

# Regional District LGDE Help Manual

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Ministry of  
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## 7. Statistics Schedules

### **7(a) Schedule C1 – General Statistics for Rural Areas Only**

#### **A. Development Information**

This section deals with both building permit and business license information. All information is for **rural areas only** this does **not** include municipal areas unless the RD is providing the service for a municipality.

##### **1. Number of Building Permits Issued in Year**

This represent the total number of building permits issued in accordance with sections 317 and 298 of the *Local Government Act*.

Residential – All permits issued for building residential properties (residential being defined as Class 1 properties under regulation to the *Assessment Act*).

Industrial/Agricultural – All permits issued for building of industrial or agricultural facilities (defined as Classes 4, 5 and 9 properties under regulation to the *Assessment Act*).

Commercial - All permits issued for building of commercial facilities (defined as Class 6 properties under regulation to the *Assessment Act*) except any institutional properties.

Institutional – All permits issued for building facilities for delivering government services (either directly or indirectly) and include government offices; hospitals; seniors housing; and primary, secondary and post secondary education facilities.

Other – Building permits issued for any other types of development that do not fit into the above categories.

##### **2. Total Building Permit Value**

This is the total dollar value of all building permits issued during the reporting period.

##### **3. Total Building Permit Construction Value**

This is the total value of all improvements constructed during the reporting period.

##### **4. Number of Business Licenses Issued in Year**

The total number of business licenses issued by the board during the reporting period. In most cases regional districts do not have the authority to issue business licences. However, in some cases certain regional districts may issue licenses under special legislative authority.

#### **B. Number of Fire Hydrants**

Total number of fire hydrants located within the boundaries of regional water distribution services. Regional water distribution does **not** include bulk supply.

#### **C. Number of RD Employees**

This is the number of full-time equivalent regional district employees.

#### **D. Distance of Pipes**

This is the total distance (in Kilometres) of pipes for water, sewer and storm drainage within the regional service boundaries (does not include pipe that is under the operating authority of a member municipality for municipal purposes). The pipes are broken down into categories depending on whether they are mains or secondary lines **and** based on the purpose of the piping (water, sewer, drainage). If the drainage system cannot be separated from the sewer system, include both drainage and sewer together under the line labelled “Sanitary Sewer Pipes.”

#### **E. Water Systems**

The following information is for all water systems under the authority of the regional district.

Water works systems are systems for water supply including source, treatment, storage, transmission and distribution facilities where water is furnished or offered for domestic/commercial purposes (as defined under Section 1 of the *Drinking Water Protection Regulation* --- BC Reg. 120/2001). These include (but are not limited to) mains, distribution lines, intakes, wells, reservoirs, pressure reducing valves (PRVs), pump-houses and treatment and disinfection facilities.

This table is divided into three columns based on the source of water (surface, ground, and combined).

- Surface Water – water from a source open to the atmosphere and includes streams, lakes, rivers, creeks, springs and shallow wells (under direct influence from surface water(s) as defined under the *Drinking Water Protection Regulation*).
- Ground Water – water below the surface of the ground (except shallow wells) as defined under the *Water Act*.
- Combined Water – water from both surface and ground sources.

#### **Number of Systems**

Some regional districts may be responsible for multiple water systems. Identify each separate system based on raw water source (column).

#### **Level of Treatment**

##### **% Water Receiving Disinfection**

Based on total annual potable water supplied by the regional district, identify percentage of water under each column that receives disinfection.

Disinfection means a treatment process that kills or inactivates organisms which are infectious or injurious to human health. These include, but are not limited to, the use of chlorine, chloramine, chlorine gas, ultra violet light, and ozone.

##### **% Water Receiving Additional Treatment**

Based on total annual potable water supplied by the regional district, identify percentage of water supplied, under each column that receives additional treatment.

Additional treatment means any physical, biological or chemical process which makes water potable, in addition to disinfection. These include, but are not limited to flocculation, coagulation, filtration, activated carbon, iron/manganese removal and pH control.

**Number of Intakes and Wells**

This is the site of raw water extraction. A water works system may have one or many intakes/wells. Under each column, identify the total number of intake(s) and well(s).

**Number of Service Connections –**

This is the number of property connections to the water system.

***Residential***

Total number of system connections to residential properties (i.e. Class 1 properties under the *Assessment Act*)

***Commercial and Other***

Total number of connections to commercial and other properties (schools, hospitals, other institutions) identified by water source. This is all connections excluding residential and industrial/agricultural properties.

***Industrial/Agricultural***

Total number of system connections to industrial & agricultural properties (i.e. Class 4, 5 and 9 properties under the *Assessment Act*).

