

Seine River Watershed

MB Intergovernmental Affairs, Community Planning Services – Meagan Henke

Summary

The Seine River Watershed comprises several urban and rural municipalities in whole or in part. These include: the City of Winnipeg*, Town of Ste. Anne, Town of Niverville, City of Steinbach and the rural municipalities (RMs) of De Salaberry, Hanover, La Broquerie, Piney, Reynolds, Ritchot, Springfield, Ste. Anne and Tache. The table below indicates various attributes of the parts of each municipality that fall within the Seine River Watershed.

The watershed covers an area of 2509 km² and has an estimated population of 44,139*. There are an estimated 15,551* dwellings within the watershed area and the potential number of properties that have livestock structures (including loose housing, general barns and/or animal specific barns) is 1495*.

The population of the watershed increased, on average, by 5.15% between 1996 and 2001 and the population density, on average, for the watershed is 91* people per km².

* Other than the area of the City of Winnipeg that falls within the Seine River Watershed, City population, dwelling units and implications have not been included in this report.

Municipality	Area within Watershed (km ²)	Population within Watershed (estimated)	Dwelling units within Watershed (estimated)	Potential properties with livestock structures within Watershed	Population change of entire municipality from 1996-2001 (%)	Population density of entire municipality (people per km ²)
De Salaberry (R.M.)	17	9	3	4	5.2	4.8
Hanover (R.M.)	566	8493	2831	602	9.7	14.6
La Broquerie (R.M.)	458	3228	1074	206	16.1	5.0
Niverville (Town)	8	2577	884	5	11.0	233.5
Piney (R.M.)	88	2	1	0	5.2	0.7
Reynolds (R.M.)	142	7	4	0	-1.2	0.4
Ritchot (R.M.)	216	3767	1255	96	-5.5	4.9
Springfield (R.M.)	53	495	165	22	3.6	1.4
Ste. Anne (R.M.)	424	4499	1570	294	5.1	9.3
Ste. Anne (Town)	4	1847	675	0	0.1	360.8
Steinbach (City)	25	10,994	4443	25	8.8	360.9
Tache (R.M.)	393	8221	2646	241	3.7	4.8
Winnipeg (City)	115	n/a	n/a	n/a	n/a	n/a
TOTAL	2509	44,139	15,551	1495	5.15 (Avg)	91.0 (Avg)

Land use within the watershed is primarily agriculture. Residential development generally increases from southeast to northwest within the watershed. It is typical that concentrations of residential development occur in relatively close proximity to urban centres, in this case, the City of Steinbach and the City of Winnipeg. There is relatively less development in the southeastern portion of the watershed--land use within this area is agricultural in nature and land holdings are in relatively large parcels.

In terms of **anticipated land uses and growth** in the future, there has been a steady increase in applications for rural residential and hobby farm development throughout the watershed, save for the southeastern-most quarter. This development is expected to continue given demand for large-lot rural-residential development and the continually increasing population in the area.

Current land fragmentation provides a rough guide for areas that might yet be developed in the relatively near future. Typically, agricultural land that is already fragmented is less and less viable for agricultural use and ultimately, it might be developed for residential use. Therefore, it is within areas that have experienced land fragmentation that further development is likely to occur.

There are numerous livestock operations within the watershed and this industry continues to develop steadily. With new legislation in place for the siting and setback requirements for livestock operations and their location with respect to established and designated residential areas, the potential for the establishment of new operations might be increasingly limited--given the level and extent of residential growth.

With respect to opportunities to guide and control development within the watershed, the recently designated Water Planning Authority (Seine-Rat River Conservation District Board) might act as a commenting agency for development applications such as subdivision applications, development plan and zoning by-law adoptions and amendments.

Each development application, in particular each subdivision, is assessed on the basis of its conformity to the respective municipality's Development Plan and Zoning By-laws. Reviewing the existing policies within each municipality's Development Plan that might affect the health and environmental viability of the watershed might help this new Authority adopt the best of those policies and develop others that will maintain the health of the watershed for the future, thereby meeting the objectives of the Integrated Watershed Management Plan (IWMP) being developed and ultimately, the Authority's policies could be adopted by each municipality as part of their Development Plans to ensure that each and every future development application approved within their municipality conforms to the objectives and policies of the IWMP for the Seine River Watershed.

Each of the municipalities in the Seine River Watershed has adopted planning policies (i.e. Development Plans) to direct and guide development within their boundaries. Typically, each Development Plan provides land use objectives and policies that apply generally throughout the municipality and that provide guidance on development and conservation of: natural areas, hazard lands, lands subject to flooding and erosion,

waterways and groundwater. The policies adopted by each municipality (with the exception of the City of Winnipeg) are outlined below:

R.M. of Springfield

Located just east of the City of Winnipeg, Springfield has an abundance of aggregate resources, good ground water, and a thriving agricultural community. Lying on the edge of the Red River Valley, the municipality is mostly composed of flat agricultural prairie. Land use within the R.M. of Springfield is primarily agricultural. In areas to the north and east of the municipality, the farm fields give way to scattered brush and wooded areas. The Shoal Lake Aqueduct and the Deacon Reservoir that are situated in the southern part of the municipality, provide the only source of drinking water to the Capital City of Winnipeg. The Red River Flood Way dissects the western portion of Springfield.

The R.M. of Springfield covers 1103.34 square kilometers and has a population, according to 2001 Statistics Canada information of 12,602 people. This was an increase of 3.6% from the 1996 census. There are 4335 dwellings in the R.M. of Springfield and a population density of 11.4 people per square kilometer. The portion of the R.M. of Springfield that is part of the Seine River Watershed covers 53 square kilometers. Within that area there are 22 properties with livestock structures including loose housing, general barns and animal specific barns and 165 properties with dwelling units. From December 1, 2005 to December 1, 2006 there were 22 subdivision applications in the R.M. of Springfield.

Development Plan

There is little in the R.M. of Springfield Development Plan that addresses water resources within the municipality.

R.M. of Tache

The Rural Municipality of Tache is located in eastern Manitoba, approximately 61 kilometres southeast of Winnipeg. The Trans Canada Highway, running east from Winnipeg provides easy access to the municipality. Tache is situated at the beginning of the rich fertile prairies that characterizes the eastern border of the Canadian Shield. The scenic Seine River meanders throughout the municipality. Lorette and Landmark are the municipality's largest centres, while Dufresne, St. Genevieve, Rosewood, Ross and Elm Grove are other significant centres. The economy of Tache is diversified, with agricultural industries being the prominent employers.

The RM of Tache covers 581.51 square kilometers and has a population, according to 2001 Statistics Canada information of 8578 people. This was an increase of 3.7% from the 1996 census. There are 2761 dwellings in Tache and a population density of 14.8 people per square kilometer. The portion of the R.M. of Tache that is part of the Seine River Watershed covers 393 square kilometers. Within that area, there are 241 properties with livestock structures including loose housing, general barns and animal specific barns and 2,646 properties with dwelling units.

Land use within the municipality is primarily agriculture with pockets of rural residential development generally west of PTH 12, along the Seine River and in the vicinity of the Local Urban District (LUD) of Lorette. The rural residential land use increases as one

moves west from PTH 12 to the western edge of the municipality and is concentrated on the south side of PR 207. Development along this corridor has been a result of a high demand for rural residential development within the municipality due, in part, to its proximity to the City of Winnipeg. This corridor is also attractive for this type of development due to its proximity to the Seine River. As one moves east through the municipality, east of PTH 12, land is also primarily agricultural in use; however, the agricultural uses within this part of the municipality are more limited and, as a result, there are sections designated as natural resource and natural environment areas. Land use within the urban centres of the municipality is primarily residential in nature.

From December 1, 2005 to December 1, 2006 there were 18 subdivision applications in the R.M. of Tache. Of these, most were concentrated in the western half of the municipality, west of PTH 12 as demand for rural residential parcels within the municipality is generally high.

