

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Rural Municipality of Strathclair  
**PROPOSAL NAME:** Salt Lakes Water Level Control Project  
**CLASS OF DEVELOPMENT:** Two  
**TYPE OF DEVELOPMENT:** Water Development and Control  
**CLIENT FILE NO.:** 5538.00

### **OVERVIEW:**

The Proposal was received on August 25, 2011. It was dated August 22, 2011. The advertisement of the Proposal was as follows:

“An Environment Act Proposal has been filed by the Rural Municipality of Strathclair for a project to regulate high water levels on North and Center Salt lakes. The project involves the construction of a gated culvert control structure in SW 27-16-22W and the construction of a channel upstream of the control structure into Center Salt Lake and downstream of the control structure thorough 22-16-22 W into the north end of South Salt Lake. Levels on North and Center Salt lakes would be lowered to an elevation of 566.0 metres, which is nearly 2 m lower than the present level of North Salt Lake. Water would be discharged from the existing outlet on South Salt Lake to the Oak River drainage system when the additional flows would not aggravate flooding on the downstream system, especially after spring runoff and in the fall of each year.”

The Proposal was advertised in the Minnedosa Tribune on Friday, September 16, 2011 and in the Brandon Sun on Saturday, September 17, 2011. It was placed in the Main, Millennium Public Library (Winnipeg), Manitoba Eco-Network and Western Manitoba Regional Library (Brandon) public registries, as well as at the office of the Rural Municipality of Strathclair as a registry location. It was distributed to TAC members on September 15, 2011. The closing date for comments from members of the public and TAC members was October 17, 2011.

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

**Norman and Kaye Little** In regards to the proposed Salt Lake Water Level Control.....The "existing outlet" from south Salt Lake is a small culvert which proved totally incapable of handling the influx of water this year, resulting in historically high water levels in the lake and extensive bank erosion. South Salt Lake needs to be lowered to its traditional level. Any further drainage from North and Middle Salt Lakes through South Salt Lake would only aggravate the situation resulting in drastic bank erosion and

property damage unless adequate means of drainage are installed at the south end of the lake.

We have been cottage owners at south Salt Lake for 50 years and never in that time has the water level been anywhere near the current levels. We have lost many feet of shoreline, trees have been destroyed and there is absolutely no beach at all. Salt Lake has long been a popular recreation spot. Its value as such has been greatly diminished in the last few years.

Disposition:

Additional information was requested concerning the operation of the proposed control structure and the need for upgrading of the South Salt Lake outlet.

**Cal and Pat Campbell** In regards to lowering North and South Centre Salt Lakes, the construction of a gated culvert and channel upstream of the control structure upstream of the control structure into Centre Salt Lake to which both would flow into North end of South Salt Lake and into the Oak River drainage system.

This could be a great idea only if you start by making sure the water coming into South Salt Lake was going out at the same amount as which it is flowing into the Lake. Due to the existing outlet for discharging the water it is very inadequate.

The culvert is too small, only a 30" culvert and at its existing level does not flow at full capacity. Causing the water to flood cabins on the south east end of South Salt Lake.

2010 the water came up due to releasing water from the north causing flooding concerns. The water raised 5" deep and up 25' under our cottage. To stop flooding the municipality opened the road to release the water which worked, we did not get water in the cottage.

The culvert was replaced with a 30" culvert instead of a 36" one to which the municipality had permission to put in. The culvert was replaced too high and then it was caught by someone and pulled even higher at the east end of the culvert causing water levels to be so high before it starts flowing out of culvert that our cottage and others on the east side of South Salt got flooded in 2011. Pictures enclosed.

Now due to all the water and mold the cottage and contents were destroyed, we feel this is unduly unfair as this could have been avoided with the proper drainage system in place at the culvert on the south end of Salt Lake disposing of the water as fast as it was coming into the lake at the North end of South Salt Lake.

If this Proposal goes through as the municipality has set it out flooding of South Salt Lake will be an ongoing problem.

If you have an abundance of water flowing from the north to the south without making sure it is being disposed of at the same rate, it is going to build up and cause flooding. So

get the water flowing from South Salt or Oak River drainage system then open the North as you get culverts, channels, etc. working so NO ONE GETS FLOODED.

(46 photos enclosed showing flood damage to cottage and surrounding area in 2010 and 2011.)

Disposition:

Additional information was requested to address planned water level control on South Salt Lake.

[bicumj@mymts.net](mailto:bicumj@mymts.net) I am the owner of a trailer on the beach at the south end of South Salt Lake. This year I could not use my trailer until the middle of July and even then I had to wear rubber boots. If the existing outlet on South Salt Lake is left as is and the North and Central Lakes are lowered to an elevation of 566 meters, I believe the cottages and trailer would be flooded completely. Last year the existing culvert was supposed to have been replaced with a 36" culvert, a smaller culvert was poorly installed. This project would only work if a control structure is also built to allow water out of South Salt Lake at the proper time of year. When completed this project should not be controlled by the RM of Strathclair.

Having spent 48 summers at this beach it is sad to see the damage that could have been prevented.

Disposition:

Additional information was requested concerning plans for controlling water levels on South Salt Lake.

**Fraser and Barbara Moffat** The announcement that has been printed in our local newspaper brings great cause for hope. We have been flooded out for 6 years. Our driveway (lane) has been washed away and is causing us great concern, as it is slowly receding. It is our only way out of our yard onto the highway 16. We are seniors who live on a farm. We have lost miles of fences and many many acres of pasture, also the loss of great many trees. We do hope that you will listen to our concerns and go ahead with your proposed control structure.

**Bill and Angela Grills** My husband and I are listing why we do not want the water project to go forward at this time.

1. Our farm (3-16-22W) is located on the east and south side of South Salt Lake. We will lose income from renting the land to the cabin owners if they are flooded again and decide to leave. This year we lost land on the east side from 30 – 40 foot banks falling in the lake from erosion when the lake was high.

2. Our drinking water changed this year when the flooding of South Salt Lake occurred. The lake water came half the distance to the well that it was previous to the flooding. (from 1000 feet to within 500 feet approximately.) When tested on August 17, 2011 manganese was 0.143 (0.05 recommended) sodium was 844 (200 recommended) sulfate 1130 (500 recommended) TDS 2040 (500 recommended) and it was brownish in May-June. (Iron in August <0.10 (0.30)) Unless all the lakes have water testing done in the spring and prior to the swimming season, by an agency other than the R.M., and is tested for bacteria, heavy metals and pesticides water should not enter South Salt Lake.
3. The 30 inch culvert that was in South Salt Lake managed the water level prior to 2010. When the R.M. dug their ditch thru 22-16-22W, 1 cabin was flooded before they (in their infinite arrogance) replaced the culvert with a 30 inch culvert. Because of the high water level in 2010 with a 36 inch culvert we do not believe a 36 inch culvert will be sufficient in keeping the water levels on South Salt Lake at a non-destructive level. We do not believe the R.M. of Strathclair should have control of any gated culvert in SW 27-16-22W as they do not have any credibility as to operating by any rules set out by Water Stewardship in other projects. Example – Licence No. 2624 re town effluent not reaching South Salt Lake.
4. Permission from us was not asked nor given to flood our land or to lose land into South Salt Lake. We are downstream from the project. (3-16-22W)
5. If this project goes forward the town effluent would enter South Salt Lake. If this effluent has to be changed that proposal should be brought forward and approved firstly. If “it” comes directly south from the lagoon it would go thru 35-16-22, 26-16-22, 23-16-22, 15-16-22, 10-16-22, 11-16-22 then it enters our land at 3-16-22 where it will flood us out. Since Licence No. 02-DR-269 was granted we have had extensive water in the spring. For the past two years a crop has not been able to be planted and the R.M. will not change the culvert on the SE quarter at the south corner as it goes under a boundary road into Blanchard R.M. They did however lower it and may have changed the size of the culvert going from 11-16-22 into us at 3-16-22 anticipating that the effluent course will change.
6. Until a project downstream of South Salt Lake is completed we ask that this project not be allowed.

South Salt Lake was a self contained lake with natural springs at the north end of it. Solving a problem north of Highway 16 and at Middle Salt “Lake” slough will kill this lake at this time if the project proceeds this fall or near future.

Disposition:

Additional information was requested concerning the outlet of South Salt Lake and operating plans for the regulation system.

**John and Donna Gill** We are writing in support of the proposal to regulate the high water levels in North & Center Salt Lakes by the R.M. of Strathclair. We appreciate the councils futile attempts to alleviate this chronic challenge as it has affected our farmland and our neighbours for several years now. We have lost roads at both ends of the Salt Lakes and if this problem is not addressed highway#16 could be in jeopardy as well in the future. This proposal looks to be a viable solution for this longstanding issue and the least damaging for the area. We hope this project will move forward as the present situation is very counter productive in a farming community.

**Debby Lee**

Introduction:

I was born and raised in the R. M. of Strathclair and have lived here my whole life except when I went to University and worked in Winnipeg till age 28 when I returned to take over the family farm. I farmed until 2 years ago when I retired. South Salt Lake has been used by my family since the early 1930's with my Grandfather Henderson purchasing property on the west side (Henderson's Beach). Generations of this family have used this lake for recreational use since then including my own family.

