



### 3. A Healthy Environment

Providing for a compact, complete community by nature involves maintaining the health of Coquitlam's natural environmental resources. These include forested lands, grasslands, rivers, streams, and a diversity of plant, fish and animal life within our community. They also include basics that are sometimes taken for granted, such as the quality of the air people breathe.

Providing for a healthy environment is a complex exercise that requires the involvement of many different stakeholders, including the City, other municipalities and senior levels of government, private businesses, stewardship groups, landowners and citizens. To provide for continued community sustainability, efforts to protect environmental health must be comprehensive. They must also be integrated with community, social and economic values, and recognize that no one element is absolutely achievable at the expense of another.

## 3.1 Taking Local Action to Address Climate Change<sup>1</sup>

### ISSUES

#### A GLOBAL ISSUE REQUIRING A LOCAL RESPONSE

Climate change has global, regional and local implications for ecosystems, infrastructure and people. The 2007 report of the International Panel on Climate Change (IPCC) concludes that the earth's climate is changing, the change is being caused by human activities, and its effects will worsen if no action is taken. Unchecked, climate change is expected to have significant impacts on food production, water supply, ecosystems and the frequency of extreme weather events.



The largest source of greenhouse gas (GHG) emissions is carbon dioxide released through combustion of fossil fuels used to move vehicles and heat and power buildings. A smaller proportion of emissions is methane produced from decomposing waste.

Recognizing the required collective effort and important role municipal governments can play in mitigating climate change, the Provincial Government amended Section 877 (Bill 27, 2008) of the *Local Government Act*, requiring all municipalities to include targets, policies and actions to reduce greenhouse gases in their Official Community Plans.

For several years, Coquitlam's Official Community Plan has included and developed a land use and transportation policy framework that complements climate action. The following policies and actions build on existing CWOCP policy directions, outlining additional ways the City is prepared to strengthen its action on climate change.

#### THE NEED FOR BROADER COOPERATION

The long range policy framework of Coquitlam's Official Community Plan provides a solid foundation to make significant progress towards complete, compact, walkable and transit-oriented communities, however, **it is clear that the City's community-wide greenhouse gas reduction targets will only be reached with further action by senior levels of government, particularly in the key sectors of buildings and transportation.**

### RESPONSES

#### OBJECTIVE

Coquitlam will work in cooperation with senior levels of government to reduce the City's annual community-wide greenhouse gas emissions 15% below 2007 levels by 2031 and per capita annual greenhouse gas emissions 30% below 2007 levels by 2021.

## POLICIES AND ACTIONS

### Community-wide

- a. Complete a Community Greenhouse Gas Reduction Strategy by the end of 2011 to support the City in integrating energy and GHG reduction opportunities in broader land use, transportation, solid waste and infrastructure planning.
- b. Complete the ongoing update of the City's Strategic Transportation Plan, in accordance with the work program approved by Council in 2009.
- c. Continue to pursue opportunities to implement the City's Corporate Climate Action Plan, demonstrating the City's commitment to local climate action.
- d. Encourage Regional, Provincial and Federal levels of government to expand and improve measures to reduce greenhouse gases through actions such as leading edge research, incentive programs, expansion of transit service, progressive building codes and strengthened legislation.

3

### Land Use

- e. In consultation with the community, explore the longer term transition of low density neighbourhood commercial centres to vibrant, walkable mixed-use nodes. To improve access to daily needs for Coquitlam residents, also give consideration to strategically extending existing commercial centres or establishing new ones, scaled to the neighbourhood context.
- f. Explore, in consultation with the community, broader opportunities for facilitating new housing choices in Southwest Coquitlam's lower density neighbourhoods.
- g. Continue to support, in consultation with the community, further transition of the City Centre to a highly urban and vibrant downtown with a compact mix of land uses and employment opportunities.
- h. Support integration of the planned Evergreen Rapid Transit Line through station area planning that considers transit-oriented land uses and densities.
- i. Support future rapid transit service along the Lougheed corridor with transit supportive land uses around stations in the longer term.
- j. Focus the majority of growth within 800 metres of high frequency transit service.
- k. Explore opportunities to integrate more live/work uses throughout the City.
- l. Explore implementation tools to provide greater opportunities for smaller format commercial offices in neighbourhood centres to encourage and support small business.
- m. Create opportunities for a diversity of service and entertainment destinations in neighbourhood centres.