Development Plan

The largest portion of the Municipality is within the Seine River drainage basin. The Seine River flows westerly through the western part of the municipality. Lands in the southwestern corners are in the Seine River Diversion and Manning Canal watersheds while the lands in the eastern part of the municipality are in the Cook's Creek and Brokenhead River watersheds.

On the lands west of PTH 12, extensive networks of agricultural drains have been constructed. As a whole, the system functions well, but there have been some flooding problems along the Fish Creek Drain and in the upper reaches of the Youville Drain. The problems on the Youville Drain are mostly the result of flowing wells in the Blumenort area.

East of PTH 12, the drainage system is much more limited, which reflects the more limited agricultural opportunities in the area.

Spring flooding occurs along the Seine River, but is confined primarily to the meander plain. Flood risk mapping has been completed for the Village of Lorette under the Canada-Manitoba Flood Damage Reduction Program.

Within the municipality, 28 miles (45 km) of the waterways are "Provincial Waterways" under the jurisdiction of the Province; those waterways within the Cook's Creek Watershed Conservation District are under the jurisdiction of the Conservation District and the remaining waterways are the responsibility of the Municipality.

Groundwater quality in the Municipality ranges from fair to excellent, and in general, it is better in the eastern than the western sections. Fairly extensive surface and near surface sand and gravel aquifers exist in the eastern part of the municipality. Aquifer pollution by infiltration from the surface may occur in these areas. The eastern Township of the municipality has a large area of undeveloped bog and marsh land. It is the concerns of the municipality that these areas displaying unique natural and environmental qualities be maintained.

Except for the easternmost one to two miles of the municipality, groundwater is generally available throughout. There is also a small flowing well area west of PTH 12 and south

of PR 201. As such, the total groundwater supply in the municipality is adequate for present requirements and for moderate future development.

The Seine River and the Seine River Diversion are the only significant waterways in the Municipality. Although the Seine River Diversion supports some spring spawning activity of Pike, the two waterways do not constitute significant fish habitats. However, both these waterways do flow into the Red River which is a significant fish habitat and thus the water quality is important.

All the wooded portion of private and Crown Land, grassland areas, rivers, corridors and wetland areas are important for wildlife in the Municipality. These areas support populations of white-tailed deer, upland game such as ruffed grouse, sharp-tailed grouse, grey partridge and many species of waterfowl. The eastern wooded portions of the Municipality are particularly important to deer. Much of the area has been severely impacted by modern agricultural practices which had seen the abundance and diversity of wildlife reduced.

Specific policies that address environmental conservation within the municipality are as follows:

Natural Environment Area

- 3.3 Appropriate activities such as, wildlife management areas, and game farms shall generally be permitted in Natural Environment Areas.
- 3.4 Development proposals and subdivisions of land for permitted natural environment uses shall be reviewed in consideration of the municipal services, such as roads and drains, available to the site.
- 3.5 The Municipality shall seek advice from the Department of Natural Resources on proposals to fill major wetland areas which may experience use by waterfowl. Land drainage projects may be regulated by the zoning by-law in order to ensure that municipal drainage systems and other lands are not adversely affected.
- 3.6 Agricultural activity shall be limited to grazing and no changes to the drainage system shall be allowed.

Hazard Lands

- 3.1 Development in areas which, in the opinion of Council, may be subject to hazards such as flooding, or bank instability shall generally be limited to non-intensive agriculture uses or open space uses. Under special economic or social circumstances Council may permit more intensive development if the hazard is eliminated or protected against. Development in these hazardous areas shall be subject to the following requirements:
 - a) If the land is subject to flooding, all permanent structures shall be located on land which has been raised by fill to an elevation at least 0.6 metres above the 100 year flood level.

- b) Land which may be eroded away within a 50 year period shall be excluded from development unless it is demonstrated, to the satisfaction of Council, that the erosion process has been halted.
 - c) Development shall not be permitted on lands subject to bank instability, landslides or subsidence.
 - d) All structures and services shall be protected against damage and shall be functional under hazard conditions.
- 3.2 Notwithstanding the preceding policy (Policy #1), development will not be permitted if, as a result of the development:
- a) There is an added risk to life or safety, or
 - b) Water flow, flow velocities or stages are adversely altered, obstructed or increased.
- 3.3 Activities such as dumping, excavation, clearing, cultivation or excessive grazing which would accelerate or promote dangerous erosion or bank instability will be prohibited.
- 3.4 In areas where the specific hazard has not been defined, permanent structures shall be set back from all waterways a distance of at least 10 times the height of the bank above channel grade or 60 metres which ever is greater unless an engineering investigation shows that these limits may be reduced.
- 3.5 Council will support those programs and policies of the Cook's Creek Conservation District that work toward optimizing the use of resources in the Municipality.

Groundwater Resources and Surface Water

- 3.1 Aquifer management comes under the authority of the Water Resources Branch of Manitoba Natural Resources through the provisions of the Groundwater and Water Well Act and The Water Rights Act. Under this authority the following policies shall apply:
- a) Intensive development and high capacity wells will not be permitted in areas where they will cause reduction in water supplies for existing users.
 - b) Wells should be installed in a manner that would not have a detrimental effect on the aquifers.
 - c) Wells in the flowing well areas shall be constructed in a manner that will facilitate the control of discharge.
 - d) Activities that may cause pollution under normal operating circumstances shall not be permitted in groundwater pollution hazard areas unless it can be proved by adequate field investigation that the proposed activities will not cause pollution of the groundwater supply.
- 3.2 Where individual or community wells exist, adjacent development shall be restricted to the type that would not pollute the well or groundwater source. The advice of the appropriate public health personnel may be sought in this regard.

- 3.3 Surface water quality protection, particularly with respect to the Seine River and Seine River Diversion shall be promoted by:
- a) Applying the Manitoba Surface Water Quality objectives as guidelines for surface water quality and encouraging the use of measures that would limit nutrient and sediment inflow.
 - b) Prohibiting the introduction of foreign materials such as fuels, petroleum products, agro-chemicals and other material which would be detrimental to water quality. This would be particularly significant with respect to the Seine River and Seine River Diversion.
- 3.4 Development abutting a surface water body will not be permitted if as a result of the development:
- a) There is a risk to life or safety; or
 - b) Water flow, flow velocities or stages are adversely altered, obstructed or increased.
- 3.5 Activities such as dumping, excavation, clearing, cultivation or excessive grazing which would accelerate or promote dangerous erosion or bank instability will be prohibited.

Fisheries and Wildlife

- 3.1 Water quality protection of the Seine River and Seine River Diversion shall be promoted by:
- a) Prohibiting cultivation and development to the waters edge. Intensive uses and development of shorelines shall be protected from excessive erosion and organic loading.
 - b) Applying the Natural Resources "Stream Crossing Guidelines" when evaluating applications for crossing the Seine River and Seine River Diversion.
- 3.2 The co-operation of the Province, The Municipality and its residents to participate in the stewardship of wildlife resources shall be encouraged.
- 3.3 Education programs concerning wildlife, the protection of habitat of rare and endangered species shall be encouraged.
- 3.4 The retention of wetlands and other wildlife habitat such as windbreaks, hedgerows, drainage ditches, road allowances, small blocks of wooded cover, and rivers and streams within intensively cultivated areas, shall be encouraged when in keeping with the overall objectives of this Plan.
- 3.5 In areas prone to wildlife complaints and depredation, landowners shall be encouraged to seek the advice and assistance of Manitoba Natural Resources in an effort to mitigate damage and costs.

R.M. of Ritchot

The Rural Municipality of Ritchot is located in south central Manitoba, just 27 kilometres south of Winnipeg. The municipality extends from Winnipeg's Perimeter Highway and is found between Provincial Trunk Highway No.'s 75 and 59. Ritchot has many small communities within its boundaries including the villages of St. Adolphe, Ste. Agathe, and Ile des Chenes, with Glenlea, Grande Pointe, and Red River Drive representing other significant communities in Ritchot. Ritchot boasts a primarily agricultural farming economy that includes cereal and oilseed operations, hog operations and dairy farms.