Concerns:

1. How will massive amounts of water being diverted through South Salt Lake affect this body of water? The R. M. of Strathclair has stated the problem of high water levels in North and Central Salt Lake that are flooding agricultural land. (Part 1, page 7). In the report, increased drainage (Part 1, page 8) has been stated as one of the main culprits in conjunction with the wet period the area is experiencing. In this report there are no maps showing the watershed that drains into either North or Center Salt Lake. There are no maps showing the change in the watershed over the past 10 – 15 years, when the flooding problem was beginning. Their solution to the plan is to create permanent ditches that will pass the problem on. If increased drainage of agricultural land is part of the cause here, why is it not being addressed? Will these permanent ditches just encourage further drainage? If so, the problem of flooding will continue. They will expropriate profitable agricultural land from any landowners who do not agree with their plan (part 2, page 23) Then the waters will be passed into South Salt Lake and further on regardless of the damage that may be caused to this lake, its shores and lakeshore cabins due to erosion, water quality and quantity affecting recreational use. Losses do not stop there. After putting masses amounts of water through this lake, no ditches have been planned to prevent further flooding once the water leaves the west side of the lake. Agricultural land on the west side will be affected. Whose farm land is more important?

2. Who is monitoring the water levels and how much and when this water release can be done? My understanding is the R. M. of Strathclair council (of whom none have any expertise in water management) will be the control personnel in this release. Their pass record of not applying for licenses for culverts, calling states of emergencies for water drainage and not following ministerial orders to either change culverts to their proper size

or closing up ditches properly after they were dug by the R. M. questions their ability to operate this proposal if given a licence to do so.

Possible Solutions:

1. Close any illegal ditches draining water into the Salt Lakes.
2. If some drainage has to be done to alleviate the current problem, have some of it done this fall with a temporary ditch monitored by the Water Stewardship Branch.
3. Install the proper sized culvert in the west side of South Salt Lake and at a depth that lowers this lake to a correct level.
4. Look at draining water through Nip Creek Proposal, preventing some of the water going into North Salt Lake.

Thank you for considering my argument against the R. M. of Strathclair's Environmental Act Proposal.

Disposition:

Additional information was requested on operation and the outlet of South Salt Lake.

**Terry and Allyson McNish**

This letter is in direct response to the Environment Act Proposal that was filed by the Rural Municipality of Strathclair for a project to regulate high water levels on North and Centre Salt Lakes. Let it be known that herewith, we are submitting our formal objection to above quoted proposal (file #5538.00).

We are the legal land owners of the properties known as; SW 28-15-22W, NE 28-15-22W, and SE 28-15-22W of the Rural Municipality of Blanshard. We have recently purchased this land with the possession date being August 1<sup>st</sup>, 2011.

Our impressions of this property are that there has been improper/negligent drainage and poor land management in regards to water drainage and stewardship. We have obtained property maps from Agriculture Canada that show the bodies of water that are naturally occurring and should be on the land; we also have physically seen the amount of water on our land and have obtained internet images of the land that is more current than the maps provided by Agriculture Canada. The directing of water via large culverts installed on the east side (NE 28-15-22W) which is a naturally occurring stream; which should be flowing directly through the property and exiting out the most northern corner of that quarter section; is not "flowing" right through the property, but rather, "backing-up" on our property. Although there seems to be a few factors involved in this impediment (dikes & ditches), the fact is that water that did not exist on this land 10 years ago has now become a series of small "lakes" that are not receding via water movement. Water that should be "moving" through our land is now "sitting" on our land. Our conclusion is that this is due to man's manipulation and infrastructure and not nature itself.

It is the writer's intent to let it be known that we are not in agreement with this proposal, and that our land is not a "reservoir" to be used for drainage purposes of the municipalities to appease land owners that are being effected by aggressive & lucrative farmers who are "draining" their land of naturally occurring sources of water and overloading the naturally existing water systems in our province. We understand and are sympathetic to the plights of area farmers that have a primary income dependant on grain/oil seeds crops etc., (as we also are farmers) but cannot agree to environmental manipulation that changes the natural terrain of the land and benefits some, but not all people.

As we have only had possession of these properties since August 1<sup>st</sup>, 2011, our initial impressions/opinions could be erroneous, but at this time agreeing to such a proposal would be both foolish and negligent. We are not willing to risk the backing-up of additional water on our land.

Disposition:

Additional information was requested to address the operation of the proposed works and their effects on downstream land.

### **Vicki Henderson and Doug Pastuck**

#### **Introduction**

We own a cottage on fifteen acres on the shore of Salt Lake (also referred to as South Salt Lake) and have a serious and growing concern about a proposal submitted to Water Stewardship by the Rural Municipality (RM) of Strathclair (spring 2008) to drain an extremely large volume of water from Middle Salt Lake (also referred to as Center Salt Lake) and North Salt Lake into Salt Lake. We are long-term seasonal residents of the Salt Lake area. Vicki's father and grandparents were permanent residents of Strathclair and the land we own was purchased in the 1930s. We are not outsiders who wish to interfere with accepted agricultural practices or wise land use. Many Salt Lake families, like ours, are third and fourth generation residents of the area and virtually all are strongly opposed to the proposed drainage until it can be demonstrated that the drainage will not degrade Salt Lake from the environmental and recreational use perspectives.

Our comments and views, which are shared by the seven other cottage owners situated on our property and most other property owners around the lake, will be presented in two sections. The first presents our concerns about any drainage from Center Salt Lake into Salt Lake and the second provides page by page comments supporting our concerns.

#### **Concerns**

Hydrological Assessment for Flood Control Planning

In addition to our strong feelings that human activities should be managed to minimize negative impacts on the environment, we have two specific concerns:

1. maintaining the highest possible water quality at Salt Lake
2. managing Salt Lake water levels to prevent degradation of the local flora and fauna, to minimize shoreline erosion and to ensure continuation of high quality recreational activities which are currently enjoyed on Salt Lake

After reviewing the “Hydrological Assessment for Flood Control Planning & Environmental Impact Assessment”, we are not persuaded that the proposed drainage project will be conducted in a way that addresses these two concerns. The consultant immediately reaches the conclusion that drainage is necessary, that the drainage must pass through Salt Lake, and that there are no or negligible resulting implications. This is done without analyzing any data or information and without providing any references to scientific studies when he provides his opinions on environmental and social impacts.

Over the past three summers, Salt Lake has been subjected to historically high water levels worsened by drainage effected by the RM as an “emergency measure”. In addition, the quality of Salt Lake appears to have been degraded. From our observations Salt Lake has been more turbid. Also, recreational and agricultural interests have been significantly affected because high water has flooded cottages at the south end, inundated all beaches, and caused serious shoreline erosion at cottage sites and agricultural lands.

The consultant discusses why Salt Lake water levels have risen to flood stage. He attributes most of it to the flow of water from Center Salt Lake which he claims was “inevitable”. I suppose he means that even without an engineered drain, water would flow into Salt Lake from Center Salt Lake anyway. In fact, in 2009 and 2010 no water would have flowed from Center Salt Lake without the excavated drains installed by the RM as “emergency measures”. The 2010 drain was significantly eroded and as a result, there was insufficient earth available to fill and pack the drain “shoulder to shoulder” in the fall 2010. The water flow into Salt Lake in 2011 occurred because the 2010 drain was not properly filled in as ordered by Water Stewardship and this flow has continued until October. This contributed greatly to extreme flooding of beaches, cottages and agricultural property around Salt Lake and caused serious shoreline erosion. The problems of excessive water in Salt Lake was exacerbated because the single outlet culvert was apparently improperly installed by the RM in 2010 and inadequate in diameter (30 inch instead of the required 36 inch).

The consultant does not address one of the main causes of the high water which has concentrated in the Salt Lakes complex. Excessive drainage of wetlands on private land north and east contributes significantly to the high water in all three lakes, but solutions to this activity are barely touched on. The consultant does not seem to acknowledge that over 90% of drainage from private land is unlicensed (Broughton Creek study, 2010). Closing at least some of these illegal drains certainly should be an option. Historically, the solution to high water is to pass it downstream by creating more drains, and this is exactly what the consultant recommends.

After minimal or no formal analysis of information and data, the consultant concludes that draining Center Salt Lake is the solution, and, furthermore, the best route happens to be into Salt Lake which is “coincidentally” exactly what the RM has been

striving to do over the past several years. Inexplicably, under the heading Nip Creek, the consultant outlines his “strategy”. He leaps to the conclusion that “the best case solution forms around turning North and especially Center Salt Lake into a connected reservoir to regulate releases...”. Such a conclusion would normally follow from a detailed presentation of data and a comprehensive analysis and discussion of the data. We don’t see the supporting data anywhere in the report.

The list of drainage options from Center Salt Lake were evaluated in a superficial way. We believe that the discussion provided is inadequate to draw the conclusion that the route must pass through Salt Lake. The excuse for rejecting all options that circumvent Salt Lake is mainly that it would be too costly to “consider reasonable for funding as a project by a Rural Municipality”. This is an interesting conclusion since it is apparently based on absolutely no cost analysis. There is not even a hint provided as to possible cost differentials. Is the cost of the routes that bypass Salt Lake \$10,000 or \$100,000 more. We do not know and the consultant seemingly does not know either. Therefore, the conclusion drawn here seems to be based on his intuition or some other factor that is not apparent. The consultant also uses the rationale that Route 10 would result in a “major hazard in the form of a deep, roadside trench”. There are steep slopes by hundreds of roads and highways across Manitoba. Is there a particular guideline or bylaw in the RM of Strathclair the bans a deep ditch adjacent to this road? The consultant also states the some of the options “would be a nuisance to agricultural practices”. It seems that he would prefer to potentially degrade Salt Lake rather than cause a nuisance to farming on a 1/4 section of agricultural land.

There may be a host of alternative drainage procedures that have not been considered. For example flexible large diameter pipe and a high capacity pump system has been used elsewhere to move water over high points rather than excavating deep trenches. Consideration should be given to this method to move Center Salt Lake water over the high points to the drainage run west of Salt Lake (Route 10). Since, the Salt Lake’s high water problem may be short-lived, perhaps a more temporary measure is all that is required.