## Transportation

- n. Support continued and steady implementation of new cycling and pedestrian facilities in coordination with the Strategic Transportation Plan, as amended.
- o. Work with transit planning/operational authorities to implement measures that support transit throughout the City, in coordination with the priority Strategic Transportation Plan and Neighbourhood Plans, as amended (e.g., support for frequent transit network service, separate bus lanes, signal systems, queue jumpers).
- p. Increase walking and cycling connectivity and infrastructure at the neighbourhood scale, beginning with the City Centre.
- q. Promote, and where possible invest in, transportation demand management (TDM) measures in new developments and in neighbourhood centres and the City Centre (e.g., car sharing, bike end-of-trip facilities, telecommuting, parking reductions).
- r. Explore the development of policies to support low emission vehicles – hybrids, plug-in electrics, electric scooters (e.g., dedicated premium parking, vehicle plug-ins).
- s. Work with key partners to promote education and outreach programs to support active transportation – walking and cycling (e.g., walking school bus program).

## Buildings

- t. Continue to support a high increase in multi-unit residential and mixed use development.
- u. Explore strategic outreach and education opportunities to encourage building owners and users to reduce energy use, reduce solid waste, and invest in renewable on-site energy (commercial, institutional, light industrial and residential).
- v. Explore opportunities for strategic outreach and education for developers, realtors and other stakeholders to promote energy efficiency, passive design and renewable energy technologies and practices.
- w. Explore market-sensitive land use tools to encourage higher performance buildings, passive design and renewable energy (e.g., Development Permit Areas, streamlining approval of permits, Rezoning, Development Cost Charges, Sustainability Checklist).

## Energy Supply

- x. Continue to encourage implementation of district energy in Northeast Coquitlam Village Centre and Waterfront Village Centre (Fraser Mills).
- y. Explore potential opportunities for district energy systems in fast growing Coquitlam neighbourhood centres (both new and existing).

## Solid Waste

- z. Support Metro Vancouver efforts to increase recycling and diversion of organic waste through City programs and initiatives.
- aa. Encourage Provincial and Federal Governments to legislate measures to reduce waste (e.g., extended producer responsibility, product stewardship and reduced packaging).

## Air Quality

- bb. Recognize the benefits of vegetation and landscaping treatments in improving air quality, and regulating temperature.
- cc. Encourage best practices by construction and other industries to minimize airborne dust and fine particles.
- dd. Continue to support the Metro Vancouver air monitoring program and Air Quality Management Plan (AQMP).
- ee. Continue to learn and benefit from the work of other government agencies, including public education efforts.

3



## 3.2 Water Resources

### ISSUES



*Coquitlam's approach to the management of watersheds and stormwater seeks to:*

- *Reduce the potential risk of health hazards, loss of life and property damage;*
- *Preserve and improve the natural environment for present and future generations; and*
- *Conserve social and financial resources while providing opportunities for sustainable land use and development near Coquitlam watercourses.<sup>1</sup>*

#### **ENSURING AN ADEQUATE SUPPLY OF SAFE DRINKING WATER**

Coquitlam residents receive a dependable, clean supply of drinking water from the Coquitlam and Seymour Reservoirs. These reservoirs are managed by the Greater Vancouver Regional District (GVRD), and were recently upgraded to include ozone disinfection and corrosion control facilities. To provide for future supply needs, work is now underway on the GVRD Watershed Management Plan, and as a participatory agency, the City has a supporting role to play. The City also helps ensure the high quality of local drinking water through its various programs. These efforts should continue, ideally complemented by citizen and business efforts to use this valuable resource wisely and to prevent contamination of downstream water bodies and storm drains.

#### **PROTECTING WATERCOURSES AND WATERSHEDS WITHIN THE CITY<sup>1</sup>**

Watercourses and watersheds provide important habitat for fish and wildlife species. They also provide recreational opportunities and contribute to the City's natural character. Local and senior governments, landowners, businesses, stewardship groups and other stakeholders all have a role to play in managing watercourses and watersheds. Their actions are needed to protect these resources, while reducing the potential risk of health hazards, loss of life and property damage. Continued coordination between these groups is thus needed to maximize results. As this work occurs, it will also be important to achieve a flexible approach to preservation, which balances the needs of existing communities with preservation of natural watercourse features and functions, in a socially and fiscally prudent way.