The R.M. of Ritchot covers 333.24 square kilometers and has a population, according to 2001 Statistics Canada information of 4958 people. This was a decrease of 5.5% from the 1996 census. There are 1652 dwellings in the R.M. of Ritchot and a population density of 14.9 people per square kilometer. The portion of the R.M. of Ritchot that is part of the Seine River Watershed covers 216 square kilometers. Within that area there are 96 properties with livestock structures including loose housing, general barns and animal specific barns and 1255 properties with dwelling units.

From December 1, 2005 to December 1, 2006 there were 13 subdivision applications in the R.M. of Ritchot.

Development Plan

The R.M. of Ritchot is in a Planning District with the R.M. of Macdonald, meaning the two municipalities have adopted common policies to guide development, being the Macdonald-Ritchot Planning District (MRPD) Development Plan.

The principal groundwater resource in the MRPD is a potable aquifer located in the eastern township region of the RM of Ritchot. The majority of the potable water utilized in the regional water distribution system from groundwater sources comes from an aquifer in the RM of Hanover near New Bothwell. Due to poor groundwater conditions from the eastern edge of the river lot system in the RM of Ritchot to the western boundary of the RM of Macdonald, an extensive network of rural water pipelines has been developed to serve the planning district. Potable water is supplied by a water treatment plant located in Sanford that draws water from the La Salle River and from an aquifer located near New Bothwell in the RM of Hanover.

Approximately 87 percent of the rural land base is utilized for agricultural purposes and 96 percent is rural in nature of associated land use and approximately 99 percent of the soils in the MRPD are classified as prime agricultural soils.

Red River Valley Designated Flood Area

The Designated Flood Area within the planning district encompasses almost all the lands within the RM of Ritchot, excepting a narrow band along the eastern portion of the municipality, and significant areas within the RM of Macdonald generally located south of PR 305 and east of PR 330. Approximately 430 properties in the RM of Ritchot were affected by the 1997 flood. Based on an average cost of \$55,000 per property, the 1997 flood required more than \$23 million in flood protection for the municipality.

Specific policies that address environmental conservation within the municipality are as follows:

Natural Areas

- 2.3.3.1 Natural areas and habitats should be protected from incompatible or potentially incompatible uses where rare or endangered flora and fauna have received provincial designation and protection under *The Endangered Species Act*, lands have received provincial designation and protection under the Protected Area Initiative, lands have been identified as Wildlife Management Areas, or private lands have been voluntarily protected by landowners under *The Conservation Agreements Act*.
- 2.3.3.2 Access to natural areas and wildlife and fisheries habitat will be encouraged to foster appreciation for and enjoyment of nature but such access should not lead to levels of activity which will exceed the capability of the area to sustain the environment and ecosystem integrity.
- 2.3.3.3 Preservation and enhancement of natural areas and habitats will be encouraged through direct municipal actions as well as through the subdivision process which could establish requirements for tree planting as part of any development agreement.

Flooding & Erosion

- 2.3.4.1 Development will generally be directed away from lands which would be flooded by the 100 year flood, or by a recorded flood exceeding the 100 year flood; and lands which would within a 50 year period be eroded or become unstable due to the action of water contained in an adjacent waterway.
- 2.3.4.2 Proposed developments should not obstruct, increase or otherwise adversely alter water and flood flows and velocities. Additionally, there should be no added risk to life, health or personal safety, and all structures and services should be protected against damage and be fully functional during hazard conditions.
- 2.3.4.3 Activities or developments that alter existing slopes and may accelerate or promote erosion or bank instability should be prohibited unless appropriate measures are taken to minimize the potential of such erosion or bank instability. Existing tree and vegetation cover should be preserved where appropriate to reduce erosion and maintain bank stability.
- 2.3.4.4 In areas where the specific hazard has not been determined, buildings shall be set back from all waterways a distance of at least 10 times the height of the bank above channel grade or 30 metres, whichever is greater, unless an engineering investigation shows that these limits may be reduced.
- 2.3.4.5 Any building or structure constructed within the designated flood area for the Red River valley will be required to meet all provincial flood-proofing criteria.

2.3.4.6 The subdivision of land within the designated flood area for the Red River valley, especially within the PTH 75 to PR 200 corridor north of PR 210, will be restricted to flood protected areas within existing urban centres, agricultural operations and limited commercial and industrial developments as defined by the appropriate development plan policies providing such developments can also meet all provincial flood-proofing criteria.

2.3.4.7 No further subdivision of land for rural residential purposes will be considered within the PTH 75 to PR 200 corridor north of PR 210.

Water & Shoreland

2.3.5.1 The preservation, enhancement and rehabilitation of native vegetation will be encouraged in sensitive environmental areas such as the riparian zones associated with the shorelines of all rivers, creeks and streams in order to stabilize banks, filter run-off and to promote surface water quality.

2.3.5.2 Development or activities that may cause pollution will be directed away from groundwater sensitivity areas and major surface water bodies such as the Red, Rat, Seine, La Salle and Morris Rivers. Activities which could cause pollution may be considered provided it can be proven by adequate engineering or hydro-geological investigation that the proposed activity will not cause pollution of the potable water supply or that appropriate measures have been or will be taken to sufficiently safeguard the potable water supply.

Municipal Infrastructure

2.3.7.1 Record Keeping and Servicing Standards

Accurate records will be maintained for both the domestic water and wastewater systems in order to evaluate existing system performance and to accurately assess future demands. Servicing standards for municipal roads, drainage, water and wastewater systems should be adopted in order to provide guidelines for infrastructure renewal and development.

5.3.7.2 Topography and Land Drainage

Detailed engineering servicing studies shall be required prior to determining the most effective servicing arrangements for the development of unserviced lands. Lot grading and weeping tile by-laws will be adopted and implemented to minimize storm water impacts on the sanitary sewer system.

5.3.7.3 Municipal Water and Wastewater Systems

A demand and capacity analysis should be undertaken to determine the potential requirements for expansion to either municipal water or wastewater systems in order to accommodate any new developments

and to assess the financial and servicing implications of such service expansions.

R.M. of Ste. Anne

The Rural Municipality of Ste. Anne is located along the Trans Canada Highway approximately 27 kilometres east of Winnipeg. The municipality includes the unincorporated urban centre of Richer, and the hamlets of Giroux, Greenland and La Coulee. The westerly portion of the municipality consists of flat agricultural prairie that is the eastern edge of the Red River Valley. To the east, the municipality is covered in dense wooded areas as the terrain yields to the edges of the Canadian Shield.

The R.M. of Ste. Anne covers 477.63 square kilometers and has a population, according to 2001 Statistics Canada information of 4427 people. This was an increase of 5.1% from the 1996 census. There are 1545 dwellings in the R.M. of Ste. Anne and a population density of 9.3 people per square kilometer. The portion of the R.M. of Ste. Anne that is part of the Seine River Watershed covers 424 square kilometers. Within that area there are 294 properties with livestock structures including loose housing, general barns and animal specific barns and 1570 properties with dwelling units.

Land use within the municipality is primarily agricultural in nature save for the several settlement centres located throughout the municipality. There are several concentrations of rural residential parcels north and south of Highway No. 1 and PR 207, primarily between the Town of Ste. Anne and Richer. There are also small concentrations of residential development along the southwestern edge of the municipality bordering the R.M. of La Broquerie and the R.M. of Hanover. The southeastern portion of the municipality is generally held in large parcels with two large concentrations of land designated as natural resource areas. Land within the southeastern portion of the municipality is more limited in terms of its agricultural uses and have a higher concentration of aggregate resources. Land use within the settlement centres of the R.M. of Ste. Anne is primarily residential.