The consultant’s findings do not in any way lessen our concerns that a drain from Center Salt Lake will damage the Salt Lake ecosystem and the activities that are currently enjoyed on the lake. However, if the drainage project is approved for some incomprehensible reason, then a clearly defined and mandatory Salt Lake water management plan must form an integral part of the project.

Until Salt Lake was been subjected to additional water from Center Salt Lake there were few problems with high water because Salt Lake always had a historical outlet. Prior to road development there was absolutely no barrier or constriction to flow from Salt Lake to the south west. The lake flowed freely into a marsh complex and then on to the Oak River. When the road that borders the western side of Salt Lake was first constructed, a bridge still allowed for the free flow of water to the southwest marsh complex. The bridge was replaced by a culvert in the late 1950s which has somewhat constricted outflow from Salt Lake.

The consultant provides a mandatory management plan for water levels in Center Salt Lake and North Salt Lake. Exact levels that are to be achieved in Center Salt Lake

and North Salt Lake are stipulated. In addition, an extensive engineering project including dredging, new culverts, excavated drains, and control structures are all recommended in detail. However, there is no management strategy for Salt Lake. All this additional water is to enter Salt Lake but the consultant seems to think that a 36 inch culvert that was required without additional water will suffice. This is wrong.

The consultant's cryptic management plan for Salt Lake states that "Salt Lake will not be reduced in volume or depth...". In fact, Salt Lake level should be lowered because it is flooding, even though the existing culvert is not currently flowing. Installation of an adequate outlet control structure at the proper elevation must be installed to regulate Salt Lake at a lower ideal level, whether or not the proposed drainage from Center Salt Lake is approved.

The consultant does not discuss appropriate levels for Salt Lake, or recommend measures to ensure that Salt Lake does not flood as it did in 2010 and worse yet in 2011. He merely states that releases from the "reservoirs" would occur only after flows have peaked in the Oak River system and that the "water flows would be regulated to match flows allowed by the Oak River watershed sections and prevent excessive water elevations in South Salt Lake". This is an ill-thought-out criterion for allowing flow from Center Salt Lake. Even when there is near-zero flow in the upper Oak River system, Salt Lake and portions of private land southwest of the lake could still be flooded (as is currently the case - October 2011). Also, because the Salt Lake outlet culvert is inadequate (as noted above), additional water to Salt Lake will result in worse flooding along the lakeshore. The best he can do is "prevent excessive water elevations". Excessive is not defined, yet he is quite specific when he discusses acceptable water levels in Center and North Salt Lakes. This strategy is inadequate and unacceptable.

We agree that levels in the upper Oak River system (perhaps using the "Riley culvert as an indicator" would be one aspect of this) must be considered prior to a release from Center Salt Lake, but the level of Salt Lake must also be a primary consideration. The water management guidelines for Salt Lake must be the following:

- water shall not be released from Center Salt Lake unless Salt Lake is at or near a prescribed ideal level (the ideal Salt Lake level must be set 0.5 to 0.75 meters below the October 2011 level (i.e. the bottom of the existing outlet culvert))
- a maximum allowable level must be established at or below the October 2011 level (i.e. the bottom of the existing outlet culvert). Salt Lake may only rise to this level for a short period of time
- proper outlet control structures must be installed at the southwest end of the Salt Lake, to manage lake levels; the bottom of the new Salt Lake outlet control structures must be set at least 0.5 to 0.75 meters below the bottom level of the existing culvert so Salt Lake level can be reduced to its ideal level (this provision should be undertaken whether or not the proposed drain from Center Salt Lake is installed)
- the capacity of the Salt Lake outlet control structures must be sufficient to prevent the level of Salt Lake from increasing as additional water is introduced from Center Salt Lake (i.e. exiting water volume must equal or exceed entering water volume)

- a dredged underwater ditch must be excavated to allow efficient flow from Salt Lake through its outlet control structure (a shoreline sand bar and vegetation debris often impedes water flow into the existing outlet culvert); this underwater ditch would be similar to a dredged underwater ditch as recommended by the consultant from the deep part of Center Salt Lake to the culvert at Road 94N.

The Salt Lake outlet control structure must be the first upgrade undertaken under this program so that Salt's ideal level can be achieved prior to releasing any water from Center Salt .

The consultant concludes that "concerns over the 'polluting' of the south lake are unfounded". It unclear how the consultant arrived at this conclusion since there is no evidence or analysis anywhere in this report that shows that introducing water from Center and North Salt Lakes will not degrade the water quality of Salt Lake.. The consultant's assessment of the the water sample data did not appear to be based on conventional scientific analysis. It would be interesting to know his academic training and source of expertise in water quality assessment.

The only valid analysis we have seen was prepared by a senior scientist from the Water Science and Management Branch (Water Stewardship) with specific expertise in the area of surface water quality. The scientist prepared a preliminary report on the water samples taken from the Salt Lakes in 2007 and 2009 (copy was submitted to the RM in 2009). The scientist made the following observations.

- The water is Saltier and generally of a poorer quality in Middle Salt Lake compared to Salt Lake.
- Total dissolved solids concentrations and conductivity were about double in Middle Salt Lake compared to Salt Lake. Total dissolved solids is a measure of the filterable Salts and minerals in a water sample. High total dissolved solids concentrations usually result in poor taste and may, if high enough, become a health concern.
- Concentrations of sodium and sulphate were about twice as high as in Middle Salt Lake compared to Salt Lake.
- For variables such as chloride, magnesium and phosphorus, concentrations in Middle Salt Lake were about twice as high as those in Salt Lake. High levels of chloride can affect sensitive aquatic plants. High levels of phosphorus can result in excessive algae growth and aquatic plant growth.
- The measure taken of algae biomass (chlorophyll *a*) indicated that concentrations of algae were higher in Middle Salt Lake compared to Salt Lake.

The scientist indicated that there was considerable annual and/or seasonal variability in Middle Salt Lake and Salt Lake. Concentrations of dissolved solids, calcium, sodium, magnesium, chloride, and sulphate were two to almost five times higher in July 2007 as compared to April 2009. The following conclusions were made.

- Salt Lake had better quality of water than either Middle or North Salt Lake.
- More information on water quality in these three lakes is required to assess potential impacts of water diversion from North or Middle Salt Lakes to Salt

Lake. This would include a seasonal monitoring program in the spring, summer, fall and winter. Given the differences in water quality between the three lakes, potential affects of water diversion could include impacts on the aquatic community, recreation, and the use of Salt Lake water for drinking, livestock watering or irrigation/garden watering.

Regarding this final conclusion, note that there could be a impact to recreational use and livestock watering on Salt Lake due to the introduction of water from Middle Salt Lake. Both activities occur on Salt Lake. There are no recreational activities on Middle or North Salt Lake.

The consultant provides the raw data from 2011 water samples but provides no discussion of the results or conclusions based on the data. The consultant's only conclusion is that the water is "free of contaminants". How he arrives at this conclusion is unknown since almost all parameters are different between Salt Lake and Center and North Salt Lakes - in many instances by a factor of 2 or more. He indicates that no indicators were found in the water samples to suggest any "strong sources of pollution, pesticides or otherwise". Since there is no evidence of data analysis, it seems we are to take his word that there is nothing of concern. What does "strong sources of pollution" mean? He should have discussed the various parameters in terms of the Manitoba Water Quality Guidelines and Objectives. Also, the implications of the level for each parameter should be outlined.

The water samples presented in this report were taken in April when the water in Center Salt Lake was greatly diluted. We are concerned that if the intent is to draw Center Salt Lake down to a level where there is virtually no water, then how will the water quality change as the impact of dilution becomes less of a factor?

The consultant neglects to mention that the license for the water treatment lagoons stipulates that outflow from the lagoons shall not flow to Salt Lake. The consultant brushes this issue aside by opining that the effluent is "of small consequence". He apparently does not know that effluent from the lagoons cannot be directed to Salt Lake. Since the consultant has clearly stated that the Center and North Salt Lake complex is all interconnected during high water, opening a drain from Center Salt Lake to Salt Lake will result in effluent from the lagoon reaching Salt Lake. That contravenes the provisions of the license.

The consultant provides an unsophisticated listing of various observations concerning plants, animals and swimmer's itch. The relevance of this is unclear since there is no analysis or discussion about the implications of the information.

The consultant states that the long-term effects on the upper Oak River watershed should be monitored over the first decade of the program. We believe that monitoring the impact on Salt Lake should also be a priority.

Some of the points raised by the consultant seem to indicate an odd attitude toward the concerns of those not in favour of the drain into Salt Lake. Comments like these may demonstrate a level of bias against the interests of those concerned about the integrity of the Salt Lake ecosystem. Some examples include:

- The consultant uses phrase "more fresh water is 'flushed' through the system" (meaning Salt Lake). Almost all parameters measured in Center Salt Lake have

concentrations from 2x to 10x higher than Salt Lake. That is not fresh water - that is water of poorer quality.

- The consultant states the land fill has been a source of “virulent rhetoric”. This is a condescending statement, suggesting that comments by those opposed were vindictive or malicious. This is an unfair characterization of the comments expressed to the RM which were in fact based on a sincere concern about the quality of Salt Lake. That is not rhetoric and it was not virulent.
- The consultant states that samples were taken by the old landfill because local people claimed there was pesticide residue “supposedly” leaking through the soil. Local people requested that a qualified scientist undertake an analysis to allay concerns about this potential source of pollution.
- What is the relevance of referring to two local rate payers as “squatters” when they have permission from the landowner to use the site.
- Para 4, page 21 is condescending when the consultant states that “these are the very folks opposed to the control structure and trench.” That does not make us bad or wrong. Some local residents have opposed the drainage because there is no certainty that the water would not degrade the quality of Salt Lake and because there was no confidence that the drainage would be conducted in a professional manner.

