

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Central Manitoba Resource Management Limited

PROPOSAL NAME: Jeffrey Farms Irrigation Project

CLASS OF DEVELOPMENT: Two

TYPE OF DEVELOPMENT: Water Development and Control

CLIENT FILE NO.: 4586.00

OVERVIEW:

The Proposal was received in December, 2000. It was dated November 6, 2000. The advertisement of the proposal was as follows:

“A Proposal has been filed by Central Manitoba Resource Management Ltd. (a holding company formed by Central Manitoba Irrigators Association Inc.) to irrigate up to 500 acres annually in rotation on a land base of 1433 acres. The land is located adjacent to PTH 34 south of the Assiniboine River. A maximum of 320 acre-feet of water would be applied annually, using water obtained from the Assiniboine River downstream of the PTH 34 bridge. Some water could also be obtained from Bear’s Paw Gulch, which is located six miles south of the Assiniboine River on PTH 34. Jeffrey Farms currently irrigates 320 acres per year of this project area using water from the Assiniboine River. It is proposed that some or all of the expanded acreage could be irrigated in 2001.”

The Proposal was advertised in the Treherne Times on Monday, January 29, 2001, It was placed in the Main, Centennial, Eco-Network and Portage Plains Regional Library (Portage la Prairie) public registries. It was distributed to TAC members on January 22, 2001. The closing date for comments from members of the public and TAC members was February 22, 2001.

COMMENTS FROM THE PUBLIC:

Brian Bullied:

I have a vested interest in the effect that this project has on our farm and the surroundings. I grew up on NW 10-8-11 where after I finished school, I farmed with my dad until I moved away in 1992. I have full intention of living on the farm again in the future, provided that the future of this farm is not cut short by projects such as this. Having lived here for so long, I am very well aware of the water problems that we

encountered as well as our neighbours on SE 10-8-11, which is now owned by Rob and Arlene Zeghers, who also rent our land.

I have many points of concern that I would like to bring to your attention:

1. I am rather concerned that something of this magnitude could go this far without the knowledge of those that will be affected. The notice that was placed in the local paper really did not explain the proposal at all, nor did it indicate that there was a copy of the proposal at the local Municipal Office for public viewing. Rob Zeghers “stumbled” onto the report totally by accident and informed my mom and I, however this has only left us a few days to voice our concerns.
2. The fact that there are no previous environmental impact studies submitted for this development suggests to me that everyone involved should proceed cautiously. No one can be 100% sure of the future impact a project like this can have on the surrounding ecology.
3. Who is the KGS Group that is referred to in some of the correspondence?
4. In a memo, from John Oosterveen to Michelle Harland, Mr. Oosterveen states that *“the water table is between 10 and 15 feet below the ground, which is very near the surficial sands, making shallow wells low yielding and very sensitive to drought.”* My concern here is for our farm well and the well serving the Zeghers farm. Due to the history of water problems here, I am curious to know *why the only well testing was done on the North side of the proposed project and not on the South.* This statement is actually repeated later in the same memo, which leads me to believe it is a very real concern to those conducting the study; I know it is a major concern of mine.
5. The effect of the weir is to be similar to spring flooding, however the report states, *“that more land would be involved due to the height of the proposed structure.”* Why would we want to disturb the natural beauty of such a gulch by making such modifications to the ecology?
6. There is reference made to having two small weirs instead of one big one to reduce the area of flooding. Does this really make sense? My feeling is the two small areas probably will add up to the same area as the one big one.
7. How was it determined what vegetation and such was present in the gulch? Did someone walk through or did they fly over in a plane? Flying over does not give someone an accurate picture of the natural surroundings that you are talking about disturbing.
8. Pesticides/Fungicides, I have had direct experience with the fungicide issue as I now live in Carberry and worked at the potato plant there. I know for a fact that right now the growers rely heavily on the fungicides due to Late Blight. My neighbour there told me that he had the plane applying fungicide every day. This causes a groundwater concern in my mind.
9. In the Environmental Assessment Act, point 4.7.1, it is stated, *“If fertilization is contemplated in the future, backflow prevention devices will be required to protect waterways.”* I would not want to see fertilizer applied in this manner, as I don’t believe that our water supplies would ever be safe. In point 4.7.2 reference is made to future development. How much pumping can this gulch sustain?
10. Pumping records, how can we be sure they are accurate, it will be too late to look back if the gulch ends up dry.