**Average Daily Flow (m<sup>3</sup>/day)**

Based on total potable water supplied by the regional district, calculate average daily flow (cubic metres per day) for each column for each type.

***Residential***

Average daily flow to residential properties (i.e. Class 1 properties under the *Assessment Act*)

***Commercial and Other***

Average daily flow to commercial and other properties (schools, hospitals, other institutions) identified by water source. This is all connections excluding residential and industrial/agricultural properties.

***Industrial/Agricultural***

Average daily flow to industrial & agricultural properties (i.e. Class 4, 5 and 9 properties under the *Assessment Act*).

**% of Surface Water from a Combined System**

For the last column “Combined Surface/Ground” water source, please provide the percentage of combined source water that comes from a surface source (not a ground source). A reasonable estimate is acceptable.

### **% of Total Water that Comes from Surface and Ground Sources**

This is a calculated field that estimates the total percentage of water from surface and ground sources based on average daily flows and the percentage of combined source water (surface/ground) from a surface source.

The formula is equal to:

$$\text{Surface Water} = \frac{(a + (c \times d))}{a + b + c}$$

$$\text{Ground Water} = \frac{[b + (c \times (1-d))]}{a + b + c}$$

#### **Where:**

- a = Average daily flow from surface water sources
- b = Average daily flow from ground water sources
- c = Average daily flow from combined water sources
- d = % of combined water from a surface source

### **F. Sewer Systems**

The following information is for all sewer systems under the authority of the regional district.

A sewer system means any facility or work that gathers, treats, transports, stores, utilizes or discharges sewage or reclaimed water (as defined under Section 1 of the *Environmental Management Act* Municipal Sewage Regulation --- BC Reg. 129/99). These include (but are not limited to) mains, collector lines, pumps, outfalls and facilities for storage, treatment, reuse/recycling and disposal.

This may also include storm sewer infrastructure if it is not separate from the sanitary sewer system.

This table is divided into four columns based on the level of sewage treatment (preliminary, primary, secondary, and tertiary)

- Preliminary – generally refers to screening and grit removal.
- Primary – any form of treatment, excluding dilution, that consistently produces an effluent quality with a 5-day biochemical oxygen demand (BOD<sub>5</sub>) not exceeding 130 mg/L and total suspended solids level (TSS) not exceeding 130 mg/L.
- Secondary - any form of treatment, excluding dilution, that consistently produces an effluent quality with a 5-day biochemical oxygen demand (BOD<sub>5</sub>) not exceeding 45 mg/L and total suspended solids level (TSS) not exceeding 45 mg/L, except for lagoon systems for which the effluent quality is not to exceed a BOD<sub>5</sub> of 45 mg/L and a TSS of 60 mg/L.
- Tertiary – means any form of treatment, excluding dilution that provides the removal of phosphorus (can also include nitrogen removal).

### **Number of Systems**

Classify each separate system by the highest level of treatment produced

### **% of Final Effluent Receiving Disinfection**

Percentage of effluent from each system (column) that receives disinfection.

**Disinfection** is defined as the destruction, inactivation or removal of pathogenic micro organisms by any means. Disinfection usually takes place at the end of the treatment process.

### **Discharge/Outfall**

A discharge/outfall is a site where liquid waste is introduced into the environment from the waste system.

For each column in the table, please describe this site as one or more of the following: Marine, Fresh, In Ground, and/or Reclaimed.

- Marine – describes an open marine water which is all ocean water with appropriate flushing action.
- Fresh – includes all non-marine surface water including streams, lakes, rivers, creeks, and springs. This also includes any marine water with insufficient flushing action (e.g. embayed marine waters).
- In Ground – refers to the discharge of effluent sub-surface as described in the Municipal Sewage Regulation ---- BC Reg. 129/99.
- Reclaimed – refers to any effluent from a sewage facility that is suitable for direct designated water use or controlled use.

### **Number of Service Connections –**

This is the number of property connections to the sewer system.

#### ***Residential***

Total number of system connections to residential properties (i.e. Class 1 properties under the *Assessment Act*)

#### ***Commercial and Other***

Total number of system connections to commercial and other properties (schools, hospitals, other institutions). This is all connections excluding residential and industrial/agricultural properties.

#### ***Industrial/Agricultural***

Total number of system connections to industrial & agricultural properties (i.e. Class 4, 5 and 9 properties under the *Assessment Act*).

### **Average Daily Flow (m<sup>3</sup>/day)**

Average daily flow into the treatment facility(s), calculated for each treatment level (column).

### **Liquid Waste Management Plan**

Complete with 'yes'/'no'/or 'in progress', as to the status of the regional Liquid Waste Management Plan.