Water Use Licensing Report: Swan Lake 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 water use licensing process is the principle mechanism available for ensuring the sustainable development of the province's water resources for beneficial purposes 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 Ig/day (25,000 L) do not require licensing. These projects are protected under the Domestic Use 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 Swan Lake Watershed:

Fourteen Water Rights Licenses have been issued for projects located within the boundaries of the Swan Lake watershed. Seven of these projects are groundwater sourced and seven are surface water sourced. There are four irrigators in the watershed, including the Swan River Golf and Country Club, all surface water sourced. There is one industrial groundwater user. The remaining licenses are issued for municipal use to various First Nation Communities, the Rural Municipality of Mountain and the Towns of Benito, Minitonas and Swan River.

In this watershed 1306.8 dam^3 has been allocated under licence. Municipal distribution systems are the highest water users from a volumetric perspective within this watershed followed in turn by industry (Louisiana Pacific Canada Ltd.) and finally the irrigators (Figure 1).

Purpose	Allocated Under Licence (dam^3)		Total Allocation (dam^3)
	Groundwater	Surface Water	
Agricultural	0	0	0
Industrial	108	0	108
Irrigation	0	100	100
Municipal	905	194	1099
Other	0	0	0
Total	**1013**	**294**	**1307**

Figure 1: Amounts Allocated Under Licence

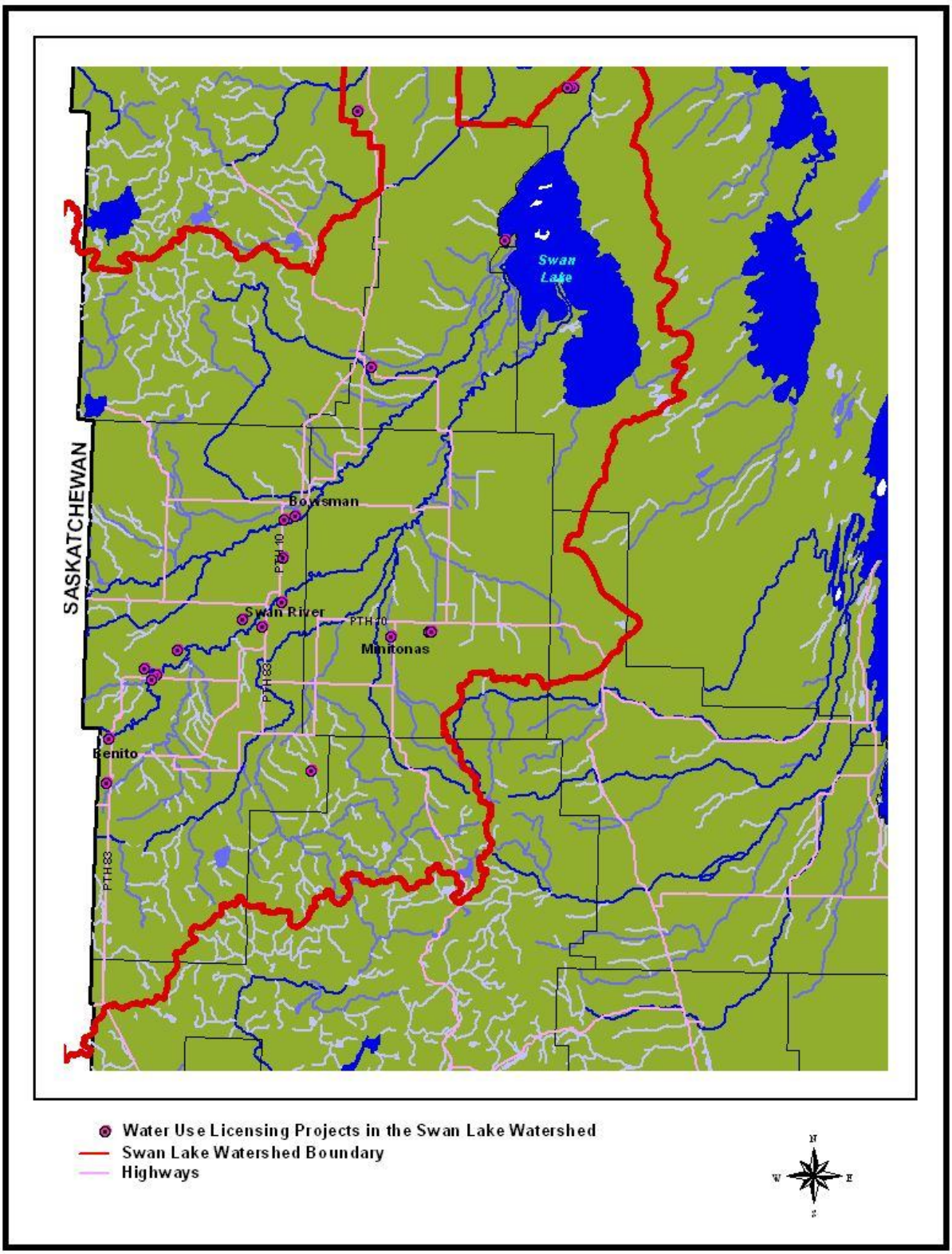

Figure 2: Location of all Water Use Licensing Projects in the Swan Lake Watershed

Data Gaps:
Aquifer or whole stream budgets have not yet been established in the Swan Lake 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 as the amount of water allocated from this region is small.