# **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Manitoba Natural Resources

**PROPOSAL NAME:** Rosenort Flood Protection Dykes and River

**Diversion** 

CLASS OF DEVELOPMENT: Two

**TYPE OF DEVELOPMENT:** Water Development and Control - Flood

**Control Projects** 

CLIENT FILE NO.: 4375.00

## **OVERVIEW:**

The Proposal was received on September 8, 1998. It was dated September 4, 1998. The advertisement of the proposal was as follows:

"A Proposal has been filed by Manitoba Natural Resources for the construction of a ring dyke system and associated works for the community of Rosenort. The protected area of 1475 hectares (3660 acres) would include 146 structures in the developed areas in and near Rosenort along the Morris River. During flood events, a proposed diversion of the Morris River around the west side of the protected area would prevent flows on the Morris River or backwater from the Red River from entering the protected area. Under non-flood flow conditions on the Morris River, all flow would continue to pass through the natural river channel. The level of flood protection provided would be equal to the level of the 1997 flood plus two feet for freeboard. An engineering feasibility study report for the project is included with the Proposal. Construction is proposed for 1999."

The Proposal was advertised in the Carman Valley Leader on Monday, September 28, 1998. It was placed in the Main, Centennial, Eco-Network registries and in the office of the R. M. of Morris. It was distributed to TAC members on September 22, 1998. The closing date for comments was October 26, 1998.

#### **COMMENTS FROM THE PUBLIC:**

**<u>R. M. of Macdonald</u>** - The Council of the R. M. of Macdonald would like to make a representation against the proposal.

<u>Dan Loewen</u> - Opposed to the diversion - located about 1 ½ miles from the proposed site and concerned that flood levels at yard location could be negatively affected under windy conditions. Cost compared to property protected and agricultural land taken out of production is also a factor.

**Leo Kornelson** - A project of this magnitude may change the flow and water levels unexpectedly. Winds are a major factor in a flood. There is no concern shown for area residents outside of the proposed dyke. It is proposed to take large portions of property for the diversion but there has been no communication with the owners. Buildings are

constructed in the proposed dyked area below flood levels - why? A large part of the UVD is flood protected. The present dyke should be upgraded and increased in area. The roads that are to be raised and used as dykes will be a hazard in winter driving conditions.

.../2

<u>Bert Kornelson</u> - Concerned about the excessive cost of the project, its unknown effect on water levels in the surrounding areas, diversion related problems such as drainage and erosion, lack of consideration of alternatives, and the large amount of land that will be taken out of production.

- 2 -

**Kerry Brandt** - (Letter to the Minister of Natural Resources) The proposed diversion will be within 100 m of the writer's residence. This will decrease the property value because of the aesthetics of a large ditch and dyke. Flooding could also become more frequent and less predictable. Levels higher than 1997 would be very hard to prepare for. Also concerned about the safety of children in the area during construction and after.

<u>Dennis Friesen</u> - Concerned that the diversion would cause much more serious and prolonged flooding outside the protected area. The damage to cropland and drainage ditches would be severe. Natural habitat for beaver and other animals could be destroyed permanently. Other flood proofing measures could be used that would benefit homeowners near the river without jeopardizing the outlying properties.

<u>Kathy and Ed Cornelson</u> - The proposal may increase water levels west of Rosenort, causing increased flooding west and south of Rosenort. The proposed cost is too high for a small community and is likely underestimated. This cost will discourage people from moving to the area and will encourage people to leave. The cost estimates for the plan without the diversion sound inflated and are likely overestimated. Many people within the proposed protected area are already protected by the present dyke, private dykes or raised homes. The proposal should be re-evaluated and a less costly and better solution should be found.

