



April 2015

Red River Basin Nutrient Reduction Strategy

Need

- Red River Basin Commission (RRBC), working with the International Red River Board (IRRB), have recognized that excess phosphorus and nitrogen are two of the greatest water quality issues in the Red River Watershed and Lake Winnipeg.
- While Red River Watershed contributes 10 to 15% of the water that flows through Lake Winnipeg it contributes about 60% of the phosphorus load to the lake.
- Manitoba Conservation and Water Stewardship and Environment Canada have been monitoring nutrients at the Emerson, Manitoba border station since 1994. Both phosphorus and nitrogen loads have been increasing.
- Phosphorus reduction needed to meet proposed Lake Winnipeg objective will be approximately 50% reduction in current average annual load. This goal will return Lake Winnipeg to the condition that existed in 1990.
- Nonpoint phosphorus sources in the Red River watershed contribute 84%, made up of cropland runoff 43%, atmospheric deposition 18%, streambank erosion 6% and non-agricultural rural runoff 17%. Phosphorus contributions from point sources total 16%, made up of domestic/industrial wastewater 11%, urban stormwater 2% and individual sewage treatment systems 3%.
- Current point-source domestic and industrial phosphorus loads are approximately 416 metric tons per year. Current total phosphorus loads for the Red River at the Canadian border are 2,600 metric tons per year.
- MNDNR 2012 analysis of highly protective buffer shows the Red River Basin had the lowest percentage of streams with perennial vegetation.

Proposal

- RRBC would use experience gained through development of the Long Term Flood Storage project, a basin wide stakeholder driven process completed in 2011, to develop a nutrient reduction strategy that encompasses the three jurisdictions that make up the Basin - Minnesota, North Dakota and Manitoba.
- **The RRBC is requesting \$200,000 from the State of Minnesota to be matched by the State of North Dakota and the Province of Manitoba. The RRBC has received a Bush Foundation Community Innovation Grant to provide opportunities to get stakeholders participating in a nutrient reduction strategy.**

- The proposed effort would bring together citizens, local units of government, state and federal interests to put together a comprehensive plan to address water quality issues within the basin, focusing on sediment and nutrients.
- While all jurisdictions within the Red River Watershed have various plans and approaches to reduce nutrients, this project would develop a coordinated and systematic strategy across boundaries to advance basin wide nutrient reductions.
- The RRBC will work with the IRRB and the individual jurisdictions of Minnesota, North Dakota and Manitoba to utilize the current efforts of the jurisdictions and facilitate citizen stakeholder meetings throughout the Red River basin to adopt an agreed upon Nutrient Reduction Strategy.
- In this effort the RRBC will partner with agricultural interests as well as local units of government to hold community conversations to build a nutrient reduction strategy that meets the intent of each individual jurisdiction as well as the Red River Basin as a whole with unique nutrient reduction allocations by major watershed.



Red River Basin Commission
 1120 28th Ave N. Suite C, Fargo, ND 58102 701-356-3183
 205-1100 Concordia Ave. Winnipeg, MB R2K 4B8 204-982-7250
www.redriverbasincommission.org