture.

TARGET: % of net loss per decade of working forest landscapes (outside identified settlement areas):

- 2020 ~ <1%
- 2030 ~ <1%
- 2040 ~ <1%
- 2050 ~ 0%

These targets recognize that working lands provide many opportunities to contribute to ecosystem function (e.g. land stewardship, habitat restoration, conservation, educational initiatives). The targets aim to counteract pressure to convert agricultural and forest land into more urban, commercial and residential uses.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Work with key stakeholders to monitor the status of working forest and agricultural lands through a regional mapping system on an annual basis.	Short-term
b. Work with the province and agricultural champions to advocate and develop incentives for habitat restoration and conservation covenants on agricultural and forestry lands.	Medium-term
c. Develop a range of tools and policies to support the retention of resource and agricultural lands where regional growth planning has not identified town center, corridor or other settlement areas, as per the RGS.	Medium-term
d. To optimize appropriate the use of working lands, develop policies for exchange of working lands through RGS, OCPs and other planning tools to achieve environmental and economic goals.	Medium-term
Community Organizations	
e. Create a program for ecological protection and restoration of working lands for resource-based business owners, managers and students.	Medium-term
f. Create a leadership council on value-added rural resources to build momentum and expertise on marketing locally produced products, working with resource-based businesses to grow the profitability and scope of value-added industries.	Long-term

g. Work with landowners, government, and other stakeholders to explore the development of a charter or terms of agreement that landowners can utilize on a voluntary basis to permit public access on some working lands. This charter needs to include emphasis on an ethic of education, respect and responsibility and address opportunities for tourism (e.g. rural walking tours), restricting access at times of safety concern, such as during harvesting, with due consideration to agriculture and other land use sensitivities.	Medium-term
h. Support small-scale resource-based operations (e.g. farms and woodlots) and marketing of locally produced crops and products.	Long-term

Goal 5.4: All citizens have access to recreational opportunities.

Objective 5.4.1: Ensure widespread access to a variety of recreational parks and greenways.

TARGET: % of residents municipal areas that live within 2.5 km of a larger conservation area or large natural park area:

- 2020 ~ 50%
- 2030 ~ 60%
- 2040 ~ 70%
- 2050 ~ 90%

Targets for increased access to parks and recreational greenways respond to our understanding of the wide-ranging benefits of recreation and greenspace to human health and wellness.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Coordinate parks and greenways planning, land acquisition and other issues (see 5.1.1).	Ongoing
b. Create a region-wide parks and trails network, linked by inter-community greenways, that addresses social and ecological needs.	Short-term
c. Where applicable, require new developments to include greenways that connect to a regional greenways network.	Ongoing

ACTIONS	
Agency	Priority
d. Develop an online recreational greenways map integrating recreational trail and park information from all jurisdictions.	Short-term
e. Pursue opportunities to jointly acquire land to meet park needs in municipal and electoral areas.	Medium-term
f. Lobby the provincial government to review and update the provision of parkland as a condition of subdivision in the Local Government Act.	Medium-term
Community Organizations	
g. Partner with schools to develop student stewardship groups to learn about and assist in greenways and parks planning.	Short-term

Objective 5.4.2: Enhance sports and recreation infrastructure.

Public recreation facilities are a cornerstone of a good quality of life in the Comox Valley, especially for families. Because each municipality has a constrained tax base and because all residents use facilities in each community, an overall strategy on how best to continue to enhance the recreational infrastructure of the region is important.

There is no quantitative target associated with enhancing sports and recreation.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Undertake a study on future recreational needs of the future in the Valley, addressing changes in demographics, sports, and others, and integrate the results of this study into recreational facility planning and economic development strategies. Ensure research into the recreational needs of non-urban areas is included in this study.	Short-term
b. Work together to develop a regional parks and recreation facility strategy to ensure the collective pool of public resources across all local governments is strategically invested to minimize redundancy, share costs and benefits equitably, and provide the greatest level of service to all.	Ongoing

ACTIONS	
Agency	Priority
c. Undertake an education initiative to inform residents on the value of sports and recreation facilities and programs and on the benefits of being a healthy community and society.	Ongoing



6.0 Food System

VISION

The Comox Valley has a prosperous local food economy that provides for a significant amount of local food needs, celebrates a rich culture of local food keeps natural ecosystems healthy, and includes a high degree of food security and accessibility to food.

SUSTAINABILITY PERSPECTIVES

Healthy communities enhance aspects of a sustainable food system through integration of people, their living environments and food. A sustainable food system reconnects us to where our food comes from, boosts our economy, and allows viable, site specific forms of agriculture and food activities in a range of spaces, from wild foraging areas to downtown cores.

Locally produced food (within the Comox Valley) or food produced on Vancouver Island has many economic, social and environmental benefits that food produced elsewhere may not. Preliminary analysis (*by From the Ground Up Agricultural Consulting*) indicates that the Comox Valley could be almost 50% self sufficient for food with a range of meat, seafood, grains, vegetables, fruit and alcohol production. A further goal is to focus not only on agricultural commodity production, but also on the value-added chain of processing, food services, businesses, education and culture that can be part of a sustainable food system.

GOALS, OBJECTIVES, TARGETS, ACTIONS

Goal 6.1: Support a diverse and thriving local agriculture system.

Objective 6.1.1: Increase the personal and commercial production of local food for local consumption.

TARGET: % of fresh produce consumed in the Comox Valley that is produced in the region:

- 2020 ~ 25%
- 2030 ~ 40%
- 2040 ~ 55%
- 2050 ~ 60%

TARGET: % of dairy consumed in the Comox Valley that is produced in the region:

- 2020 ~ 100%

TARGET: % of protein (beef, pork, venison, poultry, bison, seafood, eggs, dairy, nuts and vegetable based protein) consumed in the Comox Valley that is produced in the region¹⁵:

- 2020 ~ 25%
- 2030 ~ 33%
- 2040 ~ 40%
- 2050 ~ 45%

To meet the target for local food production and diversification, market demand must drive agricultural land uses that reflect a proportional share of recommended dietary needs (i.e. balanced production of fruit, vegetables, dairy and protein). A necessary requirement for allocating agricultural land uses for various food types is to ensure that there is market demand for a full range of foods. Innovative methods in intensive food production, such as land based aquaculture, present improved opportunities to significantly increase local food production (Including items such as wine, beer, and spirits).

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. In partnership with local community organizations, the CVEDS, establish a Comox Valley Food Policy Council (CVFPC) to lead the work on a sustainable food system in a multi-stakeholder manner. The CVFPC would be the central coordinating agency across	Short-term

¹⁵ Assuming a decrease in overall meat consumption.

ACTIONS	
Agency	Priority
governments, other agencies and community groups to lead the development of food strategies, research on food issues, connecting food stakeholders and other roles. Local governments need to allocate basic initial funding until the CVFPC can establish its own sources of funding.	
b. Building on past work done on agriculture and food in the Valley, develop a sustainable food strategy for the Valley that addresses: <ul style="list-style-type: none"> a. Agricultural production and land management; b. Aquaculture; c. Food processing industry opportunities; d. Wholesale and retail networks; e. Food services industries; f. Agro tourism; g. Education on food issues and industries; h. Celebration of the Valley's food culture; i. Solid waste management systems; j. Economic opportunities for all aspects of the food system; and k. Many others. 	Short-term
c. Within the RGS planning process and as part of OCP reviews, develop parallel policies to manage growth and preserve farmland for farming with a focus on food production farming.	Short-term
d. Review and create a resource report on the best policies and practices that other communities have implemented to increase local food production.	Medium-term
e. Work with environmental groups, provincial ministries and local educational institutions to develop progressive policies for agricultural land interface with both natural and settlement areas, considering how best to integrate agriculture with wildlife, urban edge, and recreation areas.	Medium-term
f. To promote efficient composting, nutrient recycling and waste management within the food system, work with regional solid waste management facilities, processing facilities, farmers and others to create an efficient regional 'waste' nutrient cycling stream for agriculture.	Long-term
g. Promote the integration of non-timber forest based food production such as mushrooms, maple syrup and others into forest and rural land management, including these considerations in regional and rural planning work where appropriate. Promote education on forest-based agriculture across the community and with key stakeholders regarding forest lands.	Long-term

ACTIONS	
Agency	Priority
h. Identify a key staff contact to work with food initiatives and to serve as a liaison for Councils, the Regional Board, management, the CVEDS and individual groups on food related issues. In the interim, this can be the regional contact for sustainability initiatives.	Short-term
i. Explore funding strategies (e.g. working with the province) to increase staff capacity for food system planning and coordination at the local government level.	Short-term
j. Incorporate local food goals into OCP updates and local neighbourhood area plans.	Ongoing
Community Organizations (including a CV Food Policy Council)	
k. Undertake a comprehensive food system assessment to identify assets, ways to increase production capacity and overall food security issues. Pursue a range of funding sources, including private industry, foundations and government grants.	Short-term
l. Create and support a master gardening group, in conjunction with educational institutions, to share skills and provide educational opportunities in food production.	Medium-term
m. Establish a local seed bank and include an educational outreach component on the importance of preserving seed diversity in agriculture.	Short-term
n. Work with conservation organizations to create a Comox Valley agricultural land bank that can make agricultural land available to new farmers or managed as community farms.	Medium-term
o. Continue to promote food festivals, such as multicultural food events to promote indigenous, traditional, and cultural foods.	Ongoing
School Board and North Island College	
p. Carry out a research project on the capacity of the Valley's agricultural land to produce a proportional amount of vegetables, protein, grains, etc., as is required for a healthy diet and develop an understanding of what will need to continue being imported (e.g. grain from the prairies). Consider including as part of a food assessment and address both the market economy and subsistence economy realities.	Short-term
q. Increase the availability and specialization of extension education services and courses for new and existing farmers. Offer educational	Medium-term