11. Jeffery Farms and Central Manitoba Resource Management Ltd. **BELIEVE** that the proposal is environmentally sustainable. I am sure that the project won't be halted because **I BELIEVE** it is an environmental concern. No one can say for sure if there could be potential problems, but I do know that if something develops down the road it is too late to turn back.
12. "**Water will be applied on demand to meet crop moisture requirements**" in a dry year our shallow wells will be even more vulnerable as I have witnessed irrigation running every day when it is dry.
13. If the in-flow rates have not been determined yet, how can it be stated that pump out rate will equal the in-flow rate?
14. Re-fuelling of the pumps is to be carried out at least 100 meters from the water. The Jefferys have been seen re-fuelling the pump by #34 highway right on the water surface, who is going to monitor this practice? Is out water going to get contaminated by diesel fuel?
15. The pipeline from Bear Paw Gulch is to be on previously cleared road allowances, how come our council is unaware of this?
16. According to the proposal the pumping site east of #34 highway is part of the proposal, how come it is set up and was used all last summer? Where is the license allowing it to be used?
17. Our council is telling us that our taxes are going to rise if this project goes through. It seems to me that since government grants are being applied for and considering the land taxes, we as neighbours are going to be paying forever for something that does not benefit us and may in fact do us harm down the road. The Jeffery's will be the only people to benefit from it, as they are the only ones who will be able to use it.
18. Half of the water to be used is to be pumped from the Assiniboine River, why not pump it all from there? It will be used to top up the gulch if run-off isn't sufficient to keep the gulch full, and there will have to be a pumping station and pipeline there regardless. It will cause less environmental disruption this way.

In conclusion I do not believe that projects such as this should be "pushed" through and that is what I feel is happening here. The notice in the paper was very vague, as well, as I stated before, I lived there for 28 years and I had no idea that what we referred to as "the slough" was named Bears Paw Gulch. Therefore I would have had no idea that you were talking about that ravine. The Jeffery's seem very reluctant to talk to anyone about it and this also leads me to believe that they just want it to happen no matter what the consequences.

One of the options stated is to pump the water all from the Assiniboine River, since it is also stated that there is 15,000 acre feet of water which can be drawn from the river, why not take it all from there? There will be two pumps required regardless of the option chosen and this project only requires 270 acre feet of water, why destroy the beauty of the gulch when it isn't necessary?

Also the site that is proposed for the east side of #34 was actually used all last year, was there a license issued for that and if so why was that not public knowledge? The Jeffery's also pretty much pumped that body of water dry so that does not show well for their

management of what is proposed here. I feel that there needs to be some very careful consideration put into this, you will be playing with the natural surroundings of an area that has been the way it is for many, many years.

Disposition:

A meeting was held with interested residents on March 23, 2001 to discuss these concerns and determine areas of concern which required additional information. A subsequent alteration to the project in February, 2002 removed Bear Paw Gulch as a water source, thereby addressing these concerns.

Betty Bullied:

First of all, the ad in the Treherne Times gave no idea as to the extent of this project, so I didn't give it any more thought until I found out the details in a roundabout way. I did have some concern when I saw that Jeffrey's were pumping the gulch dry on the east of #34 highway last year.

On reading the report I found that no studies were done on the south side of the gulch where most of the inflow must be originating, which involves my half section N1/2 10-8-11. A branch of this gulch cuts across my farm, ending on Rob Zeghers' half. This branch has beaver dams on it which we absolutely do not want disturbed as this is where the cattle water in spring, summer and fall.

My well is downhill from my buildings, and is situated very near my north property line on an underground stream which drains into the gulch at the west end of the proposed project. Therefore my main concern is the possibility that this project could cause some lowering of my well supply. Over the years we've had many water problems and have had 4 or 5 wells dug in this area. It is only the past few years since we were able to get cribbing that would keep out the sand, that we've had a stable supply. There is quicksand underground and it filled in the wells with sand. Our well is 49' with a constant 30-35' of water – we have always measured regularly. We have tried unsuccessfully to find a water source for a good well anywhere else, or closer to our buildings at the top of the hill.

It would seem to me that there is very little to assure us that this project won't affect us, if not immediately then in the future. I have read my son Brian's letter and Rob's and they raise many good points, as they understand the situation much better than I do. My son Bruce has also been involved in this, as it is his concern also.

