SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT:	Hespler Enterprises Ltd.
PROPOSAL NAME:	Hespler Enterprises Reservoir Expansion
CLASS OF DEVELOPMENT: TYPE OF DEVELOPMENT: CLIENT FILE NO.:	Two Water Development and Control 5651.00

OVERVIEW:

The Proposal was received on May 27, 2013. It was dated May 23, 2013. The advertisement of the Proposal was as follows:

"A proposal has been received from Hespler Farms Ltd. for the expansion of an irrigation operation south of Rosebank in the Rural Municipality of Thompson. An off channel reservoir in SW 5-5-5W would be expanded to a volume of 150 cubic decameters, and nearby owned and rented land would be irrigated in a one year in three rotation when potatoes were grown. The total project landbase would be approximately 300 hectares. Water would continue to be pumped into the reservoir during the spring runoff period from a tributary of Graham Creek. The reservoir expansion is planned for the summer/fall of 2013."

The Proposal was advertised in the Carman Valley Leader and in the Morden Times on Thursday, June 13, 2013. It was placed in the online, Legislative Library, Millennium Public Library (Winnipeg), Eco-Network public registries, and in the office of the Rural Municipality of Thompson as a public registry location. It was distributed to TAC members on June 11, 2013. The closing date for comments from members of the public and TAC members was July 18, 2013.

COMMENTS FROM THE PUBLIC:

No public comments received.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

<u>Manitoba Conservation and Water Stewardship – Environmental Compliance and</u> <u>Enforcement Branch</u>

No concerns.

<u>Manitoba Conservation and Water Stewardship – Environmental Programs and Strategies</u> <u>Branch, Air Quality Management Section</u>

No comment. The proposal has no significant impact on air quality.

<u>Manitoba Conservation and Water Stewardship – Watershed and Protected Areas Branch</u> <u>and Lands Branch</u>

No concerns.

Manitoba Conservation and Water Stewardship – Parks and Natural Areas Branch

No comments to offer as this does not impact any parks or ecological reserves.

Manitoba Conservation and Water Stewardship - Water Science and Management Branch, Water Quality Management Section

I would be interested in more information on their planned phosphorus fertilization practices. They do mention that they will not be applying any N in fall but there is no mention of P management. Irrigated potatoes will likely have a higher P recommendation than current cropping, which may increase risk of P loss in runoff depending on management.

The minimum flow units in sections 4.3.2 and 4.5.2 are different but they come out of their water rights licence and that is where it really matters I suppose?

It is not clear if tile drainage has already been installed or if it is planned and it may not be part of this licence (or in a separate licence). If it is, research suggests that controlled tile drainage reduces nutrient and pesticide loss in tile drainage water so if new tile drains are to be installed controlled drainage would be recommended to help protect surface waters.

Monitoring tile drain water and soil testing records will be kept according to the proposal. If possible I would like to get a copy of these each year. This will allow us to confirm compliance with the Nutrient Management Regulation and also to keep an eye on soil test N and P versus tile drain nutrient loss.

Disposition:

Additional information was requested to address several of these comments. Monitoring information can be addressed through licence conditions.

Manitoba Conservation and Water Stewardship - Fisheries Branch

Fisheries Branch has reviewed this request to expand an existing reservoir SW 5-5-5W by approximately 80 acre feet (90 decameters) to a total requirement of 120 acre-ft. The reservoir would supply one pivot and one travelling gun at a combined rate of 1250 USGM. It is proposed that water to fill the reservoir will come from the Graham Creek Tributary which currently the proponent has a licence to divert 36.48 acre feet but they have applied for an increase in the amount of water to divert. The proponent indicates pumping will last approximately two weeks. Under the current licence they can withdraw during the spring runoff which they indicate is between April 1st and May 31st. The applicant's indicate that they will cease pumping when the instream flow is less than 0.09 m³/s (3.1783 ft/s), at a point immediately downstream of the temporary pumping installation, as per a condition of the current Water License.

Graham Creek and the tributary are 3rd order surface waters. While there is no fisheries information for the tributary, white suckers, brook stickleback, central mudminnow and fathead minnows have been found in Graham Creek. Fisheries Branch has concerns with this request.

- 1. The applicants indicate that because this tributary flows intermittently maintaining instream flows at 0.09 m³/s should ensure minimal impact to any existing fish habitat. The applicants have made no effort to determine what fish species utilize the creek and when, what the fisheries habitat is rated as, what the implications of removing water during the spring runoff are in terms of affecting the hydrologic cycle in terms of frequency, timing, magnitude and duration as well as maintaining channel forming flows (bankfull flows) and overbank flooding, and have not identified if there are any other diversions upstream or downstream of them and what the accumulated impacts of all the diversions are on the system and downstream receiving waters.
- 2. In terms of the instream flow rate they have provided there is no information on how that figure was derived. Instead of an instream flow rate, to which it may be difficult for the applicant to monitor, we would like to recommend the following withdrawal condition based on habitat suitability index (HSI) curves for spawning, juvenile and adult life-stages of fish found in Graham Creek. This water depth will meet the 80th percentile HSI for most life stages of the resident species.
 - a. Water withdrawal cannot occur when total water depth downstream of the withdrawal point is 0.25m or less for 2/3 of the bankfull channel width.
- 3. Further to this would it be possible to add a clause that would request the proponent to record the downstream depths over the period of withdrawal and take photos as a monitoring component? And could there be an additional clause that provides for change to the depth requirement depending on future studies/climatic changes, etc.
- 4. The current timing of the withdrawal overlaps with the spring spawning window of April $1 June 15^{th}$. We would like to recommend the following clause which takes temperature into consideration.
 - a. Water withdrawal cannot occur when water temperatures reach or exceed 10 °C.
- 5. While we are requesting that there be a temperature limit (4a) to which no withdrawal would occur there is still the potential to overlap with fish being present in the creek so we would request that the proponent adhere to DFO's End of Pipe Screening requirements. We would also request the clause used in other irrigation proposals that makes provisions for change in screening requirements should it be needed.

