

The Red River Basin Commission 8 A Proposed Approach to **Developing a Basin-Wide Nutrient Management** Strategy for the International Red River Watershed

By: Robin Gislason

#### International Basin with Numerous Jurisdictions

- •2 Countries
- •3 States
- •1 Province
- Conservation
  Districts and
  Watershed Boards
  Numerous
- Counties and Rural Municipalities



### **RED RIVER BASIN COMMISSION**

Moorhead • Winnipeg



#### **RRBC VISION**

A Red River Basin where residents, organizations and government work together to achieve basin-wide commitment to comprehensive integrated watershed stewardship.

#### **RRBC MISSION**

To develop a Red River Basin integrated natural resources framework plan; to achieve commitment to implement the framework plan; and to work toward a unified voice for the Red River Basin.

# Organizational Background



The RRBC was formed in the July 2002 when the following organizations merged

- •Red River Water Resources Council (RRWRC)
- •The International Coalition for Land and Water Stewardship (TIC)
- •Red River Basin Board (RRBB)



### **41- BOARD MEMBERS**

Each has an alternate that they choose 2 year terms All elected/selected on the same two year cycle

#### Manitoba

- 3 Premier Appointees
- 1 City of Winnipeg
- 1 City of Selkirk
- 1 P.V. Water Co-op
- 4 Municipalities
- 1 Environmental
- 1 First Nation
- 1 Citizen At Large
- •

#### South Dakota

- 1 Governor Appointee
- 1 Local Government Unit

#### Minnesota

- 3 Governor Appointees
- 3 Cities
- 2 Counties
- 2 Watersheds
- 1 Environmental
- 1 Tribal
- 1 Citizen At Large

#### North Dakota

- 3 Governor Appointees
- 3 Cities
- 2 Counties
- 2 Watersheds
- 1 Environmental
- 1 Tribal
- 1 Citizen At Large



# What we do – The Role of the RRBC



Work with residents, organizations and governments to build and facilitate a comprehensive and cooperative approach to land and water management within the Red River Basin.

#### Natural Resources Framework Plan (NRFP) Basin Goals

Goal #1 Goal #2 Goal #3 Goal #4 Goal #5 Goal #6 Goal #7 Goal #8 Goal #9

Goal #10

Goal #11 Goal #12

Goal #13

Manage by Watershed Integration Data & Tools for Decision Makers Education/Information Flood Forecasting **Flood Mitigation** Flood Response & Recovery Drainage Water Quality Water Supply **Red River Basin Commission** Conservation Fish & Wildlife **Outdoor Recreation** 

## Goal # 1 Manage by Watershed Watershed Groups

- North Chapter
- South Chapter
- Roseau River International
- Watershed
- Pembina River Basin Advisory Board
- Joint Powers Board
- South Valley Initiative



### **Goal #4 Outreach and Education**



### RRBC 28<sup>th</sup> Annual Red River Basin Land and Water International Summit Conference



Jan. 18-20<sup>th,</sup> 2011 Fargo, ND

29<sup>th</sup> Annual Conference January 24-26<sup>th</sup>, 2011 Hotel Fort Garry Winnipeg, Manitoba



### 2009 FLOOD Impetus: for MN & ND Legislative Action

## RRBC's Long Term Flood Solutions Project





# **Drought Planning Project**

• Completion of the *Red River Basin* Drought Preparedness Strategy Scoping Document

 Identified need for further work in the areas of drought jurisdictional processes and drought conservation/soft paths



## Natural Resources Framework Plan Basin Goals (NRFP)

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### WATER QUALITY GOAL # 9

- Maintain, protect and restore surface and ground water quality in the Red River Basin
  Develop a common approach to
- •Develop a common approach to assessing water quality goals and conditions

9.6 restoration goals for impaired waters; reduce point- and non-point source pollution to protect surface and ground water; develop strategies to reduce nutrient loading to Lake Winnipeg by 10% in 5 years; encourage respect for water quality standards; develop programs that prevent the spread of non-native aquatic species and prevent the introduction of new species to the basin. A Proposed Approach to Developing a Basin-Wide Nutrient Management Strategy for the International Red River Watershed

## **Background**

•Nutrient loading in the RRB and Lake Winnipeg •RRBC water quality compact •4 party talks





## Background 1. Nutrient Loading to Lake Wpg and the RRB

- One of the greatest water quality threats to the RRB
- Jurisdictions each have their own approach
- Enhanced, coordinated and systematic strategy is desirable

## Background 2. RRBC Water Quality Compact

- Mission Statement
- Guiding Principles
- Objectives

### Background

#### 3. 4 Party Talks



**News**Release

November 22, 2010

FOUR-PARTY TALKS CENTRE ON CRITICAL NEED TO PREVENT UNCONTROLLED OVERFLOW FROM DEVILS LAKE

Manitoba, North Dakota Agree to Work Together on Flood Planning for Spring 2011 and Beyond

(WASHINGTON, D.C.) - Progress toward resolving a number of long-standing water policy differences between Canada and the U.S. was made during a second round of four-party talks held Monday. All parties agreed that preventing an uncontrolled overflow of Devils Lake through the natural outlet at Tolna Coulee is a critical priority in order to preserve downstream water quality, and that more water needs to be transferred out of Devils Lake through controlled outlets to achieve this goal.