From December 1, 2005 to December 1, 2006 there were 16 subdivision applications in the R.M. of Ste. Anne. The majority of subdivisions applications within the municipality have occurred in the north and northwestern area of Ste. Anne. As in other municipalities, hobby farm and rural residential development is in generally high demand.

Development Plan

The eastern part of the RM of Ste. Anne is most heavily treed and best suited to support natural plant, animal and fish species. The eastern boundary of the RM of Ste. Anne abuts the Sandilands Provincial Forest and topography is generally flat with some low boggy areas. There are two wetlands that have value to waterfowl as staging areas for migrating birds. As well, the Seine River runs through the area providing a natural environment for water-based flora and fauna. White-tailed deer are the most common ungulate and there are no major deer wintering areas but adequate summer and winter ranging is present. Moose and black bear are also evident but not in large numbers. A variety of fur-bearing animals occur in wooded and wetland portions of the municipality but trapping is not a significant proportion of the economy.

Specific policies that address environmental conservation within the municipality are as follows:

Land Use Objectives and Policies in Natural Resource Areas

- B.1 The areas designated for resource protection are shown on Map 1: General Development Plan as Natural Resource Area.
- B.2 Significant wetland areas which could serve as waterfowl staging areas, and natural wildlife habitat areas, and lands along the edges of waterways in the municipality should be preserved in their natural state.
- B.3 Noxious activities that discharge pollutants into ground water pollution areas and near water bodies shall be regulated. It shall be required that precautionary safeguards be built into the development activity to control any pollutants which may be released. The establishment of setbacks or development controls should take place in consultations between the municipality and the Environmental Control Branch, Province of Manitoba,
- B.4 The retention of tree cover on land having low agricultural capability and unused road allowances shall be encouraged as a means of preserving natural habitat area and as a soil conservation technique to control erosion and minimize wind damage.
- B.5 The clearing, draining or filling in of natural marshes, ponds or significant wetland areas should only take place upon consultation with the Municipality and the Department of Natural Resource.
- B.6 Lands subject to hazards or classified as groundwater pollution hazard areas shall generally be limited to forage agricultural uses or open space uses. More intensive development may be permitted at the discretion of Council in consultation with the responsible government agency or Conservation District if the hazard can be eliminated or protected against. In areas where a specific hazard has not been defined or fully determined, preventative measures should be undertaken to:
 - a) eliminate pollution of existing or potential groundwater supplies;
 - b) minimize the effects on the creation or aggravation of erosion, bank instability and drainage problems; and
 - c) restrict activities which would adversely alter, obstruct, or increase flow, flood velocities or flood stages.

Town of Ste. Anne

The Town of Ste. Anne is located just off the Trans Canada Highway, 40 kilometres east of Winnipeg. Many residents commute to Winnipeg to work, but the "bedroom community" offers most necessary retail goods and services. The Seine River runs through the middle of Ste. Anne providing a picturesque setting. The areas surrounding Ste. Anne are primarily flat including agricultural land to the west and increasingly wooded areas to the east.

The Town of Ste. Anne covers 4.19 square kilometers and has a population, according to 2001 Statistics Canada information of 1513 people. This was an increase of 0.1% from the 1996 census. There are 553 dwellings in the Town of Ste. Anne and a population density of 360.8 people per square kilometer. The Town of Ste. Anne is a relatively inactive municipality when compared with other developing municipalities within the Seine River Watershed. The Town of Ste. Anne is fully within the Seine River Watershed, covering 4 square kilometers. Within that area there are no properties with livestock structures including loose housing, general barns and animal specific barns and 675 properties with dwelling units.

Land use within the municipality is overwhelmingly residential, although there are areas designated for commercial, institutional and industrial use within the Town.

From December 1, 2005 to December 1, 2006 there was 1 subdivision application in the Town of Ste. Anne.

Development Plan

The Seine River meanders through the Town of Ste. Anne. There is a significant amount of undesignated open space in the form of Church-owned property on both sides of the Seine River, the former lagoon site, the water control site at the point of the Seine River Diversion, and other riparian areas.

Ste. Anne operates a piped sewage collection system which is connected to a lagoon south of the Town. The built-up portions of the Town are serviced by the system. When there is a need to extend the system it can be undertaken without major expense in all but two areas of the Town. The latter two areas include the northeastern portion of the Town and the South central portion of the Town south of the River between the railway crossing of the River and Rue Finnigan.

The Town does not have a central water supply and distribution system. Each resident has their own private or shared well as a source of potable water. According to the Water Resources Branch of the Province of Manitoba, groundwater is readily available throughout the Town and the supply is adequate for present requirements and considerable new development. Groundwater ranges from good to excellent although the hardness is generally above desirable levels and most homeowners and businesses have water softeners.

During the last few years, the Town has installed an extensive storm sewer system which, along with ditches and culverts, alleviates the surface and storm water concerns of the Town.

Specific policies that address environmental conservation within the municipality are as follows:

Open Space and Recreation

- E.3.6 The shorelands of the Seine River shall be maintained as an attractive amenity through the public ownership of land or through the public ownership of land or through development restrictions along the shoreline.

Municipal Services & Transportation

- A.3.9 As groundwater is the source of potable water supply to the village, no development shall be permitted which may potentially pollute this groundwater supply.
- A.3.10 All wells, including flowing wells, shall be constructed and maintained in a manner that will control discharge and reduce any risk pollution as per established Provincial guidelines and regulation.
- A.3.11 As a condition of subdivision approval, the developer may be required to provide the necessary number of shared wells to serve the future residents of the subdivision.
- A.3.12 Council will continue to develop its storm water protection works to minimize any property damage risks associated with surface water runoff.
- A.3.13 An overall storm drainage plan for a new development may be required prior to development. The Department of Highways and Transportation shall be consulted before proceeding with development that may result in increased storm water flows in the Provincial highway system.

Town of Niverville

The Town of Niverville is located 55 kilometres south of Winnipeg and 40 kilometres west of Steinbach. Niverville lies on the edge of the Red River Valley. The land is remarkably flat, and the rich black soils here are known as being some of the finest crops in the land. To the east of the town, the land becomes gently rolling as one gets out of the valley. Many trees and wooded areas dot the countryside, breaking up the view over the vast flat plain.

The Town of Niverville covers 8.23 square kilometers and has a population, according to 2001 Statistics Canada information of 1921 people. This was an increase of 11.0% from the 1996 census. There are 659 dwellings in the Town of Niverville and a population density of 233.5 people per square kilometer. The Town of Niverville is a fast growing centre, due, in part, to its position between Steinbach and Winnipeg, two major urban centres in the vicinity. The Town of Niverville is fully within the Seine River Watershed, covering 8 square kilometers. Within that area there are 5 properties with livestock structures including loose housing, general barns and animal specific barns and 884 properties with dwelling units.

Land use within the municipality is overwhelmingly residential, although there are areas designated for commercial, institutional and industrial use within the Town.

From December 1, 2005 to December 1, 2006 there were 6 subdivision applications in the Town of Niverville. Of these subdivisions, the majority were residential in nature.

Basic Planning Statement

Specific policies that address environmental conservation within the municipality are as follows:

Municipal Services and Transportation

- B.1 The groundwater aquifer water supply shall continue to be utilized through individual and/or group wells, until:
 - a) The population density of the Town increases to the point where it is economically feasible to provide a central water distribution system; or
 - b) Groundwater pollution begins to occur.

- B.7 As new residential, commercial and industrial areas are developed, the existing ditch drainage system shall be examined and upgraded to the desired standard prior to or during development, to prevent swalling and provide adequate surface runoff.

Specific Conditions to Development

- C.B.1 The Town shall insure that all newly constructed wells are properly installed to prevent groundwater problems under The Groundwater and Well Act.

- C.B.2 The Council shall not approve any subdivision or issue a development permit if, in the opinion of Council, the subdivision, the development, or its related activities endanger the potability of the water resources; or if the precautionary measures taken by, or proposed by, the development do not sufficiently mitigate the risk of polluting the resource.