In conclusion, the Environmental Impact Assessment provides no evidence that the quality of Salt Lake water will not be degraded by the proposed drainage. The conclusions seem to be largely the expressed opinion of the consultant based on cursory observations. The consultant did not support his opinions with data analysis or any reference to scientific research conducted in this field of study.

It seems that actions such as Phase 2 and other actions to stop unlicensed drainage from private land should be done before this drainage proposal is considered.

The Hydrological Assessment for Flood Control Planning attempts to address high water levels of Center Salt Lake and North Salt Lake and indicates a concern about water levels and flows through the upper Oak River system but does not provide any evidence that the risks of flooding in Salt Lake will be addressed. The report largely ignores the need to manage the level of Salt Lake.

The consultant proposes that the RM should consult Water Stewardship and the RM of Blanshard “before commencing any releases of water” from Center Salt Lake into Salt Lake. It is our understanding that, if a license is granted for this drainage project, there would be no requirement to do this. We would have to rely on the integrity of the RM to release water only when the flow will not result in downstream catastrophes. Based on the past record of the RM, we have no confidence that the drainage will be conducted in a professional manner. The RM released water at the Salt Lake outlet in 2010 by breaching the road. No landowners downstream nor the RM of Blanshard were notified in advance - water left the lake in a torrent causing land to be flooded. One rancher that we know of almost lost calves to drowning. The RM has also ignored Water Stewardship regulations by installing drains without a license. The only way this ill-advised drain could be properly managed is if it is handled entirely by Water Stewardship.

We are very concerned that if the Center Salt Lake drain is installed then it will be a green light to undertake more drainage into the Salt Lakes from the north and east.

## **“Hydrological Assessment for Flood Control Planning”**

### **Page by Page Comments**

- Page 7, para 2. “greatest impacts began circa 2005”. In fact, the greatest impact is the longstanding agricultural practice since the 1880s to drain private land and pass the problem downstream to other people and local governments to deal with. The problems associated with this practice were worsened by heavier than normal precipitation around 2005.
- Page 7, para 3. “roadbeds of Highway 16 and the CPR are also threatened or nearly so as in 2011”. There is no documentation that HWY 16 and the CPR were threatened nor does the consultant cite correspondence from the affected government department or the CPR.
- Page 7, para 5. The consultant provides a historical account of infrastructure projects by the CPR and Highways. He claims that “during a recent improvement of Highway 16, more water was diverted that has to pass into the Salt Lakes system or find its way through other watershed locations to end in the Oak River”. What does “find its way through other watersheds” mean? Also, the Department of Highways policy does not allow the department to change water flow when construction projects are undertaken. Highways staff have indicated to us that additional water in ditches along the highway near Strathclair was the result of illegally draining private land into ditches along HWY 16.
- Page 7, para 6. “the only means available other than emergency releases... is evaporation”. The consultant does not seem to acknowledge that over 90% of drainage from private land is illegal (Broughton Creek study, 2010). Closing at least some of these illegal drains certainly should be an option.
- Page 9, para 4. “flowed in an uncontrolled manner for some weeks”. In fact, according to Perry Stonehouse, the RM did not adequately fill in the drain installed as an “emergency measure” in 2010. The problems of excessive water in Salt Lake was exacerbated because the single outlet culvert was apparently improperly installed and inadequate in diameter (30 inch instead of the required 36 inch).
- Page 11, para 1. Inexplicably, under the heading Nip Creek, the consultant outlines his “strategy”. He leaps to the conclusion that “the best case solution forms around turning North and especially Center Salt Lake into a connected reservoir to regulate releases...”. From the information presented to this point it is difficult to understand how the consultant managed to make the leap to this conclusion.
- Page 11, para 3. The consultant refers to “recent climate change”. While climatologists around the world still debate the validity of climate change and what the impact on local weather may be, the consultant definitively states that the higher than normal precipitation over the past 5 to 10 years is the result of climate change. The consultant states that “any future excessive rain event will not pass through the sole submerged culvert under Highway 16 fast enough to prevent flooding and unsafe conditions. The CPR railway bridge would also be strongly affected.” What evidence does the consultant have that this is the case? Does he have correspondence from HWYs

that there will be unsafe conditions? Does he have documentation from the railway that the railway bridge will be strongly affected (note: meaning unclear)? Or, are these conclusions just something he has surmised based on cursory field observations?

- Page 12. After plugging his unsupported conclusion into the Nip Creek section, the consultant jumps back into background information. The organization of this report is to say the least confusing.
- Page 12, para 1. “Salt Lakes, by their very nature (?) depend on wind and sun induced evaporation”. In fact, Salt Lake has a historical outlet. There is a lot of information in this paragraph about evaporation and how it works. The consultant states that “evaporation is reduced proportionally”. Statements like this should have supporting references.
- Page 12, para 3. This entire paragraph is speculative. The consultant’s version of “climate change” resulting in high precipitation may, just as easily change to a period of drought. Therefore, he cannot definitively conclude that “levels will continue to rise”.
- Page 13. The consultant is back to outlining his conclusions.
- Page 13, para 1. The consultant again recommends “that Central Salt Lake and the upper layer of North Salt Lake be converted to reservoirs to retain water until after flows have peaked in the Oak River system...”. This is one of several examples where the consultant does not consider the levels of water in Salt Lake. He does not discuss appropriate levels for Salt Lake, or recommend measures to ensure that Salt Lake does not reach flooding level as it did in 2010 and worse yet in 2011. What does the consultant mean by the upper layers of North Salt Lake - isn’t it impossible to draw water from the lower layer?
- Page 13, para 2. Two planned releases are indicated. No where is the level of Salt Lake considered when determining if a release is to occur in either the spring or the fall.
- Page 13, para 3. The consultant provides exact levels that are to be achieved in Center Salt Lake and North Salt Lake, but again does not indicate the maximum levels (x meters) that Salt Lake would be subjected to, nor the ideal managed level (y meters) for Salt Lake. Salt Lake water management is ignored throughout the report. This is unacceptable.
- Page 13 para 5. Again the level of Salt Lake at the time of release is completely ignored. The level of Salt Lake must also be the primary consideration. A proper outlet control structure must be installed at the southwest end of the Salt Lake. The guideline must be that water shall not be released into Salt Lake unless it is at or near a prescribed ideal level. Then the water levels in the Oak River system shall be considered. Therefore, the levels in **both** Salt Lake and the Oak River system must be at or below prescribed levels prior to release of water from Center Salt Lake.
- Page 14. Downstream effects are inadequately outlined.
- Page 14, para 2. It is stated that care is needed prior to release of water from Center Salt Lake because of concern about the levels in the upper Oak River System. Again there is no consideration of Salt Lake levels. It is recommended that the “culvert at the Riley road would serve as an indicator culvert”. This is unacceptable because as noted previously Salt Lake could be flooding while the Riley culvert may signal that a release is allowable. In discussing the use of the Riley culvert as an indicator with local residents it is clear that the Riley culvert may not be flowing while land in the vicinity is inundated. Both the level of the upper Oak River system and Salt Lake must dictate when a release is permitted.

- Page 14, para 3. Don't know what the consultant is talking about.
- Page 15, para 2. Unlicensed drainage from private land contributed to the problem.
- Page 17, para 3. We are not sure what the consultant is talking about. We note that whatever it is, he notes that there are two major hurdles - then he lists five points.
- Page 18, last para. This action (which may be a good idea) should be taken as phase 1, not after a drain has been installed from Center Salt Lake to Salt Lake. We are very concerned that if the Center Salt Lake drain is installed then it will be a green light to drain more water into the Salt Lakes.
- Page 19 to 21. The list of drainage options from Center Salt Lake were evaluated in a superficial way. We believe that the discussion provided is inadequate to draw the conclusion that the route must pass through Salt Lake. In virtually all options that circumvent Salt Lake the excuse is mainly that it would be too costly to "consider reasonable for funding as a project by a Rural Municipality". This is an interesting conclusion since it is apparently based on absolutely no cost analysis. The consultant also uses the rationale that Route 10 would result in a "major hazard in the form of a deep, roadside trench". There are steep slopes by hundreds of roads and highways across Manitoba - Is there a particular guideline or bylaw in the RM of Strathclair that bans a deep ditch adjacent to this road? The consultant also states that some of the options "would be a nuisance to agricultural practices". It seem that he would prefer to potentially degrade Salt Lake rather than cause a nuisance to farming on a 1/4 section of agricultural land. There could be a host of alternative drainage procedures that have not been considered.
- Page 21, route 7. The consultant indicates that this route "was successfully used during the first EMO release in 2009". In fact, that drain had almost zero impact on the water level of Center and North Salt Lakes because the drain was initially dug so there was only a trickle of water; then it was further excavated to allow more water to flow, only to have EMO order the drain closed because the situation did not qualify as an emergency (personal communication with EMO staff).
- Page 21, route 9. After minimal analysis it would appear that the option for lowering Center and North Salt Lakes through Salt Lake was inevitable.
- Page 22, para 1. The consultant opines that Winstone property "cannot be considered a barrier to the rising waters in Center Salt Lake... as proven in 2011". Our information based on discussions with Water Stewardship staff would indicate a contrary conclusion. The water flowed across the Winstone property largely because the 2010 drain was not properly filled (shoulder to shoulder) nor packed. The high water in Center Salt Lake easily eroded a path through the improperly filled 2010 drain. The effect on Salt Lake "was disastrous" because water flowed unimpeded from Center Salt Lake and the resulting damage to shorelines, cottages and habitat was greatly magnified because the undersized and improperly positioned Salt Lake outlet culvert could not accommodate the flow.
- Page 24, para 6. "Emergency trenches have been filled in as per requirement of such EMO prerequisites". This was not done according to Perry Stonehouse of Water Stewardship. In fact, part of the drain (more proximate to the Moffat property) was not filled in at all.
- Page 29, para 1. The consultant states that "based... on costs, the recommendation forwarded is...". To repeat there was absolutely zero cost analysis.