The plan also helps achieve the general direction and implementation of the Fraser River Estuary Management Plan (FREMP), supported by Council in 1994.

#### **GROUNDWATER PROTECTION**

Many residents in less developed parts of the City draw their drinking water from underground wells. In some cases, groundwater provides a constant base flow of cool, clean water for streams. However, groundwater is easily contaminated by pollutants leaching through soils. Once contaminated, groundwater is difficult and costly to remediate. Provincial environmental agencies have a role to play in controlling the release of contaminants both above and below ground surface. The City has an opportunity to require adequate water quality measures for stormwater runoff, as well as to encourage infiltration of clean stormwater runoff to increase groundwater recharge. Residents, businesses and community groups also have a role to play in understanding the impact of their activities on groundwater, and in responding accordingly.

## RESPONSES

### OBJECTIVE 1

To continue providing Coquitlam residents and businesses with clean, high quality drinking water through a combination of City efforts and regional partnerships.

#### POLICIES

- a) **Support preparation of the GVRD Watershed Management Plan currently under development.**
- b) **Continue to recognize the importance of the local distribution system in ensuring good drinking water quality.** Maintain existing and future water distribution infrastructure programs within the City. Continue other City quality control measures including ongoing implementation and enforcement of the Coquitlam Water Distribution Bylaw and Cross Connection Program.
- c) **Continue to promote the efficient use of water as a valuable resource.** Review existing water conservation initiatives and examine the feasibility of enhanced user pay programs to promote a fair and equitable citywide water supply.



### OBJECTIVE 2

To explore the feasibility of developing measures to protect groundwater.

#### POLICIES

- a) **Refine existing efforts toward groundwater protection.** Partner with provincial agencies in data gathering on local groundwater resources.
- b) **Encourage the provincial government to prepare groundwater protection legislation.**

*More information is needed on the location, direction of flow, and vulnerability of our groundwater.*

### OBJECTIVE 3<sup>1</sup>

To provide for effective and prudent management of Coquitlam's watercourses through sustainable land use and development and other comprehensive watershed and stormwater management approaches.

#### POLICIES

- a) **Create a strategy for integrated stormwater management planning.** Build this strategy incrementally through watershed studies, and aim to eventually cover the whole of the City. Such studies should:
  - Follow a consistent standard, with variation as appropriate to local conditions;
  - Enable the City to meet its commitments under the Regional Liquid Waste Management Plan; and
  - Consider inputs from those affected.

## POLICIES cont'd/1

- b) **Reflect watershed conditions and needs in the neighbourhood planning process, by:**
- Ensuring that new neighbourhood plans are completed after applicable watershed studies;
  - Responding to watershed study results with appropriate land use and Development Permit Area designations in neighbourhood plans, as critical for environmental or hazard protection reasons, or as potentially required for communal stormwater management purposes; and
  - Requiring that each new neighbourhood plan include a stormwater management component.
- c) **Adopt and implement the City's Stormwater Policy and Design Manual, including appropriate consideration in capital planning for infrastructure.** Implementation should also entail:
- Updating of application submission requirements and reviewing related procedures, security provisions and agreements, fee structures and construction specifications, in order to operationalize the stormwater management manual; and
  - Servicing standards for streets and lanes in the Subdivision and Servicing Bylaw which promote infiltration opportunities and additional pervious cover including appropriate vegetation, together with criteria for the Approving Officer to deal with environmental concerns and the modified application of the new standards within areas of existing development.
- d) **Ensure appropriate interim approaches to watercourse management.** Investigate and apply site-specific, best management measures for mitigating the impacts of stormwater runoff through the development process (e.g. oil-water separators, sediment control and other technologies). Maximize the environmental benefit of new technologies by recommending appropriate performance criteria.
- e) **Continue to work in partnership with senior government agencies in providing for appropriate approaches to streamside habitat protection for new developments.** This includes continued partnership with FREMP in monitoring and regulating shoreline development along the Fraser River.
- f) **Help implement the FREMP goals of conserving and enhancing the environmental quality of the river and estuary to sustain healthy fish, wildlife, plants and people:**
- Respecting and furthering the estuary's role as the social, cultural, recreational and economic heart of the region; and
  - Encouraging human activities and economic development that protect and enhance the estuary's environmental quality.