We need to have these concern addressed thoroughly, and sincerely hope that you will be able to do so.

Disposition:

A meeting was held with interested residents on March 23, 2001 to discuss these concerns and determine areas of concern which required additional information. A subsequent alteration to the project in February, 2002 removed Bear Paw Gulch as a water source, thereby addressing these concerns.

Rob and Arlene Zeghers:

There are many concerns about this proposed project we would like to address. As I will state, our main concern is our water level. We never seemed to have the money to dig a proper well and have enough water for a small cattle operation. Our existing well serves our house and that is hardly adequate. Now that we will be digging a deeper well we are doubly concerned about wasting our money, especially if someone starts pumping out water downstream of us to serve as a need on mostly rented land--not even their own! We've needed this well for 20 some years and maybe can finally afford it!

Our main concern here as you can see is, once drilled this well is in jeopardy of being drained lower and our investment wasted, in addition the already existing well water being lowered.

Other concerns are:

- 1) Our cattle rely on dams and runoffs on our land and Betty Bullied's ravines. Thus, on the water issue, we want a guarantee this water will remain at its constant level now and more-so in the future.

Other questions and concerns when reading over the proposed report are:

- 1) How would overpumping be overseen and by whom?
- 2) What studies were done on the south side of Bear Paw Gulch?
- 3) If weirs are put in for Jeffrey's, possibly weirs should be put in our gulches to protect us from too much runoff for Jeffrey's wants. This may guarantee our needs!
- 4) Jeffrey's are already getting water from the Assiniboine. Do they also need everyone else's water for miles around? This seems preposterous to me. What about the future of our siblings & our land (There is no future for land that has no water or access to water)
- 5) Why are the landowners names on who's land these proposed weirs are to be located never mentioned once in this report and not even on the Environmental Act Proposal Form? (e.g. Darrell Callewaert and Larry Rutherford)
- 6) Re: memo from John Osterveen to Michelle Harland (August 23/00) "*Sands in the area yield some ground water. Wells in the area are low yielding and very sensitive to drought*" My point, therefore is, pumping water downstream will heighten this sensitivity of low yielding wells.
- 7) A special note – Between Site #1 and Site #2, there are no ravines or gullies of any length or size running into Bear Paw Gulch from the north (e.g. From Jeffrey's land or Callewaert, or Rutherford's) Any gullies or ravines running into Bear Paw Gulch are from the South side. These all start on Section 10-8-11 (Bullieds' and Zeghers') But no tests of well water depth or anything were done on the south side.
- 8) Under Section 6.0 – page 20 "*C.M.R.M. Ltd and Jeffrey Farms believe the proposed distribution system, associated pumpworks and reservoirs can be built and operated in an environmentally sustainable and responsible manner*" Then why was all this being pushed through without any consultation whatsoever with neighbours? No mention was ever made that copies of this proposal were available to view. Water is our most precious commodity, no operation exists without it, all people along this waterway could be affected by this proposal but are probably not even aware of it.
- 9) It is our impression that we as taxpayers are helping to fund this irrigation project, but are not being consulted whatsoever, even when it involves using the very water that come from our land and pumped out for one person or company's benefit. This

is totally unacceptable we want a written guarantee as to our water level being sustained.

- 10) This project cannot go ahead yet anyway, because an instream flow needs (IFN's) have not yet been determined by the province (page 9 – 3.4.3) and pumpout is applied on demand to meet crop requirements. To us this means that Jeffrey Farms will continue to pump these water pools dry (as they have already done in the fall at Highway #34)
- 11) In your report there is no mention of their pipeline already being installed along Highway #34 (intake pipe) and that they have already being pumping out to Bear Paw Gulch.
- 12) What about noise for neighbors if gas pumps are used? The noise was very evident last fall already when they were pumping along #34 Highway. Any wildlife in the area also will disappear because of this?
- 13) Pump out (4.4.5) outflow equal to inflow? What does this mean? To me this means they will pump out whatever water is collected in the proposed weirs.
- 14) What about the provision (2.5) 3 – to release water to the weirs by opening beaver dam upstream of Site #1?
- 15) How could anyone from the Environmental Department allow water to be pumped from the Assiniboine into Bear Paw Gulch in drought situations, or in the summer time as Jeffrey Farms sees fit. It says they may top up water levels in summer from the Assiniboine.
- 16) It is ironic that all these pollutants and groundwater contaminant tests were done on Jeffrey's land and then the proposal allows for pumping of water from the Assiniboine into Bear Paw Gulch. Please take some test of the Assiniboine water and see what results show. Everyone's chemical, nitrates, pollutants, etc for many, many miles end up in the Assiniboine River water.