- Page 29, para 5. Detailed plans for how water will leave Center Salt Lake are provided in the forgoing pages but there is absolutely no discussion or plans for how water will efficiently leave Salt Lake. The consultant does not appear to get it - when you add more water to a lake, the level will rise unless you allow more water to leave the lake.
- Page 31, para 2. The consultant indicates that water flows would be regulated to match flows allowed by the Oak River watershed sections and prevent excessive water elevations in South Salt Lake”. This cannot happen since even when there is near zero flow in the upper Oak River system, Salt Lake may be at flood stage (as is currently the case - October 2011). As always, the consultant does not address Salt Lake water management. The best he can do is “prevent excessive water elevations”. Excessive is not defined, yet he is quite specific when he discusses acceptable water levels in Center and North Salt Lakes (see page 13).
- Page 32, para 6. The consultant indicates that the intent is to drain “over and extended periods... without creating flooding and shoreline erosion on South Salt Lake” This is good but again the level that is considered flood stage is not specified. Also, the consultant indicates that the intent is not to “overwhelm” the 90 cm (36 inch) Salt Lake outlet culvert to be installed later in 2011. As noted above, a 36 inch culvert will be inadequate, and the current culvert is set about 0.5 to 0.75 meters too high, since the lake is still at flood stage but the existing culvert is barely draining.
- Page 33. The drainage structure seems to be planned to prevent excessively rapid flow and to prevent siltation and erosion into Salt Lake. This is good.
- Page 37, para 2. The consultant claims that there was no overland flooding in the Oak River system. There certainly was flooding on private land down stream from the Salt Lake outlet. This flooding was worse because water was allowed to flow into Salt Lake all through this past summer. The flooding in the Oak River system was limited somewhat because the water from Center Salt Lake was impeded from flowing out of Salt Lake because of an inadequate outlet culvert. As a result the most serious flooding occurred in Salt Lake.
- Page 37, para 3. There is no analysis to defend the conclusion.
- Page 37, para 4. The consultant concludes that “concerns over the ‘polluting’ of the south lake are unfounded”. There is no evidence or analysis anywhere in this report that shows that introducing water from Center and North Salt Lakes will not degrade the water quality of Salt Lake.
- Page 37, para 5. Observations made by boaters from the south shore indicated that by June 2010, the lake was clear in the south basin but murky in the north half of the lake. Later in 2010, the entire lake was murky. In 2011, Salt Lake was murkier than pre-2009. Normally, by August the lake clears after the end of the algae bloom. This year, after the algae bloom the lake remained murky until late September.
- Page 38. It seems that actions such as Phase 2 should be done first along with other actions to stop water from entering North Salt Lake.

## “Environmental Impact Assessment”

### Introduction

A senior scientist from the Water Science and Management Branch with specific expertise in the area of surface water quality prepared a preliminary report on the water samples taken from the Salt Lakes in 2007 and 2009. The following conclusions were made:

- Salt Lake had better quality of water than either Middle or North Salt Lake.
- More information on water quality in these lakes is required to assess potential impacts of water diversion from North or Middle Salt Lakes to Salt Lake. A better understanding of water quality in these three lakes could be gained through implementation of a seasonal monitoring program including sampling for general chemistry, metals, and nutrients in spring, summer, fall and winter. Given the differences in water quality observed in April 2009 between the three lakes, potential effects of water diversion could include impacts on the aquatic community, recreation and use of water from South Salt Lake for drinking, livestock watering or irrigation/garden watering.

Regarding this final conclusion note that there could be a concern regarding recreational use and livestock watering. Both activities occur on Salt Lake. There is no recreational activities on Middle or North Salt Lake.

The Environmental Impact Assessment provided the raw data from 2011 water samples but does not provide one observation, discuss the implications or draw one conclusion based on the data. The consultants only conclusion is that the water is “free of contaminants”. This would appear to be merely an opinion.

### Page by page Comments

- Page 7, para 2. Where is the evidence or reference that the effects of the abattoir “have been long since degraded”. This may be just another opinion.
- Page 7, para 4. The consultant states that there are no “harmful factors” at the old landfill site. There may not be any measurable effect now but there is no guarantee that it cannot happen in the future. In fact, on page 22, para 5 the consultant states that “the abandoned land fill does not, *at present*, create any detrimental effects...”. The consultant seems to be backtracking by suggesting there is no threat “at present”.
- Page 7, para 5. What is the relevance of referring to two local rate payers as “squatters” when they have permission from the landowner to use the site.
- Page 7. The consultant neglects to mention that the license for the water treatment lagoons stipulates that outflow from the lagoons shall not flow to Salt Lake. Since the consultant has clearly stated that the Center and North Salt Lake complex is all interconnected during high water, opening a drain from Center Salt Lake to Salt Lake will result in effluent from the lagoon reaching Salt Lake.

- Page 8, para 4. This ‘guideline’ indicates that the RM should consult Water Stewardship and the RM of Blanshard “before commencing any releases of water” from Center Salt Lake into Salt Lake. In reality, if a license is granted for this drainage, we would have to rely on the integrity of the RM to only release water when conditions will not result in downstream catastrophes. Based on the past record of the RM, we have no confidence that the drainage will be conducted in a professional manner.
- Page 9, para 2. The consultant states that “more fresh water is ‘flushed’ through the system”. This statement is based on nothing. Almost all parameters measured in Center Salt Lake have concentrations from 2x to 10x higher than Salt Lake. That is not fresh water - that is water of poor quality.
- Page 11, para 3. How can he state that there will be no impact on the campground when with the existing Salt Lake outlet culvert, water was impeded from leaving the lake. The entire beach and some campground facilities were inundated. He provides no remedy for this.
- Page 12, para 1. “Care must be taken to not interfere or damage docks...”. Again very unspecific guidelines when Salt Lake is discussed. There should be a prescribed Salt Lake level that shall not be exceeded under any circumstances.
- Page 12. The science lesson regarding swimmer’s itch is irrelevant.
- Page 13. Mainly irrelevant..
- Page 13, para 5. What does this mean? Salt Lake levels can certainly be reduced if the lake levels are managed with an proper outlet control structure. If the outlet is lowered Salt Lake could be lowered by at least a 0.5 meter from the current level (October 2011).
- Page 13, para 7. The consultant declares that “Salt Lake will not be reduced in volume or depth...”. Why not? It is in flood stage. Installation of adequate outlet control structures at the proper elevation will regulate its level. The rest of the stuff in this paragraph is irrelevant.
- Page 13, para 8. Irrelevant.
- Page 14, para 1. This is the extent of the analysis of water samples. Has the consultant any expertise in this area?
- Page 14, para 2. The consultant is suggesting that turbidity was not the result of water rushing through a mud ditch through a farm field. What “study” revealed the true source? What was the study methodology? A few photos. He concludes that water draining slowly off agricultural land caused the turbidity but not water rushing through a muddy ditch for five months from Center Salt Lake to Salt Lake. The photo on page 14 of a drain shows a very flat ditch - would water be gushing through here picking up silt? The photos of ditches shown on page 15 seem to be covered in vegetation - this is a source of silt? Not convinced.
- Page 17. All three sections seem to be filler. What is the relevance? This was a year of high numbers of salamanders but none was observed by the consultant.
- Page 18. More irrelevant stuff.
- Page 19. What is the point? This is a grade 6 field trip.
- Page 20. What is a basic invertebrate?

- Page 20. Under Impact on Aquatic Vegetation (bullet 1), the consultant states that the long-term effects on the upper Oak River watershed should be monitored over the first decade. He does not recommend the same for Salt Lake. The impacts on Salt Lake should also be a priority! The third bullet is not a scientific or measurable means of determining impact, this is high school.
- Page 21, para 1. Again, Salt Lake is ignored. The consultant is only concerned about effects downstream of Salt Lake.
- Page 21, para 4. This is a condescending paragraph and makes no sense. The flow into Salt Lake came through a ditch that should have been properly blocked in 2010 but was not. We asked the RM to put in a proper Salt Lake outlet culvert long after high waters in the Oak River system declined. The RM refused and continues to refuse to install a proper culvert. Therefore, this paragraph is nonsense. “These very folks have been opposed to the control structure and trench” because we have had no assurance that the water would not degrade the quality of Salt Lake and because we had no confidence that the drainage would be conducted in a professional way thereby protecting our concerns about excessively high water. Comments like this by the consultant seems to demonstrate a level of bias against the interests of those concerned about the integrity of the Salt Lake ecosystem.
- Page 21, para 7. The consultant again opines that the effluent is “of small consequence”. He apparently does not know that effluent from the lagoons cannot be directed to Salt Lake, which does occur during periods of high water.
- Page 22, para 1. The consultant states the land fill has been a source of “virulent rhetoric”. This is another condescending statement, indicating a possible bias against those who oppose this drainage project. The comments submitted to the RM have in fact been based on a sincere concern about the quality of Salt Lake. That is not rhetoric.
- Page 22, para 2. What is a disinterested third party? Is this party someone the consultant hired because he felt that he was not unbiased or does he consider himself to be a disinterested third party? Don’t really know.
- Page 22, para 3. This paragraph may also show some bias on the part of the consultant by virtue of its pejorative nature. He states that the water sample was taken by the old landfill where some people “claimed pesticide residue *supposedly* was leaking through the soil into the lake”.
- Page 22, para 4. The consultant again demonstrates the lack of analysis and perhaps understanding of the water sample parameters. He indicates that no indicators were found in the water samples to suggest any strong sources of pollution, pesticides or otherwise. Since there is no evidence of data analysis, it seems we are to take his word that there is nothing of concern. What does “no strong sources of pollution” mean? What does “otherwise” entail. That is not a scientific way to describe a risk. He should have discussed the various parameters in terms of the Manitoba Water Quality Guidelines and Objectives. Also, the implications of the level for each parameter should be outlined.
- Page 22, para 5. The consultant states that “the abandoned land fill does not, at present, create any detrimental effects...”. The consultant seems to be backtracking by suggesting there is no threat “at present”. It would seem that he feels that there could be some issues with the landfill in the ‘future’.