*The FREMP provides a long range framework for integrating decision-making and coordinating human activities in the estuary, while at the same time, maintaining and enhancing, where possible, the estuaries environmental qualities.*

*One of the FREMP's management tools is the Area Designation Process which facilitates agreement on the primary uses such as log storage, conservation, or industry within the estuary and its foreshore areas amongst agencies responsible for both water- and land-based planning in the estuary.*





## 3.3 Green Spaces

### 3.3.1 Environmentally Sensitive Areas



Natural areas within Coquitlam form part of its character, while providing important habitat for fish, birds, wildlife, and a diversity of plant life. They also ensure human health and community livability. At times there are competing community expectations for how these lands will be used to meet different needs. Making appropriate choices poses both challenges and opportunities to the City, its residents, landowners, businesses and other government agencies.

#### ISSUES

##### **BALANCING ENVIRONMENTAL AND SETTLEMENT NEEDS**

Coquitlam has committed to help prevent regional urban sprawl by providing locally for compact, complete communities. This commitment is balanced with the desire to preserve selected green space nearby. In achieving this balance, Coquitlam has committed to protecting Green Zone lands shown in Schedule 1, largely consisting of City and Regional parks. Yet there are other lands that contribute to the City's open and natural character, and an opportunity exists for such assets to complement the Green Zone. The approach for managing such assets must recognize the competing needs of wildlife; birds and their respective habitats; private property ownership; legal commitments already made through land use designations; and community needs for additional institutional, employment, service, leisure facilities and recreational areas.

##### **MAINTAINING ECOLOGICAL FEATURES AND FUNCTIONS**

Whether or not a natural or environmentally sensitive area (ESA) is protected, activities occurring both on and around such lands can affect the health of its features and the ecological processes that take place on it. It will thus be important for the City to identify additional steps that will maintain key natural features on lands to be protected. This entails providing appropriate site management directions, and developing strategies for effective implementation, including work with partner agencies, private landowners and stewardship groups.

##### **PARTNERING TO ACHIEVE RESULTS**

While Coquitlam has a key role in managing local areas of environmental significance, its activities and procedures must respect and complement those of neighbouring municipalities and senior levels of government. The City must also be prepared to take on some new roles, as directed by recent senior government legislation and regulations, albeit with appropriate resources and authorities to achieve desired outcomes.



## RESPONSES

### OBJECTIVE 1

To reaffirm the City's commitment to protecting the Green Zone, and explore opportunities to preserve additional environmentally sensitive areas which have been identified through a balanced and fair approach.

### POLICIES

- a) **Reinforce the role of public parks and open space, including Green Zone lands with environmentally significant features in the ESA network.** Identify park sites, or portions, with significant environmental features in need of protection.
- b) **Develop and carry out an implementation strategy for addressing other significant ESAs that are not part of the Green Zone.** The strategy should:
  - Build on the information collected in ESA studies;
  - Recognize and respect the need of biodiversity of species, habitat, and ecological functions;
  - Address private land ownership;
  - Consider future intent for the sites, indicated through land use designations;
  - Build on existing levels of protection, where feasible; and
  - Develop appropriate and feasible implementation techniques for ESA protection.
- c) **Develop a meaningful and balanced approach to public agency acquisition of non-protected ESAs.** Where reasonable ESA protection is otherwise impractical, develop criteria and priority-setting mechanisms for recommending and prioritizing potential public agency purchases of selected ESAs. These should consider:
  - Potential partnership opportunities, including efforts toward land banking, land trusts, and other approaches which could involve government and non-governmental agencies;
  - A site's current ecological value;
  - A site's role in providing for a diverse range of ecosystems and species Citywide;
  - Expected future viability of a site's natural processes;
  - Potential for protection by other City regulations and policies; and
  - Other community priorities.
- d) **Develop alternatives where protection is impractical.** Explore the ecological, administrative and financial feasibility and regulatory acceptability of establishing strategies such as a habitat banking system by the City or other agencies, land trusts, etc.



## **OBJECTIVE 2**

To develop strategies for respecting and enhancing ecological features and functions, such as wildlife, habitat, and plant species, in ESAs to be protected.