ACTIONS		
Agency		Priority
	opportunities for people wanting to learn how to farm.	
r.	In collaboration with local government, work to re-establish an agricultural research facility in the region.	Long-term
s.	Pursue research into innovative farm tenure and approaches to operations to make access to farming assets easier for new farmers. Work with the Agricultural Land Commission on supporting small farms (10 acres) to keep threshold costs for new farmers to a minimum.	Long-term
t.	Undertake a research project on optimal green technology to enhance local food production for a wide range of products that can assist farmers in the region to be more sustainable and competitive.	Long-term
Comox Valley Economic Development Society		
u.	Continue to promote the Comox Valley as a leader in local sustainable food and build capacity in EDS to offer increased programming and support for developing agri-food businesses to contribute both to food security and to the local economy.	Ongoing
v.	Develop stronger links between the CVEDS work on food and the community stakeholders in this area, possibly through establishing a community advisory group or other means to coordinate work together to support the local food economy.	Short-term
w.	Work with key stakeholders, including North Island College, to develop a strategy to increase the scale and prosperity of the local food industry and provide ongoing recommendations to local governments and businesses on what can be done to assist farmers and the local food industry. Include a strategic analysis of the carbon footprint of the Valley's food system and a creation of a strategy to reduce food system-related emissions.	Medium-term
x.	Work with stakeholders to promote the local seafood industry as a key sector of local, sustainable food sources and one in which the Comox Valley has competitive advantage.	Medium-term

Objective 6.1.2: Bolster the local farm and food economy.

TARGET: # of food-oriented farmers' markets distributed throughout the region that operate seasonally (May to October) and all year round:

- 2020 ~ 3 seasonal, 1 of which is all year round
- 2030 ~ 4 seasonal, 2 of which are all year round
- **TARGET:** % of farmers who have access to processing facilities within the Comox Valley (e.g. for fresh produce, grain, meat, dairy, alcohol and many others): 2020 ~ 30%
- 2030 ~ 40%
- 2040 ~ 60%
- 2050 ~ 75%

Farmers markets can also create synergy and collaboration with existing food retail outlets; partnerships or supportive relationships should be pursued where possible. The cost of land and other core inputs to agriculture are some of the main challenges to farming and creative efforts are required to increase local production.

In order to increase local food production for local consumption the necessary provisions are farm infrastructure (i.e. water, soil, and drainage), processing facilities and storage, as well as distribution networks for Comox Valley foods. Increased infrastructure capacity will help promote primary production and value added products (including distilleries, meat processing, etc.).

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Ensure that all new large developments have a public open space that is capable of supporting a farmers' market in the future, including appropriate infrastructure (e.g. loading zones, washroom access, water, and electricity).	Short-term
b. Continue to work with the Farmer's Market Association to support the development of a permanent farmers' market.	Short-term
c. Ensure local planning (OCPs, etc.) address food issues and ensure sufficient land and incentives exist to encourage the growth of local food processing facilities and industries, including those for seafood.	Medium-term
Comox Valley Economic Development Society	
d. Develop an effective contact and interaction system with the region's farmers, food industries, and other food stakeholders to support collaborative work to enhance the local food industry.	Short-term

ACTIONS	
Agency	Priority
e. As part of a sustainable food strategy and working with the Farmer's Market Association, outline a plan to further promote farmer's markets and other points of access to the local food supply, including the development of policy recommendations to other levels of government.	Short-term
f. Promote and provide information to assist in local food procurement by businesses and institutions in the Valley.	Medium-term
g. Connect the farmers' market initiative to groups and projects promoting tourism in support of the region as a world class food destination.	Medium-term
h. Help connect farmers to existing senior government support programs (e.g. Environmental Farm Plan and others), including working with the Farmers' Institute to address key issues in farming in the Valley.	Short-term
i. Lobby provincial government to amend regulations to be more supportive of small scale, local abattoirs and other key processing facilities.	Short-term
j. As part of a food system assessment, determine gaps and assets in the local food processing, distribution and storage infrastructure, and develop a strategy for enhancing this infrastructure to meet regional sustainability goals.	Medium-term
k. Work with stakeholders and governments to promote the growth of the local food processing industry.	Medium-term
l. Develop an enhanced marketing system to distribute local foods through existing marketing channels. (i.e. grocers, butchers, restaurants) to promote the success of small - medium scale farms.	Medium-term
School Board and North Island College	
m. Establish a coordinated recruitment and retention program for farmers that offers a continuity of services from apprenticeships to ongoing education for established growers and food processors. This can possibly occur in conjunction with provincial government employment programs.	Medium-term

n. Develop a Comox Valley center of excellence in sustainable food systems, including partnerships amongst various levels of government and various educational institutions, including a sustainable food and agriculture research facility. Address global food issues, climate change, emergency food supplies and many other key issues as part of this initiative.	Long-term
o. Incorporate First Nations organizations, perspectives, history and experts into educational opportunities around local food.	Long-term

Objective 6.1.3: Local food products are labelled and made available at government facilities, schools, health-care facilities, grocery stores and restaurants.

TARGET: % of food stores/purveyors that carry or serve a significant amount of local and Island “sourced and labelled” fruits, vegetables, nuts, meat, shellfish and fish:

- 2020 – 40%
- 2030 – 60%
- 2040 – 80%
- 2050 – 100%

Challenges to meeting this target are related to the ability of stores to source non-local food products at lower prices than locally grown foods. Exploration of strategies to ensure that local growers are fairly compensated and that stores are able to access and sell local products within a reasonable price range are needed. Increased consumer awareness of the benefits of buying local is helpful; however, price remains a strong driver of consumer choice. Rising fuel prices for the shipment of imported food products may indirectly increase the demand for local products over time. The reliable and sufficient supply of local food products will require extensive local processing, distribution & storage infrastructure and continued work is required on many fronts to establish this infrastructure. In addition, an efficient “labelling program” will be required.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Implement an initiative to work with local food producers to enhance their ability to compete effectively for local government food procurement contracts. Government procurement contracts are governed by trade agreements that may need to be dealt with regarding favouring “local” procurement or suppliers.	Medium-term

ACTIONS	
Agency	Priority
b. Where social assistance is being delivered to low income residents, work with agencies and the Provincial Government to include farmer's market vouchers as part of the support where possible.	Medium-term
Comox Valley Economic Development Society	
c. Implement a buy local food initiative that includes a local supplier brand label on locally produced products. Where possible, coordinate with provincial labelling initiatives.	Medium-term
d. Launch an 'Eat Local' program through a local government and non-profit partnership that promotes awareness, support and consumer purchasing decisions in favour of locally produced food.	Medium-term
e. Work with local food retailers and restaurants to connect them to local food suppliers in an effective and productive manner. Provide information on demand that new farmers or food industry businesses can access easily to encourage participation.	Medium-term
f. Host an annual food producer/purchaser trade show to connect local producers to consumers and the rest of the industry, possible working with the Chef's Collaborative, restaurant associations and others.	Medium-term
Local Businesses / Chamber of Commerce	
g. Continue to promote locally produced food in stores, restaurants, food services and tourism experiences.	Short-term

Objective 6.1.4: Require that all new neighbourhoods integrate local food system considerations into their design (Agricultural Urbanism¹⁶) and support work to ensure that the urban agricultural capacity of existing neighbourhoods (particularly multi-residential) is increased.

TARGET: % of multi-residential developments that offer a garden plot and supporting facilities on site (or in a community garden on private or public land within 400m) with sufficient sun and support facilities for at least 50% of its units:

- 2010 ~ 25%
- 2015 ~ 50%
- 2020 ~ 75%
- 2030 ~ 100%

TARGET: # of “food precincts” in the Comox Valley where food is a central theme for a mixed-use development project, possibly including the ability of people to buy direct from multiple farmers (farm gate cluster) and to participate in food events:

- 2020 ~ 1
- 2030 ~ 2
- 2040 ~ 3
- 2050 ~ 4

Over the past few decades agricultural systems and practices have become disconnected from urban environments and from the majority of residents in many communities. Beneficial circumstances that will support the implementation of these targets are a growing movement to reconnect citizens to growing food on or near their property through new technology, policies and education. A new movement of Agricultural Urbanism is starting in BC to better integrate food systems into community and development planning.

Elements of a food precinct include:

- Commercial storage and processing facilities for local farm products.
- Supported by a Centralized distribution hub where multiple farmers may combine and distribute their goods from, thereby enabling wholesale purchasers to obtain the quality and quantity of local foods necessary for restaurant operations and institutional procurement, among others.
- A permanent farmers market where retail and direct marketing of locally farmed products may be sold.
- Office space for non-profit organizations and small businesses associated with the local food and agriculture program of the precinct.
- Visible community kitchens, labs, and community education areas for facilitating seminars on how to grow, process, prepare and maximize fresh, healthy local food experiences.
- Café and or restaurant that has a locally sourced menu and is a social environment for people to gather and experience the enjoyment of delicious foods and vibrant communities.

¹⁶ Agricultural Urbanism is an all-encompassing planning and design framework that combines sustainable community ideas and design strategies as well as the growing practices of urban agriculture and sustainable food systems: www.agriculturalurbanism.ca.