Ron and Sharon Friesen - The large area enclosed will have an impact on flooding outside it, especially to the west and south. The natural flow of overland flooding will be blocked off. The plan does not prevent flooding, but enhances it. The river should be diverted towards the Red River north of Rosenort. If enclosing 3000 acres has no appreciable effect, why not enclose the whole community? The large ditch on the west side will fill with snow each year and will cause yearly overland flooding. Taking land from landowners who will experience this type of flooding yearly is not acceptable. The land along the west bank of the river is very productive and fertile and cannot be replaced. The few homes protected could be replaced or moved at a much lower cost. The dykes can be built in the backyards of the properties to be protected. The petition should not be ignored. The solution is to add on to the original dyke on a much smaller scale. Individual homeowners can construct their own dykes or move out. Our MLA has

assured us that the project would not go ahead if there was a petition drawn up. If a referendum was called and a secret ballot were assured, the project would be rejected.

**Don and June Elliot** - Object to the project due to the following concerns: infinite costs that are unrealistic eg. yardsite costs, burden of costs to ratepayers and the R. M., maintenance costs and the hazard of breaching. Property values may increase inside the dyke. Not everyone has an equal opportunity to protect their property outside of currently protected towns and villages. The proposed dyke protects some farmland, and takes other farmland out of production. Water level increases are unknown, as are changes in flow patterns due to roads and railways. If the project proceeds, will areas outside the dyke be adequately protected by the guidelines set out by Natural Resources?

.../3

- 3 -

<u>Kelly Friesen</u> - (Letter to the Minister of Natural Resources) A project of this magnitude is both unnecessary and a misuse of taxpayer money. The negative effect on residents outside the protected area is a real concern. Individual raising or dyking projects are not a concern, but including thousands of acres in the dyke is not common sense. Other proposals would require less money and be less damaging to the environment and farmland, and would have very little opposition from surrounding areas. We support extending the Rosenort Dyke, but the Morris River should not be moved. If a diversion is necessary, a channel to divert the river to the Red River north of Rosenort should be considered. Floodwater could be allowed to run under or over PR 205.

Petition to the ministers of Finance, Government Services, Natural Resources and the R. M. of Morris - (233 names) - Concerned about excessive costs, additional farmland removed from farming, and increased water levels outside the expanded dyke. The Province and R. M. are requested to reconsider the proposed diversion.

#### Disposition of Public Comments:

A number of the concerns identified involve project planning and design considerations rather than environmental impacts. Planning and design concerns include selection of the proposed design from studied alternatives, land requirements, and costs. As responsibility for these decisions lies solely with the proponent, no specific additional information was requested to address these matters. The proponent was invited to provide general comments respecting these concerns.

Environmental concerns include the hydraulic impact of the project on flood levels and duration outside of the proposed dyke, habitat loss, and public safety considerations. With respect to the hydraulic impacts of the project, the proposed dyke would create an island in the middle of an extensive shallow lake during design flood conditions. Due to the insignificant volume of floodplain storage removed by the project, level impacts on areas outside of the dyke would be negligible. Similarly, the project would have no noticeable effect on the duration of flooding for

unprotected adjacent areas. The proposed diversion channel would have a capacity greater than or equal to the capacity of the Morris River within the proposed dyke.

Habitat issues and snow drifting concerns are discussed below. Safety concerns during construction are similar to those at any construction project which involves large quantities of earthwork. Normal construction practices provide adequate public safety during construction. Additional information was requested on matters relating to the project's environmental impacts.

# **COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

Manitoba Environment - South-Central Region - The route of the dyke along the east side of the Morris River may impact on private sewage disposal systems in the area with Alternative 1. If lot sizes are changed, the systems could be in non compliance with requirements due to reduced boundary setbacks. Variations could be considered under MR 95/88R. The wastewater facility and waste disposal ground is not included in the protected area in either alternative. Both dyke routes pass directly west of these facilities. Consideration should be given to including these facilities within the dyke.

.../4

# - 4 -

# **Disposition:**

As Alternative 2 has been selected, impacts to private sewage disposal systems have been minimized. Additional information was requested to address the comment respecting the wastewater and waste disposal ground facilities.