### **POLICIES**

- a) **Consider the protection of wildlife corridors, where feasible and desirable.** This may be achieved by seeking to maintain large natural areas, or at least a contiguous series of sites, rather than small, and isolated areas.
- b) **Develop other strategies for enhancing and linking key features on selected lands, including City parks as appropriate.** This may include consideration of:
  - Varied land use planning tools;
  - Development of a flora and fauna strategy for City parks;
  - Distinguishing between beneficial and invasive native plant species; and
  - Raising awareness of these features and their requirements.
- c) **Foster greater public appreciation for all ESAs by providing appropriate exposure and access to ESAs.** Determine which areas are suitable to access, and develop criteria for appropriate public access treatment, and signage, based on City policies.

## **OBJECTIVE 3**

To work towards an effective approach to managing Coquitlam's ESAs and other lands with significant ecological features, through effective partnerships with other municipalities, senior governments, landowners and interested public groups.

### **POLICIES**

- a) **Encourage senior levels of government to provide resource support for new areas of City environmental responsibility.** This may include compensation, shared liability, financial and technical support.
- b) **Work with other governments to protect endangered and at-risk species.** This may be achieved by:
  - Continuing to monitor the latest research findings, senior agency initiatives, and legislative changes in this area; and
  - Developing appropriate programs and policies as needed to respond in collaboration with other levels of government.
- c) **Encourage senior government cooperation in ESA protection on their Coquitlam land holdings.** Continue to work with those agencies to balance their development and service provision needs with provision of some protection, where feasible, of significant ecological features on lands they own locally. Ensure that such agencies are aware of appropriate City development regulations, procedures, guidelines and best management practices.
- d) **Recognize the value of senior agency efforts in informing land-owners of environmental protection measures set out in provincial and federal legislation.**

## 3.3.2 Parks, Trails, and Other Open Spaces

### ISSUES

#### **COMPETING NEEDS FOR VITAL COMMUNITY RESOURCES**

Open spaces and urban greenery are part of Coquitlam’s identity, and ensure human health and community livability. Consequently, there are often competing aspirations for how those spaces will be used or programmed to meet community needs. Such aims are related to demographic change, rising land costs, and shifting patterns of urban growth. To ensure continued relevance of the system, a balance between passive and active park opportunities, and the cultural fit of those activities, will be required at all levels of the parks hierarchy. It will also be important to assess whether the current balance of spaces within the hierarchy, and their physical distribution throughout the City, remain appropriate over time.

#### **SPECIALTY OPEN SPACES: TRAILS, GREENWAYS, BLUEWAYS**

Trails and greenways provide recreational benefits while also helping to link and beautify parks, open spaces and other parts of the City. Plazas can also play a strategic role in enhancing the overall parks and open space network. The City could benefit from a strategic approach to enhancing these connective amenities.

#### **PARK DELIVERY METHODS WITH FUTURE IMPLICATIONS**

To maintain a healthy inventory of green spaces as the City grows and changes, land must be secured for parks and open spaces, both within the City and in surrounding natural areas. The cost of acquiring, developing and maintaining recreational land and open spaces must be balanced with competing interests for limited tax dollars. Park delivery also depends upon community input, and Coquitlam residents and businesses desire consultation on the plans, decisions, and delivery systems that affect them. It will be important to continue consulting with the public in the acquisition, development and use of green open spaces. However, care must be taken to ensure a full range of representation from the community. Furthermore, participation in those decisions must acknowledge complex tradeoffs and other issues.

### RESPONSES

#### **OBJECTIVE 1**

To develop a responsive, appropriately balanced system of parks, open spaces, pathways and waterway corridors throughout the City that addresses community needs at all levels of the park hierarchy, and ensures passive and active open space opportunities for all.