- Community event areas that provide space for events and celebrations around food and agriculture.
- Authentic architectural and landscape character where buildings, public realm and landscape visibly demonstrate elements of each community associated with the precinct uses.
- Residential in areas where a neighbourhood food precinct has been built into new development.
- Food recovery and waste collection.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop policies and guidelines to support community gardens in multi-residential developments, including addressing the need to locate community gardens in public park areas when access to sun and land in a multi-family private development will not be sufficient.	Short-term
b. Develop guidelines for developers on ways they can incorporate food productivity within new development projects and to support the enhancement of urban agriculture capacity in existing neighbourhoods.	Short-term
c. Support the inclusion of food systems goals, policies and opportunities into OCPs and local area plans.	Short-term
d. Explore tools to ensure that during the approvals processes for new developments, no prohibitions can be later placed on food production by strata councils or others. Prohibit strata by-laws that limit food production in multi-residential projects.	Short-term
e. Permit the use of fruit trees and perennial food crops in parks and other public spaces where appropriate, with consideration to liability, management and wildlife issues.	Short-term
f. Work with a wide range of food and development stakeholders to develop an “agricultural urbanism” strategy to identify opportunities for food to be a key feature in new developments (particularly those adjacent to agricultural land).	Medium-term
g. Review and amend land use guidelines to offer farmers a wide variety of value-added and secondary business activities within agriculturally zoned areas to enhance viability of small farms.	Medium-term

Comox Valley Economic Development Society

h. Work with the Real Estate industry, architects, landscape architects and developers to create an award for the best integration of sustainable food systems into a development project.	Medium-term
i. Explore economic opportunities associated with developing a number of “food precincts” (possibly specializing in certain types of food) that become key destinations for local food system activity (production, retail, education, events, and others).	Medium-term
j. Create a fund for pilot projects that showcase innovative, green urban agriculture initiatives (e.g. community gardens, permaculture demonstration sites, school yard gardens).	Medium-term

Community Organizations

k. Promote the conversion of lawns or unused garden spaces to food gardens where appropriate.	Short-term
l. Provide strata councils with resource packages for how to effectively manage food gardens in multi-residential developments.	Medium-term
m. Develop an annual awards system for the “best converted lawn to edible garden space” and other initiatives that promote grassroots initiatives for local food production.	Medium-term

North Island College

n. Launch an urban agricultural training program for people who want to learn how to garden in smaller urban spaces.	Medium-term
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Objective 6.1.5: Increase community and youth education on food production, harvesting and healthy eating.

TARGET: % schools that have food gardens and on-site composting as part of school grounds:

- 2020 – 50%
- 2030 – 100%

TARGET: % schools that have an educational component on healthy and sustainable food as part of required curriculum:

- 2020 – 80%
- 2030 – 100%

School grounds are an optimal location for food systems education. There is a good case for prioritizing funding for food systems education because of multiple positive outcomes including health and wellness, science and art education opportunities, and skills development. Extensive resources exist to support these initiatives.

ACTIONS	
Agency	Priority
School Board and North Island College	
a. Develop a Regional Food and Schools Strategy to coordinate the phasing in of a wide range of sustainable and local food system elements into school facilities and curriculum. Include exploration of opportunities for the inclusion of locally produced food in school cooking classes and cafeterias.	Short-term
b. Launch a speaker series with experts in sustainable food systems to build interest, knowledge and energy on the potential for expanding local food systems.	Short-term
c. Disseminate information on school ground gardens currently available to all schools in the Valley and host an educational workshop with them to explore opportunities to promote sustainable and healthy food systems through the schools. Consider including food systems education in Professional Development days for teachers.	Short-term
d. Work with food stakeholders to develop an educational program on healthy, local food systems (e.g. for-credit high school education in agricultural/food production).	Medium-term
e. Develop curriculum and kits with gardening and ethnobotany materials for use in schools, working in collaboration with local NGOs.	Medium-term
f. Set up an agri-food skills training program through partnerships with the province and other various stakeholders.	Long-term
g. Establish apprenticeships in sustainable food production through a public/private/non-profit partnership and in conjunction with provincial apprenticeship programs.	Long-term
h. Work with stakeholders to find funding and support for assessment, design and implementation of community-wide educational programs on food systems, available to all residents.	Long-term

Goal 6.2: Increase the ecological sustainability of the local food system.

Objective 6.2.1: Improve the ecological sustainability of local food systems through increasing energy efficiencies, improving land stewardship practices, and limiting or recycling waste.

TARGET: % of farms and processors that produce net zero waste through use of innovative methods to compost organic waste and manage packaging and other materials:

- 2020 – 40%
- 2030 – 60%
- 2040 – 80%
- 2050 – 90%

Chemical inputs to the food system can be harmful to both the environment and human health. In addition, their production is often energy intensive. Emerging farming systems are reducing the use of chemical inputs through referencing pre-industrial farming techniques and using new technology.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. As part of solid waste and water management plans, develop a strategy for promoting safe nutrient and water cycling for agricultural waste streams.	Short-term
Comox Valley Economic Development Society	
b. Work with food industry stakeholders and the provincial government to develop a resource center for the food industry that connects farmers and food industry companies to the full range of support currently available and promotes additional support as needed.	Short-term
c. Work with the province to improve and expand the Environmental Farm Plan Program and the farmers in the region.	Ongoing
d. Work with SPCA to promote awareness of its ethical farming guidelines.	Medium-term
e. Promote and coordinate the development of links between farmers and food processing industry stakeholders with waste management and environmental agencies, to improve recycling of wastes for conversion to agricultural uses.	Medium-term

Provincial Government	
f. Promote organic and natural production methods by offering a range of incentives for transitioning from conventional to organic farms.	Medium-term
School Board and North Island College	
g. Provide educational programs on leading sustainable agricultural trends including organic or natural agricultural practices, low/no till agriculture and food industry product / packaging stewardship.	Medium-term
h. Provide educational opportunities to farmers on value-added opportunities for increased profitability in their farming businesses.	Medium-term



7.0 Social & Community Well-Being

VISION

The Comox Valley is a caring, integrated community where people of mixed income, mixed capacity, and mixed background, live and work together with a great quality of life in accessible, diverse neighbourhoods.

SUSTAINABILITY PERSPECTIVES

A socially sustainable environment encourages all individuals to contribute to the well-being of the entire community, drawing upon a shared foundation of education, skills and leadership. Strengthening relationships between organizations, services and individuals increases the ability of our community to function harmoniously and to our highest capacity in the face of any and all challenges.

Overall the Comox Valley has many community health oriented groups and initiatives, but they are not well integrated and coordinated at this time. In addition, their connection to local governments is limited. Improved coordination will help achieve the desired goals for social sustainability.

The number of goals for social and community well-being is significant and access to sufficient resources is a constraint. Working together, sharing resources and developing a strong volunteer base will be central to achieving the Valley's community health and vitality goals.

GOALS, OBJECTIVES, TARGETS, ACTIONS

Goal 7.1: All Comox Valley residents are safe and have basic needs¹⁷ met.

Objective 7.1.1: Increase the social planning capacity in local governments in the Comox Valley and the integration of social planning objectives into community planning.¹⁸

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Explore the possibility of establishing a multi-stakeholder group, with participation from all local governments, to monitor and address key social issues and initiatives over time, and to provide updates and recommendations to all levels of government on needs and opportunities. Resources for this function will need to be shared across all jurisdictions and partnerships with social-oriented agencies, stakeholders and NGOs is essential to keep costs reasonable.	Short-term
b. Work to acquire funding to create an inter-jurisdictional social planning staff position that would include coordinating policy development and working to secure funding for social facilities and programs. This position can be linked to the regional social planning group identified at the beginning of this section.	Short-term
c. Develop a regional Social Programs and Facilities Strategy that outlines equitable investment and access to social services and maximizes the public benefits from the total investment of all governments in social programs and facilities.	Medium-term
d. Undertake a social needs assessment, including the identification of funding needs and potential sources, and review existing facilities and programs to ensure that they meet social planning needs and goals of the region.	Medium-term

¹⁷ Basic needs include food, water, clothing and shelter.

¹⁸ Social programs and facilities enrich the lives of individuals in a community by providing accessible, responsive services such as employment assistance, housing, volunteer, health care, and counselling.

Objective 7.1.2: All residents of the Comox Valley have adequate housing.

TARGET: Homeless population in Comox Valley¹⁹:

2020 – 50% fewer than 2009

- 2030 – No homeless people in the Valley

TARGET: % of new homes/units that are designed according to the principals of Universal Design²⁰ and meet level 1 accessibility criteria:

- 2020 ~ 10%
- 2030 ~ 15%
- 2040 ~ 20%
- 2050 ~ 25%

There were approximately between 200-300 people who were homeless or without secure housing of any type²¹ in 2009. The targets are focused on these basic housing needs. Action on these targets will involve all levels of government as well as non-profit groups, charities, churches and others. The Housing and Land Use chapter speaks to a wider range of housing issues, including diversity of housing types, complete neighbourhoods, and basic levels of housing affordability.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Work to reduce homelessness in the Valley in a cross-jurisdictional and integrated manner, including addressing the recommendations of the Comox Valley Task Force on Homelessness.	Ongoing
b. Develop both mandatory and voluntary Adaptable Design Guidelines to increase the availability of accessible housing to ensure it addresses the needs of a growing elderly population.	Medium-term
c. Pursue a pilot project on innovative housing for the homeless.	Short-term
d. Continue to access funding and grants for innovative approaches to affordable and non-market housing.	Ongoing

¹⁹ This strategy recognizes that there may be a small number of individuals who prefer not to utilize housing, even after it is made available.