- Page 23. That is RM business.
- Page 25. The area is largely undiscovered because until last year it amounted to only a few potholes. Temporary high water has created this temporary wetland.
- Page 27, para 1 & 2. Again Salt Lake is ignored regarding the time of release. The release should only occur, first if Salt Lake is at a prescribed ideal level, if proper outlet control structures are in place and then the condition of the upper Oak River system would be considered.
- Page 27, para 4. Again the only concern of the consultant is the condition of the Oak River system. The condition of Salt Lake is not mentioned.
- Page 27, para 5 & 6. What is the point of this? Will the RM stop the flow if something changes? Not defined.
- Page 28. Not very profound conclusions of what was to be an environmental impact assessment. It essentially includes a few shots taken at some landowners, makes the assumption that the water will again get to Salt Lake in 2012 (no real basis for this if the 2010 drain is properly filled in), suggests that HWY 16 and the CPR roadbed will be threatened (no information to suggest they have been in the past).Salt
- A final point - After providing almost 20 pages of raw data, no scientific analysis was conducted.

Disposition:

Additional information was requested to address many of these comments, including operation, the outlet of South Salt Lake, water quality, and the effluent discharge route from the community of Strathclair's wastewater treatment lagoon.

**Wayne and Kathy Baker** Wayne, Kathy Baker and family would like to extend our support for this project **File: 5538.00**. We have been without our land for more than 7 years now and would really like to see something done about this crisis. We have very little land left as we are at the lowest point of what has now become North Salt Lake and could really use a solution.

Thank you for your time in this matter.

**Allan Riley** I am writing concerning Strathclair's proposal on Salt Lake drainage File: 5538.00 I am a landowner in the affected area in both Strathclair and Blanshard municipalities. Affected Strathclair land: SW 4-16-22. Affected Blanshard land: NW 33-15-22, N half of SW 33-15-22, SE 32-15-22. This land has been in our family since 1888 and I have farmed it for 30 years. For this year it is rented to Matthew Ramsey.

I have concerns about the report done by Bob Sheedy for Strathclair municipality. What qualifications does he have to do this report? Environmental background? Engineering background?

Page 8 - The premise that “modern” farming practices should supercede environmental concerns is in my opinion wrong. We are in pothole country and draining all these sloughs and potholes directly affect wildlife habitat and contribute to a lowering of the water table. In addition the effects downstream both financially and environmentally are bound to be devastating. The process of licensing draining off farmland in this area has been ignored, neglected, not enforced for many years both by the municipalities and Water Stewardship. Please see enclosed Winnipeg Free Press editorial how political this is becoming.

Page 11 – The statement that climatic changes are a large part of this water buildup is in my opinion wrong. In the 50, 60, 70s, we had more snow over winters most years, and the water buildup was not as severe. It is drainage off large farms that is the problem.

Page 14 – Reference to the area south of South Salt Lake as being prone to flooding, partly true. We have a long history on this land of spring flooding that drains down so that we could hay and pasture most if not all this land. This has not happened since EMO release started.

Page 37 – States “no alternative” – incorrect. “Proven in 2011 – no overland flooding in Oak River system” wrong – substantial flooding on my Strathclair and Blanshard property that is still there, especially Blanshard. “Pollution of South Salt Lake unfounded” – questionable. Question methodology of samples taken – who took them? There is a past, long term dump right on Centre Salt Lake that must be leaching into this watershed. There is a licence allowing Strathclair municipality to drain excess effluent from their lagoon into Centre Salt Lake but not South Salt Lake. How will this be resolved? In conclusion I question the water sample taking procedure. “Railways and highway departments are concerned about water levels” If so, where are their reports?

In economic and environmental terms this proposal would change the agricultural use and have an environmental impact on my land. There would be no or very limited haying, pasturing of this land. More importantly, the marsh lands that usually drain down every summer, would be changed to a deeper lake type scenario. This will increase the large dead zones of deep water with marginal wildlife around the perimeters. On SE 32-15-22, water cannot get away in any volume and backfloods across the south side of the quarter – more dead zones. In the past, all productive hay sloughs – not any more.

There is no natural drainage between Centre and South Salt Lake. How will the increased volume of water affect us downstream? By my calculations North and Centre Salt Lakes make up about 1000 acres. South Salt Lake is about 500 acres. Proposal is to lower North and Centre 2 metres or 6 ½ feet. This would put 6000+ acre-feet into South Salt Lake and the Oak River, Assiniboine system. In my opinion, the system couldn’t handle it without devastating environmental and economic effects. Who would regulate these levels? Municipality? Water Stewardship?

Past history: Three years ago Strathclair councilors Earl and Woodley came to our house to tell us of their intentions and get our concerns. We detailed our concerns and they never got back to us in any fashion. At this meeting Councilor Earl conceded that if they

got the project through drainage in the North and Centre Salt Lake system would increase. At this meeting Councilor Earl also said the highway (16) and CPR had no concerns with water levels.

Would we be better as a province and municipality leaving the water at its source in potholes and sloughs? Why should rural and urban people downstream have to pay for “big farmers convenience?”

Disposition:

Additional information was requested to address concerns involving water quality, South Salt Lake regulation and downstream impacts.

**Irwin Lennox** I am generally opposed to this project in many ways.

First off there are many flooding situations on farmland due to excess moisture the last few years. On our farm we have several quarters that have lost ten to twenty acres on each, in the last decade. I really do not foresee municipal council time and tax payer dollars being spent on my behalf. The Salt Lake project seems to have consumed a lot of time and dollars to the benefit of just a small handful of people.

Also, the money already spent and the future costs this will incur will be shared by all tax payers, including me. Ironically, I will share in the cost of something that will impact our land south of the South Salt Lake in a very negative way.

There is already too much water in the drainage system into the Oak River and if the proposed drain is to run after spring run-off it will make some land inaccessible all summer and flood pastures. In my case I have pasture that I lease out that has been unusable for two years now because of an "emergency cut" done that was never closed up. This pasture rent was used in the past to pay the taxes on that quarter.

If this continues I wonder how compensation will be paid in the future, as nothing has been paid in the past. I feel that compensation should be paid fairly and without delay on damages done to downstream land owners. If land is devalued by this project there needs to be more than fair compensation paid long term and these costs should be paid by the ones benefiting from the drainage, not the general ratepayers.

The cost of lowering the north lake is going to be quite expensive, so why not maintain at a decent level not at historic low levels? This water body obviously has no natural outlet so why does it need to be lowered to such an extreme?

Finally, I am opposed to this project because of the obvious damage to the South Salt Lake Recreation area. This is a place many look back fondly to time spent with family and friends. It may not be much to many people, but to those of us who have taken our kids there through the years and seen improvements to the campground and cabins it's all we have got. Unfortunately this flooding has damaged and will continue to damage a local recreation area if things are not stopped.

I genuinely hope that you will take into consideration the thoughts and rights of everyone involved not just a select few.

Disposition:

Additional information was requested to address water level and water quality issues.

**Roxanne Marks** In reply to the statement made in the local Strathclair paper, I would like to respond and say that I would agree to the proposal to go ahead with the drainage of north Salt Lake. I think this is a necessity and needs to be done. My parents who actually live right on north Salt Lake and are being flooded by the high water levels. They are seniors and it is difficult for them to deal with all this water and the stress and discouragement they have been receiving both from the municipality and the government. Again, I reiterate that this needs to be done and sooner than later, it is destroying the surrounding land and also highway 16 and the CN railway. Winter is upon us again, and if we have a large snowfall winter it will be detrimental to the lake and surrounding area. Thank you.

**Stan and Ann Marks**

I am in favor of the drainage of North Salt Lake.

**Ian and Cathy Gerrard**

It was positive and encouraging to read this report which brings factual information and common sense solutions to what has become an emotionally driven discussion. It is most unfortunate that a few individuals in a community can misinform others and cause fear and concern when studies and testing have shown clearly that there is a safe and workable solution to the Salt Lake Water Basin issue. Many people are affected and cooperation among all of us is the only way to solve the problem. Unfortunately we have suffered the impacts of this situation far longer than necessary because of misinformation and a lack of cooperation. This has prevented our local municipal government from dealing with the issue-despite what appeared to be their very diligent efforts.

We are lifelong residents and landowners around North Salt Lake, Jarema's Marsh and Nip Creek. Our residence and primary farm operation is located on the east side of North Salt Lake. As with many of our neighbors we have been affected by the flooding of farmland and roadways along these bodies of water. We have also been impacted by the high water levels killing the trees, degrading the riparian areas and negatively affecting the aesthetics of the area.

In our opinion, the ideal solution would not only manage the excess waters during times of heavy precipitation, but would also contribute to more desirable water quality and facilitate responsible modern farming practices. To this end we support the implementation of the Control Project to reduce the high water levels as proposed. With proper management this solution should eliminate the current problem of excessively high water without creating any undue hardship on those downstream. It would also

seem to be a very logical way of preventing such a problem in the future should excessively high precipitation trends continue.