*Regional and Region-Serving Parks in Coquitlam include:*

- Mundy Park
- Colony Farm
- Minnekhada Park
- Addington Point
- Widgeon Park

## POLICIES

### Parks Development Framework

- a) **Create an array of experiences and opportunities within the parks system for users' enjoyment and health.** Program for a diverse population, focussing on active living and cultural relevance. Promote flexibility and innovation in planning, and developing new open space.
- b) **Plan for new open space acquisitions in ways that respond to changing population distribution patterns.** Pursue acquisitions in tandem with area plan reviews and neighbourhood planning. Measure the effectiveness of these efforts by supplementing the current standards, relating acreage requirements to population base, with other criteria that reflect community needs and location-specific circumstances.
- c) **Ensure the parks planning process continues to meet changing needs over time.**
- d) **Enhance the compatibility of open space facilities with existing residential areas nearby and consider safety as a key aspect in park design.**

### Region-Serving Parks

- e) **Acknowledge Coquitlam's role in accommodating region-serving open spaces.** Continue to work with the GVRD and neighbouring municipalities to create and maintain region-serving open spaces that celebrate Coquitlam's natural amenities and beauty, in keeping with Coquitlam's needs and aspirations. Recognize programming opportunities offered by Regional parks.

### Major City Parks

- f) **Celebrate and enhance access to Coquitlam's water-related open space assets, in a manner that balances sensitive ecosystem health.** Continue to provide and enhance waterfront and water-oriented open spaces to serve the City. Reinforce this riparian theme through park furnishing and interpretive signage.
- g) **Reinforce Coquitlam's forested character.** Continue to provide for City-serving parks with forested areas, as appropriate. Develop park furnishing standards, and interpretive signage to reinforce this forested theme.
- h) **Provide for the needs of special user groups within the City.**
- i) **Continue to recognize the importance of specific cultural groups through parks development and programming, where appropriate and where opportunities exist.** This may include such things as:
  - Being sensitive to potential differences in the open space needs of specific ethnic and cultural groups within the City; and
  - Landscaping treatments in portions of Citywide parks which reflect specific cultural elements in an appropriate manner.

## Community-Level Parks

- j) **Develop a plan to retrofit parks in older, established communities and implement as opportunities arise.** Focus on parks susceptible to pressures from additional users, or where opportunities exist for a retrofit in conjunction with land use planning work.
- k) **Recognize the role played by community parks in providing for school and sporting activity needs.** Partner with the School District to co-operatively develop a system of community parks and facilities. Upgrade school fields to municipal field standards to increase both the quantity and quality of sports fields for school and community use. Consider involving community sports groups as active partners in the funding, development, and operation of these upgraded fields.

## Neighbourhood-Serving Parks

- l) **Recognize the specific need for neighbourhood parks in areas undergoing transition.** Prioritize the development of parklands in those neighbourhoods anticipated to accommodate growth and intensification, such as the Lougheed and Burquitlam areas.
- m) **Aim to provide both passive and active open spaces for residents in all neighbourhoods.**
- n) **Enhance public access to, and upgrade, school sites to serve as public open spaces and neighbourhood centres for surrounding residents.** Continue to work with the School District on Joint Use Agreements to develop neighbourhood parks adjacent to or integrated with school sites wherever feasible.
- o) **Provide both structured and unstructured open play space for children in or near residential areas.** Where feasible, integrate mini-parks or tot lots into multi-family residential developments or neighbourhood parks, particularly in high-density areas.
- p) **Address other neighbourhood-level open space opportunities and deficiencies as appropriate.**





*Trail users may include cyclists, hikers, equestrians, nature viewers, bird-watchers, etc.*

*Alternative approaches to acquiring park land could include:*

- Statutory Rights-of-Way and easements;
- Conservation covenants;
- Options to purchase, first rights of refusal, long-term leases;
- Privately-Owned Publicly-Accessible (POPA) open spaces; and
- Other tools as deemed appropriate by the City.

## **OBJECTIVE 2**

To enhance the unique benefits provided by trails, greenways, blueways and plazas through a strategic approach to their provision.

### **POLICIES**

- a) **Develop an inter-connected comprehensive off-road trail system.** Include links to regional amenities and networks, and work in partnership with agencies such as the GVRD and neighbouring municipalities.
- b) **Explore opportunities for a Regional Blueways policy,** consistent with the goals and policies outlined in the Northeast sector Recreational Greenway Plan, including proposals for water crossing links on waterways.
- c) **Consider the following criteria in the design and specific location of the off-road trail system:**
  - Potential for adapting existing linear corridors for trail use;
  - Trail-type use, and location diversity;
  - Incorporate viewpoints and unique features where feasible;
  - Opportunities for looped circuits and connections to community nodes;
  - Minimized trail impacts on riparian corridors and other sensitive lands;
  - Priority to bike and pedestrian routes accessing key nodes; and
  - Riparian areas along watercourses shall be protected in accordance with standards which Council may approve by bylaw and through any necessary authorization by senior levels of government.<sup>1</sup>
- d) **Recognize the value of urban plazas in the open space network.** Foster strategically located and designed urban plazas and other public open spaces in commercial areas, and where appropriate provide linkages.

