5

Improve Natural + Built Systems

Vision

Abbotsford will become both more "city" and more "country", where the city becomes more urban and the integrity of the country becomes stronger. In the country, Abbotsford's cherished natural areas will be enhanced. Habitat will provide space for wildlife to thrive, recreational areas will provide residents access to nature close to home, and ecosystems will provide Abbotsford with clean land, air, and water.

Nature will also find its way into the city and will be "close to home" for everyone, with a growing tree canopy, creative landscaping, green infrastructure and architecture, and other green and naturalized open spaces. Abbotsford will plan with long term perspective emphasizing a sustainable approach to planning and managing municipal infrastructure, and to meaningfully address challenges associated with climate change and other global and local ecological issues.

Big Picture

Natural and Built Areas in the City and Country

Bylaw No. 2721-2018

Protect and maintain ecosystems, habitat and habitat corridors, and environmental quality within the city and enhance it by increasing the urban tree canopy, embracing integrated stormwater and invasive species management practices, and creating new greenways throughout the city.

Views

Views to natural features such as Mt. Baker are protected and highlighted.

Resource Conservation and Responsibility

Reduce consumption and conserve water and energy resources for current and future generations. Plan with a long term perspective to address the challenges associated with climate change, and minimize Abbotsford's contributions to climate change.

Sustainable Infrastructure

Emphasize a sustainable approach to managing municipal infrastructure by maximizing the efficiency and performance of the existing infrastructure, and planning for infrastructure to support long term growth.

Policies

The policies in this Chapter apply across the city, and Neighbourhood Plans and updated Master Plans will consider many of them in more detail.

NATURE IN NEIGHBOURHOODS

5.1 Ecological Greenways

Enhance and restore ecological links between existing natural areas and public open spaces, increasing connections between isolated habitats.

5.2 Urban Forest and Tree Canopy

Expand and strengthen a healthy and diverse tree canopy to improve air quality, capture carbon dioxide, reduce heat island effects, support public health and quality of life, and create beauty in the city through a number of approaches:

- Establish a tree canopy coverage target.
- Increase the urban forest to a determined target in public spaces;
- Require tree conservation strategies, and street tree plantings and landscaping in all development and infrastructure projects. Ensure street planting are at close intervals and with suitable growing conditions to allow a mature “kissing canopy” on all streets over time.

5.3 Retention of Natural Landforms

Retain natural landforms, such as escarpments (including Townline Hill and McKee Peak), ravines, rock promontories, hilltops, and glacial erratics.

5.4 Riparian Habitat

Bylaw No. 2721-2018

Maintain the City’s *Streamside Protection Bylaw, 2005,* that defines setback widths depending on existing stream and riparian conditions. Streams and riparian areas should be restored to improve the quality of urban streams in particular, including the potential for day-lighting some streams.

5.5 Terrestrial Habitat

Bylaw No. 2721-2018

Protect terrestrial habitat, particularly areas with species at risk, and mitigate areas of habitat loss.

5.6 Viewscapes and Vistas

Protect viewscapes to natural features such as Mt. Baker, north shore, and Fraser Valley mountains, and minimize the visual impact of development on the hillside from the lowlands.

CONSERVATION AND RESILIENCE

5.7 Flooding Hazards

Identify floodplain hazards and impacts to infrastructure systems, such as transportation, agriculture, water, and economic. In particular, align habitable space in the floodplain with the provincial flood construction levels.

5.8 Aquifer Protection

Protect the Abbotsford-Sumas aquifer using tools within the City’s regulatory mandate and communicate the importance of aquifer protection. Consider using an aquifer protection plan.

5.9 Climate Change and Disaster Resilience

Conduct an assessment of municipal infrastructure to determine the level of risk and impact from more frequent and larger storms, droughts, or other natural disasters such as earthquakes, and ensure future development is informed by this assessment.

5.10 Green Buildings

Develop a strategy to create regulations, incentives, and remove regulatory barriers to reduce energy consumption in buildings. This could be considered, among other places, as part of a broad strategy of incentives offered through a coordinated density bonusing program. Incentives should be used only for significant green design achievement, and should not be used where regulations and other techniques are reasonably available.

5.11 Water Quality

Improve local water quality through reduction of point and non point source pollution, and through watershed planning in partnership with neighbouring and regional jurisdictions.

5.12 Air Quality

Promote strategies that reduce local air pollution, including measures to protect the Fraser Valley airshed from additional point pollution sources such as energy plants.

SUSTAINABLE INFRASTURUCTURE

5.13 Drinking Water

Continue to work with Abbotsford Mission Water and Sewer Commission to ensure drinking water supply and distribution is managed and expanded to safeguard public health, protect the environment, and provide adequate supply for a growing population:

- Monitor demand and implement conservation strategies including awareness and education.
- Implement system efficiencies to ensure infrastructure use is maximized.
- Plan for short, medium and long term water supply sources.
- Replace infrastructure reaching the end of its useful life cycle, and coordinate replacing with other road and utility replacement programs.

5.14 Stormwater

Bylaw No. 2721-2018

Support an integrated stormwater management approach for the comprehensive management of surface water, stormwater, and ground water resources that promotes healthy aquatic ecosystems, resilience to climate change and the maintenance of hydrologic systems.

Continue using Integrated Stormwater Management Plans for watersheds and designing stormwater features to form part of the broader open space network.

Continue to implement and manage the drainage systems in the floodplains to support agriculture production in these areas.

5.15 Wastewater

Continue to work with Abbotsford Mission Water and Sewer Commission to meet or exceed provincial and federal wastewater treatment regulations to safeguard public health and protect the environment.

- Monitor flow and effectiveness of treatment measures.
- Implement system efficiencies to ensure infrastructure use is maximized.
- Plan for short, medium and long term treatment systems.
- Replace infrastructure reaching the end of its useful life cycle, and coordinate replacing with other road and utility replacement programs.

5.16 Solid Waste

Support ongoing initiatives that will provide for effective and responsible solid waste management of recyclables, compostables, and garbage through programs, education, services, policies, guidelines and alignment with the Fraser Valley Regional District's Solid Waste Management Plan:

- Waste diversion of 65% by 2018
- Waste diversion of 80% by 2020
- Waste diversion of 90% by 2025
- Practice the six R's of waste management: Rethink, Reduce, Reuse, Recycle, Recover, and Residual Management
- Consider material recovery as a component for achieving the waste diversion targets

5.17 Flood Protection

Work with senior levels of government to assess projected impacts on dykes and stormwater infrastructure and respond to changing conditions through management strategies. Particular attention should be given to the Fraser River, Vedder Canal and Sumas River for protection of the Sumas and Matsqui Prairies.

5.18 Franchise Utilities

Ensure the coordination of land use planning with the provision of essential utility infrastructure to facilitate project efficiencies, minimize costs and reduce disruption to the public.

Update the Underground Wiring Policy to prioritize the Mixed Use Centres.

5.19 Gravel Extraction

Gravel extraction and mining activities fall under the jurisdiction of the Provincial government leaving local government limited authority to manage it. As such, it is important to liase with Provincial agencies responsible for gravel to ensure the City's interests are recognized. Gravel extraction eligible areas are identified in Map 15 and provide clear direction regarding long term gravel resources in Abbotsford.

5.20 Land Reclamation and Restoration

Continue and enhance reclamation and restoration of land used for temporary uses such as soil removal or aggregate extraction, returning the land to original and improved conditions.

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