- C.B.3 The Council shall ensure that a permit under The Water Resources Administration Act and Manitoba Regulation 179/79 is obtained for any new structures or additions to existing structures within the Red River Valley Designated Flood Area and that the construction is in compliance with the conditions specified in the permit.

R.M. of Hanover

The R.M. of Hanover is located southeast of Winnipeg and surrounds the city of Steinbach. The R.M. of Hanover has three major centres of population: the communities of Mitchell, Blumenort and Grunthal. The communities are well connected along many highways including Provincial Trunk Highway No.'s 12 and 52, as well as, Provincial Road No.'s 203, 206, 210, 205, 311, and 216. Agriculture is the dominant industry in the municipality, with most residents either directly employed in agriculture, or in agricultural businesses and support services. Manufacturing, construction, and retail are other strong economic initiatives in the municipality.

When it was settled, much of the land in Hanover was not ideally suited to grain farming. The area had coarse textured soils, was largely wooded and had major drainage problems. While grain farming was possible, some of the characteristics listed above have lead to the diversification of agriculture that the municipality displays today. Diversification into dairy, hogs, poultry, honey, potatoes and other specialty crops has made Hanover a leader in the production of many of these products in Manitoba.

Hanover has been highly productive in hogs since the 1940's but in the last twenty years the area has specialized in hog production.

The R.M. of Hanover covers 740.87 square kilometers and has a population, according to 2001 Statistics Canada information of 10,789 people. This was an increase of 9.7% from the 1996 census. There are 3199 dwellings in the R.M. of Hanover and a population density of 14.6 people per square kilometer. Hanover is the busiest municipality within the Seine River Watershed due to its proximity to the City of Steinbach, active agricultural industries and abundance of rural residential residents. The portion of the R.M. of Hanover that is part of the Seine River Watershed covers 566 square kilometers. Within that area there are 602 properties with livestock structures including loose housing, general barns and animal specific barns and 2831 properties with dwelling units.

Land use within the municipality is a mix of general agricultural areas, rural areas and rural residential areas. Rural residential areas are generally centered within the municipality, west of Steinbach and north of Grunthal. The rural area, which contains a higher mix of uses other than agricultural uses, surround the urban centres including Steinbach and Niverville. Agricultural areas, consisting primarily of agricultural uses with lands in larger holdings, exist at the southeastern and northwestern corners of the municipality. Again, land use within the urban centres is primarily residential with minor commercial and industrial services.

From December 1, 2005 to December 1, 2006 there were 52 subdivision applications in the R.M. of Hanover. Substantial development has taken place within Hanover, which is indicated by the number of development applications. Many developments occur within and surrounding the urban centres of the municipality and are primarily located within the rural areas, as explained above. The municipality is well developed in its livestock industries throughout the municipality, which can result in land use conflict due to the high rural residential populations.

Development Plan

Specific policies that address environmental conservation within the municipality are as follows:

Natural Areas & Environmental Conservation

- 5.3.6 Natural areas and habitats should be protected from incompatible or potentially incompatible uses where:
- a) rare or endangered flora and fauna have received provincial designation and protection under *The Endangered Species Act*;
 - b) lands have received provincial designation and protection under the Protected Area Initiative;
 - c) lands have been identified as Wildlife Management Areas; and
 - d) landowners have voluntarily protected private lands.
- 5.3.7 Council shall encourage the retention of wildlife habitat and the preservation of native vegetation in the form of natural treed area or uncleared lands along creeks, drains, unused road allowances or other areas that are not suitable for agriculture or which may create more

benefit when left in a natural state. Any work in or near water must be reviewed by Manitoba Conservation to ensure compliance with applicable regulatory requirements.

- 5.3.8 Public access to natural areas and wildlife/fisheries habitat will be encouraged to foster appreciation for and enjoyment of nature but such access should not lead to levels of activity which will exceed the capability of the area to sustain the environment and ecosystem integrity.

Hazard Lands, Flooding & Erosion

- 5.3.9 Development will generally be directed away from hazard lands. Hazard lands include the following:

- a) lands subject to flooding – all lands which would be flooded by the 100 year flood or by a recorded flood exceeding the 100 year flood and lands that are subject to periodic local flooding.
- b) land subject to water erosion – all lands which would, within a 50 year period, be eroded or become unstable due to the action of water contained in an adjacent waterway or water body; and
- c) lands subject to other hazards such as landslides or subsidence – those lands where actual effects of such hazards have occurred or have been predicted.

- 5.3.10 Land subject to significant flooding, erosion or bank instability should be left in its natural state or only developed for low intensity uses such as open space recreation, grazing, cropping, forestry and wildlife habitat.

- 5.3.11 Consistent with Policy 5.3.10 above, any development permitted on or near hazard lands shall:

- (a) minimize property damage, public expenditures and danger to public health and safety;
- (b) maintain the natural capability of waterways to convey flood flows;
- (c) prevent the acceleration or promotion of environmental damage; and
- (d) be required to build above the 100 year flood elevation or such other elevation established by the Provincial Government or Council.

- 5.3.12 Council will refer development proposals in suspected flood prone areas to the municipal engineer and/or the Department of Conservation for review and recommendation prior to consideration.

- 5.3.13 Where more intensive development, including structures, is proposed in hazard areas, council may require the applicant to complete a professional environmental, geotechnical or hydrological studies, including recommendations regarding preventative and mitigation measures that eliminate the risk or reduce the risk to an acceptable level.

Waterways and Groundwater

- 5.3.14 Development will be encouraged in a manner that ensures that waterways and groundwater resources are sustained.
- 5.3.15 In areas where flood level or erosion information is not available, the following policies shall be implemented:
- (a) development shall generally not be permitted within the meander belt of the waterway and will not be permitted in areas which would normally be eroded away; and
 - (b) in areas where the specific hazard has not been defined, permanent structures will be set back from all waterways a distance of at least 10 times the height of the bank or 200 feet from the top of the bank, whichever is greater.
- 5.3.16 In the case of development proposals that require significant volumes of surface water and/or groundwater, the proponent may be required to obtain a Water Rights Licence. If a permit is required, development approval may be withheld until such time as a licence is issued.
- 5.3.17 Development proposals that may have a detrimental effect on water quality shall provide for safeguarding areas susceptible to surface and groundwater pollution. These include intensive livestock production operations, lagoons, solid waste disposal sites, septic systems, commercial and chemical fertilizer storage facilities, fuel tanks, and similar uses.
- 5.3.18 Developments or activities that may cause pollution under normal operating conditions or by accident will be encouraged to locate away from the potential groundwater pollution areas shown on Map 8 in Appendix B to this plan. Where this is not feasible or practical, developments or activities, which could cause pollution, may be considered in groundwater pollution hazard areas provided:
- (a) it can be proven by adequate engineering or hydro-geological investigation that the proposed activity will not cause pollution of the groundwater supply; or
 - (b) appropriate precautionary measures have been or will be taken to sufficiently mitigate the risk of endangering the quality of the water supply for domestic potable water supply purposes.

City of Steinbach

The City of Steinbach is located approximately 61 kilometres southeast of Winnipeg and is surrounded by the Rural Municipality of Hanover. Steinbach is one of the fastest growing cities in Manitoba with a vibrant business community and locally generated economic activity. Steinbach is the hub of economic activity in southeastern Manitoba and is the regional shopping centre, service centre and agriculture supply centre for a large surrounding area.

The City of Steinbach covers 25.57 square kilometers and has a population, according to 2001 Statistics Canada information of 9227 people. This was an increase of 8.8% from the 1996 census. There are 3729 dwellings in the City of Steinbach and a population density of 360.9 people per square kilometer. The City of Steinbach is fully within the Seine River Watershed, covering 25 square kilometers. Within that area there are 25 properties with livestock structures including loose housing, general barns and animal specific barns and 4443 properties with dwelling units.