## **OBJECTIVE 3**

To provide and maintain Coquitlam's open spaces in a cost-effective, efficient and balanced manner that considers community input.

### **POLICIES**

- a) **Pursue innovative means to acquire, use or protect land to meet park and open space needs.** Recognize that more specific direction for acquisition may be provided in individual area and neighbourhood plans.
- b) **Investigate opportunities for public-private partnerships in the development and implementation of park amenities where feasible.**



## 3.4 Natural Hazards Management

### ISSUES

#### PROACTIVE PLANNING TO AVOID NATURAL HAZARDS

Coquitlam spans two major landforms: the Fraser Lowland and the Pacific Coast Mountains. These features provide an attractive setting and reinforce Coquitlam's sense of place, but also present constraints posed by natural hazards. As the City continues to respond to change, it must consider natural hazards. Much work has already been done through appropriate land use planning, bylaws, engineering works, and other requirements; but improvements may be needed to continue protecting human safety and property, including partnerships with other government agencies.

*Natural hazards may include earthquakes, flooding, landslides, avalanches, erosion, hailstorms, fire and others.*

#### CO-EXISTENCE OF ENVIRONMENTALLY SENSITIVE AREAS WITH HAZARD LANDS

Most natural hazards are part of the natural, dynamic cycles of nature. Some isolated or seasonally occurring extreme events are part of the natural physical processes that restore or rejuvenate the environment. An opportunity exists to manage natural habitat on steep slopes.

#### EMERGENCY RESPONSES TO NATURAL HAZARDS

Although most natural hazards are addressed through careful planning and management, some situations may require emergency response measures. The City has developed an emergency response plan and capability to deal with many situations. Some hazards such as earthquakes require specialized efforts. In this context, continued partnerships between Coquitlam and other government agencies will be important.

### RESPONSES

#### OBJECTIVE 1

To enhance the City's response to geotechnical and natural safety issues which could affect development and infrastructure.

#### POLICIES

- a) **Explore establishing a terrain and watershed evaluation system to create terrain and watercourse suitability and geotechnical hazard mitigation plans for designated areas or watersheds within the City.**
- b) **Recognize the importance of vegetation in maintaining slope stability.** Continue to enforce the Tree Cutting Permit Bylaw which aims to protect lands on steep slopes as well as significant ESAs.
- c) **Encourage retention of topsoil in new developments.**
- d) **Ensure public safety through appropriate local regulations and compliance inspections.** Continue to pursue seismic upgrades and apply seismic regulations provided in the BC Building Code.

*Topsoil provides nutrients necessary for plant growth and also plays an important role in rainfall infiltration.*



## **OBJECTIVE 2**

To preserve hazard lands as ESAs that serve as wildlife corridors or contain important habitat, where appropriate.

### **POLICIES**

- a) **Continue to provide for safe tree retention, where appropriate.** Review the existing Tree Cutting Permit Bylaw and Zoning Bylaw to ensure that any leave strips are not susceptible to tree falls.
- b) **In areas to be replanted, encourage the use of appropriate native vegetation.** Native trees and plants provide habitat for birds and wildlife and are best suited to local soils and climate.

## **OBJECTIVE 3**

To improve emergency response for addressing incidents involving natural hazards.

### **POLICIES**

- a) **Continue to work within the City, and with regional agencies, governments and residents to increase emergency response preparedness.**
- b) **Implement policies contained under 7.2 Community Safety.**

## 3.5 Noise Control

### ISSUE

#### **MANAGING NOISE IN A GROWING CITY ENVIRONMENT**

Residents who choose to live, work and play in Coquitlam enjoy its location, natural green spaces, and quiet friendly neighbourhoods. Noise and vibration can affect quality of life and even human health when levels are excessive or sustained. As the City continues to grow, noise could increase. Opportunities may exist to prevent extreme noise disruption through mitigation measures.

### RESPONSE

#### **OBJECTIVE**

To ensure that new residential areas are planned and developed to address noise, to promote safe and comfortable communities and work environments.

