

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Ducks Unlimited Canada  
**PROPOSAL NAME:** Jackson Creek Downey Project

**CLASS OF DEVELOPMENT:** Two  
**TYPE OF DEVELOPMENT:** Water Development and Control  
**CLIENT FILE NO.:** 4329.00

### **OVERVIEW:**

The Proposal was received on April 23, 1998. It was dated February 25, 1998. The advertisement of the proposal was as follows:

“A Proposal has been filed by Ducks Unlimited Canada for the construction and operation of a wetland habitat enhancement project in the south half of 17-4-20W. This location is on Jackson Creek north of Melita in the Rural Municipality of Arthur. The project would consist of an earthfill dam with a rockfill service spillway and an earthen emergency spillway. The project would store 130 cubic decametres (105 acre-feet) of water.”

The Proposal was advertised in the Melita New Era on Tuesday, May 12, 1998. It was placed in the Main, Centennial, Eco-Network and Border Regional Library (Virden) public registries, as well as in the office of the R. M. of Arthur. It was distributed to TAC members on May 5, 1998. The closing date for comments from members of the public and TAC members was June 5, 1998.

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

No public comments were received.

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

**Manitoba Environment – Park-West Region** The Proponent identifies that one of the objectives of the project is to serve as a water source for local agricultural use such as livestock water. The Environment Act Licence should address concerns relative to the use of a surface water course for livestock watering purposes. MR P210-326/88R (Protection of Water Sources Regulation) prohibits the fouling or contamination of surface water by the congregating or watering of stock. The Livestock Manure and Mortalities Management Regulation (MR 42/98) might also have some bearing on this

development if any of the lands adjacent to the development are used for livestock related purposes. Other than the aforementioned, the terms and conditions routinely applied to developments of this nature should adequately address parameters of concern to Environmental Operations.

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Disposition:

These comments can be addressed as licence conditions.

**Manitoba Environment - Water Quality Management** There are not any perceived direct significant impacts to water quality from this development. Photo #1 indicates that a beaver dam has raised the water level in that section of the river to near FSL and artificially maintaining a higher water level through this project will probably not create any different changes to water quality. However, there could be some indirect long term effects if direct cattle access and runoff from fields are not properly buffered. Nutrient loading and subsequent algae blooms may become more prevalent with a reservoir situation. More frequent algae blooms increase the possibility of toxic algae occurrences. Toxic algae consumed by cattle can be lethal.

This site is located fairly close to the Souris River so will effectively eliminate the fish spawning potential of this creek during spring. Obstacles such as beaver dams may limit this potential anyway, but these structures are not always permanent. Fisheries Branch will better determine if this is an important creek for fish spawning purposes. There was not any indication of a control structure on the dam to allow controlled releases of water if needed. It was mentioned that less than 50% of the average annual runoff volume would be retained, but there is no indication of what percentage of flow will occur at critical times for fish or other downstream needs.

Disposition:

The comment regarding algae production will be brought to the attention of the Proponent. Cattle access should be controlled; this can be addressed as a licence condition. Additional information on riparian and spillway works for the project will be requested. The matter of minimum instream flows is discussed in the Discussion portion of this summary.

**Historic Resources Branch** No concerns.

**Mines Branch** No concerns.

**Community Economic Development** No concerns. (by telephone)

**Medical Officer of Health - South Westman Regional Health Authority** Comments: Minimize the risk of contamination by fuel or chemical spills during construction, ensure appropriate waste disposal as per existing environmental regulations. Dust, noise, gaseous and particulate emissions during construction may be a concern.

Disposition:

These comments can be addressed as licence conditions where appropriate. Waste disposal should not be a concern as no demolition is required to construct the project. Construction emissions will not be a concern as the project will be constructed in a relatively isolated agricultural area.

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**Natural Resources** Additional information on the existing environment would be useful in evaluating this proposal from a fisheries perspective. In this regard, the proponent should consult with the DNR Regional Fisheries Manager as to what information is required. Farmers should be encouraged to water livestock away from the impoundment. If possible, cultivation or haying to the high water mark should not occur so that upland cover is preserved. In addition, native woody vegetation in the riparian zones should also be maintained. As this is the first of a series of similar projects it is suggested that there should be regional fisheries and Fisheries Branch involvement in the planning stages of future projects.

Disposition:

The Proponent will be asked to discuss the project with regional fisheries staff as requested. A mechanism to allow early DNR input in future project planning can also be developed through this discussion. Riparian zone protection can be addressed through licence conditions.

