

Section 7.0 – Watershed Development

Section 7.6 – Environmental Licensing (source: Manitoba Conservation, Regional Operations, Portage la Prairie District)

Organisational Mandate:

The Portage District of the Manitoba Conservation's Red River Region covers the Rural Municipalities of Dufferin, Grey, Lakeview, North Norfolk, Portage la Prairie, South Norfolk, Victoria and Westbourne together with the City of Portage la Prairie, the Towns of Carmen and Gladstone, and the Villages of MacGregor, Notre Dame de Lourdes and St. Claude. The Portage office has three environment officers who are responsible for monitoring and enforcing the various acts and regulations, as follows:

The **Environment Officer / Public Health Inspector** (EO/PHI) is responsible for enforcing Public Health Act regulations on food service establishments, temporary food service, seasonal food service, food processing businesses, retail food stores, mobile food units, un-inspected meat processors, non-institutional care facilities, food-borne, waterborne and communicable disease investigations, insanitary conditions, housing, personal care services, public accommodations, recreational camps, swimming pools and whirlpools, water supplies, and atmospheric pollution. The EO/PHI is also responsible for enforcing the Non-Smokers Health Protection Act and Regulations.

The **Environment Officer / Generalist** (EO/G) is responsible for enforcing the Environment Act with regards to waste disposal grounds and transfer stations, environment act licenced developments, private sewage disposal systems and crop residue burning. The EO/G also has responsibilities for enforcing The Dangerous Goods Handling and Transportation Act regulations on petroleum retailers and bulk facilities, pesticide containers depots, and PCB storage sites, together with contaminated sites regulation under the Contaminated Sites Remediation Act.

The **Environment Officer / Livestock** is responsible for enforcing the Environment Act with regards to the Livestock Manure & Mortalities Regulation.

Description of Data Collected:

Data held in the Portage District office that is relevant to the La Salle River Watershed Management Plan includes:

Locations of municipal and private wastewater treatment systems within the western portion of the La Salle River Watershed. Files on the wastewater treatment systems include water quality data on discharges – typically BOD₅, Fecal Coliform and Total Coliform counts.

Locations of onsite waste management systems.

Locations of contaminated sites and petroleum storage facilities.

Locations of livestock operations (hog barns).

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Trends:

The most significant trend seen in the past 10 years has been the development of large scale livestock operations within the watershed. Typically these operations dispose of animal wastes on the land, usually by injection of liquid wastes into the soil.

Another trend that may affect surface water quality in the watershed is aging municipal and private wastewater treatment systems. Age-related deterioration of wastewater treatment facilities and lack of funding available to maintain the publicly owned ones may result in more discharge of nutrients to the watershed via groundwater seepage.

Areas of concern:

Areas of concern include non-point sources of nutrients going into the watershed such as run-off from farm fields that have received animal waste from livestock operations. Nutrients are also added to the watershed when municipal and private wastewater treatment systems discharge effluent to the watershed either through controlled discharges or groundwater seepage from leaking lagoons.

Besides nutrients, another other area of concern is from contaminated and impacted sites. Runoff and groundwater seepage from these sites in the watershed eventually reach the La Salle River and add to the contaminant load in the river. “Orphaned” sites where there are no responsible parties left who can pay for the clean-up are a Provincial responsibility, but funds for clean-ups are limited.

Information Gaps:

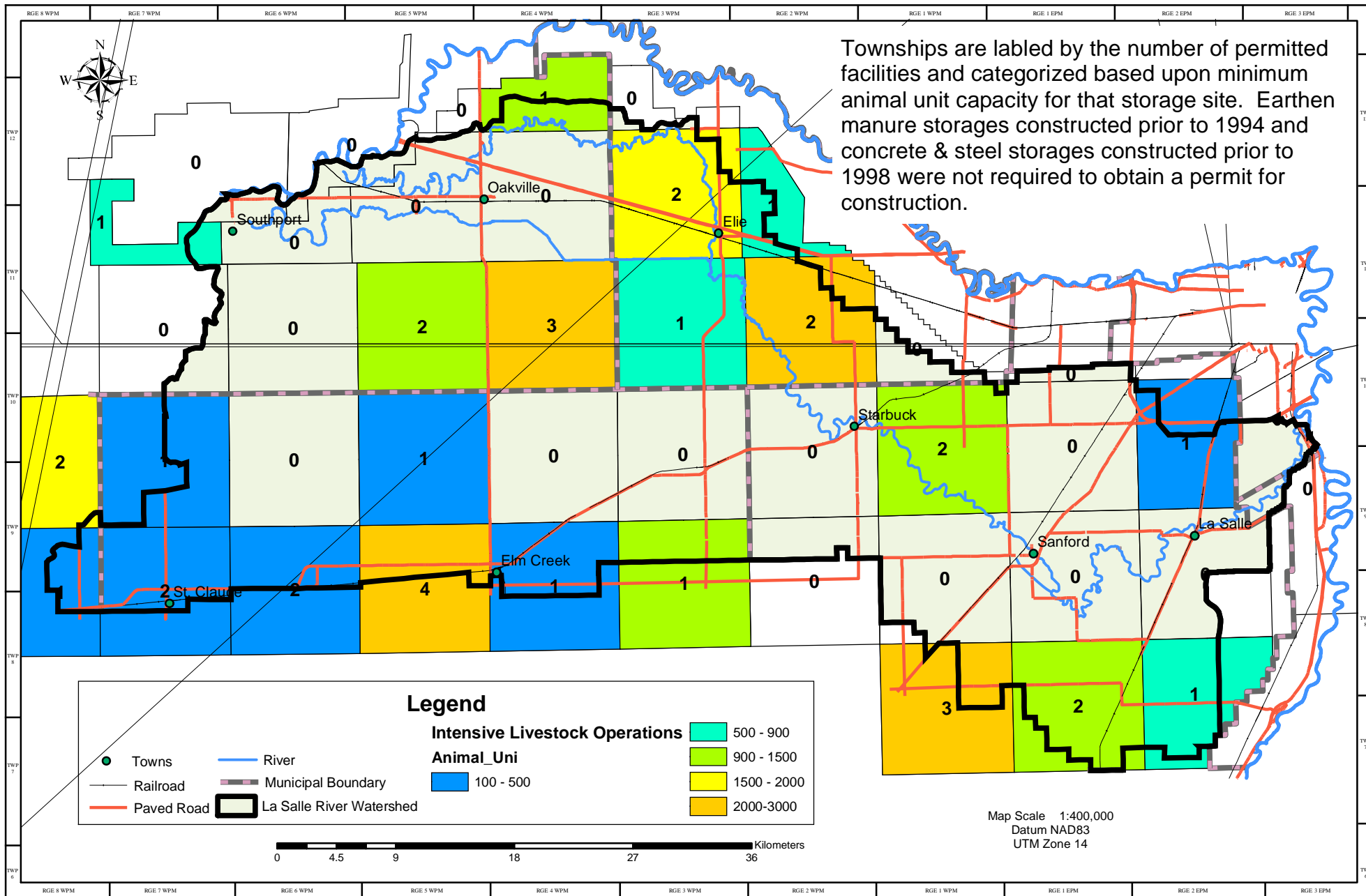
Current research within the watershed is addressing information gaps on the various non-point and point sources of biological loads on the La Salle River system.