²⁰ The principals of universal design are provided by The Center for Universal Design:
http://www.design.ncsu.edu/cud/about_ud/udprinciples.htm

²¹ Source: Task Force on Breaking the Cycle of Mental Illness, Addictions and Homelessness in the Comox Valley, March 2008.

Objective 7.1.3: Safety services are provided to all residents to ensure appropriate, responsive security, and crime reduction, including crises services and restorative and community justice approaches.

TARGET: % of reduction in crime rates (all types) from 2009 (recognizing variance amongst rates of various crimes):

- 2020 – 5%
- 2030 – 10%
- 2040 – 15%
- 2050 – 20%

TARGET: % of new developments larger than 10 residential units or 10,000 sq ft of commercial space that complete a basic Crime Prevention Through Environmental Design (CPTED) analysis prior to construction:

- 2020 – 25%
- 2030 – 50%
- 2040 – 75%
- 2050 – 95%

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Work with the RCMP to discuss sustainability goals and strategies to work together to achieve these goals.	Short-term
b. Develop regionally consistent CPTED design guidelines and requirements for use in development planning and approvals.	Medium-term
Community Organizations	
c. Work together to highlight issues and develop strategies to increase safety for all residents and visitors with additional attention to women and children, visible minorities, trans-gendered residents, physically and mentally challenged residents, the homeless and others who may be at risk.	Medium-term
d. Work towards regional cooperation through discussion around provision and location of special needs residential facilities (e.g. addiction recovery centres).	Ongoing

Objective 7.1.4: Effective emergency health response services are provided for all residents.

TARGET: % of neighbourhoods that have an emergency response plan (for natural or human-made disasters) that is in place in at least 50% of the neighbourhood's households:

- 2020 – 30%
- 2030 – 45%
- 2040 – 65%
- 2050 – 85%

TARGET: % of households that have basic emergency preparedness kits²²:

- 2020 – 25%
- 2030 – 50%
- 2040 – 60%
- 2050 – 85%

These targets focus on increasing the ability of residents to quickly respond to emergency situations with a minimum of injury or loss of life. An organized neighbourhood and household response, in addition to municipal emergency services, can increase community resiliency to disasters. The Comox Valley Emergency Program's²³ education program on creating emergency preparedness kits started in the mid-90's. The target for the education program was 1000 residents per year. It's estimated that approximately 14,000 residents have received the training to date.

ACTIONS	
Agency	Priority
Comox Valley Emergency Program	
a. Undertake ongoing communications to residents, businesses and schools to raise the level of awareness of the Comox Valley Emergency Program and of how residents can prepare themselves.	Ongoing
b. Develop and source funding for citizen emergency response teams in all neighbourhoods as key contacts with municipalities to increase responsiveness in emergency situations.	Ongoing
c. Set up neighbourhood workshops to meet with residents and discuss local emergency response plans and recommended supplies.	Ongoing

²² Basic survival supplies necessary for an individual or family to be self-sufficient for 72 hours in a major community disaster.

²³ CVEP website: http://www.rdc.bc.ca/section_comserv/content.asp?id=1689&collection=80

d. Review the Comox Valley Emergency Program to ensure that possible impacts from climate change or other global environmental trends are addressed.	Medium-term
e. Establish an emergency response training program to raise the capacity of residents to respond to emergencies including schools, workplaces and others. Ensure coordination with provincial agencies responsible for emergency programming.	Medium-term
f. Partner with local schools to promote emergency kit preparation for students.	Medium-term
g. Implement a communications initiative to raise awareness of emergency issues and response strategies (consider the use of social media for this initiative e.g. twitter, facebook, blogs). Ensure that low-technology communication methods are included, as city or regional disasters have the potential to interrupt access to modern communication technology.	Long-term
h. Set up a program to conduct neighbourhood mock emergency response exercises.	Medium-term
Comox Valley Regional District and Local Municipal Governments	
i. Examine the tools such as residential sprinkler systems to reduce fire risks across the region.	Medium-term
Vancouver Island Health Authority	
j. Research the amount of access to crisis, mental health, and addiction services currently available, and set targets to increase these services, as necessary.	Ongoing
Comox Valley Economic Development Society and Chambers of Commerce	
k. Work with businesses to develop emergency response and overall resilience plans to maintain the highest level of business function possible through any potential disaster scenarios for the Valley.	Medium-term

Objective 7.1.5: All residents have access to sufficient food to meet the basic requirements of a healthy diet.

TARGET: % of residents that have access to sufficient food to meet daily food requirements:

- 2020 – 99%
- 2030 – 100%

There are many root causes of hunger (particularly for children) including low household income, mental illness, and sudden changes in family structure. Meeting this target will require a coordinated effort from many agencies and stakeholders. Hunger count for the Comox Valley in March 2009: 707 households used the Food Bank to feed approximately 1434 people.²⁴

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Ensure that food security is addressed as part of a regional Sustainable Food System strategy.	Medium-term
School Board	
b. Continue to ensure that all students have sufficient access to healthy food and work with community stakeholders to increase the response to students in need.	Ongoing
Community Organizations	
c. Undertake a research project on food security to establish a greater understanding of local food security and related issues. Ensure that the project addresses food distribution issues.	Short-term
d. Support food recovery agencies and outline a path to implement and expand food recovery and direct surplus food to those in need.	Short-term
Comox Valley Economic Development Society	
e. Working with the Chambers of Commerce and other stakeholders, encourage businesses to support food banks and the channelling of potentially wasted food to those in need.	Medium-term

²⁴ Comox Valley Food Bank

Goal 7.2: Promote health and wellness for all residents.

Objective 7.2.1: Community awareness and the built environment support healthy, active living.

TARGET: % of increase in the number of residents classified as active or moderately active: ²⁵

	Aged 12 – 19 years old (from 2001 level of 59%):	Aged 20 – 64 years old (from 2001 level of 41%)	Aged 65+ years old (from 2001 level of 34%)
2020	5%	10%	5%
2030	10%	20%	10%
2040	15%	30%	15%
2050	20%	40%	20%

An Active Comox Valley initiative began in September 2005, aimed at promoting healthy lifestyles and invigorating community spirit through physical activity. This target builds on the success of this program and encourages further increases in active living, recognizing the positive impacts that active lifestyles can make on health and increasing social capital.²⁶

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop a strategy to increase awareness on health and wellness, encouraging healthy lifestyle choices and ensuring a focus on healthy living for all residents.	Medium-term
b. Support efforts to raise the profile of health, wellness and active living in schools.	Ongoing
c. Continue to support work by other organizations on health and active living (e.g. bike to work week).	Ongoing
d. Work with stakeholders such as the BCRPA, the school district and the regional Medical Health Officer to increase public awareness of programs on health, wellness and active living.	Ongoing

²⁵ 2000/01 Canadian Community Health Survey

²⁶ Social capital refers to shared values, understanding, and connection that facilitate cooperation within or among individuals and groups.

e. Initiate a pilot project that showcases how the Built Environment can encourage Active Transportation (BEAT), building on the leadership and resources of the BC Recreation and Parks Association and other organizations.	Medium-term
f. Develop policies on the Built Environment and Active Transportation (BEAT) for new developments.	Short-term
g. Provide incentives for public employee fitness/wellness programs (e.g. bike lock up, showers).	Medium-term
Community Organizations	
h. In partnership with local governments, develop a recreation strategy that supports a high quality of life for all residents.	Medium-term

Objective 7.2.2: Health care facilities meet the needs of the residents.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Work with VIHA, the province and other stakeholders to locate a new hospital and other medical facilities in a location that can be easily served by transit and offers employees and visitors a range of amenities surrounding the location.	Short-term
Vancouver Island Health Authority	
b. Create a community health task force or committee that connects community, local government stakeholders and other agencies to identify and respond to health needs of the population over time.	Short-term
c. Work with the school district, VIHA and other partners (e.g. Ministry of Children and Family Development, Salvation Army, churches, BC Housing) to create community health centres in areas where they are needed (consider utilizing existing buildings).	Long-term
d. Support additional detox, rehabilitation and mental health facilities.	Ongoing

Community Organizations and Educational Institutions	
e. Create design guidelines that support the incorporation of principles of “healing gardens” for appropriate developments (e.g. medical facility grounds, retirement community area, or public park) and make recommendations to local governments on how they can incorporate healing garden approaches into public and private development landscapes where appropriate. North Island College should be seen as a location and leader for a healing garden pilot project.	Medium-term
f. Work with the school board, North Island College and local post secondary institutions to promote health care and wellness, including First Nations food and medicine.	Medium-term

Goal 7.3: Residents participate in the community and governance process.

Objective 7.3.1: Promote involvement in community activities.

TARGET: % of adult residents volunteering in some form in their community for at least one event or group per year:

- 2020 ~ 15%
- 2030 ~ 20%
- 2040 ~ 25%
- 2050 ~ 30%

Volunteerism helps to increase social capital, strengthening bonds between individuals and groups. There is already a strong precedent of volunteering in the Comox Valley to build upon. VolunteerBC lists the Comox Valley as having 4,000 volunteers in 2009 (approximately 6% of the population are formally registered as volunteers).

