

Water Use Licensing Report: Willow Creek Watershed

Protective Process:

Water Rights Use Licensing is done under the authority of the Manitoba *Water Rights Act* which came into force in 1930 when Manitoba took control of its natural resources which had previously been administered by the Federal government. The Act provides for hydrologically based legal framework that balances human and environmental needs. The licensing process takes into consideration the appropriate social, economical, political and administrative aspects of water management. At the core of the licensing process is the requirement for water to be legally appropriated and put to beneficial use by the licensee.

The intent of water rights licensing is to protect the interests of licensees, domestic users, the general public and the environment with respect to the use or diversion of water or the construction and operation of water control works under licence. In Manitoba, water withdrawals of less than 5500 l/day (25,000 L) do not require licensing. These projects are protected under the domestic exemption. Licenses are issued for municipal, agricultural, industrial, irrigation and "other" purposes. Projects that fall into the "other" category include air cooling/heating; aquaculture; fire protection; water bottling; water slides; etc.

The general and specific conditions that are included on all licenses reflect, in part, the information received from the technical and management studies that have been carried out for the project and/or water body. For surface water projects, this determination is based on an analysis of stream flow data, riparian needs, the water use requirements of senior water users, domestic needs, and instream flow requirements. For groundwater projects, this determination is based on an assessment of hydrogeological information including; geological information on aquifers, aquifer sustainable yield estimates and water allocation budgets, where available, as well as the water use requirements of senior users and domestic needs. [Note – Projects withdrawing more than 200 cubic decameters of water in a year are also subject to Environment Act licensing which has a formal public notification process.]

Water Rights Projects in the West Souris Watershed:

There are five Water Rights Licenses and five Water Rights applications for locations within the boundaries of the Willow Creek watershed. All 10 of these projects are groundwater sourced. There are no licensed surface water users within this watershed.

In this watershed 1833.2 dam³ has already been allocated under licence. Industry (Diageo Canada Inc.) is the highest water user from a volumetric perspective within this watershed followed in turn by municipal users (Rural Municipality of Gimli), other purposes and finally livestock producers. It is important to note that all allocations under the "other" category are for air cooling/ heating projects. These are generally non-consumptive as the water is returned to the same aquifer (Figure 1).

Purpose	Allocated Under Licence (dam ³)		Total Allocation (dam ³)
	Groundwater	Surface Water	
Agricultural	23.9	0.0	23.9
Industrial	1250.0	0.0	1250.0
Irrigation	0.0	0.0	0
Municipal	320.0	0.0	320.0
Other	239.3	0.0	239.3
Total	1833.2	16.0	1833.2

Figure 1: Amounts Allocated Under Licence

Figure 2 illustrates the locations of all the Water Use Licensing projects within the Willow Creek watershed.



Figure 2: Location of all Water Use Licensing Projects in the Willow Creek Watershed

Data Gaps:

Aquifer or whole stream budgets have not yet been established in the Willow Creek watershed; therefore, licensing decisions are based on an individual site specific evaluation. Current allocations are believed to be well below the sustainable yield of the major streams and aquifers. Water Budget Models are developed by the Groundwater and Surface Water Management Sections to set allocation limits for major streams and aquifers. These models divide aquifers and waterways into individual sub-basins and reaches. Each sub-basin or reach is assigned a specific amount of water that is available for allocation. By inputting an allocation amount the model computes the amount of water available for allocation at all other points in the sub-basin or along the reach and adjacent reaches affected by the allocation. Such models have not been done for this watershed.