Recommendations:

Institute “best practices” in agricultural, municipal and industrial management practices within the watershed.

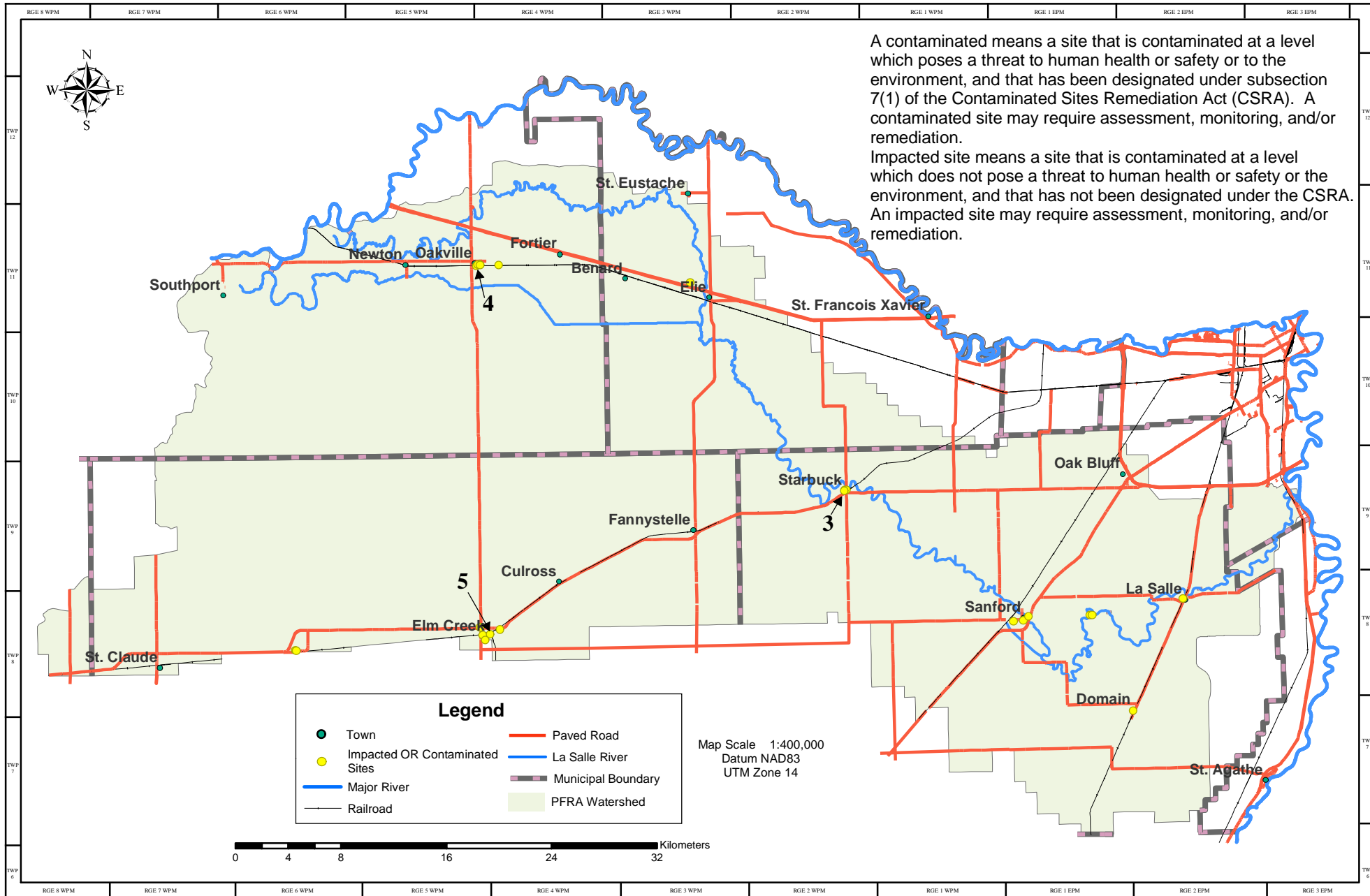
SECTION 7.6.2

Permitted Manure Storage Sites within the La Salle River Watershed



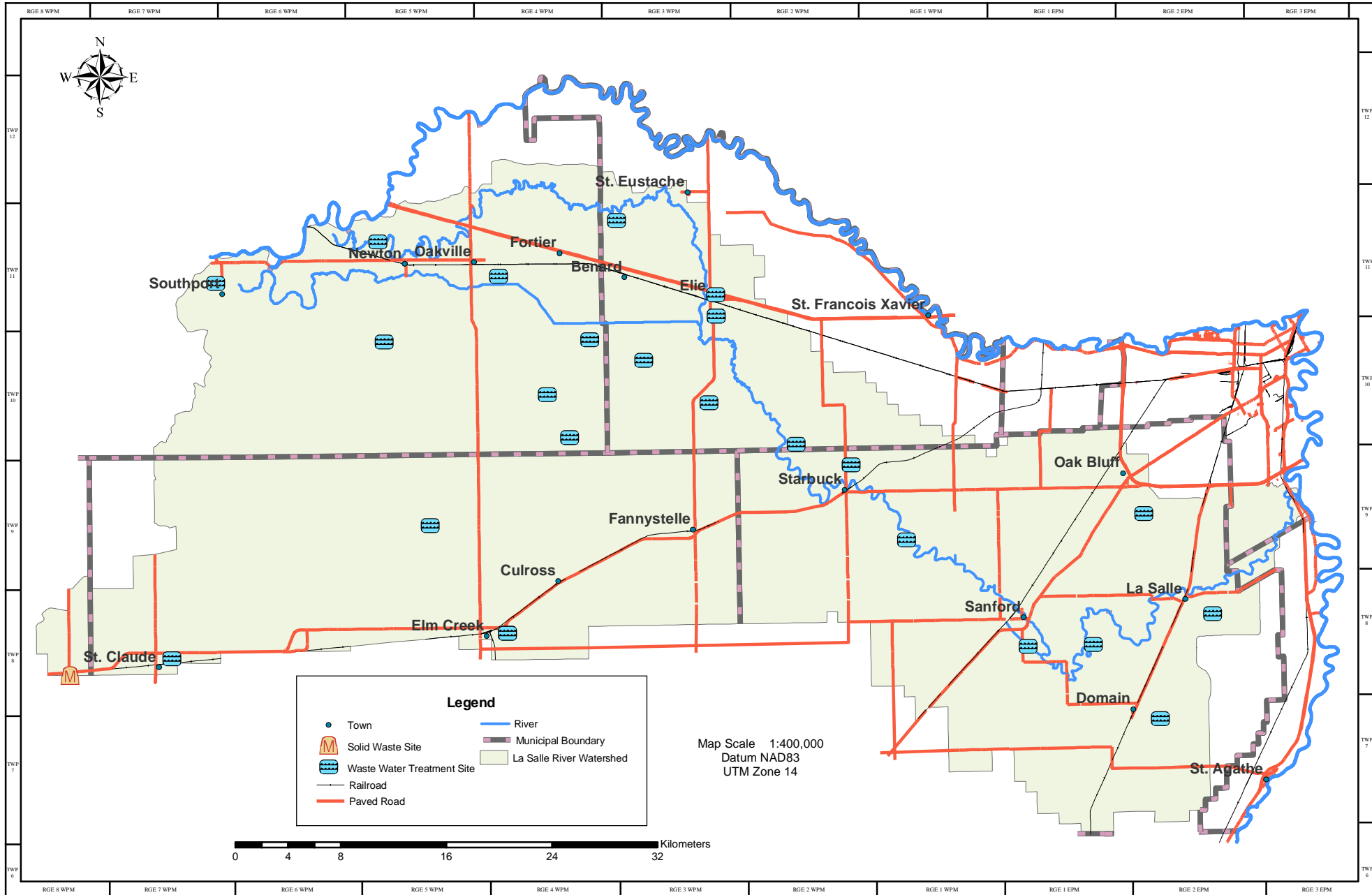
SECTION 7.6.6

Impacted and/or Contaminated Sites within the La Salle River Watershed