ACTIONS	
Agency	Priority
Comox Valley Regional District and Municipal Governments	
a. Continue to encourage public involvement in community planning and decision making processes and support “Volunteer Comox Valley.”	Ongoing

Community Organizations	
b. Provide support for skills and capacity building for local non-profit organizations to maximize effectiveness and volunteers.	Ongoing
c. Continue to recognize and award volunteers for their efforts.	Ongoing
d. Work with non-profit and volunteer groups to develop a “volunteer” strategy that looks at community needs, strategic alliances, and shared support opportunities for increasing volunteerism in the future.	Medium-term
e. Partner with local non-profit organizations to ensure safe environments for cross-cultural and cross-generational learning.	Ongoing

Objective 7.3.2: Increase the number of residents participating in community processes.

TARGET: % of residents who will have participated in a community planning or decision-making processes per year:

- 2020 ~ 10%
- 2030 ~ 20%
- 2040 ~ 25%
- 2050 ~ 30%

TARGET: % of residents who vote in municipal elections²⁷:

- 2020 ~ 70%
- 2030 ~ 80%
- 2040 ~ 85%
- 2050 ~ 95%

ACTIONS	
Agency	Priority
Comox Valley Regional District and Municipal Governments	
a. Support the creation of a network of neighbourhood sustainability coordinators that can advise and update local governments on sustainability progress and be a key neighbourhood-scale liaison for sustainability and other initiatives. Explore the use of various social media mechanisms to coordinate and communicate with this network.	Short-term

²⁷ Voter turnout in Comox Valley municipal elections since 2005 has ranged from 24% - 61% (Comox Valley 2009 Quality of Life Report).

b. Develop a portal website that lists all major public consultation processes that are underway in the region to improve awareness, ease of reference and access.	Medium-term
c. Develop region-wide consultation guidelines for development projects that go beyond public open houses to stimulate discussions and provide an avenue for feedback from a broad range of the population.	Medium-term
d. Create a Valley-wide youth advisory committee with appropriate resources to link all organizations working with youth and to create an avenue for youth input on political and community issues.	Medium-term
e. Develop strategies for engaging under-represented sectors of the population (all age groups and minority demographics) in community processes.	Medium-term

Objective 7.3.3: Increase the profile and involvement of Comox Valley First Nations in all planning and decision making processes, as well as in the economy and local cross-cultural events.

Gaining perspectives of First Nations and openness to learning from First Nations approaches to planning and governance are key to achieving community sustainability.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop a protocol for discussion, consultation and decision making with local First Nations groups for all local governments, agencies, institutions and larger development projects to use.	Ongoing

Goal 7.4: Maintain a high level of overall educational achievement and provide extensive education on sustainability issues.

Objective 7.4.1: Increase the graduation rates in the Valley²⁸.

TARGET: % of students who start grade 8 who graduate from high school:

- 2020 ~ 75%
- 2030 ~ 80%
- 2040 ~ 85%
- 2050 ~ 95%

TARGET: % of population who have a basic understanding of sustainability, including local and regional sustainability initiatives:

- 2020 ~ 65%
- 2030 ~ 75%
- 2040 ~ 85%
- 2050 ~ 90%

Education is a key driver of quality of life and for meeting sustainability goals through increasing support for and involvement in innovative local government initiatives.

ACTIONS	
Agency	Priority
School Board and North Island College	
a. Continue to work with the community and stakeholders to support students who need assistance and help to complete high school.	Ongoing
b. Develop a sustainability education initiative to ensure all students receive education on sustainability issues, including local and global approaches and projects.	Short- term
c. Develop programming that encourages and supports students in pursuing post-secondary education after high school graduation.	Medium-term
Comox Valley Regional District and Local Municipal Governments	
d. Create a sustainability education and leadership program, informing residents about projects underway and opportunities to get involved.	Short- term

²⁸ There was a 71% graduation rate in the Comox Valley in 2006. Source: Comox Valley 2009 Quality of Life Report.

e. Create a website on sustainability that outlines initiatives and allows organizations to provide resources and updates. This website could be based on the Comox Valley Sustainability Strategy.	Short-term
Community Organizations	
f. Work with schools and North Island College and other post-secondary institutions to develop information and education programs on sustainability.	Medium-term

Goal 7.5: Enhance the profile of arts and culture in the community.

Objective 7.5.1: Promote arts and culture capacity in the Comox Valley.

TARGET: % of increase in municipal investment for arts and culture.

- 2020 ~ 5%
- 2030 ~ 10%
- 2040 ~ 15%
- 2050 ~ 20%

Cultural practices in a community are unique and broadly defined, and include diversity, spiritual practices, and the customs of various cultural groups.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Work with arts and culture stakeholders to develop an overall multi-jurisdictional Arts and Culture Strategy for the region, including coordinating regional facilities and promoting arts throughout the Valley.	Short-term
b. Investigate the inclusion of a public art levy as part of development cost charges (DCC) to support local art for any large new development project.	Short-term
Community Organizations	
c. Continue to support visual arts, culture, performance and the overall profile and awareness of local artists and the arts.	Ongoing
d. Work together to develop resources to support many different types of artists and art organizations regarding accessing funds and enhancing their economic success.	Medium-term

Comox Valley Economic Development Society	
e. Integrate the rich artistic resources and offerings into the brand and promotion of the Comox Valley as a great place to live.	Ongoing
School Board and North Island College	
f. Continue to promote arts and culture in the educational system and work to connect students to artists directly, including the North Island College / Emily Carr Institute of Art and Design partnership.	Ongoing



8.0 Local Economic Development

VISION

The Comox Valley has a diverse and sustainable economy and is a leader in innovation, cooperation, and a managed response to growth.

SUSTAINABILITY PERSPECTIVES

Businesses often need some assistance in identifying and implementing what they can do to become more sustainable. This is particularly true of small businesses with few extra resources. This chapter focuses on things that can be done to raise the bar on sustainable economic performance throughout the region. Initial investments by businesses to increase performance of sustainability objectives can sometimes (although not always) bring added costs and businesses should be encouraged to consider the long-term cost savings of greening their operations. As the two primary organizations engaged in economic development work, the Comox Valley Economic Development Society and Chamber of Commerce are identified as the primary leaders and coordinators for much of the work in this section, in partnership with other groups and governments.

GOALS, OBJECTIVES, TARGETS, ACTIONS

Goal 8.1 Economic development increases performance on sustainability objectives.

Objective 8.1.1: Develop a widespread level of knowledge and implementation of green business practices.

TARGET: % of businesses that have policies or practices on sustainability performance (including climate emissions) to meet provincial and international targets:

- 2020 ~ 50%
- 2030 ~ 70%
- 2040 ~ 90%
- 2050 ~ 100%

TARGET: % of emissions reduction per GDP in the Valley’s economy (emissions intensity) from 2007 levels:

- 2020 ~ 50%
- 2030 ~ 60%
- 2040 ~ 70%
- 2050 ~ 80%

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Refine the mandate for the CVEDS to include the mandate of promoting sustainability in the CV economy and its businesses, including promoting climate change emission reductions in businesses and coordinating associated initiatives and Task Forces.	Short-term
b. Consider creating a Sustainable Economic Development Task Force, coordinated by the CVEDS to oversee the research, education promotion, and monitoring of sustainability initiatives and performance in the Comox Valley economy.	Short-term
c. Update economic development strategies to include sustainability and sustainable prosperity as a central premise informing all areas of business development.	Short-term

d. Monitor the percentage of emissions reduction per GDP per capita in the Valley's economy.	Ongoing
Comox Valley Economic Development Society	
e. Undertake regular consultation with local businesses on green business practices and sustainability overall.	Ongoing
f. Develop resources and guides around green business practices to be distributed to all local businesses through various media channels to address how to make the following aspects of a business more sustainable: <ul style="list-style-type: none"> a. Company strategy; b. Services and goods offered; c. Equipment and vehicles; d. Facilities and buildings; e. Human resources management; f. Financial strategies; g. Materials management; h. Product stewardship and packaging management; i. Procurement policies; j. Supply chain management; k. Marketing strategies and practices; and l. Others. 	Short-term
g. Establish a monthly speaker series on green business practices with additional deployment of the information through various forms of media to reach a large audience.	Short-term
h. Create a Triple Bottom Line reporting framework for economic development initiatives promoted by all governments.	Medium-term
i. Host workshops or other educational events with tourism business owners to explore opportunities for green tourism business practices, local purchasing and the branding of the Valley as a center of green business.	Medium-term
j. Submit a proposal to the provincial government for support and capacity building for green business practices, as related to the provincial climate change agenda.	Medium-term
k. Hold a workshop with companies in the Valley to increase the amount of green products and services available to both the public and to other businesses.	Medium-term
l. Develop a set of recommendations for how local governments can best provide incentives to encourage sustainable business practices.	Medium-term

m. Develop a resource for businesses on the needs of a progressive and diverse workforce to support progressive practices and the attraction of businesses and entrepreneurs.	Long-term
Chambers of Commerce	
n. Monitor the percentage of businesses that have formal policies and practices on sustainability performance.	Ongoing
o. Develop a charter on sustainable business practices for local businesses to be signatories to.	Short-term
p. Continue to offer awards program for businesses to celebrate excellence in green business practices.	Ongoing
q. Continue to support and extend the success of the Chamber's plastic bag elimination program.	Ongoing

Goal 8.2: Innovative industries that support sustainable development are encouraged in the Comox Valley.

Objective 8.2.1: Encourage potential opportunities in new green business sectors, particularly those focused on reducing climate emissions.