The proposal does address the issue of excessive water in the Salt Lake System which is the immediate problem and we are definitely supportive of this. We respectfully ask that future consideration also be given to maintaining minimum water levels during drier periods. This would help to maintain stable, desirable shorelines and riparian areas (vs. large dried out areas) and acceptable water quality during extended dry periods. Consider that:

- Historically we have experienced more years of scarce moisture than years with excess moisture, one would wonder if the past five years might be a once in a lifetime weather anomaly.
- Most farmland in the area is managed under a zero or minimal tillage program. This is significant because it greatly reduces the total amount of run-off in springtime. During years of low snowfall the snow melt yields virtually no run-off to replenish the watercourses.
- Once the current high water levels are removed the water holding capacity of the Salt Lake System is more than adequate to handle excess water that might be generated from extreme rain or snowfall.

With this in mind we suggest that the diversion of Nip Creek into the Little Saskatchewan River may in the end prove unnecessary. If it is judged that the Salt Lake System may not handle potential inflows then, if anything, the water flow from Highway 16 and CPR should be redirected to their natural watercourses East and South of Strathclair.

We also suggest that the inflow and outflow of North Salt Lake be regulated to maintain optimal water levels and quality. Management of the upper portion of this system could have further benefits which may include enhanced recreational use of these waters and better ecological health of the system.

We are most supportive of the initiatives taken by our local Rural Municipality to resolve this issue. They have contributed time and have incurred significant costs to have water quality testing done and studies completed in an effort to find a solution that is reasonable for all. We sincerely hope that the proposal now being recommended will be implemented.

**Brent and Kim Moffat**

This is a letter in reference to the potential establishment of a drainage system for the North Salt, Middle Salt Lake watersheds. As a result of the uncontrolled land drainage in this watershed I feel it is the responsibility of local government and Water Stewardship to resolve this ever worsening issue as there is currently no adequate outlet for the collection of this runoff.

**Gerald W. Winstone** For the past two years we have had extreme flooding in our area and endured extreme damage to our land, fences pastures and arable farmlands. We have had to endure erosion to our lands, salt contamination of our haylands, loss of crops and damage to our fences and pastures. This has been done due to the excess water spilling out of the Salt Lakes.

It is my contention that we should have some compensation for these damages. If we do not receive these damages, we will have to pursue legal recourse or possibly ask for our lands to be removed from the Province of Manitoba.

I feel we are being treated as people from another province altogether. Winnipeg and Portage area receive damages for all forms of flood loss and we get nothing. I haven't had one person or any government of Manitoba official call or stop in to see what damages are being done to us on a yearly basis.

This new proposal from the R. M. of Strathclair has in my opinion many flaws. The most significant one is that there needs to be a plan for the water when it leaves the R. M. of Strathclair's border and goes into the Oak River. There must be infrastructure put in place, as well as ditches need to be cleaned and a compensation package put in place if flooding still occurs. I wanted an underground pipe system to be installed from the Middle Salt Lake to South Salt Lake with a flow control on it. We are led to believe that this will not be allowed by Water Stewardship. I have used underground tile for at least 30 years and it has been perfect. Why would anyone want to tear all that land up when a pipe underground would cost much less and do a far neater job. I will never allow the ditch to be dug thru my property. If you pursue taking this approach and decide to expropriate my land, then be prepared to use a SWAT team to do it as I will give my life up before I will see that done to me.

I sincerely believe that a great deal of the water could and should be diverted to the Little Saskatchewan River by a ditch that has been surveyed by the R. M. of Strathclair (done by Bob Sheedy.) If this water was diverted, which is fresh water, not salt water, there is no contamination of salt in any water system in Manitoba's watershed. But if the water is taken from South Salt Lake it definitely puts salt into the Oak River and then ultimately into the Assiniboine River. Fish don't like salt water and there has never been fish survive in Salt Lake for that very reason.

On closing, I think its time for a lot of us who have been adversely affected to stop paying our taxes. You owe us and until you get someone to make up for our losses, then this will be our first step to try and recoup some of the money we have lost.

P.S. I couldn't agree more with Ken's letter in the Minnedosa paper. The Municipality is caught in a very precarious position. They are at least trying to do something to alleviate this problem. The government of Manitoba has just done nothing and its their responsibility to help every person within the borders of Manitoba.

Disposition:

This letter was directed to both the R. M. of Strathclair and the Environmental Assessment and Licensing Branch. With respect to environmental matters, additional

information was requested concerning operation of the proposed outlet to address concerns over downstream effects. Compensation matters are outside the scope of the environmental assessment and licensing process.

**Tyler Marks** Just wanted voice my opinion. That being that North salt lake needs to be drained, It is ruining the land in the surrounding area. Only a matter of time before it ruins the #16 highway and the cn rail line, and washes out driveways into farms homes and land.

**Linda Little**

I am a seasonal cottage owner on the West Side of South Salt Lake. I own land and operate a grain farm in the Rural Municipalities of Blanshard and Hamiota. Our farming operation is not directly downstream; however we do share the Oak River watershed.

I have had opportunity to review the Environmental and Hydrological Assessments as prepared by Bob Sheedy. I have a few comments regarding this drainage proposal:

- 1) I could not find any suggestions for the maintenance level of South Salt Lake in the report. The level of this water body should be considered in the decision making process for controlled release.
- 2) The water levels in South Salt Lake have been excessively high in recent memory. Shoreline erosion continues to be a problem with the existing water levels. The culvert at the south end of the lake has now been replaced with a larger diameter tube. However, the elevation of the culvert is still too high to maintain the lake at an acceptable level. I would suggest that the level of this new culvert should be surveyed to ensure it meets the outflow needs for South Salt Lake.
- 3) As the outflow of this drainage project affects the Oak River watershed, I would suggest that the Rural Municipalities of Blanshard and Hamiota have adequate notice and assistance to prepare infrastructure for the change in flows. Also, as the Oak River is part of the Upper Assiniboine River Conservation District, that entity should be made aware of the controlled release.

I am aware of the tremendous issues faced by agricultural producers and local governments in carrying out responsible water management in Western Manitoba. It is my opinion that water control projects are necessary to maintain infrastructure and agricultural production capacity in this region. I believe that this can be done without excessive adverse effect on wildlife habitat, recreational users of South Salt Lake or downstream stakeholders. I would encourage the Rural Municipality of Strathclair to consider all of these interest groups as they move forward with this proposal.

Disposition:

Additional information was requested to address South Salt Lake water levels and outlet works.

**Jeremy Marks** I agree with the opening to allow the flow of the water of North Salt Lake to drain.

**Kerry Maxwell**

Regarding the submission made by Vicky Henderson and Doug Pastuck: I have had a summer home on Salt Lake since 1987. I would like to echo my concern for the preservation of the lake. I have followed with great interest all of the correspondence and commentary over the last three years and it would seem that little or no regard has been afforded the residents and producers surrounding South Salt. I would agree that a lot of the problem has been created by many years of drainage and land reclamation north of highway 16. The solutions put forth by the RM and the consultant they hired are simplistic and not based on any sound science. I would urge the RM to look very closely at the outcome of the decisions they are making. There are very few recreational areas left in southern Mb to develop. South Salt lake has provided many decades of outdoor recreation and relaxation. It would be a shame to threaten this resource.

Disposition:

Additional information was requested to address the concerns referenced in this letter.

**Rural Municipality of Hamiota**

The official reason for this e-mail is to make your department aware that the Rural Municipality of Hamiota is dealing with a drainage problem in an area called the Six Mile Slough which is along Highway 21 at SW ¼ 16-15-24 WPM. Council and area landowners are looking at doing some improvements to existing drainage and sending water to the Oak River at SW ¼ 36-15-24 WPM. A profile is attached. Council is not sure that they have a concern with the proposal but we were only made aware of this process today since it was not published in a local newspaper (Crossroads) or sent to our office.

Disposition:

The project referenced is located on an Oak River tributary well downstream of the confluence with the South Salt Lake outlet. As a result, operation of the proposed outlet will not affect the R. M. of Hamiota project.

**R. L. Biccum**

I have been spending a lot of every summer at Salt Lake for 53 years. I would like to spend a lot more. My concerns over this proposal are simple. The water quality, and water levels.

I think there are a few of us that feel that no matter what we object to, the project will go ahead anyway. That is probably because of all the dealings with the RM of Strathclair and their lack of concern for Salt Lake. Their total concern is for landowners in the area of North and Center Salt Lake, which is somewhat synonymous with the RM of Strathclair. They may not have any influence over the proposal, but they seem to do what they want anyway.

The water analysis charts in the proposal would need some explanation for me to understand. I am supposed to take Bob Sheedy's word that it is all ok. Can't really see how that's possible. For the stuff I did understand, I liked the readings for Salt Lake better than the other 2. The north end of Salt Lake smelled like a lagoon by mid August 2011. That has never happened before. I have to think that the water we got from the north had a lot to do with it. The fact that North Salt lake has the effluent from Strathclair in it bothers me a lot. That fact alone should have this proposal in jeopardy right from the start. High water in the spring might have that lake in trouble, but there are unlicensed drainage issues from private land there that don't help that situation. The effluent was supposed to be contained. I don't think we are supposed to be swimming in it.

The proposal does not address the required water levels on Salt Lake, but really specific for the North and Center lakes. There is a need for specific water levels of Salt Lake to be addressed and maintained. That may require a better control structure than just a 36 inch culvert. I could see the RM letting the water in to Salt Lake at a rate that can't be released fast enough and more flooding would result. North and Center Salt lake would be their main concern. Water release guidelines might be stretched if they have to meet their goals. Always easier to ask forgiveness than permission. There is an obvious water level for Salt Lake that has worked for decades. There was little erosion and no flooding of cottage areas. There needs to be a control structure that can maintain that level.

I keep going back to the effluent in North Salt Lake that is supposed to be contained.