Manitoba Environment - Water Quality Management - Although adherence to the Manitoba Stream Crossing Guidelines is not specified in the Proposal for Alternative 2, it should apply. It appears that the Little Morris River (Tobacco Creek) and two other drains which currently flow into the Morris River from the west will be diverted into the diversion channel should Alternative 2 be chosen. The preference of the Water Quality Management Section is to avoid project alternatives that involve stream diversions. This issue may also be of concern to DFO and the Manitoba Fisheries Branch.

# **Disposition:**

The application of the Manitoba Stream Crossing Guidelines to Alternative 2 can be addressed as a licence condition. With respect to the diversion of Morris River tributaries, additional comments are provided below from DFO and Manitoba Natural Resources.

<u>Manitoba Environment - Terrestrial Quality Management</u> - Information is needed on land use, vegetation and wildlife that is located where the dykes and diversion are proposed. If there is any native vegetation, a vegetation survey should be conducted, especially in riparian areas, to determine if any rare plant species are present. Information

is also required concerning plans for the seeding of dykes and disturbed areas. Native plant species are recommended wherever possible.

## **Disposition:**

Most of the dykes are proposed to be located on cultivated agricultural land. Riparian habitat would be affected only where the dykes intersect natural waterways. The project area was inspected with Terrestrial staff in May, 1999. An examination of the affected vegetation addressed the concerns which had been provided.

<u>Historic Resources Branch</u> - Preliminary information regarding known and potential heritage resources in the area of the proposed dyke and diversion channel was provided previously to Water Resources staff. As heritage resources have been found in the study area, the Branch may have some concerns. The Branch will be informed of the detailed location of the development as well as borrow pit locations. Branch staff will either conduct preliminary testing in archaeologically sensitive areas prior to construction and/or will monitor operations involving excavation below the level of existing disturbed ground. Therefore, Branch concerns have been addressed in the proposal. It is recommended that the draft licence outline that the Branch will conduct testing and/or monitoring.

# **Disposition:**

A licence condition addressing heritage resources can be provided as requested.

**Mines Branch** - No concerns.

.../5

- 5 -

<u>Highway Planning</u> - It appears the dyke will cross the Riverside Access Road in at least one location and PR 205 in two new locations. The Department requests that the dyke be constructed in such a manner as to prevent snow drifting problems. As identified in Figure 2 of the Phase I Feasibility Study, a structure is proposed on PR 205. It is assumed that the elevation of this structure would require raising a portion of PR 205 for approaches. Please ensure the roadway design, traffic control and pavement design standards are followed. The Departmental contact in this regard is the Regional Technical Services Engineer in Portage la Prairie.

### Disposition:

These comments were forwarded to the proponent for information.

<u>Community Economic Development Branch</u> - No concerns with either alternative. Regardless of the alternative selected, it is imperative that the project be accompanied by the necessary land use controls. Previous subdivision and development activity created

the need for a flood protection system of this magnitude. Future development must be controlled to ensure that development in the area occurs within the flood control system.

#### **Disposition:**

These comments were forwarded to the proponent for consideration.

<u>Canadian Environmental Assessment Agency</u> - Western Economic Diversification Canada and PFRA have provided notification that an environmental assessment under the Canadian Environmental Assessment Act will be conducted by federal officials, and additional information is being requested. The Department of Fisheries and Oceans requires additional information before making a decision and has requested specific additional information. Environment Canada, Parks Canada and Natural Resources Canada have offered to provide specialist advice in accordance with Section 12(3) of the Act.

<u>Western Economic Diversification</u> - Requires a federal environmental assessment with respect to the project. This will be undertaken by PFRA on behalf of WED.

# **Disposition:**

All additional information received respecting the project will be provided to PFRA for review.

