

8.0 Community Infrastructure and Services

8.1 CONTEXT

Community infrastructure such as water, sewer, and drainage systems, roads, and parks are all significant investments for local governments to provide and maintain. Infrastructure services in View Royal are provided by both the Town and the Capital Regional District. The Town provides and manages sewer and drainage services, manages natural assets, and is responsible for collection of curbside waste and organics, including lawn and garden waste. Drinking water for the community is the responsibility of the Capital Regional District. Roads and parks, while the responsibility of the Town, are discussed in their own unique sections (sections 7.0 and 12.0, respectively). The Town seeks to provide infrastructure and services to meet the needs of the population and plan for impacts of both climate change and development on these systems as the community grows.

SEWER SYSTEM

The Town's sewer system, as shown on Map 8, comprises a number of pump stations that are electronically monitored. Some lands are located lower than the gravity sewer system, and so grinder pumps are located on these properties. The pump stations all work together to pump sewage waste from the Craigflower Pump Station to McCauley Point in Esquimalt, both of which are operated and maintained by the Capital Regional District. The system provides services to lands located within the Town's Urban Containment Boundary shown on Map 1, leaving those located north of Thetis Lake to be serviced by on-site private septic systems.

STORMWATER SYSTEM

The Town's stormwater system, commonly referred to as 'drainage', as shown on Map 9, largely comprises of open ditches and culverts that drain into Craigflower and Millstream Creeks or directly into Portage Inlet and Esquimalt Harbour.

WATER SYSTEM

View Royal is connected to the regional water distribution system that is owned, operated, and maintained by the Capital Regional District. Buildings within the Town are connected to a water metering system that measures water consumption. Areas located within the Town's Urban Containment Boundary have sufficient water supply for both potable water and fire protection purposes, while those located north of Thetis Lake have more limited capacity. Many properties in this area of View Royal rely on alternative water supply sources for this reason. Four water supply mains exist within the Town's boundary, as shown on Map 10. These mains carry water from the Sooke Reservoir to the Town and the jurisdictions located beyond.

SOLID WASTE

Household waste is collected on a weekly basis by a company contracted by the Town to provide this service. Waste classified as garbage is disposed of at the regional Hartland Rd Landfill, operated and owned by the Capital Regional District. Organic waste is taken to a composting facility. Recycling is a regional service provided through the Capital Regional District's Blue Box Recycling Program.

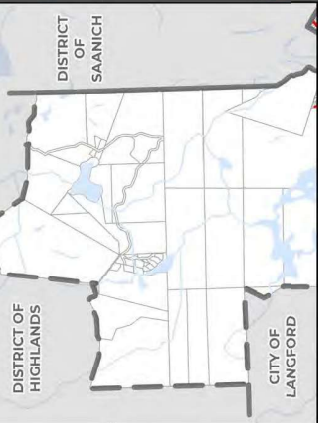
Community members desire to see infrastructure and assets provided and maintained in a manner that is both environmentally and fiscally responsible. The objectives and policies of this section aim to ensure that this vision is achieved in the provision of community infrastructure and services.

The following OCP Goals may be achieved through the policy direction provided in this section:

- Growth Management & Community Character Preservation
- Regional Partnerships
- Sustainable Service Delivery and Asset Management



THETIS LAKE NORTH



THETIS LAKE NORTH

DISTRICT OF
HIGHLANDS



CITY OF
LANGFORD

DISTRICT OF
SAANICH

0 150 300
Metres

- Stormwater Main
- E&N Rail Corridor
- Regional Multi-Use Trails
- Waterbodies
- Administrative Boundaries