Land use within Steinbach is a mix of residential, commercial (including a substantial central commercial district, highway commercial and shopping centre areas), industrial (including general and light industrial development), agricultural uses and parks and open space. As one of the fastest growing municipalities within the Province, there is great demand for residential development, in particular, within the City of Steinbach.

From December 1, 2005 to December 1, 2006 there were 36 subdivision applications in the City of Steinbach. The majority of subdivisions applied for within the municipality are residential in nature, although there have been several commercial subdivisions within the last year which have expanded some of the highway commercial areas.

Development Plan

Groundwater is readily available from three wells in Steinbach. These wells supply the water to two underground reservoirs. The groundwater is piped from the reservoirs to the Water Treatment Plant (for iron removal) and then disbursed through the piped distribution system throughout the built-up portion of the City or to the water storage tower.

The City's sewerage collection system is composed of a series of gravity flow sewer mains which range in size from 8-12 inches and a series of low pressure sewer mains ranging in size from 2-6 inches. These sewers feed a series of gravity flow trunk sewers ranging in size from 15-30 inches. Intermediate life stations support the sewer system. The trunk sewer system terminates at the City's main lift station, on Park Road West, from which waste water is pumped through an 18 inch force main two miles west to the City's aerated lagoon treatment facility located in Section 8-7-6E in the RM of Hanover

Specific policies that address environmental conservation within the municipality are as follows:

Water Supply, Municipal Services and Protective Services

- 3.1.4 Generally, new areas should be served with gravity flow connection sewers. In the interests of economy, low pressure force mains may be used instead of conventional sewers in the existing large lot residential areas in the N ½ & SW ¼ Section 25-6-6E, S ½ of the SE ¼ Section 36-6-6E, and the E ½ of the NE ¼ 2-7-6E.
- 3.2.1 New wells in the flowing well areas should be constructed in a manner that facilitates control of discharge. Well construction and aquifer management shall be implemented in consultation with the Water Resource Branch, Department of Natural Resources.

3.2.2 In order to protect the quality of the water supply for the City, the following policies are established:

- a) Groundwater consumption should not exceed the total sustained yield of aquifer; and
- b) Activities that may cause pollution under normal operating conditions or which pose a high risk of accidental contamination, shall not be permitted in groundwater pollution hazard areas unless it can be demonstrated by adequate field investigation and analysis that the proposed activities will not cause pollution of existing or potential groundwater supply in the area.

3.3.1 There are three areas within the City in which drainage is handled separately through the tributaries of the Manning Canal:

- i) the developed area of the City, mainly Sections 3-7-6E & 35-6-6E;
- ii) the area in Sections 26-6-6E & 34-6-6E; and
- iii) the area in Sections 2-7-6E, 10-7-6E & 36-6-6E.

3.3.2 The separation of the land drainage and wastewater sewerage in the developed portion of the City should be continued.

3.3.3 General Recommendations:

- a) Prior to the development of Sections 2, 3 & 34, studies should be undertaken which address storm drainage, with recommendations for long term improvements for those areas;
- b) Future land drainage sewer in the developed portion of the City should be planned to coincide with roadway pavement replacement to minimize pavement disturbance; and
- c) The existing major drainage channels north and west of the City to the Manning Canal should be regarded and shaped to improve flow efficiencies. This work is to be completed on an on-going basis beginning in the year 2000.

R.M. of De Salaberry

The Rural Municipality of De Salaberry is located along Provincial Trunk Highways No. 23 and 59. De Salaberry is approximately 50 kilometres south of Winnipeg and includes the unincorporated urban centres of St. Malo, Dufrost, and Otterburne, and surrounds the Village of St. Pierre-Jolys. The Marsh River runs alongside the western edge of the municipality and the Rat River and Joubert Creek run northwest through the municipality.

The R.M. of De Salaberry covers 670.29 square kilometers and has a population, according to 2001 Statistics Canada information of 3227 people. This was an increase of 5.2% from the 1996 census. There are 1118 dwellings in the R.M. of De Salaberry and a population density of 4.8 people per square kilometer. The portion of the R.M. of De Salaberry that is part of the Seine River Watershed covers 17 square kilometers. Within that area there are 4 properties with livestock structures including loose housing, general barns and animal specific barns and 3 properties with dwelling units.

Land use within the municipality is primarily agricultural in nature with land generally in large holdings. The serviced communities of St. Malo and Otterburne provide a mix of residential, commercial and industrial uses to their residents and the communities of Carey and Dufrost represent substantial concentrations of rural residential development in the municipality. There is also considerable rural residential development along the Rat River, generally between Otterburne and St. Pierre Jolys, but also east of St. Pierre Jolys. A mixed use area exists north of St. Pierre Jolys to provide for limited subdivision of a mix of uses due to poorer soil capabilities in the area. There is another concentration of rural residential land use on either side of PTH 59, approximately half way between St. Pierre Jolys and St. Malo. East of the serviced community of St. Malo is St. Malo Provincial Park which surrounds a reservoir that is used for seasonal recreation purposes.

From December 1, 2005 to December 1, 2006 there were 16 subdivision applications in the R.M. of De Salaberry. Subdivisions within the municipality have been generally distributed between agricultural and rural residential uses, although a particular concentration of development has occurred in and in areas surrounding St. Malo Provincial Park.

Development Plan

Specific policies that address environmental conservation within the municipality are as follows:

Environmental and Natural Resource Policies

- 5.1.1 The Municipality shall endeavor to ensure the sustainability of the environment and natural resources and promote compatible relationships between the environment, resources and the use of land.
- 5.1.2 The Municipality shall encourage the protection of natural areas and habitats from incompatible or potentially incompatible uses where rare or endangered flora and fauna have received designation and protection under the Manitoba *Endangered Species Act* or the Federal *Species At Risk Act*.
- 5.1.3 Council shall recognize, protect and ensure the sustainability of provincially designated provincial parks, wildlife management areas and protected areas by identifying these areas on *Map 1: General Land Use Map* and on corresponding Zoning By-law maps.
- 5.1.4 The Municipality shall endeavor to minimize impacts of development on fish and fish habitat and aquatic ecosystems. Proposed developments adjacent to waterways and water bodies shall be forwarded to Manitoba Water Stewardship for their review and comment. If necessary, Manitoba Water Stewardship will consult with Fisheries and Oceans Canada regarding the potential for harmful alteration or disruption of fish habitat protected under *The Fisheries Act*. The following policies shall help ensure that this objective is met:
 - a. Ditching and stream modification should not be permitted in areas identified as important spawning sites and nursery areas. The

- construction of dykes as opposed to channel deepening and straightening shall be encouraged;
- b. Land clearing, cultivation and development to the shore of any natural water body shall be prohibited;
- c. Excessive nutrient loading of natural waters as a result of agricultural, municipal and private sources shall be discouraged;
- d. The development or maintenance of vegetation adjacent to waterways shall be encouraged to prevent erosion, siltation and to reduce run-off along spawning streams, creeks and lakes; and
- e. Encouraging public and private co-operation in meeting these objectives through management and development agreements.

R.M. of La Broquerie

The Rural Municipality of La Broquerie is one of the fastest growing rural municipalities in Manitoba. La Broquerie is Located just 12 kilometres from the City of Steinbach, and only 70 kilometres southeast of Winnipeg. The Rural Municipality of La Broquerie is a prominent producer of pork, beef and poultry. The unincorporated village of La Broquerie is the biggest urban centre in the municipality, with the small community of Marchand being another significant community in the municipality. The municipality boasts a diversified mix of agricultural, forestry, livestock, and tourist industries. La Broquerie is one of Manitoba's largest dairy farm centres with approximately 36 dairy farms in its borders. The municipality also hosts approximately 26 pork large producers, 26 beef producers, and seven poultry producers.