<u>Department of Fisheries and Oceans</u> - DFO has an interest in the project pursuant to the fish habitat protection provisions of the Fisheries Act. The project description is lacking in detail with respect to the potential impacts of the proposed diversion of the Morris River on fish and fish habitat. A summary of additional information requirements follows:

Further information regarding the general habitat conditions and fish and fish habitat of the reach of the Morris River in the vicinity of Rosenort should be provided. There are a number of concerns with respect to fish passage. It is proposed that the flows will be prevented from entering the diversion channel during summer and low flow periods by

.../6

- 6 -

designing the invert elevation of the diversion channel to be 1.6 m higher than the natural river bottom. Morris River flows in and out of Rosenort are to be controlled through gated culverts in the control structures at each end of the diversion channel, but no information has been provided with respect to anticipated flow velocities. Both of these project components are potential obstructions to fish passage. Furthermore, the maximum flow velocity in the diversion channel is predicted to be 1.1 m/s under all possible discharges. This would be excessive for many life stages and species of fish,

given the length of the diversion channel and the lack of diversity of flow conditions that is anticipated in a channel such as the one proposed.

Insufficient information has been provided regarding the intended operation plan for the diversion and its impacts on flows in the natural channel, and consequently, availability of fish habitat within the dyked area of Rosenort under different flow conditions. Additional information should be provided regarding how the control structure will apportion flow between the natural channel and the new diversion channel during both flood and non flood conditions. Under most spring conditions it would be preferable to not use the diversion channel at all, so that the natural discharge continues to flow through Rosenort. Information in this regard is somewhat contradictory. On page 13, the report states that the excavated channel would be used to divert the normal flood discharge, whereas elsewhere it indicates that the flow in the river will be cut off entirely for only a short period during extreme flood events. (Page 21)

The operation of the diversion channel and control structure could also impact fish by preventing or delaying fish movements to and from spawning and rearing habitat upstream of Rosenort.

Until the foregoing information deficiencies are addressed, DFO is unable to determine whether Authorization pursuant to Section 35(2) of the Fisheries Act is required for the proposal. It is recommended that a meeting be held between DFO, other federal authorities, Manitoba Fisheries Branch, Manitoba Environment, Manitoba Water Resources Branch and their consultant to clarify some of the questions regarding operational and design details of the project. DFO also wishes to participate in the provincial review of the project.

### **Disposition:**

The suggested meeting was held on January 25, 1999. Additional information was provided by the consultants. A site inspection was undertaken by staff of DFO, Manitoba Fisheries Branch, PFRA and Manitoba Environment on February 8, 1999. DFO then decided that an Authorization would be required for the project. The consultants provided additional information concerning velocities in the proposed culverts. A further meeting was held between the agencies concerned on March 12, 1999. This led to a clarification of fisheries related questions to be addressed by the consultants. DFO provided a draft Authorization for the project on September 27, 1999. Receipt of a final Authorization prior to construction of the project can be required as a licence condition.

### **ADDITIONAL INFORMATION:**

Fisheries impacts were reviewed due to the requirement for an Authorization for the project under the federal Fisheries Act. In order to obtain the necessary Authorization, the project must be designed to mitigate adverse impacts to fisheries resources, or habitat compensation will be required.

Comments on environmental concerns and general comments on non-environmental concerns were requested on April 21, 1999. The attached response dated October 18, 1999 was received.

## **PUBLIC HEARING:**

As no public concerns addressable through a public hearing were identified, a public hearing is not recommended.

### **RECOMMENDATION:**

All comments received on the Proposal can be addressed through licence conditions or have been addressed in additional information. It is recommended that the Development be licensed under The Environment Act subject to the limits, terms and conditions as described on the attached Draft Environment Act Licence. It is further recommended that enforcement of the Licence be assigned to the South-Central Region.

#### PREPARED BY:

Bruce Webb Environmental Approvals Environmental Land Use Approvals October 27, 1999

Telephone: (204) 945-7021 Fax: (204) 945-5229

E-mail Address: bwebb@gov.mb.ca