Proposed Nutrient Water Quality Objectives for the Red River at the U.S./Canada Boundary

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Outline



- International Red River Board (IRRB) Reporting
- Water Quality Reporting at the U.S./Canada Boundary
- What are Binational WQOs?
- IRRB's Proposed Nutrient WQOs
- IJC process for Making Recommendations to Governments under a Reference
- How can you be heard? Questions?



Map of U.S./Canada Transboundary Basins





IRRB Reporting



- Keeps the IJC informed of basin activities that affect:
 - flows across the boundary
 - water quality at the boundary
 - ecosystem health in the Red River and its tributaries
 - flood preparedness and mitigation activities

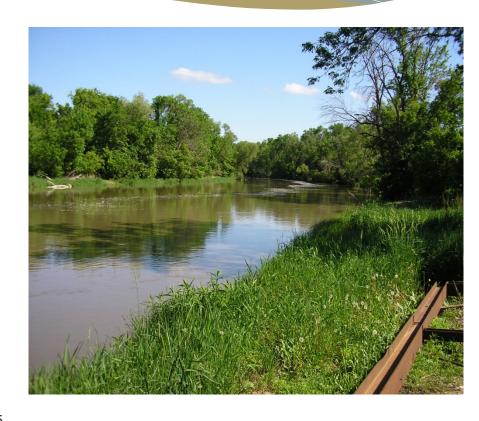




What are Binational WQOs?

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.... Water quality objectives are a numerical concentration limit or narrative statement, based on scientific criteria, relevant socio-economic and other factors, which has been negotiated to support and protect the designated uses of water (IJC, 2017)





What are Binational WQOs?



Progress towards attainment of WQOs is carried out by domestic requirements of each country – federal, state, provincial, tribal, municipal, etc.





IRRB's Binational WQOs

- Total Dissolved Solids (TDS)
- Chloride
- Sulfate
- Dissolved Oxygen (DO)
- E. Coli

"Recommend amendments or additions when warranted..."

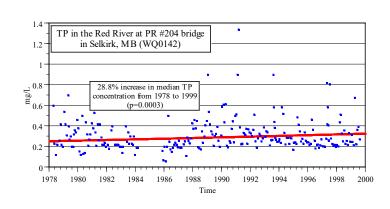
 E. Coli was added in 2009, replacing fecal coliforms as modernized indicator of bacterial contamination (sources such as manure)

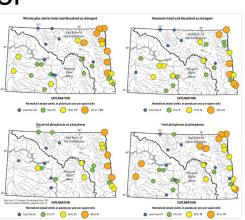


Red River Nutrients



- Nutrients are increasing
- Manitoba 2001 trend analysis showed an almost 200 % increase at some streams in the Red River watershed (La Salle River, Seine River)
- USGS 2012 study showed increasing trends and higher yields along the Red River





IRRB's Proposed Nutrient WQOs



- In 2011, IRRB approved a "Basin-Wide Nutrient Management Strategy" as part of its work plan.
- Board's Water Quality
 Committee is leading this
 work includes active
 membership from over
 ten organizations



Participants in IRRB's Proposed Nutrient WQOs



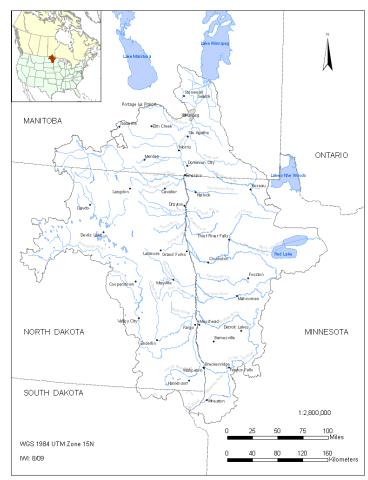
- Red River Basin Commission
- US Environmental Protection Agency
- US Department of Agriculture
- US Geological Survey
- US Army Corps of Engineers
- Environment and Climate Change Canada
- Agriculture and Agri-Food Canada
- Minnesota Pollution Control Agency and Minnesota Agriculture
- North Dakota State Department of Environmental Quality
- Manitoba Agriculture and Resource Development

IRRB's Proposed Nutrient WQOs



Study Guiding Principles

- Scientifically defensible
- Integrated watershed perspective
- Coordinated, cooperative and collaborative
- Jurisdictional independence
- Protection and/or restoration of aquatic ecosystems and water uses
- Lake Winnipeg is the end point
- Benefit local water quality and Lake Winnipeg
- Consensus-based



IRRB's Proposed Nutrient WQOs

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Recommendation

 Adopt nutrient concentration objectives and nutrient load targets for the Red River at the US/Canada border.

	Total Phosphorus	Total Nitrogen	Application
Nutrient concentration objective	0.15 mg/L	1.15 mg/L	Seasonal average (April 1 st – October 30 th)
Nutrient load target	1,400 tonnes/year	9,525 tonnes/year	Five year running average

What is IJC process for this Proposal?



- A second hearing in Canada is currently being scheduled
- Public comment period ends on February 28, may be extended
- Commissioners will consider all public comments prior to making a recommendation
- Commission will communicate with governments any recommendations
- Recommendations of the IJC to governments are nonbinding and not to be considered decisions of the two governments

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How can you be heard? Questions?



Your input can be received until February 28, 2020 at:

- 1) This hearing (please fill out a submission form)
- 2) By email: <u>Commission@ottawa.ijc.org</u> or <u>Commission@washington.ijc.org</u>
- 3) By mail or online at: www.ijc.org/nutrient2020
- 4) At upcoming Public Hearing in Canada. Exact time/location to be announced

IJC website: www.ijc.org