**Canadian Environmental Assessment Agency** An environmental assessment under The Canadian Environmental Assessment Act with respect to this project will not be required. However, Fisheries and Oceans has not been able to make a determination with regard to their interest in the project and would require more information. They should be contacted directly to determine their additional information requirements. Environment Canada, Natural Resources Canada and Fisheries and Oceans would be able to provide specialist advice in accordance with Section 12(3) of the Act.

**Fisheries and Oceans** While DFO is supportive of the benefits to wetland and wildlife habitat that are predicted to result from this project, there are a number of concerns with the project's potential impacts to fish and fish habitat. The proposal is lacking in detail in a number of respects. The impoundment will be located on Jackson Creek, a tributary of the Souris River. The habitat inventory information was fairly detailed with respect to

plants and wildlife, but no information was provided with respect to fish species that may utilize Jackson Creek in the vicinity or downstream of the project area. The intermittent nature of the watercourse may well mean that it does not support fish and fish habitat in the vicinity of the proposed dam. However, there may be downstream impacts of capturing spring snowmelt and summer rain event runoff that are important for sustaining spawning, nursery or feeding habitats for fish on the Souris River. It is not clear what provision has been made for downstream riparian flows other than over the spillway when the water level exceeds FSL. This potential impact has not been adequately discussed. Instream flows are required to preserve downstream and possibly local aquatic resources. A minimum instream flow should be established for the watershed in accordance with the methodology recommended recently by the provincial Instream Flow Group for the Agassiz Irrigation Association and the Central Manitoba Irrigators Association proposals.

The project description indicates that the proposal is the first of a series of proposals for wildlife habitat enhancement projects involving small dams in southwestern Manitoba. No information has been provided as to the specific locations of the future sites, or which watersheds and watercourses would be involved. DFO is concerned with the potential cumulative impacts of these projects because these impacts could result in adverse

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impacts on fish and fish habitat through the reduction of flows that support spring spawning and incubation and ensure channel maintenance in downstream fish bearing watercourses. Until the foregoing deficiencies are addressed, DFO is unable to determine whether Authorization pursuant to Section 35(2) of the Fisheries Act is required, and hence whether DFO has a CEAA trigger with respect to the proposal. DFO looks forward to receiving any additional information or clarification that would address the foregoing issues.

**Disposition:**

Additional information concerning fish habitat is needed. Since related discussions between the Proponent and Natural Resources have been requested, the resulting information will also be forwarded to DFO. Additional information on water control works is also being requested. Minimum instream flows are discussed below. With respect to the cumulative impacts of this and future developments, there is uncertainty in where and when additional projects will be proposed. Therefore, impacts will be addressed as with the irrigation associations – each successive proposal must address the cumulative impacts of that and previous projects.

**ADDITIONAL INFORMATION:**

Additional information was requested by fax on July 8, 1998. Following a meeting between Ducks Unlimited Canada, Manitoba Natural Resources and the Department of Fisheries and Oceans, additional information was provided to DNR in

August, 1998. This information addressed fish passage and flow data. Following a review by DNR, this information and additional information provided on September 1, 1998 was accepted by the Fisheries Branch.

The Department of Fisheries and Oceans determined that an Authorization pursuant to Section 35(2) of the Fisheries Act was required for the project.

**DISCUSSION:**

In recent projects where consumptive water use is proposed from a water supply impoundment in the upper reaches of a stream, a minimum instream flow requirement has been either specified as a condition in an Environment Act Licence, or referenced as an item to be determined at a future time. A minimum instream flow has been required in these cases to protect environmental requirements and the needs of users downstream of the proposed developments. In the present situation, the proposed impoundment is located within a short distance of the downstream end of the stream, with little likelihood of future consumptive use between the project and the Souris River. It is likely that fish frequent this reach of Jackson Creek at least occasionally. The federal and provincial fisheries management agencies have accepted mitigation measures and fish monitoring in connection with the project. In view of this and the difficulty of providing a minimum instream flow in this location from an operational viewpoint, a minimum instream flow will not be specified for the project.

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**PUBLIC HEARING:**

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

**RECOMMENDATION:**

With the acceptance of proposed mitigation and monitoring measures by the fisheries management agencies, all remaining comments received on the Proposal can be addressed as licence conditions. Therefore, 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 Park-West Region.

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July 2, 1998 (Updated September 23, 1998)

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