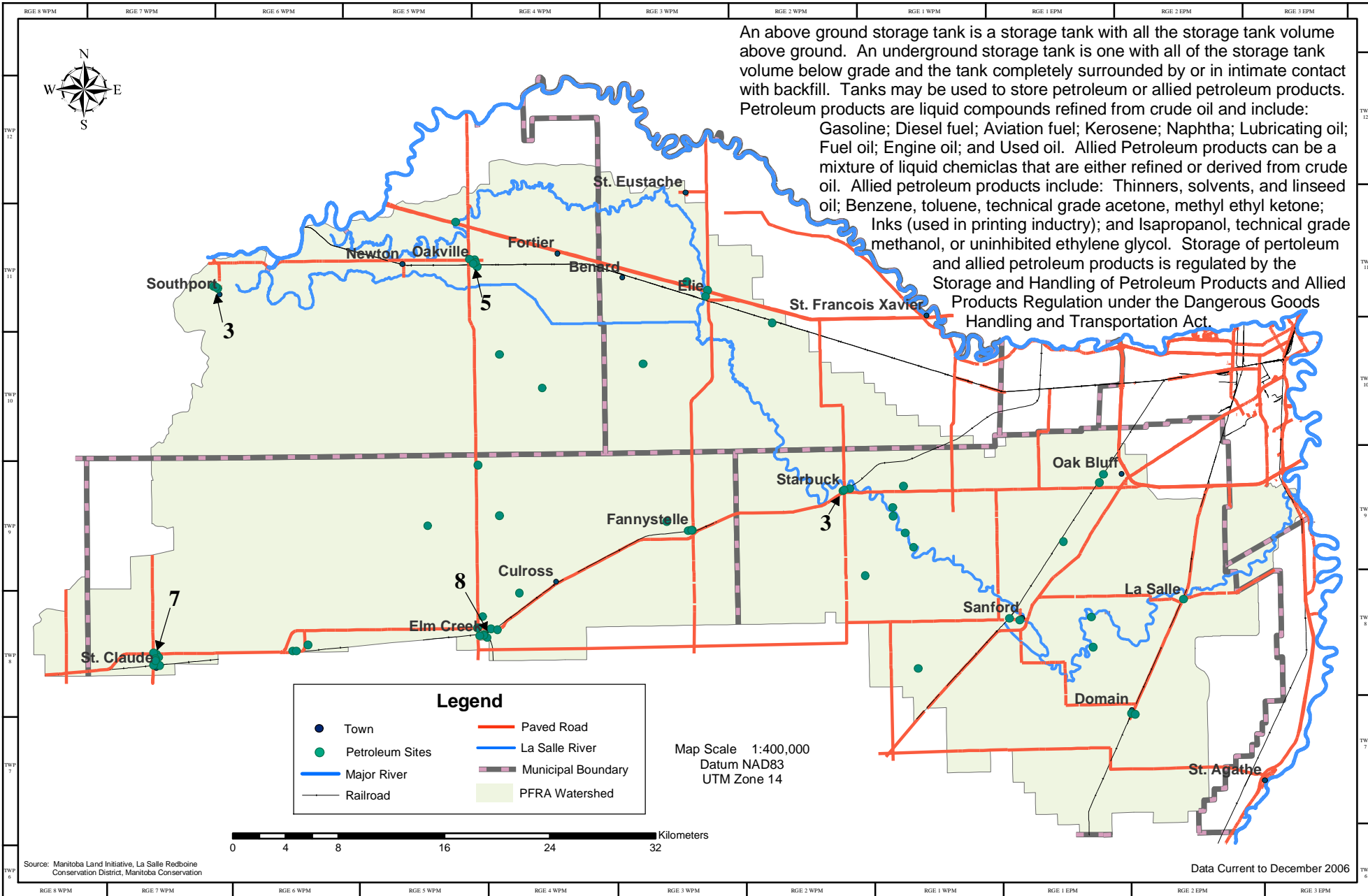
SECTION 7.6.5

Solid and Liquid Waste Sites within the La Salle River Watershed



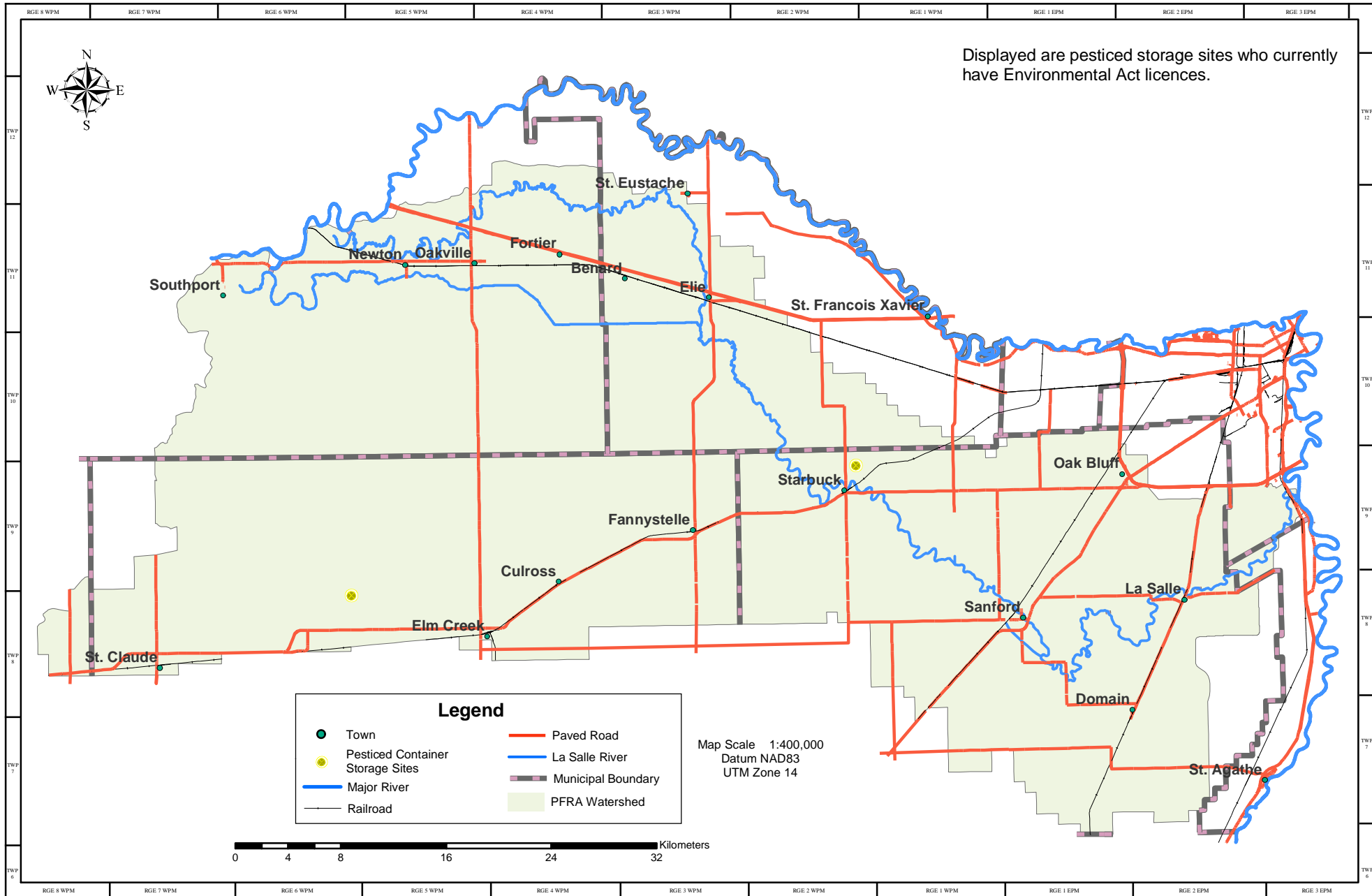
SECTION 7.6.4

Petroleum Sites within the La Salle River Watershed

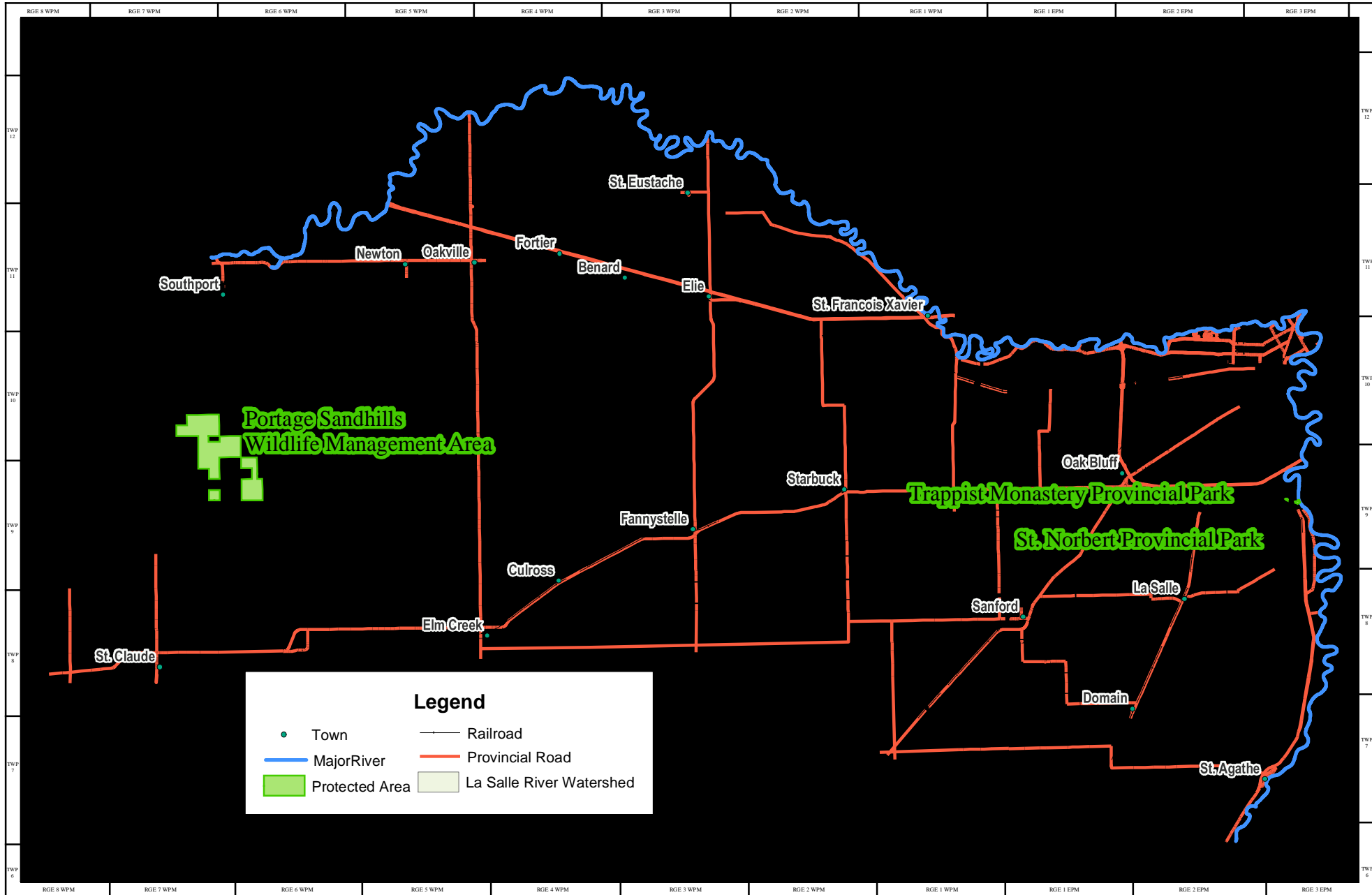


SECTION 7.6.3

Pesticide Container Storage Sites within the La Salle River Watershed