In conclusion, I think it would be in our best interests for you to sit down with us and the Bullied's and any other interested parties and discuss these concerns and any other details.

Disposition:

A meeting was held with interested residents on March 23, 2001 to discuss these concerns and determine areas of concern which required additional information. A subsequent alteration to the project in February, 2002 removed Bear Paw Gulch as a water source, thereby addressing these concerns.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Conservation – South Central Region

No concerns.

Manitoba Conservation - Water Quality Management

There are not any significant concerns from a surface water quality perspective provided suggested mitigative and best management practices are undertaken. Because there is some

uncertainty to leaching potential in this area, the recommended nitrogen management practices as suggested in Section 3.1 b of Appendix A should be incorporated into the operational plan. Generally, the least favorable option would be establishment of in-stream structures that could prevent fish migration as suggested by Option B. However, Bear's Paw Gulch appears to be a first or second order intermittent stream and fisheries personnel can better determine the potential importance of this area for fish.

It has been identified in Option B that about double the amount of vegetation would be flooded with the weirs installed as what occurs now with the beaver dams. If this vegetation doesn't adequately regenerate each season as the water level drops, there could be increased erosion in the reservoir area and silt transport downstream during heavy precipitation events. The proponent should be aware that some kind of monitoring to determine the extent of downstream impacts may be required in the future if this is identified as a problem. It was assumed in the review that the water quality data provided in Appendix C for the Jeffrey Slough and Berry Slough are from the Bear's Paw Gulch area since sampling sites were not identified on any maps in the report. The Proponent should clarify on a map such as Figure 4 the location of all water sampling sites.

It appears that buried pipeline would not cross any permanent watercourse. However, if the pipeline will cross an intermittent stream, burial activity should occur when the watercourse is dry.

Disposition:

The alteration to the project removing Bear Paw Gulch as a water source addresses most of these comments. The remaining comments can be addressed as licence conditions.

Manitoba Conservation – Policy Coordination

Under Option A all of the water will be withdrawn from the Assiniboine River. Presently, it cannot be determined whether this option will be detrimental from an IFN perspective. If conditions to limit water withdrawal for the Assiniboine River during periods of reduced flows are included in the Environment Act Licence the fishery resources will be protected once IFN are determined. From a fisheries perspective Option B would be even more acceptable if the proponent could ensure that the median spring flow (March-May) would be maintained in Bear's Paw Gulch downstream of the storage area. A beaver control pipe should be inserted in the beaver dam in SW 14-8-11W. The weir riparian pipe may require protection to prevent plugging by beaver activity. Regional staff can provide design specifications for beaver control pipes and riparian pipe protection. This project will destroy approximately three-quarters of a mile of riparian habitat on Bear's Paw Gulch. There will also be the loss of about three miles of internal shelterbelts within the irrigation pivot sites. Soils in this area are sandy and erosion prone.

Disposition:

The alteration to the project removing Bear Paw Gulch as a water source addresses some of these comments. The remaining comments can be addressed as licence conditions.

Manitoba Conservation – Petroleum Branch

No comments or concerns.

Historic Resources Branch

No concerns.

Mines Branch

No concerns.

Soils and Crops Branch

Based on the information collected for the land use and agronomic assessment, the impact of irrigated potato production on the soil resource is viewed as sustainable assuming that current crop production practices incorporating several BMP's continue.

Ninety percent of the project area is rated as excellent to good for irrigation. Less than 5% of the project area is rated as fair for irrigation with limitations including topography, imperfect drainage, and moisture holding capacity. Areas rated as poor for irrigation suitability (5% by area) are mapped as eroded slopes complex and will not be cropped to potatoes. Also, 92% of the project area is Class 1 to 3 for irrigated potato production with 1.5% Class 4. The limitation for the Class 4 soils is topography (5-9% slopes). The remainder of the soils (less than 6%) rated as Class 5 are mapped as eroded slopes complex and have limitations related to topography and will not be seeded to potatoes.