TARGET: % increase in the Valley's GDP and employment associated with sectors (see list below) that are directly responding to new sustainable development needs and demands:

- 0.75% per year to 2050 (30% overall increase)

Establishing green businesses in the Comox Valley acknowledges the opportunity for industry to contribute to progress toward sustainability goals. Experience has shown that the additional attention paid to a business when it is addressing sustainability issues results in a better managed and more profitable business in the long run.

ACTIONS	
Agency	Priority
Comox Valley Economic Development Society	
a. Monitor the percentage of increase in the Valley's GDP and employment associated with "environmentally progressive economy sectors"	Ongoing

<p>b. Update the business and industrial inventories and identify current clusters of expertise and growth in progressive environmental sector areas in response to sustainability demands including:</p> <ul style="list-style-type: none"> • Pollution and emissions reduction • Green buildings and development • Innovative infrastructure – energy, water, wastewater, solid waste • Sustainable resource management • Green product manufacturing • Green technology • Education • Professional services 	Medium-term
<p>c. Develop a green industry attraction strategy that addresses key elements required to attract new green businesses including:</p> <ul style="list-style-type: none"> • Technology and expertise in innovations • Entrepreneurial culture • Management talent to manage growing innovative companies • Access to capital • Local markets for these innovative products and services • Proactive public policy and incentives 	Medium-term
<p>d. Support the development of financing resources and services dedicated to investing in businesses in the Comox Valley, working with Community Futures, local credit unions, banks, federal agencies and other institutions.</p>	Short to Medium-term
Chambers of Commerce	
<p>e. Explore opportunities, develop strategies and coordinate the development of “green business ecology networks” where nearby businesses work to increase performance through sharing expertise, wastes, resources, infrastructure and others in all commercial and industrial areas.</p>	Medium-term

Objective 8.2.2: Develop the economic “brand” and reputation of the Comox Valley as a leader in green industry and progressive economic development.

TARGET: % of respondents who agree/strongly agree with statements in marketing survey results that sustainable business practices and companies are a key reputation element of the Valley and that this reputation would positively influence their purchasing or business decisions:

- 2020 ~ 50%
- 2030 ~ 90%

As green businesses and technology advances in response to global challenges, there is opportunity for the Comox Valley to take a leadership role in becoming a key region for the location of green industry. Chamber of Commerce and CVEDS should partner to monitor this target.

ACTIONS	
Agency	Priority
Comox Valley Economic Development Society	
a. As part of an Economic Development Strategy update, develop a branding and marketing strategy to position the region as a leader in green business opportunities (working with the Chambers of Commerce and others).	Medium-term
b. Develop a marketing brochure and a presence on the economic development website profiling the green industry presence and potential (working with the Chamber of Commerce).	Medium-term

Goal 8.3: Economic prosperity is enhanced through local employment and the local economic multiplier effects.

Objective 8.3.1: Increase the proportion of locally produced goods in locally owned businesses that are sold in the Valley’s economy.

TARGET: % increase in the proportion of the Valley’s GDP derived from goods and services produced in the Comox Valley from current baseline:

- 2020 ~ 10%
- 2030 ~ 15%
- 2040 ~ 20%
- 2050 ~ 30%

This target aims at increasing the local economic multiplier effect and increasing the diversity and prosperity of local businesses. It is not a “trade-prohibitive” approach, but rather one of enhancing the awareness and loyalty of consumers for goods produced in the Valley.

ACTIONS	
Agency	Priority
Comox Valley Regional District and Local Municipal Governments	
a. Develop a sustainable and ethical goods and services procurement policy for all the local governments. Costs for developing this policy with a consultant can be shared by all governments.	Short-term
Comox Valley Economic Development Society	
b. Work with local suppliers of goods and services to enhance their competitiveness for meeting local government procurement requirements recognizing that local governments are somewhat restricted by trade regulations in their ability to show preference for local businesses in procurement practices.	Medium-term
c. Establish a baseline, monitor and report on the percentage of increase in the proportion of GDP derived from goods produced in the Comox Valley.	Ongoing
d. Continue to promote value added aspects of all industries in the Valley.	Long-term
e. Promote the further development of sustainable seafood and shellfish industries as an area of unique competitive advantage the Valley has in the marketplace.	
f. Explore the possibility of reporting on a ‘LDP’ (local domestic product) to measure financial growth/progress.	Long-term
g. Undertake a local economy study that maps businesses to understand sector coverage, assesses the % of money in the retail economy that is leaking outside the Comox Valley, and identifies strategies to reduce leakage and enhance local retail vitality.	Short-term
Chambers of Commerce	
h. Continue to develop buy-local campaigns that support local business, including labelling and promotion.	Ongoing

Objective 8.3.2: Streamline and harmonize local government regulations and regulatory processes to support business development and sustainable practices in businesses in the region.

The policy, regulatory, political and financial environment of the Comox Valley can be challenging to existing and new businesses due to its high number of political jurisdictions. Harmonization of governance and decision making will enhance the economic competitiveness of the Valley.

ACTIONS	
Agency	Priority
Comox Valley Economic Development Society	
a. Continue to work with local governments to review regulations to support new and existing businesses.	Ongoing
b. Continue to provide information resources and support to local businesses and entrepreneurs to establish businesses in the Comox Valley.	Short-term
Comox Valley Regional District and Local Municipal Governments	
c. Work with business stakeholders (and the EDS) to identify barriers to business activity and to collaborate on developing strategies and solutions to support local economic development.	Short-term

Section 3

IMPLEMENTATION + MONITORING

Section three provides recommendations for implementing and monitoring the Sustainability Strategy, ensuring that we meet our targets and achieve our goals.

Implementation

INTRODUCTION

The Comox Valley Sustainability Strategy represents the creativity and best ideas from many residents, businesses, organizations, local government staff and elected officials regarding how Comox Valley communities can become sustainable. However, because few of the areas of action lie with only one group, the impact of the CVSS will be dependant on all stakeholders working together.

In every chapter of the CVSS, there are recommendations for task forces or other groups to be created, convened, purposed or tasked to lead the work on sustainability in that section. These recommendations are made with the recognition that there is a central role needed to lead the work on sustainability in each area, as many actions fall outside any existing group's or government's mandate or area of responsibility.

The nature of the CVSS as a document that outlines actions for many agencies and groups suggests that those responsible for actions should be represented in a group that guides overarching implementation in order to both ensure coordination and to raise the sense of accountability for taking action.

A LEADERSHIP NETWORK

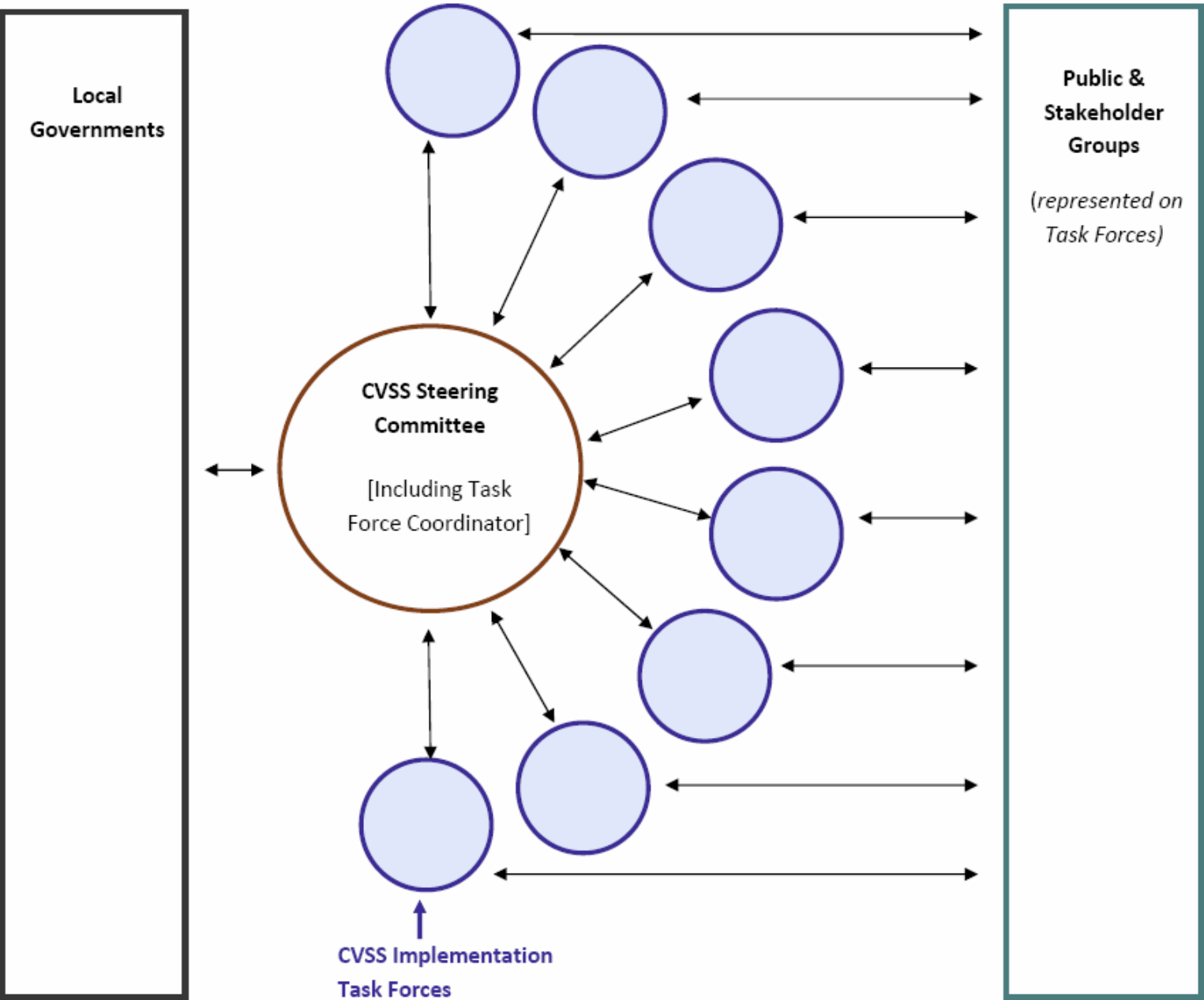
The CVSS has eight chapters and each has multiple stakeholders who will be partners in achieving sustainability objectives. In this context, the role of the local governments should be both as leaders and coordinators of these partners to support action proceeding in an effective manner.

