



AGRICULTURAL LAND-USE IN THE LAC LA NONNE WATERSHED (2006)



Background

Agricultural land use was surveyed over a 3 day period in August 2006 using a GIS based tool called Ag-Capture developed by PFRA. The survey used land ownership boundaries, or parcels, as a framework and was based entirely on what was visible from public roads.

Findings

The watershed covers about 74,000 acres. The project study area includes all parcels of land that intersected the watershed but excludes parcels that could not be accessed by public road or were known to not be associated with agriculture (villages and rural residential developments). The study area covers about **67,000 acres**.

Pasture (livestock grazing) is the most abundant land use, accounting for about **52%** of the study area (about **35,000 acres**).

Land used for the production of **hay** was second at **21%** (about **14,000 acres**).

Non-agricultural land use accounted for **15%** (about **10,000 acres**). These areas were mainly near the 4 largest lakes in the watershed and most had high proportions of tree cover.

The remaining land in the study area was either used for **annual crop** production (about **8%** or **5,000 acres**) or **agro-forestry** plantations (about **1%** or **600 acres**).

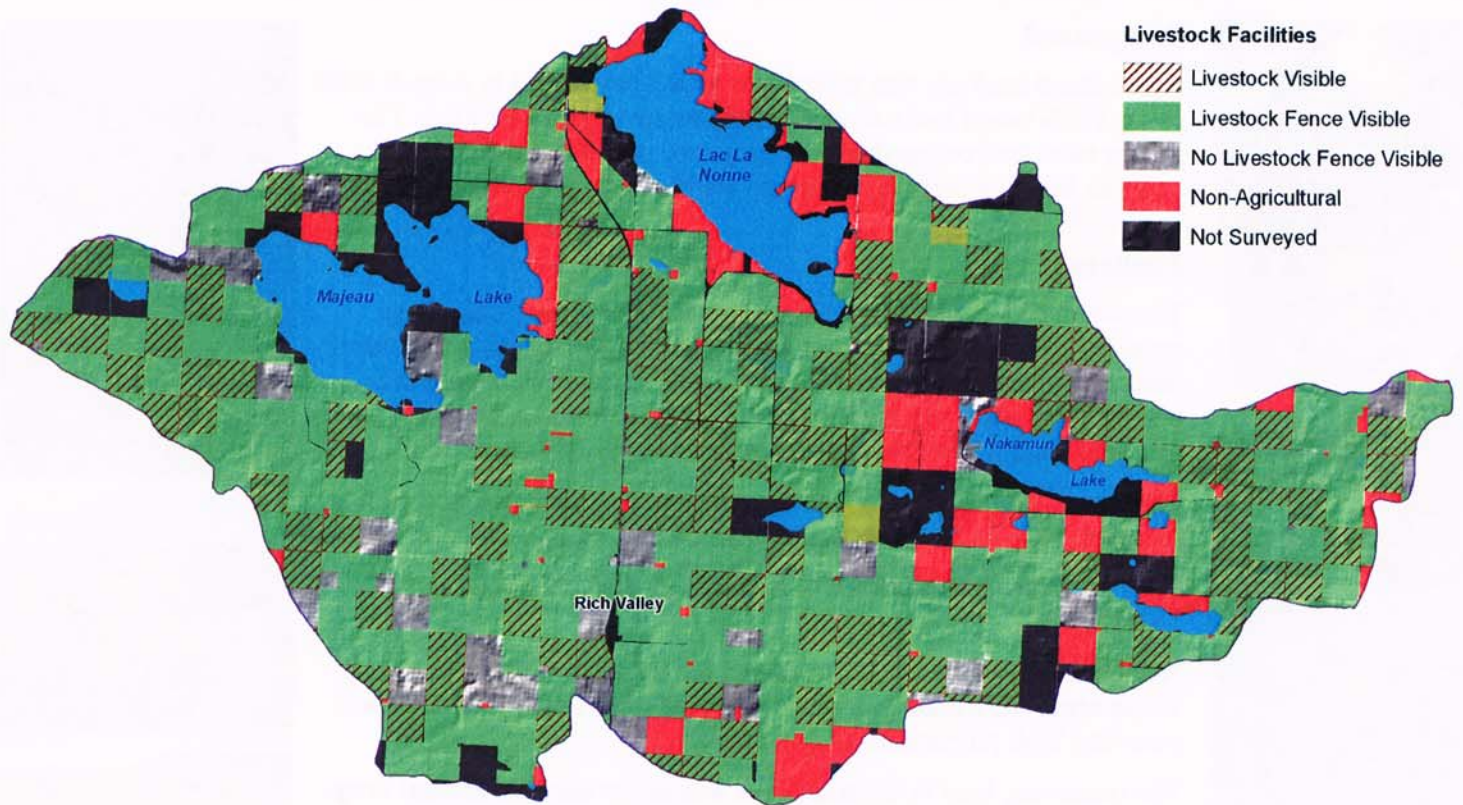
About 3% of the study area or about 2,000 acres was not accounted for in the survey.



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Livestock and Associated Facilities in the Watershed



Livestock and Structures Visible	No. of Parcels
Livestock	
Beef Cattle	97
Horses	39
Bison	3
Sheep	3
Elk	2
Alpacas/Llamas	2
Poultry	1
Goats	1
Donkeys	1
Agricultural Facilities	
Livestock Fencing	422
Grain/Feed Storage	48
Silage Storage	8
Bee Facilities	5
Poultry Barns	1
Hog Barns	1
Total Survey	639

Conclusions

1. The Lac la Nonne Watershed is an **agriculture dominated** watershed (about **85%** of the land is in some form of agricultural use).
2. The **beef cattle industry is the dominant agricultural sector** in the watershed as indicated by the number of parcels where beef cattle were visible (97). The **vast majority (73%) of the land is used for forage production as pasture or hay and much of the annual cropland is used to grow feed for the livestock sector** (a significant portion being harvested in the form of silage). **Livestock fencing** was also very prevalent (**422 out of 639 parcels** surveyed) although not all these parcels displayed evidence of recent grazing.
3. **Land use is an important piece of the State of the Watershed puzzle** and offers insight into relevant stewardship activities. Identification of locations to implement appropriate practices (BMPs) requires analysis of watershed hydrology and landscape characteristics such as soil texture and slope, vegetative cover and riparian health, as well as current land management practices used to reduce environmental risks.
4. The survey was somewhat constrained due to **limitations of public road access and visibility** of portions of parcels from roadways. Aerial photography was useful in estimating the extent of land use, especially when visibility from public roads was limited.