- 6. The applicant addresses a number of best management practices in terms of applying fertilizers and pesticides some of which are aimed at minimizing impacts to surface water quality. In the application of pesticides they indicate reducing spray drift by only applying under suitable conditions. There is, however no provision for maintaining riparian areas along the surface waters that run through the land. We recommend a clause requesting a 30 m riparian area/set back adjacent to the high water mark of any surface water that is 3rd order and higher and 15 m on 1st and 2nd order surface waters.
- 7. There is no construction detail for the expanded reservoir in terms of what it is being built from. We would hope that a layer of clay is used to line the reservoir to minimize the amount of water loss through infiltration into the ground. Furthermore that their erosion and sediment control measures are implemented as needed to ensure no sediment from the disturbed dugout expansion can enter the creek.

Disposition:

These comments can be addressed as licence conditions.

Manitoba Conservation and Water Stewardship – Office of Drinking Water

The EAP notes no adverse impacts on groundwater or surface water in the area are anticipated. A review of information on file at ODW indicates there are no public or semi-public water systems in the area using local surface or ground water as raw water sources.

Based upon this, ODW does not see any cause for concern respecting drinking water safety from the EAP or proposed development.

<u>Manitoba Infrastructure and Transportation – Highway Planning and Design Branch,</u> <u>Environmental Services Section</u>

MIT has reviewed The Environment Act Proposal noted above and while we do not have any environmental concern, we would like to offer the following comments:

• Since part of the proposed development is adjacent to Provincial Trunk Highway (PTH) 23, the proponent should be informed that a permit may be required from the Highway Traffic Board for construction of a new access road or modification to or relocation of an existing one onto PTH 23. A permit may also be required for placement or modification of any structure (including, but not limited to, signage), on, under or above the ground within 76.2 metres (250 ft) of the edge of the highway's right-of-way.

• A permit may be required from MIT for any planting within 15.2 metres (50 ft) of the edge of the highway's right-of-way or for any discharge onto the highway ditches.

• An agreement with MIT may also be required for any utilities above or under the highway's right-of-way.

For clarification and further information, the proponent may contact Mr. Wesley Turk at (204) 871-2239 or at Wes.Turk@gov.mb.ca.

Disposition:

This information was provided to the proponent for information.

Manitoba Agriculture, Food and Rural Initiatives - Crops Branch

No concerns.

Office of the Fire Commissioner

No comments.

Canadian Environmental Assessment Agency

The project is not a designated project under CEAA 2012 so we will not be participating further in the review.

ADDITIONAL INFORMATION:

Additional information was requested on August 7, 2013 to address TAC comments respecting phosphorus fertilization practices and tile drainage.

The following information was received in response on August 8, 2013:

Phosphorus Fertilizer Application Practices

Annual soil testing is conducted for all crops in rotation with application rates made specific to available levels and expected crop yields. All Phosphorus applications in all crops are banded with calibrated equipment beside the seed to achieve optimal efficiency of the fertilizer. Phosphorus is applied at variable rates according to field zones which consider yield goals, soil fertility, soil salinity and previous crop yields. When potatoes are planted, additional in-season soil testing occurs to ensure sustainable levels of all nutrients. All phosphorus applications are made in the spring during crop planting.

Tile Drainage

NW and SW of 5-5-5 have been tiled in the fall of 2012. One day, we would like to have all the fields tile drained but currently do not have a plan to the remainder in the immediate future.

This information satisfactorily addresses the Technical Advisory Committee comments, and allows for follow-up through licence conditions.

PUBLIC HEARING:

No requests were received for a public hearing. Accordingly, a public hearing is not recommended.

CROWN-ABORIGINAL CONSULTATION:

The Government of Manitoba recognizes it has a duty to consult in a meaningful way with First Nations, Métis communities and other Aboriginal communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of a treaty or Aboriginal right of that First Nation, Métis community or other Aboriginal community.

The proposal involves the expansion of an existing irrigation system on privately owned land in an agricultural area. Adverse effects on surface water or habitat for wildlife or fisheries are not anticipated.

Since resource use is not affected by the project, it is concluded that Crown-Aboriginal consultation is not required for the project.

<u>RECOMMENDATION:</u>

All comments received have been addressed through additional information or can be addressed through licence conditions. 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 of the Environmental Compliance and Enforcement Branch.

PREPARED BY:

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