DISTRICT OF
SAANICH

Thetis Lake

Portage Inlet

Esquimalt Harbour

CITY OF
COLWOOD

CITY OF
LANGFORD

0 250 500
Metres



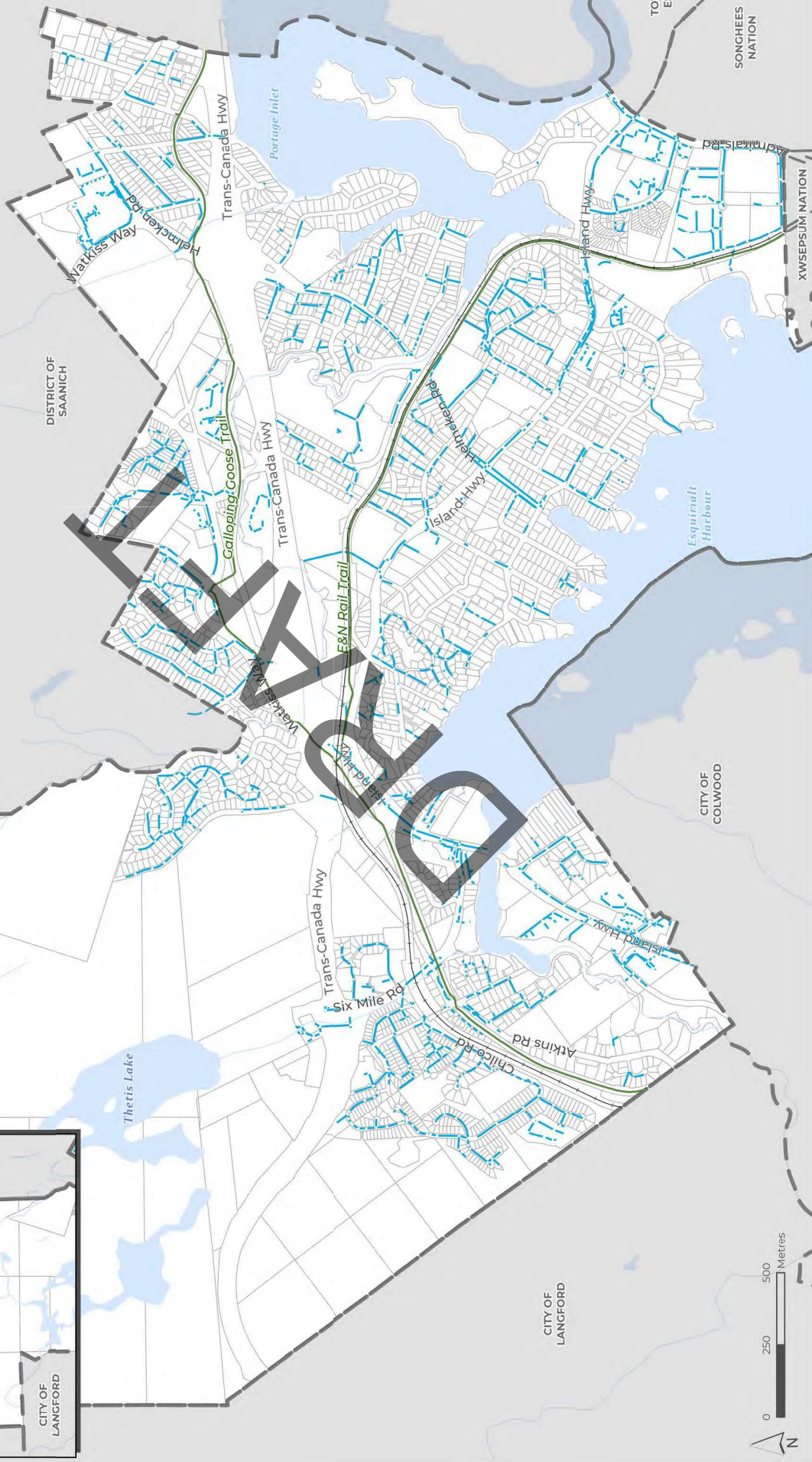
SONGHEES
NATION



XWSEPSUM NATION

TOWNSHIP OF
ESQUIMALT

MAP 9 - STORMWATER SERVICING SYSTEM



THETIS LAKE NORTH

DISTRICT OF
HIGHLANDS



CITY OF
LANGFORD

DISTRICT OF
SAANICH

0 150 300
Metres

- Water Main
- E&N Rail Corridor
- Regional Multi-Use Trails
- Waterbodies
- Administrative Boundaries

MAP 10 - WATER SERVICING SYSTEM

DISTRICT OF
SAANICH

Thetis Lake

Portage Inlet

Esquimalt
Harbour

CITY OF
COLWOOD

CITY OF
LANGFORD

0 250 500
Metres



SONGHEES
NATION



XWSEPSUM NATION

TOWNSHIP OF
ESQUIMALT

Admirals Rd

Island Hwy

Atkins Rd

Trans-Canada Hwy

Six Mile Rd

Watkins Way

Helmcken Rd

Calloping Goose Trail

Trans-Canada Hwy

E&N Rail Trail

Island Hwy

Island Hwy

8.2 OBJECTIVES

8.2.1 SUSTAINABLE INFRASTRUCTURE

Ensure that infrastructure investments and renewal decisions are guided by achievable asset management programs, policies and plans. Asset management programs will consider organizational-wide approaches that maximize the value and services from infrastructure assets.

