



## 4.10 UTILITIES

Pitt Meadows has an extensive system of public utilities designed to provide the community with an adequate and secure supply of potable water (including irrigation), to dispose of sanitary sewage and solid waste, and to handle storm water. Managing these systems to ensure public health and property protection is one of the City's top priorities. Given the substantial costs involved in constructing, maintaining and monitoring its utilities, the City has established a comprehensive set of policies to guide utilities planning and management.

### 4.10.1 Utilities Planning and Management

Planning and building many of the major utilities that serve Pitt Meadows involves not only the City but other government agencies. Careful management of these utilities is needed to ensure efficient service to the community in a timely and cost-effective manner.

#### *Policies*

- a) The City will continue to advocate the interests of the community with individual provincial and federal agencies whose mandates affect utility infrastructure planning and investment;
- b) An asset management system will be developed and implemented in order to maximize the benefit of public investment in utility infrastructure and services.

### 4.10.2 Water Supply

Water for Pitt Meadows is supplied from the Greater Vancouver Water District (GVWD) system through mains that run along the Lougheed Highway right-of-way. Water service was extended to the rural area as part of the Agricultural and Rural Development Subsidiary Agreement in 1982. There are six major pressure reducing (PRV) stations located along these mains at Dewdney Trunk Road, Harris Road and Bonson Road. From these PRV stations, water is distributed to the local municipal water distribution system on both sides of Lougheed Highway.



Water supply and distribution is not considered a development constraint in the City, with only minor upgrading required over time to accommodate population growth.

Pitt Meadows is one of the only municipalities in Metro Vancouver to supply potable water for agricultural use<sup>2</sup>. Agriculture is the largest consumer of non-residential water in Pitt Meadows, representing 77% of the total metered consumption. The three largest water users in Pitt Meadows are agricultural operators.

The conversion of farmland and general intensification of the use of prime agricultural land is also causing farmers to become more reliant on domestic water for irrigation. As the cost to irrigate using potable water increases, there will be more demand on the City to supply irrigation water from the adjacent rivers. Also as land is converted to more intensive agricultural production, the extent of rural lands using irrigation water from the City's ditch system will increase over time. Improvements to the rural drainage system will enhance the supply of irrigation water.

In August, 2005, Metro Vancouver released the Drinking Water Management Plan for the region.

The plan has three primary goals:

- Provide clean drinking water
- Ensure sustainable use of water
- Ensure efficient supply of water

The City is reconsidering its own approach to water supply. For example, the City is considering a universal water-metering program as a community-wide water conservation tool. Universal water metering has several benefits, including:

- More equitable charging to users
- Improved system management
- Reduced water use

Water metering promotes water conservation through an appropriate rate structure, incentives and customer awareness.

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<sup>2</sup> The Corporation of Delta provides domestic water to greenhouse operators on a very limited basis.



- a) Efficient and effective delivery of safe drinking water will be ensured in Pitt Meadows;
- b) The use of potable water for irrigation and agri-industrial uses is discouraged where other sources of water are available;
- c) The City will work with the agricultural community to develop a plan, including an appropriate funding model, to provide adequate irrigation water from the Pitt and Alouette Rivers;
- d) The City will consider a residential water-metering program;
- e) Trunk service for waterworks will be designed for reserve capacity to accommodate future growth and are extended in accordance with the approximate location and phasing shown on Schedules 6A and 6B.

#### 4.10.3 Sanitary Sewer

The City's sanitary sewer system is intended to serve the urban area of Pitt Meadows and is not designed for expansion into rural areas. The remainder of the municipality is serviced by septic disposal, holding tanks and innovative disposal systems. In recent years, the Ministry of Health criteria for approval of septic systems has been made more stringent. Some lowland areas cannot meet the requirements for septic systems because of native soil conditions, so the City has permitted holding tanks and innovative disposal systems. However, the City does not support subdivision of lands where holding tanks would be required.

The sanitary sewer system is considered adequate for the City's urban area, although some upgrading will be required over time to accommodate population growth. Sewer package treatment plants may be an option for lands outside of the urban area in order to provide sanitary service to rural development areas. Ministry of Environment approval would be required for any such systems that discharge to the Fraser, Pitt or Alouette Rivers.