The R.M. of La Broquerie covers 578.20 square kilometers and has a population, according to 2001 Statistics Canada information of 2894 people. This was an increase of 16.1% from the 1996 census. There are 963 dwellings in the R.M. of La Broquerie and a population density of 5.0 people per square kilometer. The portion of the R.M. of La Broquerie that is part of the Seine River Watershed covers 458 square kilometers. Within that area there are 206 properties with livestock structures including loose housing, general barns and animal specific barns and 1075 properties with dwelling units.

Land use within the municipality is primarily agricultural in nature, specifically in the southern three quarters of the municipality. Areas of rural residential development are concentrated in the northern quarter of the municipality, with most being west of PR 302. Hobby farms are permitted under the development plan and have been in large demand within the last several years. The limit of the hobby farm development is the southerly one third of the municipality. Land use within the urban and settlement centre areas is primarily residential.

From December 1, 2005 to December 1, 2006 there were 35 subdivision applications in the R.M. of La Broquerie. According to development statistics, the R.M. of La Broquerie is one of the busiest municipalities that fall within the Seine River Watershed. Development applications have been primarily for small lot subdivisions including many rural residential and hobby farm lots. These have been concentrated in the northerly one quarter of the municipality and primarily west of PR 302.

Development Plan

The Seine River, which drains land in the east half of the municipality as well as land farther north and east, is the major waterway in the Municipality. The Manning Canal, Joubert Creek and Tourond Creek originate in the Municipality and drain its west half and extreme south.

Flooding of low-lying areas adjacent to the Seine River occurs during high run-off periods. The Municipality is also characterized by large areas of naturally occurring bogs and poorly drained peat soils.

In order to make land suitable for agriculture, approximately 100 miles of artificial drains have been developed. Of this total, 75 miles are under Municipal jurisdiction.

Throughout the municipality, groundwater quality is generally good to excellent. In the northern two-thirds of the Municipality the groundwater supply, which is derived from carbonate rock aquifers is adequate to meet domestic and farm requirements. In the southern one-third of the Municipality the groundwater is derived from sand and gravel aquifers where the yields range from minimal to abundant for domestic and farm requirements.

There is an extensive flowing well and high water level area extending from the Village of La Broquerie to Marchand as well as a small flowing well area near the northwest corner of the Municipality.

The extensive surface sand and gravel areas that may contain shallow aquifers subject to groundwater are considered groundwater pollution hazard areas. However, this pollution hazard applies only to aquifers within the surface sand and gravel and not to the aquifers overlain by thick clay and glacial till deposits.

The Seine River represents the only significant fishery habitat in the Municipality. However, this resource has been depleted through channelization, ditching, and construction of downstream barriers. Downstream beyond the Municipality, the River serves as a spawning area and a sports fishing area. Activities in the Municipality may affect these opportunities.

There is also a trout farm located along PR 210 which provides some commercial angling opportunities in the Municipality.

The treed areas and the forest-agriculture interface common in La Broquerie provide a major wildlife habitat for sharp-tailed grouse, and fur bearers such as fox, coyote and mink. There are also three wetlands where irregular stops by migrating waterfowl are known to occur. As such, the waterfowl habitat is minimal.

As the extent and intensity of agriculture has increased, the habitat for wildlife has decreased. Most seriously affected were the once numerous white-tailed deer. To offset the loss of habitat, the Watson P. Davidson Wildlife Management Area, consisting of 11.5 sections of land, has been established in the southeastern portion of the municipality. The "Zhoda Deer Wintering Area" immediately west of Zhoda supports dome deer in the vicinity and discussions have been ongoing to establish other deer winter feeding programs.

Specific policies that address environmental conservation within the municipality are as follows:

Groundwater Resources

- 3.1 Subject to the provisions of the Groundwater and Water Well Act, and The Water Rights Act:
- a) Intensive developments and high capacity wells will not be permitted in areas where they will cause reductions in water supplies for existing users;
 - b) Wells should be installed in a manner that would not have a detrimental effect on aquifers;
 - c) Wells in flowing well areas shall be constructed in a manner that will facilitate the control of discharge;
 - d) Activities that may cause pollution under normal operating circumstances shall not be permitted in groundwater pollution hazard areas unless it can be proved by adequate field investigation that the proposed activities will not cause pollution of the groundwater supply.
- 3.2 Where individual or community wells exist, adjacent development shall be restricted to the type that would not pollute the well or groundwater source. The advice of the Environmental Control Branch may be sought in this regard.

Hazard Lands

- 3.1 Development in areas which, in the opinion of Council, may be subject to hazards such as flooding, erosion or bank instability shall generally be limited to agricultural cropping or open space uses. Under special economic or social circumstances more intensive development may be permitted if the hazard is eliminated or protected against. Development in hazardous areas shall be subject to the following requirements:
- a) If the land is subject to flooding all permanent structures must be located on land which has been raised by fill to an elevation at least 0.6 metres above the 100-year flood level;
 - b) Land which may be eroded away within a period of 50 years must be excluded from development unless it is demonstrated, to the satisfaction of Council, that the erosion process has been halted;
 - c) Development shall not be permitted on lands subject to bank instability, landslides or subsidence; and
 - d) All structures and services shall be protected against damage and shall be functional under hazard conditions.
- 3.2 Notwithstanding policy 3.1 above, development will not be permitted if, as a result of the development;
- a) There is an added risk to life or safety; or
 - b) Water flow, water velocities or stages are adversely altered, obstructed or increased.

- 3.3 Activities such as dumping, excavating, clearing, cultivation, or excessive grazing which would accelerate or promote dangerous erosion or bank instability will be prohibited.
- 3.4 In areas where the specific hazard has not been defined, permanent structures shall be set back from all waterways a distance of at least 10 times the height of the bank above channel grade or 60 metres (196.8 feet), whichever is greater, unless an engineering investigation shows that these limits may be reduced.

Fisheries and Wildlife Resources

- 3.1 The protection of fishery habitat through water quality protection shall be promoted by:
 - a. Discouraging ditching and stream rechannelization of channels draining into the Seine River. Measures to limit nutrient and sediment inflow shall be encouraged;
 - b. Encouraging the development or maintenance of appropriate vegetation cover along Seine River waterways to prevent erosion, siltation and reduce run-off;
 - c. Prohibiting the introduction of foreign materials such as fuels, petroleum products and other material detrimental to aquatic flora and fauna into the Seine River Channels; and
 - d. Applying the Natural Resources Stream Crossing Guidelines when evaluating applications for crossings of the Seine River Channels.
- 3.2 Sport fish stocking programs in suitable water bodies and manmade pits to increase angling opportunities shall be encouraged.
- 3.3 Trout farming operations as commercial enterprises shall be promoted and encouraged.
- 3.4 The cooperation of the Province, the Municipality and its residents to participate in the stewardship of wildlife resources shall be encouraged.
- 3.5 Education programs concerning wildlife, the protection of habitat and rare or endangered species shall be encouraged.
- 3.6 The integrity of areas designated as Wildlife Management Areas shall be protected by prohibiting incompatible uses on adjacent lands.
- 3.7 The retention of wetlands and other wildlife habitat shall be encouraged when in keeping with the overall objectives of this Development Plan.
- 3.8 In areas prone to wildlife complaints depredation (e.g. beavers, muskrats, waterfowl), landowners shall be encouraged to seek the advice and assistance of Manitoba Natural Resources in an effort to mitigate damage and costs.

R.M. of Reynolds

Located just 60 minutes east of Winnipeg, The Rural Municipality of Reynolds is ideally situated in the eastern corner of the province. Reynolds is comprised of the small hamlets of Richer East, Ste. Rita, Molson, Rennie, Hadashville, Prawda, McMunn and East Braintree. River systems in the municipality include the Brokenhead, the Hazel, the Whitemouth, the Birch and the Boggy Rivers. Four major highways pass through the municipality, including the Trans Canada Highway, the Provincial Trunk Highway No.'s 15, 11 and 44. Reynolds is also accessed by three railway companies: Canadian National, Canadian Pacific and the Greater Winnipeg Water District. The municipality has four forest reserves within its boundaries, including the Sandilands, Agassiz, Whiteshell and North West Angle. The land types vary in the municipality from gravel/sand, to peat, forest and farmland.