8.2.2 FISCAL RESPONSIBILITY AND DECISION MAKING

Ensure that infrastructure and service delivery are planned and implemented in a fiscally responsible manner, and that reserves are funded so that investments are equitably funded by current and future generations.

8.2.3 SERVICE DELIVERY

Continue to provide a high level of service for critical infrastructure systems to align with community expectations.

8.2.4 INFRASTRUCTURE INVESTMENT, GROWTH, AND COORDINATION

Continue to coordinate infrastructure investments, including renewals, upgrades, maintenance, and improvements to maintain sustainable service delivery, and consider alignment with existing and future land use and growth considerations.

8.2.5 NATURAL ENVIRONMENT

Consider the preservation of the natural environment's integrity and protection of human health in infrastructure and service delivery when making decisions. Growth should be balanced with the capacity of natural systems.

8.2.6 CLIMATE CHANGE IMPACTS

Consider ongoing studies and review of climate projections in the design, upgrade, operations, and maintenance of new and existing infrastructure to make informed decisions on the optimal method of service delivery.

8.3 POLICIES

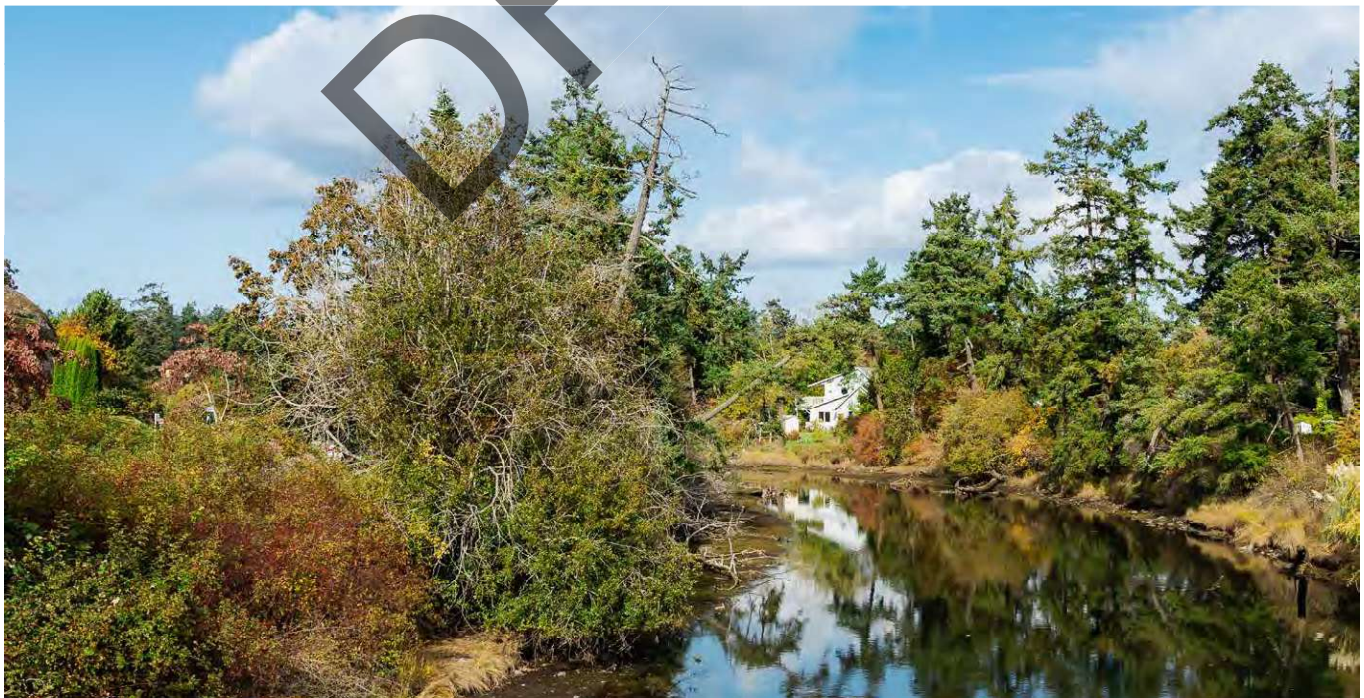
8.3.1 GROWTH MANAGEMENT AND DEVELOPMENT

- A. Plan new infrastructure and services to support compact and sustainable development, and prioritize investments that support new housing, employment, and civic uses.
- B. Ensure that development will only occur if appropriate infrastructure systems (water, wastewater, and sewer) with sufficient capacity are in place or provided as part of a development. Infrastructure upgrades should be planned for and installed through municipal finance initiatives.