Protected Areas within the La Salle River Watershed



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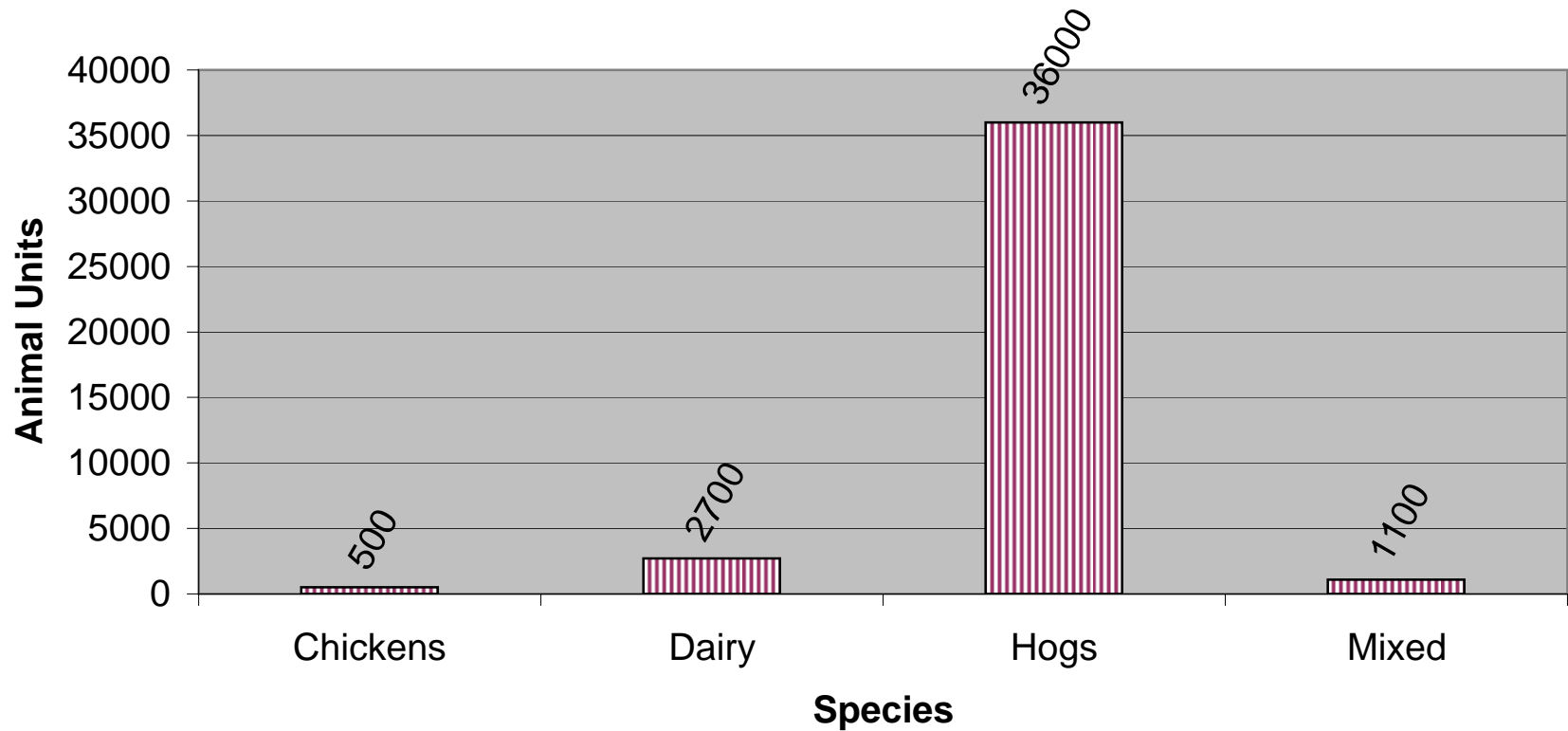
Section 6.2 - Protected Areas within the La Salle River Watershed (Source: Protected Area's Initiative)

Protected Areas Properties within the La Salle River Watershed 2007

Watershed	Protected Area	Area (ha)	Ecological Reserve	National Park	Private Lands	Provincial Park	Wildlife Management Area	Grand Total		
La Salle River	Portage Sandhills Wildlife Management Area	Protected Area (ha) within Watershed						1,591.28		
		Total Area (ha) of Protected Area						4,773.83		
	St. Norbert Provincial Park	Protected Area (ha) within Watershed					3.86			
		Total Area (ha) of Protected Area					6.62			
	Trappist Monastery Provincial Park	Protected Area (ha) within Watershed					2.02			
		Total Area (ha) of Protected Area					2.02			
	Total Protected Areas (ha) within La Salle River Watershed						5.88	1,591.28		1,597.16

SECTION 7.6.1

Licensed Animal Unit Manure Storage, within La Salle River Watershed



Note: There are 35 licensed manure storage facilities in the La Salle River Watershed