All parties agreed that the worst-case scenario would be an uncontrolled release of the lowest-quality water through Tolna Coulee, a risk that would be mitigated by greater releases from areas of higher water quality. Water quality is at least 250 per cent worse at Tolna Coulee than East Devils Lake. The parties agreed to expedite analysis of the effects of proposed outlet expansions on downstream water quality.

Participants discussed how the extremely wet conditions and high water levels throughout the Red River basin have significantly increased the potential for flooding this coming spring. In recognition of this risk, North Dakota and Manitoba agreed to share data and expertise in a new effort to protect citizens on both sides of the border.

Progress toward an integrated basin-wide nutrient management strategy was made with general agreement to identify current and potential measures to reduce nutrients in the Red River

### International Joint Commission

- •Assists governments in finding solutions to problems in waters stradling the International Boarder.
- •Established from the 1909 Boundary Waters Treaty
  - •Three member appointed by the President of the Untied States
  - •Three members appointed by the Prime Minister of Canada

### International Red River Board (IRRB)

The IRRB helps the International Joint Commission (IJC) prevent and resolve transboundary disputes by providing advice on matters affecting the quality, levels and integrity of the waters of the Red River ecosystem.

# International Red River Board Water Quality Committee

Members:

- •Manitoba Ministry of Conservation and Water Stewardship
- •North Dakota Department of Health
- •Minnesota Pollution Control Agency
- •USA Environmental Protection Agency & United States Geological Survey
- •Canada Environment Canada & Agriculture and Agri-foods Canada
- Red River Basin Commission

### **Mission Statement**

To develop a collaborative, science and watershed-based approach to managing nutrients in the Red River and its watershed with the goal of restoring and protecting aquatic ecosystem health and water uses in the Red River watershed and Lake Winnipeg.

### **Guiding Principles**

The development of the nutrient management strategy will be guided by the following principles:

- Efforts, decisions and outcomes will be based on and supported by scientifically defensible methods and research.
- An integrated watershed perspective and approach will be used in priority setting and decision making.
- Coordinated, cooperative and collaborative processes will be used where appropriate and desirable. Notwithstanding, it is understood that jurisdictional independence will be maintained and that jurisdictional participation is voluntary.
- The strategy and its objectives will be goal/outcome based with particular focus on the protection and/or restoration of aquatic ecosystems and water uses.

# **Guiding Principles**

- **Synergies** between sub basins and sub watersheds in the Red River watershed will be recognized and considered.
- Lake Winnipeg is the end point and receiving surface water body for the Red River. Efforts and decisions should strive to benefit both Lake Winnipeg and local water quality.
- Information exchange and input between the jurisdictions will be coordinated where possible
- The Parties will use a consensus-based approach to decision making (for the purpose of this document consensus-based means "unanimous" in that all parties agree on the decision).

<u>Component One</u> – Seek Endorsement of the Proposed Approach from the International Red River Board

- <u>Component Two</u> Develop a Shared Understanding of Jurisdictions' Nutrient Regulatory Frameworks and Identify Current Nutrient Reduction Actions, Activities and Plans for the Red River Watershed
- <u>Component Three</u> Recommend and Implement Nutrient Load Allocation and/or Water Quality Targets for Nutrients
- <u>Component Four</u> Monitor and Report on Progress towards Meeting Water Quality Targets and Nutrient Load Allocations
- <u>Component Five</u> Facilitate ongoing technical, scientific and methodological dialogue and information sharing relevant to nutrients and nutrient loading in the Red River watershed including exchanging information on the goals and scientific basis for the long-term ecologically relevant objectives that are under development for Lake Winnipeg.
- **<u>Component Six</u>** Adapt the nutrient management strategy based on progress and ongoing evaluation.

<u>Component One</u> – Seek Endorsement of the Proposed Approach from the International Red River Board

 The IRRB endorsed the Nutrient Mgmt Strategy at their Sept. 2011 meeting and since then the IRRB Water Quality Committee has had three meetings <u>Component Two</u> - Develop a Shared Understanding of Jurisdictions' Nutrient Regulatory Frameworks and Identify Current Nutrient Reduction Actions, Activities and Plans for the Red River Watershed

Should be completed by the Committee's March 5<sup>th</sup> meeting Includes a compilation of:

Jurisdictions and agencies Actions and Activities
Jurisdictional Regulatory Frameworks

<u>Component Three</u> - Recommend and Implement Nutrient Load Allocation and/or Water Quality Targets for Nutrients

 Identify high priority areas for implementing nutrient reduction measures

•Identify nutrient reduction actions and activities for the Red River Watershed that could assist in achieving nutrient load allocations and/or water quality nutrients

•Develop a common set of indicators for measuring progress

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# <u>Component Six</u> - Adapt the nutrient management strategy based on progress and ongoing evaluation.

## <u>Proposed Approach for Developing a</u> <u>Nutrient Management Strategy for</u> <u>the Red River Watershed</u>

A living document to continue through the long term for nutrient management in the Red River Basin