The R.M. of Reynolds covers 3573.31 square kilometers and has a population, according to 2001 Statistics Canada information of 1298 people. This was a decrease of 1.2% from the 1996 census. There are 765 dwellings in the R.M. of Reynolds and a population density of 0.4 people per square kilometer. The portion of the R.M. of Reynolds that is part of the Seine River Watershed covers 142 square kilometers. Within that area there are no properties with livestock structures including loose housing, general barns and animal specific barns and 4 properties with dwelling units.

From December 1, 2005 to December 1, 2006 there were 4 subdivision applications in the R.M. of Reynolds.

Development Plan

The R.M. of Reynolds is in a Planning District with the R.M. of Whitemouth, meaning the two municipalities have adopted common policies to guide development, being the Whitemouth River Planning District Development Plan.

The Planning District contains extensive natural environment areas and wildlife habitat which are important resource bases for extensive recreational activities. The District is characterized by extensive marshland and forested lands with most of the agricultural land located within 2 miles of the Whitemouth and Birch Rivers. The provision of an adequate drainage and road system and the impact of the forestry resource is a major consideration in developing additional lands for agricultural production in these areas.

The Natural Resource Area designation identifies those rural lands in the District exhibiting a high capability for wildlife, natural resource activities, watercourses containing critical fish spawning, nursery and feeding habitat and possibly extensive recreational uses. Many such areas are owned by the Crown and are inaccessible by all-weather municipal roads.

The District is also an important area for wildlife with high potential for moose and deer production. The Birch and Whitemouth River corridors, as well as the Agassiz Provincial Forest and Sandilands Provincial Forest north of PTH No. 1, are suitable moose and deer habitat. The mixture of farmland and natural cover along the Whitemouth and Birch Rivers make these areas suitable as summer habitat while the forested areas and Provincial Forests provide cover and ease of movement in the winter months.

Waterfowl make use of the District's river systems to some extent as well as the wetlands in the District.

The continued success of fisheries and wildlife resources in the District is dependent upon maintenance and/or improvements of suitable habitat including fish spawning and nursery areas, wetlands and native vegetation areas. These resources should be further protected from encroachment by incompatible land use and activities.

Potentially significant fisheries and wildlife areas in the District have been identified in the Whitemouth River Planning District Background Report (1994). The Crown Land Plan, to be completed at a future date, may identify lands to be designated as Provincial Wildlife Management areas and Natural Lands requiring protection.

The District Board further intends to restrict activities that would accelerate damages along shoreline arising from causes such as erosion or bank instability. It is in the interest of the District, as well as Manitoba Hydro, to ensure that development on water storage lands is consistent with the intended function of these lands.

All local sources of potable water and financial investments made in acquiring potable water should also be protected.

Specific policies that address environmental conservation within the municipality are as follows:

- 3.3.4 The District Board shall seek advice from the Department of Natural Resources on proposals to drain or fill any significant wetland area. Land drainage projects may be regulated by the zoning by-law in order to ensure that municipal drainage systems and other lands are not adversely affected.
- 6.2.1 Fisheries habitat, spawning sites and nursery areas shall be protected by the following means:
 - (1) Stream alterations should not be undertaken without the approval of Manitoba Natural resources. Instream works should be designed and timed in a manner that avoids or mitigates any negative fish or fish habitat impacts.
 - (2) Land clearing and cultivation to the water's edge shall be controlled by requiring a public shoreline reserve for all shoreline subdivisions (Section 4.2.6). This in effect will reduce run-off, erosion and sedimentation.
 - (3) Landowners shall be encouraged to maintain a minimum 30 foot natural buffer between all agricultural activities and the Birch and Whitemouth Rivers and their tributaries.
- 6.2.2 Activities that discharge pollutants shall be restricted in their location and safeguards implemented as necessary. This will protect the quality of the water to support such uses as domestic consumption, aquatic life and wildlife, industrial and agricultural consumption and recreation.

- 6.2.3 The District Board may encourage the Department of Natural Resources to maintain and enhance fish stocking programs in the district.
- 6.2.4 Significant deer and moose concentration areas, as identified by the Department of Natural Resources, shall be recognized and afforded protection by discouraging concentrations of rural residential, intensive recreational, agricultural or industrial uses from locating in or near these areas.
- 6.2.5 The retention of tree cover and woodlots shall be encouraged as a means of protecting significant wildlife habitat areas. Where possible, tree cover shall be retained on unused road allowances, and other municipal and Crown lands. Council may enact a by-law under the Municipal Act to enforce this section. Tree cover and wildlife may also be protected by clustering developments separated by treed open space, and retaining natural drainage ravines to act as corridors for wildlife.
- 6.2.6 The District Board shall seek advice from the Department of Natural Resources on proposals to drain or fill any significant wetland areas and riparian zones important as fish and wildlife habitat.
- 6.2.7 The District Board shall encourage landowners to seek advice from the Department of Natural Resources with respect to habitat removal and wildlife depredation (i.e. crop damage) and will support any educational programs undertaken by that department.
- 7.2.1 Development areas that have been designated as groundwater recharge, groundwater pollution hazard areas, or surface water retention areas can occur only following a site investigation and plan to mitigate any groundwater pollution. Facilities that are likely to cause groundwater pollution under normal operating conditions include waste disposal grounds, sewage lagoons, feed lots and septic tank drain fields. Those which may cause pollution by accident or because of improper or careless handling of toxic substances include bulk fuel stations, bulk fertilizer distribution centres, service stations and industries handling potential pollutants.
- 7.2.2 The District Board shall not recommend approval to any subdivision if, in the opinion of the Board, the resultant subdivision, development or its related activities, endangers the water resource, particularly in proximity to groundwater pollution hazard areas. The development may proceed if the developer demonstrates that the development will not endanger the water resource if measures are undertaken to minimize the effect. This may include but not be limited to sewerage holding tanks.
- 7.2.3 The Board shall not permit the construction of habitable buildings and structures on lands known to be subject to surface ponding. The developer may proceed if the surface ponding can be overcome by drainage or the site raised by additional fill.

The R.M. of Piney is located in the southeast corner of Manitoba. This corner of Manitoba has many natural resources and large tracts of undeveloped land. The Sandilands Provincial Forest is a rich mix of hardwoods and majestic pine. The high sand ridges of the Sandilands area, known as Bedford Hills and Cypress Mountains, are the second highest points of elevation in Manitoba.

The R.M. of Piney is home to Whitemouth Lake where trophy size northern pike and Master Angler size walleye are so very commonly caught in these waters. A short 20 minutes drive from any community in the R.M. will also place you on Lake of the Woods, the premier walleye lake in the world. Moose Lake offers fishing and an excellent place to camp and enjoy several water sports such as water skiing, fishing etc. As well, a variety of animals make their home in the area. White tailed deer, snowshoe hares, black bears, wolves, coyotes, fishers, and lynx all roam this forest haven.

The R.M. of Piney covers 2433 square kilometers and has a population, according to 2001 Statistics Canada information of 1688 people. This was an increase of 5.2% from the 1996 census. There are 983 dwellings in the R.M. of Piney and a population density of 0.7 people per square kilometer. Compared to other municipalities within the Seine River Watershed, Piney is a relatively inactive area. The portion of the R.M. of Piney that is part of the Seine River Watershed covers 88 square kilometers. Within that area there are no properties with livestock structures including loose housing, general barns and animal specific barns and 1 property with a dwelling unit.

Land use within the municipality is primarily agricultural in nature and land holdings are generally in large parcels.

From December 1, 2005 to December 1, 2006 there was 1 subdivision application in the R.M. of Piney.

Development Plan

The R.M. of Piney is in the process of drafting their first Development Plan and have not, as of yet, adopted any policies that would guide and protect water resources within the municipality.