

ENVIRONMENT ACT PROPOSAL

PROPOSAL NAME: Agassiz Irrigation Association - Irrigation
Dugouts - Buffalo Creek Phase 2

CLIENT FILE NO. 3636.10

PROPONENT: Agassiz Irrigation Association

DATE OF APPLICATION: June 21, 1994

TYPE OF DEVELOPMENT: Water Development

CLASS OF DEVELOPMENT: Two

LOCATION: SE 27-1-3W, NE 26-1-3W, and
NW 20-1-2W, R. M. of Rhineland

CONTACT PERSON: Bruce Webb

Advertisement

A Proposal has been filed by the Agassiz Irrigation Association for the development of three irrigation dugouts adjacent to Buffalo Creek in the Rural Municipality of Rhineland. This is the second phase of the Association's program to capture spring runoff from intermittent streams for irrigation use. The dugouts would be constructed in SE 27-1-3W (a 10 acre dugout storing 61 acre-feet of water), in NE 26-1-3W (a 9 acre dugout storing 61 acre-feet of water), and in NW 20-1-2W (a 14 acre dugout storing 122 acre-feet of water). Provision would be made in the filling of the dugouts to accomodate existing water users and instream requirements.

Comments and concerns were requested by August 10, 1994.

The proposal was advertised in the Altona Red River Valley Echo on Tuesday, July 12, 1994. As a result of the public notice and the information circulation to TAC, several responses were received from government departments. There was no response from the public.

List of Comments

Man. Envir. (South-Central Region)	No noted concerns.
Man. Envir. (Water Quality Management)	No major concerns since the project appears to follow the principles established for the first phase. Would appreciate being advised
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	should any major changes occur as the project proceeds. (Received August 16, 1994)
Man. Envir. (Terrestrial Qual. Mgmt.)	Two of the three dugouts (S11A and S11B) are to be constructed with moderately permeable materials. This is likely to lead to salinization of soils surrounding the dugouts. Significant losses of productivity could result in the affected area which may extend 20 - 40 m from the edge of the dugouts.
Historic Resources	A field archaeologist assessed the dugout sites in June, and no heritage resources were located. The Branch has no further concerns about the three proposed dugouts.
Highway Planning	If pipelines are located within 38.1 m (125 feet) from the edge of right-of-way of Provincial Roads or Highways, permits will be required from Highways and Transportation and/or the Highway Traffic Board. A permit from the department is also required for augering within the ROW. Site 11B should be constructed to allow for the possible widening of PR 248, a distance of 40 m minimum. (Received August 18, 1994)
Mines Branch	No concerns.
Rural Development	No land use concerns.
Tourism Development	No concerns.
Medical Officer of Health	Concerns: secure fencing for safety reasons, protection of groundwater from leaching of salts, pesticides and fertilizers.

Natural Resources

Two points require further assessment or examination: 1) Minimum instream flows for the S11a and S11b sites seem low in comparison to the S7 site. 2) The frequency of bankful flows at the 05OC025 gauging site (Buffalo Creek near Altona) should be examined to see if they are adequate for downstream channel maintenance. (Flows with a 67% frequency are generally considered adequate.) Details should be provided on the management of algae and vegetative growth on the dugouts. The proposal is subject to Water Rights Licensing. Water Resources is working out

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criteria and operating mechanisms with the Association and area farmers.

Fisheries and Oceans

As the proposal uses the same approach for the calculation of Minimum Instream Flows as was used in Phase I, DFO has no concerns with the proposed MIF. It is important that the proposed pumping rates be adhered to. The MIF and the proposed pumping rates should be included as conditions of an Environment Act Licence. The monitoring program should also be a licence condition. DFO would like a copy of the annual monitoring report and would like to be advised of any changes to the MIF or the operating regime that may be proposed as a result. (Received August 22, 1994)

Indian and Northern Affairs Canada

The Department does not have decision making authority with respect to the project, and has no concerns as it appears First Nations will not be adversely affected.

Discussion

There are no concerns over this proposal which would require a public hearing. The concerns of Natural Resources were forwarded to the Applicant for review and

comment. The attached response was provided. The comments of Highway Planning were forwarded to the Applicant for information.