The implementation group structure is proposed to have two elements:

A multi-government steering committee: This committee would have representatives of each of the local governments and would serve as the steering committee for implementation. This group would lead some work, assist in coordinating stakeholders in other projects, integrate work being done by each local government, and finally, monitor and report on overall progress in achieving the Valley's sustainability goals.

Multi-stakeholder committees for each area of the CVSS: A committee or task force would be created to lead the implementation of each topic in the strategy and these groups would include representatives from key stakeholders for the topic area they represent (e.g. transportation, housing, social issues, economic development, etc).

PROPOSED MODEL FOR IMPLEMENTATION



RELATIONSHIPS

The CVSS Steering Committee would seek to support and partner with other local groups wherever possible through membership on the Task Forces and through other means. The Task Forces would not be intended to replace existing groups but rather work with them in promoting sustainability and implementing the actions in the CVSS. It is probable that many of the existing groups would have representatives on the Task Forces. In addition, the Task Force can assist in building profile and awareness around what is already being done on sustainability in the community.

Significant work on sustainability is already being done by the local governments as well as by volunteers, various agencies and non-profit organizations (NGOs) in the Valley. The Steering Committee and Task Forces would work to assist in this existing work and take steps to coordinate partnerships and volunteers on sustainability projects, thereby minimizing the need for new resources. A strong relationship with post secondary institutions in the Valley can also connect professors and students to support sustainability work at no cost to the local governments while offering benefits to the students through being involved in real projects.

In addition to formal groups, the Steering Committee and Task Forces could build a network of citizen contacts in each neighbourhood to assist in dialogue and implementation in neighbourhoods. The members of the Steering Committee and the Task Forces would be appointed and invited by the respective local governments for a set period of time. Detailed terms of reference need to be developed for the Committee and Task Forces if this structure and approach is selected.

RESOURCES

The CVSS Steering Committee is proposed to be comprised of staff from each of the four local governments in the Comox Valley. While this role would add additional responsibilities to these existing staff, no new funds and resources would be required for new staff at this time as implementation commences. Their role would be to oversee the implementation of the CVSS across all four jurisdictions and to oversee the coordination of the various Implementation Task Forces. It is likely that significant resources can be attracted from senior governments, foundations and other agencies to assist in implementation and this money can support and offset any additional staff costs that may be incurred. A comprehensive plan such as the CVSS with the backing of multiple local governments is a strong foundation for pursuing funding.

An Implementation Task Force Coordinator would be one of the key roles on the Steering Committee to provide coordination, administration and secretariat roles for all of the Task Forces. This person would schedule and organize the meetings of each (monthly or bimonthly), keep minutes, assist in connecting stakeholders, lead communications and other related tasks needed to ensure these volunteer Task Forces

work as efficiently as possible. The Coordinator could be an existing staff person or a new staff person with salary costs shared appropriately by all local governments.

In order to make the significant advancements required to reach full implementation of the strategy, it is recognized that the best approach would be to create a new resource unit that would be dedicated (full time) to ensuring the sustainability agenda is pursued vigorously. An independent unit, lead by an experienced executive director is preferable. However, recognizing the financial limitations all governments are facing, it is unrealistic to expect that level of resourcing at this time. In the future, as other resources become available, this option should be considered.

MONITORING DASHBOARD

The CVSS Steering Committee would need to develop a monitoring program and dashboard in consultation with the Task Forces to use to track progress and performance on sustainability issues, as well as to map the many initiatives that are and will be underway. Using this monitoring system, the Committee and Task Forces can easily report to all stakeholders, including local governments, on the progress being made on the sustainability actions and meeting targets over time. This information will greatly assist local governments on initiating support or policy changes to implement the strategy.

PROJECTS

One of the first tasks of this group will be to develop a coordinated work plan from the action items in the CVSS and to confirm priorities based on their proposed implementation windows (short/medium/long-term). The prioritization also needs to consider issues such as other projects or plans currently underway (such as water and liquid waste management plans), resources available from various sources, work being undertaken by agencies and potential partners, capital plans and any other priorities various local governments are pursuing. Harmonizing implementation of the strategy with the work of many other groups will be important to its success.

COMMUNICATIONS

One of the most important aspects of this group's work will be to communicate about issues and projects related to sustainability and the strategy's implementation. Through publications, a website, educational presentations, the media and other avenues, this group can get out the message on sustainability issues and convey good news of progress. This work will raise the understanding, buy-in, support and commitment to sustainability across all Comox Valley communities.

Monitoring System

The CVSS is a highly disciplined sustainability strategy in its close attention to performance indicators and phased targets. This structure creates the framework for monitoring performance to report on sustainability progress over time.

The CVSS Steering Committee can oversee the process of reporting on progress toward the targets; however, they will not generate all information on indicators. Performance information will need to be provided by many agencies to cover the entire scope of the strategy, as data for the targets or data that can serve as a proxy (substitute) for the indicators is already tracked by many agencies. The individual Task Forces will have representatives of agencies closely involved in the issues and will be able to access information relatively easily. In some cases, the performance data may not be currently tracked and protocols will be needed to begin tracking performance over time. Where it is deemed that the specific data associated with the targets will be difficult to acquire in the short term, proxy data should be identified to serve as a place holder to indicate general trends in performance over time.

This section includes the indicators associated with the targets and can serve as a foundation for a performance “dashboard” for monitoring implementation progress.

One of the first tasks of the CVSS Steering Committee should be to identify agencies or groups that have the best access to data for each indicator and to establish a protocol for that group to report on current levels of performance and establish appropriate reporting cycles for receiving data over the years ahead.

Indicators

1.0 HOUSING & LAND USE															
1.1.1	<ul style="list-style-type: none">Completed: Regional Growth Strategy that identifies “Core Settlement Areas” and establishes criteria for identifying “Town Centres” within (applicable) member municipalities,– by 2011Completed: Official Community Plans for each community that physically define the locations and extent of Core Settlement Areas and Town Centres, and includes regional context statements that comply with RGS growth strategies and projections– by 2013Completed: Zoning – New zoning consistent with intent and designations of RGS land use policies should be developed by 2015.														
	% of residents in region living in existing or new Designated Settlement Areas (versus rural areas)														
	Unit / acre (hectare) range for new development in the Comox Valley: <table><tr><th>Type</th><th>Size</th></tr><tr><td>High density</td><td>Minimum 74 units per hectare (u/ha) (30 units / acre (upa))</td></tr><tr><td>Urban</td><td>10-30 upa (24-74 u/ha)</td></tr><tr><td>Neighbourhood Residential</td><td>8 - 10 upa (4 – 24 u/ha)</td></tr><tr><td>Rural</td><td>1 unit / 4 – 8 ha (1 unit / 10-20 acres)</td></tr><tr><td>Agricultural</td><td>1 unit / 8 ha minimum (1 unit / 20 acres)</td></tr><tr><td>Resource/forest</td><td>1 unit / 40 ha (1 unit / 99 acres)</td></tr></table>	Type	Size	High density	Minimum 74 units per hectare (u/ha) (30 units / acre (upa))	Urban	10-30 upa (24-74 u/ha)	Neighbourhood Residential	8 - 10 upa (4 – 24 u/ha)	Rural	1 unit / 4 – 8 ha (1 unit / 10-20 acres)	Agricultural	1 unit / 8 ha minimum (1 unit / 20 acres)	Resource/forest	1 unit / 40 ha (1 unit / 99 acres)
	Type	Size													
	High density	Minimum 74 units per hectare (u/ha) (30 units / acre (upa))													
Urban	10-30 upa (24-74 u/ha)														
Neighbourhood Residential	8 - 10 upa (4 – 24 u/ha)														
Rural	1 unit / 4 – 8 ha (1 unit / 10-20 acres)														
Agricultural	1 unit / 8 ha minimum (1 unit / 20 acres)														
Resource/forest	1 unit / 40 ha (1 unit / 99 acres)														
# of new master planned neighbourhoods or projects that have achieved a LEED Neighbourhood Development Gold status or equivalent level of performance															
1.1.3	% of residents living within a 400 m walking distance of a transit line that will take them to major work, shopping and school areas														
	% of residents within 400 m of dedicated bicycle and pedestrian pathways with direct connections to regional transit service														
	Average minimum density (units/acre) for new developments within designated Town Centres and within 400 metres of main transit corridors in designated development areas														