- C. Extend infrastructure services into un-serviced areas only when such services will be built in tandem with new development and such development will finance the service extension. Extension of infrastructure services in areas outside the Urban Containment Boundary or for developments that are not in conformance with the policies of this plan will not be supported.
- D. Plan new infrastructure in conjunction with roads, community facilities, parks, and other public spaces. Planning considerations should include:
- Stormwater management
 - Watershed systems and functions
 - Opportunities to integrate parks, greenways, natural systems, and tree canopy improvements
 - Pedestrian, cyclist, and transit connections.

8.3.2 INFRASTRUCTURE INVESTMENT

- A. Use the Town's Asset Management Program as a guide to identifying future infrastructure priorities and understand required reserve contributions for on-going service demand and delivery.
- B. Prioritize infrastructure and services investments that best address local needs and maximize community benefits.
- C. Guide infrastructure upgrades through master plans that identify investment priorities.
- D. Ensure that the cost of infrastructure investments is borne by those that benefit the most from the provision of the service; with the cost of new or upgraded systems being funded by the developments that trigger them or affected property owners.



8.3.3 INFRASTRUCTURE STANDARDS

- A. Ensure infrastructure is designed in a manner that aligns with the community's goals and desired levels of service, as well as adheres to the latest Master Municipal Construction Documents where appropriate to ensure that all infrastructure in View Royal is being constructed to a standard that aligns with best engineering practice.
- B. Aim to advance green infrastructure (e.g., natural assets, enhanced assets, and engineered assets) practices.
- C. Consider the full life cycle of infrastructure services, including operations, maintenance and service levels, when designing new systems and upgrades.
- D. Facilitate adequate operation and maintenance programs to maximize the life of infrastructure systems, reduce the frequency of replacement, and ensure proper functionality. Continue to explore strategies and solutions to understand and reduce the inflow and infiltration of stormwater into the sanitary sewer system.
- E. Continue to explore strategies and solutions to understand and reduce the inflow and infiltration of stormwater into the sanitary sewer system.

8.3.4 INFRASTRUCTURE FOR A HEALTHY ENVIRONMENT

- A. When considering infrastructure renewal priorities, considerations will be given to upgrades to infrastructure and services that will enhance the resiliency to the risks and impacts of climate change and disasters.
- B. Continue to explore opportunities to establish a natural asset inventory while supporting the protection, maintenance, and enhancement of existing natural assets and amenities.
- C. Work with adjacent jurisdictions in the Capital Regional District and other organizations to advance efforts in watershed management and drinking water protection that align with the *Drinking Water Protection Act and Regulation*.
- D. Support stormwater management practices that emphasize infiltration and detention, where possible, to minimize the negative effects (erosion, sediments and contaminants) of stormwater discharge into Portage Inlet, the Gorge Waters, Esquimalt Harbour, Craigflower Creek, Hospital Creek, Millstream Creek and other natural watercourses and water bodies.

Green infrastructure refers to natural and semi-natural engineered systems that support with managing drainage. Examples include green roofs, permeable pavements, and rain gardens, amongst others.

- E. Consider implementation of stricter source control measures to reduce runoff from private property mitigating downstream drainage impacts and potential upgrades.
- F. Continue to prioritize sewer infrastructure upgrades and inflow and infiltration reduction to reduce overall sewer flows in the system mitigating the risk of liquid waste overflowing into the natural environment.
- G. Investigate opportunities to mitigate downstream drainage impacts, in alignment with regional and provincial standards, and the level of service expected of the public. Opportunities could include rainwater collection, greywater reuse (including treated water for irrigation purposes), and dual piping systems.

8.3.5 SOLID WASTE MANAGEMENT

- A. Continue to work with the Capital Regional District and the private sector to maintain three-stream waste separation systems (garbage, recycling, composting) as a means of reducing the amount of solid waste reaching the landfill. Ensure that all collection programs are convenient and well-promoted to increase participation at the unit level, building level, in businesses and public institutions.
- B. Support small-scale composting on appropriate residential properties and community gardens.
- C. Support regional initiatives to reduce construction waste and encourage sustainable waste reduction.
- D. Investigate opportunities to address waste collection for multi-unit residential developments comprising greater than four units.