#### **POLICY**

- a) **Acknowledge the impacts of heavier industry and other potentially noisy activities on existing and future residential neighbourhoods in any future land use changes.** Investigate appropriate responses, such as segregation of land uses and the consideration of performance-based zoning.



## 3.6 Environmental Awareness and Responsibilities

### ISSUES

#### **BUILDING SHARED RESPONSIBILITY THROUGH AWARENESS**

Protecting the environment is a shared responsibility, and awareness sets the groundwork for citizens, businesses, landowners and others to play their part. Coquitlam benefits from a rich community spirit in celebrating the area's environmental attributes. The Environmental Fair, Rivers Day and TreeFest, are among the many events that provide opportunities to showcase the community's environmental efforts and natural heritage. Opportunities exist to continue building this awareness through enhanced partnerships between the City and various groups. An appropriate focus for such efforts may include furthering awareness of sustainable choices for meeting daily needs.

#### **ACKNOWLEDGING MEASURABLE AND MEANINGFUL ENVIRONMENTAL ACHIEVEMENT**

Opportunities exist to celebrate and reinforce the continued progress toward sustainability made by residents, organizations, industries and businesses operating within the City of Coquitlam. Given the range of initiatives that exist, emphasis should be placed on those reinforcing community goals for sustainability, as articulated in the City bylaws, procedures and practices.

### RESPONSES

#### **OBJECTIVE 1**

To foster a coordinated City program to increase environmental best practices and promote conservation and sustainable choices at home and at work.

#### **POLICIES**

- a) **Explore the feasibility of demonstrations to showcase successful applications of environmentally beneficial products, services or best practices.** This could include partnerships with other agencies and community groups to demonstrate such things as: composting gardens; water conservation products; sustainable transportation choices; green building materials and alternative energy sources.
- b) **Continue other City efforts to raise awareness of environmentally sustainable choices.** Explore the potential of new technologies for distributing environmental information, and ensuring continued coordination among all departmental initiatives.
- c) **Recognize that outreach to the younger generation provides a key opportunity to foster future sustainable behaviours.** Continue to encourage efforts aimed at entertaining and educating children about the environment and their role in it.



## OBJECTIVE 2

To acknowledge and reinforce the efforts of Coquitlam residents, organizations, and business operations in improving environmental quality and promoting sustainable practices.

### POLICIES

- a) **Develop appropriate strategies for responding to internal environmental issues and opportunities.**
- b) **Investigate opportunities for establishing industrial or commercial enterprise stewardship or other programs to improve environmental quality within Coquitlam.**
- c) **Explore ways to improve sharing of information and expertise between environmental firms, volunteer groups, the City and others to create a knowledge base for managing resources.**

*A successful example of business participation includes the automobile recyclers certification program, which has been included as a requirement in other cities for obtaining a business license.*

3



## 3.7 An Environmentally Responsible City

### ISSUES

#### **CONSERVING RESOURCES AND ENERGY AT CITY FACILITIES AND THROUGH SERVICE DELIVERY**

Opportunities exist to further conserve resources and energy in City facilities, and through the provision of services such as parks and infrastructure construction and maintenance. Ensuring a balance with social and fiscal goals can foster an effective approach to municipal operations.

#### **INTERNAL ENVIRONMENTAL MANAGEMENT SYSTEM**

The City has shown its commitment to a more sustainable workplace, but opportunities always exist for improvement. Continued work towards a comprehensive, internal environmental management system will contribute to achieving the City's strategic goals.

### RESPONSES

#### **OBJECTIVE 1**

To demonstrate City leadership in conservation efforts by adopting environmental best management practices in everyday work activities.

#### **POLICIES**

- a) **Continue to assist in conserving energy, water and other materials within City operations.**
- b) **Continue to foster broader transportation choices in serving City needs.**
- c) **Consider adopting Naturescape principles in City projects.** Use native plants where desirable and feasible; and promote their use in landscaping in place of pavement.

#### **OBJECTIVE 2**

To continue work on an internal Environmental Management system to further enhance sustainable practices in City facilities and services

#### **POLICY**

- a) **Develop appropriate strategies for responding to identified internal environmental management opportunities.**

*The City has won several awards for its environmental efforts, including the BC Energy Award for the plan for Northeast Coquitlam.*