1.1.4	% of jobs and school seats located along major transit corridors and in designated employment centers						
1.2.1	% of multi-family residential and attached in housing stock (units)						
1.2.2	% of residentially zoned neighbourhoods that permit suites and coach/carriage (or similar) infill homes						
1.3.1	The number of households (rental and owner occupied combined) spending more than 30% of pre-tax household income on housing						
1.5.1	<p>Minimum new development densities for rural areas by 2015 include:</p> <table border="1"> <tr> <td>Rural</td><td>1 unit / 4 – 8 ha (1 unit / 10-20 acres)</td></tr> <tr> <td>Agricultural</td><td>1 unit / 8 ha minimum (1 unit / 20 acres)</td></tr> <tr> <td>Resource/forest</td><td>1 unit / 40 ha (1 unit / 99 acres)</td></tr> </table>	Rural	1 unit / 4 – 8 ha (1 unit / 10-20 acres)	Agricultural	1 unit / 8 ha minimum (1 unit / 20 acres)	Resource/forest	1 unit / 40 ha (1 unit / 99 acres)
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Resource/forest	1 unit / 40 ha (1 unit / 99 acres)						

2.0 BUILDING & SITE DEVELOPMENT

2.1.1	First sessions in 2010: A green development and building education program on green building design, technology and construction is established jointly managed by local governments, North Island College and the development industry, holding training sessions 4-6 times/ year.
2.1.2	Number of buildings that have achieved Net Zero Energy or Living Building status
2.1.4	<p>% of residential units built in 2008 or earlier that have undertaken an energy retrofit or replacement to achieve a rating of EnerGuide 73 or above, or a 25% reduction in energy use for a given floor area</p> <p>% of non residential buildings built in 2008 or earlier that have been retrofitted or replaced to achieve at least at 25% reduction in energy use for a given floor area (space heating, electricity, and hot water)</p>
2.2.1	# of applicable new local government buildings and facilities that meet increasing standards of performance

2.2.2	% of existing local government buildings and facilities built in 2008 or earlier that have been retrofitted to achieve a 25-30% reduction in energy and water consumption from 2008 levels
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3.0 INFRASTRUCTURE SERVICES

3.1.1	% decrease in net energy intensity of infrastructure systems and equipment including water, wastewater, and street lighting, from 2008 levels
3.2.1	% of energy supplied by clean, renewable energy sources such as solar thermal or geothermal generated on site (or at a district scale) for new building energy demand
3.2.2	% of building energy needs supplied by renewable-based NEU energy for heating and cooling of new buildings in the higher density and town centre areas
3.2.3	# of new landfills that are designed to maximize methane capture and reuse
	# of existing landfills that are reviewed for viability of landfill gas capture and reuse by 2012
3.3.1	% reduction in landfill waste disposal on a per-capita basis
3.3.2	% of businesses producing and selling products that implement product and material stewardship programs to reduce waste
3.3.3	% waste diversion from landfills for civic facilities and operations
3.4.1	% of construction waste diverted from landfill
3.4.2	% of new multi-residential and commercial buildings designed to handle multi-stream separation (garbage, recyclables, compostables)
3.5.1	% of new or upgraded wastewater treatment plants that provide reclaimed water for non-potable uses
3.6.1	Average “household” reduction of per capita water consumption over 2008 levels (agriculture is exempt)

3.7.1	% of low density developments that incorporate stormwater source controls, including ecologically-based stormwater management principles in its design to address both water quality and quantity
	% of med-high density developments that incorporate stormwater source controls, including ecologically-based stormwater management principles in its design to address both water quality and quantity
3.7.2	% of streets (by length) in town centers and residential areas that are designed or retrofitted to utilize source control and ecologically-based stormwater management principles and strategies in design
3.7.3	% of new development that implements some level of rainwater/stormwater reuse (eg: rainwater harvesting)
3.8.1	% of new industrial developments that incorporate eco-industrial/business ecology design principles
3.8.2	% of new infrastructure systems (water, wastewater, solid waste, etc) that incorporate integrated resource management/recovery principles

4.0 TRANSPORTATION	
4.1.2	% of automobile emissions reduced (to meet GHG reduction targets)
	% of mode share of private conventional vehicles (current mode share is 90%)
4.1.3	# of parking stalls per unit required for multi-residential units along transit corridors
4.2.1	% of mode share of alternative vehicles (e.g. electric wheelchairs, scooters, golf carts, small or slow speed electric vehicles (< 50km))
4.3.1	% of mode share of walking
4.3.2	% of residents that live within 400 metres (5 minute walk) of a greenway or walkway and a dedicated cycling route that connects them to town centres, jobs and community services

4.3.3	% of mode share for cycling
4.3.4	% of mode share for public transit (regular buses, community shuttles, other)
	Frequency of transit service along primary transit corridors during peak hours
	Frequency of transit service along secondary transit corridors during peak hours

5.0 ECOSYSTEMS, NATURAL AREAS & PARKS

5.1.2	% of ecosystems mapped and inventoried
5.2.1	% of currently unprotected sensitive ecosystems (baseline 2009) that have an appropriate level of protection
5.2.2	% of significantly degraded sensitive ecosystem areas that have an appropriate level of ecological function restored
	% of new developments that incorporate habitat-supportive landscape design
5.3.1	% of net loss per decade of viable agricultural landscapes (including agricultural land reserve)
	% of net loss per decade of working forest landscapes (outside identified settlement areas)
5.4.1	% of residents municipal areas that live within 2.5 km of a larger conservation area or large natural park area

6.0 Food System

6.1.1	% of fresh produce consumed in the Comox Valley that is produced in the region
	% of dairy consumed in the Comox Valley that is produced in the region
	% of protein (beef, pork, venison, poultry, bison, seafood, eggs, dairy, nuts and vegetable based protein) consumed in the Comox Valley that is produced in the region
6.1.2	# of food-oriented farmers' markets distributed throughout the region that operate seasonally (May to October) and all year round
	% of farmers who have access to processing facilities within the Comox Valley (e.g. for fresh produce, grain, meat, dairy, alcohol and many others)
6.1.3	% of food stores/purveyors that carry or serve a significant amount of local and Island "sourced and labelled" fruits, vegetables, nuts, meat, shellfish and fish
6.1.4	% of multi-residential developments that offer a garden plot and supporting facilities on site (or in a community garden on private or public land within 400m) with sufficient sun and support facilities for at least 50% of its units
	# of "food precincts" in the Comox Valley where food is a central theme for a mixed-use development project, possibly including the ability of people to buy direct from multiple farmers (farm gate cluster) and to participate in food events
6.1.5	% schools that have food gardens and on-site composting as part of school grounds
	% schools that have an educational component on healthy and sustainable food as part of required curriculum
6.2.1	% of farms and processors that produce net zero waste through use of innovative methods to compost organic waste and manage packaging and other materials

7.0 SOCIAL & COMMUNITY WELL-BEING

7.1.2	Homeless population in Comox Valley					
	% of new homes/units that are designed according to the principals of Universal Design and meet level 1 accessibility criteria					
7.1.3	% of reduction in crime rates (all types) from 2009 (recognizing variance amongst rates of various crimes)					
	% of new developments larger than 10 residential units or 10,000 sq ft of commercial space that complete a basic Crime Prevention Through Environmental Design (CPTED) analysis prior to construction					
7.1.4	% of neighbourhoods that have an emergency response plan (for natural or human-made disasters) that is in place in at least 50% of the neighbourhood's households					
	% of households that have basic emergency preparedness kits					
7.1.5	% of residents that have access to sufficient food to meet daily food requirements					
7.2.1	<div><div>% of increase in the number of residents classified as active or moderately active</div><table><tr><td>Aged 12 – 19 years old (from 2001 level of 59%):</td><td>Aged 20 – 64 years old (from 2001 level of 41%)</td><td>Aged 65+ years old (from 2001 level of 34%)</td></tr></table></div>			Aged 12 – 19 years old (from 2001 level of 59%):	Aged 20 – 64 years old (from 2001 level of 41%)	Aged 65+ years old (from 2001 level of 34%)
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7.3.1	% of adult residents volunteering in some form in their community for at least one event or group per year					
7.3.2	% of residents who will have participated in a community planning or decision-making processes per year					
	% of residents who vote in municipal elections					

7.4.1	% of students who start grade 8 who graduate from high school
	% of population who have a basic understanding of sustainability, including local and regional sustainability initiatives (measure through surveys)
7.5.1	% of increase in municipal investment for arts and culture

8.0 LOCAL ECONOMIC DEVELOPMENT

8.1.1	% of businesses that have policies or practices on sustainability performance (including climate emissions) to meet provincial and international targets
	% of emissions reduction per GDP in the Valley's economy (emissions intensity) from 2007 levels
8.2.1	% increase in the Valley's GDP and employment associated with sectors that are directly responding to new sustainable development needs and demands
8.2.2	% of respondents who agree/strongly agree with statements in marketing survey results that sustainable business practices and companies are a key reputation element of the Valley and that this reputation would positively influence their purchasing or business decisions
8.3.1	% increase in the proportion of the Valley's GDP derived from goods and services produced in the Comox Valley from current baseline



Conclusion

Sustainability is the challenge of this generation - a challenge to refine the path of our economy and society to ensure we are providing a great quality of life within the carrying capacity of our planet. The Comox Valley Sustainability Strategy outlines a path to sustainability for the Comox Valley through both vision and detailed actions.

The CVSS was created through extensive consultation with many citizens, groups, agencies, local government staff and elected officials. Through many iterations it has been refined to be both visionary and pragmatic. It outlines a wide range of actions to be taken by many stakeholders over the short, medium and longer term to achieve targets and goals for sustainability.

The 21st century will bring many changes and challenges to the Comox Valley and the strategy outlines a path to sustainable prosperity and a high quality of life in the Valley.