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Section 6.1 – Wildlife Resources of the La Salle River Watershed (Source: Manitoba Conservation)

The La Salle River Watershed's main land use is the production of agricultural crops. Over 80% of the area is categorized as agricultural. Although agricultural crops provide some habitat for wildlife the key habitat areas are along riparian corridors, forested and grassland areas, which would total less than 10% of the watershed. One Provincial Wildlife Management Area (WMA), the Portage Sandhills WMA, is located in the watershed. This 1,600 ha WMA provides habitat for deer and grouse and consists of sand dunes, aspen-oak forest and mixed grass-prairie. Sand dune ecosystems are extremely fragile and this one is protected from vehicle use. The watershed supports a significant population of white-tailed deer, and a variety of fur bearing animals and neo-tropical birds.

The key element, from a wildlife standpoint, will be the preservation and enhancement of what little habitat remains. By definition wildlife habitat is the environment where animals, plants and other organisms survive and where they receive their life requisites, namely food, water and cover. It is anticipated that the watershed management plan will adopt a no net loss philosophy for these key areas. In addition to habitat, the plan should address the species of concern from the biotics database.

Manitoba Conservation staff from the Interlake Region have relatively little species specific information to provide as baseline data for the plan. Very limited survey information has been collected over the years, except for white-tailed deer survey information in Game Hunting Area (GHA) 33. The last deer survey was flown in January 1998 with a total GHA population estimate of 4,210 ($\pm 30\%$). In 1991 a more area specific survey was flown in GHA 33, with 221 deer observed in the La Salle river corridor.

Wildlife staff will contribute to the Integrated management plan through specific wildlife concerns and will review specific requests on an as needed basis.

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Section 6.3 - Rare Species and Species at Risk within the La Salle River Watershed

(Source: Manitoba Conservation Data Center)

The Manitoba Conservation Data Centre (CDC) is a storehouse of information on Manitoba's biodiversity – its plant and animal species, as well as its natural plant communities. Housed within the Wildlife and Ecosystem Protection Branch of Manitoba Conservation, the CDC is Manitoba's authoritative source of information on rare species, including Species at Risk. The information has many uses, including conservation and development planning, and is made available to government agencies, the private sector, and the public.

The Manitoba CDC is a member of NatureServe, a network of over 80 similar organizations throughout Canada, the United States and Latin America. NatureServe and its member programs use a scientifically and empirically defined methodology and rigorous standards common to all CDC's throughout the network. The CDC exchanges its biodiversity data annually with NatureServe, thereby gaining access to the expertise of a team of biodiversity scientists from throughout the western hemisphere.

The CDC has developed lists of plant and animal species and plant communities, also known as elements of biodiversity, found in Manitoba. It assigns each of these elements a conservation status rank, based on how rare the species or community is in Manitoba, and then collects detailed information on where the provincially rare elements have been found. These locations, known as element occurrences, are mapped using specialized geographic information system (GIS) and database software known as Biotics.

The following information on species occurring within the LaSalle River Watershed is based on existing data known to the Manitoba CDC at the time of the request. These data are dependent on the research and observations of CDC staff and others who have shared their data, and reflects our current state of knowledge. An absence of a data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present; in many areas, comprehensive surveys have never been completed. Therefore, this information should be regarded neither as a final statement on the occurrence of any species of concern, nor as a substitute for on-site surveys for species as part of environmental assessments. Also, because the Manitoba CDC's Biotics database is continually updated and because information requests are evaluated by type of action, any given response is only appropriate for its respective request.

The Manitoba CDC should be contacted for an update on this natural heritage information if more than six months passes before it is utilized.

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Conservation Status Ranks for Species found within the LaSalle River Watershed:

SCIENTIFIC NAME (COMMON NAME)	Number of occurrences ¹	Manitoba Status Rank ²
Plants³		
<i>Cyperus erythrorhizos</i> (Red-root Flatsedge)	1	Very Rare (S1)
<i>Euphorbia geyeri</i> (Prostrate Spurge)	1	Very Rare (S1)
<i>Amorpha fruticosa</i> (False Indigo)	1	Very Rare (S1S2)
<i>Lygodesmia rostrata</i> (Annual Skeletonweed)	2	Very Rare (S1S2)
<i>Arisaema triphyllum ssp. triphyllum</i> (Jack-in-the-pulpit)	1	Rare (S2)
<i>Carex cristatella</i> (Crested Sedge)	2	Rare (S2)
<i>Circaea lutetiana ssp. canadensis</i> (Large Enchanter's-nightshade)	1	Rare (S2)
<i>Cyperus houghtonii</i> (Houghton's Umbrella-sedge)	1	Rare (S2)
<i>Cyperus schweinitzii</i> (Schweinitz's Flatsedge)	1	Rare (S2)
<i>Dalea villosa var. villosa</i> (Silky Prairie-clover)	4	Rare (S2)
<i>Heteranthera dubia</i> (Water Star-grass)	1	Rare (S2)
<i>Orobanche ludoviciana</i> (Louisiana Broom-rape)	2	Rare (S2)
<i>Panicum linearifolium</i> (White-haired Panic-grass)	1	Rare (S2)
<i>Carex emoryi</i> (Emory's Sedge)	1	Rare (S2?)
<i>Boltonia asteroides var. recognita</i> (White Boltonia)	3	Rare (S2S3)
<i>Lotus purshianus</i> (Prairie Trefoil)	1	Rare (S2S3)
<i>Hudsonia tomentosa</i> (False Heather)	1	Uncommon (S3)
<i>Phryma leptostachya</i> (Lopseed)	1	Uncommon (S3)
<i>Stipa viridula</i> (Green Needle Grass)	1	Uncommon (S3)
<i>Verbena bracteata</i> (Bracted Vervain)	1	Uncommon (S3)
<i>Viola conspersa</i> (Dog Violet)	1	Uncommon (S3?)
<i>Carex tribuloides</i> (Prickly Sedge)	1	SNA
<i>Sisyrinchium campestre</i> (White-eyed Grass)	2	SU
Animals⁴		
<i>Athene cunicularia</i> (Burrowing Owl)	1	Very Rare (S1B)
<i>Macrhybopsis storeriana</i> (Silver Chub)	5	Uncommon (S3)
<i>Ichthyomyzon castaneus</i> (Chestnut Lamprey)	1	Uncommon (S3S4)
<i>Strix varia</i> (Barred Owl)	2	Uncommon (S3S4)
Plant Community		
<i>Salix exigua shrubland</i> (Sandbar Willow Shrubland)	1	Uncommon (S3S4)