With respect to other concerns, salinity was studied in connection with the initial stage of the project. The size of the potential area affected by seepage is limited. Fencing of dugouts sites for safety puposes has not been considered on previous sites. As there are no residences near the three proposed sites, it would appear that safety fencing is not required. Groundwater contamination through the leaching of irrigation water is of limited concern. The permeability of the underlying soil is generally low due to its clay content, and there is no potable groundwater in the vicinity of the project area. The Applicant has an ongoing monitoring program which would detect changes in soil or water quality at an early stage.

Recommendation

The comments of Natural Resources have been addressed in the additional information. Additional information is not needed to address the remaining comments. Soil and water monitoring was required for the Applicant's previous Environment Act Licence which covers three nearby dugouts. The monitoring requirement should also be included for the present project. The remaining suggestions of DFO can also be included as licence conditions.

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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, and that enforcement of the Licence be assigned to the South-Central Region.

Prepared by:
Bruce Webb
August 22, 1994

Draft Environment Act Licence

In accordance with the Manitoba Environment Act (C.C.S.M. c. E125) this Licence is issued to:

Agassiz Irrigation Association Incorporated: "the Licencee"

for the construction and operation of the Development being three water storage dugouts and related intake and outlet works for irrigation water supply in NW 20-1-2W, NE 26-1-3W and SE 27-1-3W in the Rural Municipality of Rhineland, subject to the following specifications, limits, terms and conditions:

Specifications, Limits, Terms and Conditions

1. The Licencee shall construct and operate the Development in accordance with the Environment Act Proposal dated June 13, 1994 and the supplementary information contained in a letter to Manitoba Environment dated August 10, 1994.
2. The Licencee shall submit, for the approval of the Director, detailed construction plans for each site prior to beginning construction at each site.
3. The Licencee shall obtain authorization from the Manitoba Water Resources Branch for works undertaken on Provincial Waterways.
4. The Licencee shall not undertake construction activities which result in siltation or sediment deposition on or immediately adjacent to waterways between April 1 and June 15 of any year.
5. The Licencee shall ensure that measures are taken during the construction of the Development to minimize the deposition of sediment in waterways.
6. The Licencee shall plant dykes and other areas disturbed by the construction of the Development with varieties of native or domestic grass and forb mixes. Species chosen shall be capable of rapid revegetation.
7. The Licencee shall ensure that the capacity of pumps used to divert water into the Development does not exceed $0.75 \text{ m}^3/\text{s}$ at each site.
8. The Licencee shall ensure that minimum instream flows are maintained in each waterway below its diversion point at all times while water is being diverted into the corresponding dugout. These minimum instream flows shall be $0.211 \text{ m}^3/\text{s}$ below the diversion point in SE 27-1-3W (S11a site), $0.212 \text{ m}^3/\text{s}$ below the diversion point in NE 26-1-3W (S11b site), and $0.186 \text{ m}^3/\text{s}$ below the diversion

- point in NW 20-1-2W (S11c site). Prior written approval from the Director shall be required to reduce these flows.
9. The Licencee shall ensure that buried pipelines which are installed on cultivated land or land in its natural state are installed in accordance with the methodology illustrated in the attached Figures 1 to 3.
 10. The Licencee shall monitor instream flows, seepage from reservoirs, and land impacts as proposed. All data shall be forwarded to Manitoba Environment, Manitoba Natural Resources, the Prairie Farm Rehabilitation Administration and Fisheries and Oceans Canada.
 11. The Licencee shall on a daily basis monitor streamflows, diversion rates and pumping durations when dugout filling is occurring. Dugout water levels and pumping rates and durations shall be monitored when water is being used from the dugouts. An annual report on this operating data for each dugout shall be provided to Manitoba Environment, Manitoba Natural Resources, the Prairie Farm Rehabilitation Administration and Fisheries and Oceans Canada.
 12. The Licencee shall ensure that all used oil products and other regulated hazardous wastes generated by the machinery used in the construction and operation of the Development are collected and disposed of in accordance with applicable Manitoba Environment and legislative requirements.
 13. The Licencee shall ensure that fuel storage areas established for the construction and operation of the Development shall comply with the requirements of *Manitoba Regulation 97/88R* respecting *Storage and Handling of Gasoline and Associated Products*.

Revocation

If, in the opinion of the Director, the Licencee has exceeded or is exceeding the limits, or has not complied or is not complying with the specifications, terms or conditions set out herein, the Director may revoke this Licence either temporarily or permanently.

Larry Strachan, P. Eng.
Director,
Environment Act

File No: 3636.10

