

RE: Technical Information Request for Fisher River IWMP

The following is technical information is provided by the Office of Drinking Water to assist in the development of an integrated watershed management plan for the Fisher River watershed.

1. Water Systems in the Fisher Watershed

The Fisher River Watershed currently has two Public and three Semi-Public water system that are licenced as indicated in table 1.

Table 1. Public and Semi-public water systems in the Fisher River Watershed.

Water System	Location	Source	Treatment Type	Population Served	Owner	Comments
Fisher Branch - PWS	Fisher Branch	Groundwater	Chlorination with 20 minutes contact time.	450	R.M. of Fisher	
King Buck Inn - SPWS	Poplarfield	Groundwater	Water Softener	~40	King Buck Inn	Currently Under Boil Water Advisory, issued October 1, 2012
Matheson Island School - SPWS	Matheson Island	Groundwater	UV, Iron Remover, Water Softener	~40	Frontier School Division	Currently Under Boil Water Advisory issued June, 2008
Matheson Island Community Hall - SPWS	Matheson Island	Groundwater	UV, Reverse Osmosis, Softener	~100	Matheson Island Community Council	Currently under Boil Water Advisory issued November 2011
Pine Dock - PWS	Pine Dock	Groundwater	Reverse Osmosis, Chlorination with 20 minute contact time	100	Manitoba Aboriginal and Northern Affairs	

The Office of Drinking Water has identified four other semi-public water systems in the Fisher River Watershed which are not licenced but will be in the near future. These unlicensed systems are listed in table 2.

Table 2. Water systems that have not yet been licenced in the Fisher River Watershed.

Water System	Location
Colonel Willy's	Dallas
Jack Pine Resort	Pine Dock
Marble Ridge Colony	Marble Ridge
Royal Hotel	Hodgson

The Office of Drinking Water is aware that there are several water systems in the Peguis and Fisher River First Nations. These systems do not fall under the Provincial Drinking Water Legislation and are not monitored by the Office of Drinking Water.

2. Boil Water Advisories

Currently there are three systems in the watershed on Boil Water Advisory:

- King Buck Inn – SPWS, issued October 2012 for multiple positive total coliform results in the drinking water.
- Matheson Island Community Hall – SPWS, issued November 2010 for multiple positive total coliform results in the drinking water.
- Matheson Island School – SPWS, issued in June 2008 for multiple positive total coliform results in the drinking water and not using the required disinfection treatments.

3. Public Water Systems with poor source water quality

There are two public water systems in the Fisher River Watershed: Fisher Branch and Pine Dock. The groundwater sources for these systems meet the chemical standards outlined in the Guidelines for Canadian Drinking Water Quality but have chemical parameters that exceed the Aesthetic Objectives as shown in Table 3.

Table 3. Aesthetic Objective Exceedences for the Fisher Branch and Pine Dock Public Water Systems

Fisher Branch PWS	Pine Dock PWS
<ul style="list-style-type: none"> • Iron 	<ul style="list-style-type: none"> • Total Dissolved Solids • True Color • Turbidity • Hardness • Iron

4. Recommendations for Stake Holders

Public, semi-public and private drinking water supplies are all threatened by similar issues. Within the Fisher River watershed these issues may include:

- Wells that are improperly maintained, poorly designed/constructed (ie. pit wells) and improperly decommissioned (abandoned wells);
- Sewage Management, both licenced facilities and private sewage disposal systems;
- Agricultural activities and accidents including chemical and manure management;
- Industrial Spills (including contaminated sites);
- Waste disposal grounds, both active and closed;
- Transportation route spills.

While the location and details of the majority of these items should be provided to you and discussed by Manitoba Conservation, I'll briefly discuss these items as they apply to supplies of potable water in the watershed.

The historic construction (pre regulation) of livestock operations, sewage disposal facilities and waste disposal grounds in areas of limited overburden of the watershed, could result in some areas of the watershed having small zones where groundwater pollution, such as bacterial and nitrate contamination from surface water, could be an issue.

Wells which are improperly maintained, poorly designed/constructed (ie. pit wells) and/or improperly decommissioned do pose a risk to aquifer pollution by allowing a direct conduit for contaminants to reach the aquifer. There are numerous wells of this type throughout the watershed, and their locations are for the most part unknown or undocumented by the Office of Drinking Water. Abandoned wells are also a concern for the infiltration of contaminants into source water and should be identified and decommissioned.

Whenever possible, production wells should be drilled in areas that are protected from flooding and are not susceptible to surface water pooling around the well head. Most areas of the Fisher River Watershed have shallow overburden which could make the groundwater susceptible to the infiltration of surface water and potential contamination from bacteria, nitrates and other pollutants.