1: The number of times a specific example of a plant, animal or vegetative community occurs at a specific geographic location within the LaSalle River Watershed.

2: Please refer to Conservation Status Rank Definitions

3: Vascular and Non-Vascular plants

4: Vertebrate and Invertebrate animals

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Conservation Status Rank Definitions:

The following definitions, stated in general terms, are used by the Manitoba Conservation Data Centre.

- S1** Very rare throughout its range or in the province (5 or fewer occurrences, or very few remaining individuals). May be especially vulnerable to extirpation.
- S2** Rare throughout its range or in the province (6 to 20 occurrences). May be vulnerable to extirpation.
- S3** Uncommon throughout its range or in the province (21 to 100 occurrences).
- S4** Widespread, abundant, and apparently secure throughout its range or in the province, with many occurrences, but the element is of long-term concern (> 100 occurrences).
- S5** Demonstrably widespread, abundant, and secure throughout its range or in the province, and essentially eradicable under present conditions.
- SU** Possibly in peril, but status uncertain; more information needed.
- SH** Historically known; may be rediscovered.
- S#S#** Numeric range rank: A range between two consecutive numeric ranks. Denotes range of uncertainty about the exact status of the species (e.g., S1S2).
- S#B** Breeding: Basic rank refers to the breeding population of the element in the province.
- S#N** Non-breeding: Basic rank refers to the non-breeding population of the element in the province.
- SNR** A species not ranked. A rank has not yet assigned or the species has not been evaluated.
- SNA** A conservation status rank is not applicable to the element.

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General Information for the Watershed Plan:

Description/history of organizations activities/mandate in the La Salle River Watershed:

The Manitoba Conservation Data Centre (MBCDC) is a storehouse of information on Manitoba's biodiversity – its plant and animal species, as well as its natural plant communities. The MBCDC functions under the umbrella of NatureServe and NatureServe Canada, a network of 75 similar centres throughout Canada, the United States and Latin America. This network, along with a central team of scientists, maintains science-based information about the biodiversity of the western hemisphere.

Description of the data collected and why it is collected i.:

The MBCDC has developed lists of plant and animal species and plant communities, also known as elements of biodiversity, found in Manitoba. MBCDC assigns each of these elements a conservation status rank, based on how rare the species or community is in Manitoba, then collects detailed information on where the provincially rare elements have been found. These locations, known as element occurrences, are mapped in a geographic information system (GIS) and entered into Biotics a species and plant community database. The MBCDC uses a scientifically and empirically defined methodology and rigorous standards common to all CDC's throughout the network. The information has many uses, including conservation and development planning, and is made available to government, the private sector, and the public.

Description of information gaps that exist and recommendation of follow up reports or studies that could be conducted:

These data are dependent on the research and observations of our scientists and reflects our current state of knowledge. An absence of data does not confirm the absence of any rare or endangered species. Many areas of the province have never been thoroughly surveyed, however, and the absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. The information should, therefore, not be regarded as a final statement on the occurrence of any species of concern nor should it substitute for on-site surveys for species or environmental assessments.

Recommendations on best management practices, risk management or watershed management policies that will assist in alleviating concern and appropriate locations for each practice within the Sub Watersheds:

Comments on threats to some specific aquatic species which occur in the LaSalle River watershed;

Chestnut Lamprey (*Ichthyomyzon castaneus*) - Subject to Blockage/alteration of tributary.

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Silver Chub (*Macrhybopsis storeriana*) - Main core population in Red River susceptible to habitat destruction. All populations are susceptible to human activities.

The information provided in this report is based on existing data known to the Manitoba CDC of the Wildlife and Ecosystem Protection Branch at the time of the request. Because our Biotics database is continually updated and because information requests are evaluated by type of action, any given response is only appropriate for its respective request.

Please contact the Manitoba CDC for an update on this natural heritage information if more than six months passes before it is utilised.

Third party requests for products wholly or partially derived from the Biotics database must be approved by the Manitoba CDC before information is released. Once approved, the primary user will identify the Manitoba CDC as data contributors on any map or publication using data from our database, as the Manitoba Conservation Data Centre; Wildlife and Ecosystem Protection Branch, Manitoba Conservation.