#### *Policies*

- a) Subdivision of land which requires the use of holding tanks is not permitted;
- b) All rural land uses shall provide septic disposal systems in accordance with the municipal sewage regulation. Use of innovative sewage disposal systems is supported where septic disposal cannot be approved;



- c) Trunk services for sanitary sewer will be designed for reserve capacity to accommodate future growth and are extended in accordance with the approximate location and phasing shown on Schedule 7;
- d) The sanitary system will be managed to meet the long-term objectives of the Metro Vancouver Liquid Waste Management Plan;
- e) Efficiency of the sanitary system will be improved by working with Metro Vancouver to reduce waste volume through water conservation.

#### 4.10.4 Stormwater, Drainage and Flood Protection

Approximately 90% of Pitt Meadows lies within floodplains and the Agricultural Land Reserve.

The community is protected by a series of dikes that are designed to prevent spring freshet flooding from the Fraser, Pitt and Alouette Rivers. These same dikes also prevent storm water from discharging into the river systems.

There are four separate and independent drainage catchment areas within Pitt Meadows, as shown on Schedule 8. The City’s urban area, as well as a portion of Maple Ridge’s urban area, is wholly contained within the Area # 3 catchment boundaries.



PITT MEADOWS DYKE

Storm water flows through the storm sewer, ditches, sloughs, and culverts before it is discharged by flood boxes and pump stations over the dike system into the adjacent rivers.

As agricultural uses intensify to greenhouses, processing and production plants, and grassy forage fields are converted to laser-levelled, drained berry fields, the amount and rate of run-off is increasing. The capacity of the drainage system cannot currently accommodate the increase of storm water run-off; hence it takes longer to drain rural areas, which could impact on some agricultural production.

Construction of larger residential homes in the agricultural areas generates higher expectations relative to acceptable levels of flooding. Increasing the construction level of new homes within the floodplain may mitigate some of the damage caused by flooding.



*Policies*

- a) The City will limit the extent of urban run-off by requiring each development application to adhere to the requirements outlined in the Subdivision and Development Servicing Bylaw. In addition, the City will consider using similar limits on storm water run-off for large, intensive impervious agricultural projects;
- b) The City will prepare a policy and standard regarding the placement of driveway culverts and culverts installed on key drainage courses, so as to not impede the flow characteristics of the rural drainage systems;
- c) The City will consider amending the Building Bylaw to increase the rural construction level and not permit any residential construction to occur below that level;
- d) Drainage utility corridors (ROWs) for drainage maintenance will be protected where required and building, landscaping, and cropping setbacks established in rural areas to ensure that access to drainage corridors is protected;
- e) The existing stormwater systems will be maintained and improved through an annual program of preventive maintenance and on-going appraisal;
- f) The City will help facilitate the improvement of agricultural infrastructure (e.g. irrigation, drainage, diking works) and other services that support the agricultural sector;
- g) Integrated stormwater management practices will be explored along with alternative development standards for managing stormwater by reducing impervious-surfaces and improving on-site water management;
- h) In partnership with the Federal and Provincial Government, the City will develop a comprehensive approach to flood protection that addresses the maintenance and upgrade of the dike system and dredging of the Fraser River;
- i) The storm sewer systems will be managed to meet the long-term objectives of the Metro Vancouver Liquid Waste Management Plan. The City intends to work with Metro Vancouver to develop a Municipal Integrated Stormwater Management Plan (ISMP);
- j) Efficiency of the storm sewer systems will be improved by working with Metro Vancouver to reduce waste volume through water conservation.



#### 4.10.5 Solid Waste

Responsibility for the disposal of the majority of City's solid waste rests with Metro Vancouver. Currently, all household and most business waste is hauled by truck to a transfer station in Coquitlam and then to a landfill in Cache Creek.

The City has a residential recycling program. Recyclable materials are taken by truck to Surrey, where they are sorted and sold to various commodity purchasers. While recycling reduces the amount of material being placed in landfills, reduction and reuse are preferable where possible.

#### *Policy*

- a) The City supports solid waste recycling and other initiatives to reduce and reuse solid waste and is supportive of a regional approach to solid waste management.