It appears as though sustainable farming practices are being carried out on Jeffrey Farms. Zero tillage is being practiced on all fields except when potatoes are grown under minimum tillage. Cover crops will be used on sandier soils, along with the use of cereals and alfalfa in the rotation to help minimize any risk of erosion and maintain current organic matter levels. Also, spreading straw or manure will be adopted for areas prone to severe wind erosion.

Good irrigation and crop production practices are key elements in protecting groundwater. Scheduling of irrigation will provide water to the crop when needed to ensure efficient use and minimize leaching and water table elevation. Fertilizer and pesticide applications will be applied at rates required, based on soil and crop analysis. With proper land management, the potential impacts of irrigation on groundwater are mitigable.

PFRA's recommendation for further studies targeted at characterizing and monitoring groundwater resources in areas potentially impacted by irrigated crop production should be given serious consideration. It is my understanding that PFRA will undertake EM31 and EM38 investigations in NE 21-08-11W and NW 14-18-11W to provide additional information relative to the sub-surface and surficial variability within the study area, which will help to target the monitoring program. Initial water quality samples are important to provide baseline data while periodic testing of nitrates will allow for management practices to be modified as required to maintain water quality at acceptable levels over the long-term and including intensification of BMP's if appropriate. Salt

accumulation in the root zone does not appear to be a problem, as good quality water from the Assiniboine River and Bear Paw Gulch is to be applied on suitable land with relatively low soil salts.

Overall, any concerns related to the soil and landscape properties, environmental impact of intensive management practices on soil and water quality, the supply of good quality water, and the suitability of climatic conditions for the sustainable irrigated production of potatoes have all been addressed. From an agricultural standpoint, I have no concerns with the project for an expansion in development, in order to irrigate an additional 180 acres (for a total maximum of 500 acres in any year).

Central Manitoba Regional Health Authority – Medical Officer of Health The health concerns of this proposal relate to protection of groundwater from contamination of nitrates and pesticides. The elevated nitrate levels in current wells are a concern and I agree with additional testing to get a better understanding of this problem.

Disposition:

Monitoring can be addressed through licence conditions.

Canadian Environmental Assessment Agency The application of the Canadian Environmental Assessment Act with respect to this project will not likely be required. Additional information has been requested by Fisheries and Oceans in order to make a firm determination regarding the department's responsibilities. (DFO indicated a desire to participate in the provincial environmental assessment process. A copy of this project summary and any resulting Environment Act Licence will also be provided to PFRA.)

ADDITIONAL INFORMATION:

Due to the number of concerns raised in the three public comments on the project, a meeting was organized on March 23, 2001 to discuss the concerns and identify areas in which additional information was required. In particular, concerns relating to the environmental assessment process were discussed and resolved, and concerns relating to project details were clarified. PFRA, as consultants for the Proponent, agreed to provide additional information as follows:

1. The proposed reservoir elevations for the two reservoirs in Bear's Paw Gulch would be staked;
2. The Bullied and Zeghers wells would be located and surveyed;
3. Water quality samples would be obtained from both wells for background information purposes;
4. A geologic cross section of the area south the gulch to the wells would be prepared, and a opinion would be obtained respecting the likelihood of the project having an impact on the wells.

It was agreed that staff of PFRA and Environmental Approvals would discuss item 4 with the residents once the information was available.

In February, 2002, the proponent decided to revise the proposal to obtain all water from the Assiniboine River, and to obtain no water from Bear's Paw Gulch. This addresses the public and many of the technical concerns about the project. In the spring of 2005, PFRA advised that a fish habitat assessment was being completed for the project, along with an updated soils report. The fish habitat assessment report was received in May, 2005. An addendum report dated January 2005 was provided which added two additional fields to the project's land base, and a second addendum report dated December, 2005 was provided which added five fields north of the Assiniboine River to the project's land base. Additional commentary dated April 28, 2006 from the agronomic consultant was provided to address soil classification concerns with the fields north of the Assiniboine River.

In January, 2008, a letter was sent to concerned members of the public indicating the proposal had been altered such that water from Bear's Paw Gulch would not be used in the project.

PUBLIC HEARING:

No members of the public commenting on the Proposal requested a public hearing, and all public concerns have been addressed by alterations to the project. Accordingly, a public hearing is not recommended.

RECOMMENDATION:

All comments received on the Proposal which require action 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 Central Region.

PREPARED BY:

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March 26, 2001
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