I am sure I am not the first to indicate mistrust and suspicion when there will be dealings with the RM of Strathclair. They appear to have no regard for Salt lake. Compared to their flooded farm land up north, a recreation lake might not mean much to them. It's just a means to an end. So any proposal that affects water quality and water level has to be spelled out very well to protect us around Salt Lake. I am not convinced that there isn't another route to drain what needs to be drained. Government spends a lot more money on a lot less every day. Bob Sheedy made my mind up for me in the proposal, that Salt Lake is the most cost effective route. Maybe not. There is a lot to consider there. Not just the initial construction cost.

Disposition:

Additional information was requested to address operation, including South Salt Lake levels, and to address the discharge route for lagoon effluent.

### **Tracy Baker**

I am writing to you in response to the letter issued in the matter of the construction of a gated culvert that would route the water in the RM of Strathclair to a different area than it is currently. This culvert would reduce the water level in North Salt Lake, apparently by as much as 2 meters. I am strongly in favor of this happening! The current set up not only causes issues with sitting water but it will cause a yearly flood on the land of a number of people that live in the area. This is simply not a suitable situation when there is an alternative option. Living on property that is sitting with at least 2 meters of excess water is not something that anyone should have to deal with (my parents are in this situation now and have been for a number of years) and the alternative to redirecting the water has very little impact on the community, despite the arguments.

Please accept this as a request to construct the new gated culvert.

### **Susan Moffatt**

In regard to the application by the Rural Municipality of Strathclair based on the Hydrological Assessment for Flood Control Planning and Environmental Assessment submitted by Bob Sneydy, please be advised that I wish to express my concern.

Background Information: My husband and I own property directly affected by the proposal. Since purchase of this property we have rotated cereal crops, oil seeds and have sowed alfalfa and grass mix on the land. Presently, we bale two cuts of hay, and fall graze 60-100 head of cattle on this half section of productive agricultural land. With retirement plans in the future we hope to explore the following options: returning the land to cereal crops and oil seeds, renting, selling the land which could claim organic status, or developing lake front property for recreational use. We enjoy our property - horseback riding, canoeing, kayaking, bird watching, x-country skiing, snow shoeing and skidooring are some of the recreational pursuits we share with family and friends.

I feel that the proposal has had and will continue to have a negative impact on the value of the land downstream from Middle Salt Lake. To begin, does the document adequately address the concern about water quality? The preception by some in the community is that the water quality in South Salt Lake has been compromised. Pollutants from the lagoon, dump site and an old abattoir have or will flow downstream into the lake. The original license issued to the R.M. Stated that lagoon water was to be released into North Salt Lake, and should not be released into South Salt Lake. In 2007, a basic water analysis showed that in 19 parameters tested six were similar but in thirteen there was a difference two to four times higher in concentration. In 2009 Water Stewardship reported, "more information of water quality in these three lakes is required to

assess potential impacts of water diversion from North or Middle Salt Lakes to South Salt Lake (Salt Lake)...through implementation of a seasonal monitoring program including sampling for general chemistry, metals, and nutrients in spring, summer, fall and winter." The report concluded stating, "given the differences in water quality observed in April 2009 between the three lakes, potential affects of water diversion could include impacts on the aquatic community, recreation, and use of water from South Salt Lake (Salt Lake) for drinking, livestock watering or irrigation/garden watering." Will the R.M. Follow up with water analysis as recommended by Water Stewardship?

Mr. Sneydy has included tables of data in his report and general comments--- he has not included a summary or conclusions based on his raw data. A comparison of the three samples would be interesting. Does an effort have to be made to restore and maintain public confidence in the water quality of Salt Lake?

Most recently in the EMO Release in 2010 a ditch was dug across a neighboring quarter and water drained through our property to Salt Lake. After the two week period, Water Stewardship requested the ditch be closed. Unfortunately the drain was not adequately filled. The water continues to drain across our property. Access to sixty-five acres of land requires four wheel drive. Three newly constructed beaver dams have been removed to prevent flooding and pooling on our land. Water continues to flow eroding grass runways, carrying and depositing alkaline and silt. A healthy wetland of sedges has been destroyed. Has the value of the property been compromised?

Previously, the Council removed a berm diverting water from running into middle Salt Lake across E27-16-22 and E22-16-22 into South Salt Lake. In our particular situation, this large volume of water has increased overland flooding, ditches have been excavated, and culverts have been removed and replaced. Consequently, fences require constant care, pasture management is a headache, and erosion has become a problem.

Expropriation of land sets a precedent for future infrastructure projects. Access and maintenance issues need to be documented. Communication with the land owner is imperative to avoid future conflict.

The water control program suggested includes controlled releases in Spring and Fall. In my opinion, unless drainage into the reservoirs is reviewed, accessed and new drains curtailed the problem of excess water will continue. Who will monitor and be held accountable for drainage which will continue to cause erosion problems of shorelines and beaches? The plan while it mentions levels for North and Middle Salt Lake does not recommend a minimum or maximum level for Salt Lake. Culvert size and placement have been a cause for concern for cottage owners and landowners downstream. Is water being recklessly drained at the expense of those downstream?

In conclusion, it is my opinion that the R.M. of Strathclair is determined to drain water from North and Middle Salt Lake into Salt Lake. I have advocated that this solution only creates problems downstream. To me the plan is incomplete. Would it be proactive to limit the landowner drainage into North and Middle Salt Lake, implement Phase 2 and

Phase 3 of Hydrological Impact Study(page 38),and reevaluate the situation? Although this may be a short term solution, it enables the Council time to develop a long term vision concerning water management within the Municipality. If Council is committed to practising environmental stewardship, this will allow them the time to consult with water management specialists, brainstorm ideas with other municipalities/conservation districts, collaborate with Water Stewardship, liaison with landowners and hire the personnel to maintain the infrastructure. Maybe then, the project could be completed to meet the needs of people upstream and those living downstream.

Disposition:

Additional information was requested to address water quality, lagoon effluent, and the regulation of South Salt Lake, including levels and the outlet works.

### **Reg Moffatt**

Over the last number of years highways and roads have changed the flow of water. Farmers have cleared land and trees, ditched potholes and drained sloughs. Now when we get any amount of water in the form of rain or snow, water runs off quickly because there is nowhere for it to be stored and absorbed. This water instead ends up in large lakes/marshes or at the first farm that has no drainage in place. When these areas fill the answer always seems to be dig another ditch.

In the R.M. of Strathclair the water east of the town has been rerouted to run along Highway 16, through the town, then west into Middle Salt Lake. As more land is drained the water volume is greater and faster. Since 1999 the water has filled Middle Salt Lake and continued to be a problem. The R.M. of Strathclair decided in 2005 to reroute this water through my pasture (27-16-22), under the road and into my other pasture (22-16-22) to Salt Lake. Salt Lake is a popular recreation area providing a campground and beach. It is a summer home for many cottage owners. In my opinion, this water changed the quality and the depth of Salt Lake. The lake normally spring fed with some runoff was flooded. The volume was so large that culverts were replaced with new ones because they could not handle the volume of the flow.

For the last six years this large volume has not flowed into Middle Salt Lake. This made no difference in the level of Middle Salt Lake. In fact the level has risen to unheard of levels. The Lake and marshes continue to grow in size feeding into Middle Salt Lake.

We need to find reservoirs on our own land to hold water, or the process will continue flooding our friends and neighbors downstream.

The RM. of Strathclair's proposed drain across my land will only be another ditch that causes trouble for the people and property downstream and it will not relieve the flooding in Middle Salt Lake. Please stop this proposal and guide the R..M. of Strathclair find a solution to this water problem.

## Disposition

Additional information was requested to address the operation of the proposed outlet, outlet works and water quality on South Salt Lake.

### **Jim and Carol Fortune**

We are writing to express our concerns over the planned water project that would affect South Salt Lake (SSL). Our interest in the proposed project comes from owning a cabin on the south end of the lake.

We have concerns with regards to draining water from where town waste water has been discharged and the possibility of the effects of contaminants over a longer term from the area of the former dump. Does limited testing during high water levels reveal the true picture? Would contaminants appear more concentrated at lower water levels? Consistent testing and tracking of water quality by an independent company must be done at more regular intervals in all three lakes and over a longer period to ensure the water quality of SSL is not compromised. If fluctuations in any of the lakes' water samples appear, the reasons need to be investigated and reported upon.

Much is reported on the plans for lowering Center and North Salt Lakes if water levels are high; however, what plan is there for maintaining a sought-after level for South Salt Lake? If the Center and North lake levels are high, will there be a release regardless of SSL's level? If the Oak River system cannot handle any additional water, does SSL become the new reservoir?

Though we feel there must be further studies and more information before embarking on this project, any work must start with the culvert on the west side of SSL being properly installed and SSL being restored to its original or optimum level. As well, a gate on the South Salt Lake culvert should be installed to maintain an optimum level.

Our family, like many others, has enjoyed the numerous recreational benefits of SSL, including swimming lessons (a life skill!). It is hard to believe the RM does not take greater interest and pride in protecting this 'gem' of the municipality!

## Disposition:

Additional information was requested to address South Salt Lake outlet works, water quality issues, and the lagoon effluent discharge route.

### **Little Saskatchewan River Conservation District**

The Little Saskatchewan River Conservation District has reviewed the above proposal and submits the following comments.

The Minister of Water Stewardship recently approved the Arrow-Oak River Integrated Watershed Management Plan (IWMP). Within the IWMP, stakeholders from within the watershed shared their concerns about surface water management in the watershed and one area noted in particular was North Salt Lake. This translated into the following goal and objective. Further information about this goal can be found in the enclosed IWMP.

Goal: To manage water from the top to the bottom of the watershed to minimize damage to natural ecosystems and human activities.

Objective: Prevent flood damage on North Salt Lake, Six Mile Slough, and Shoal Lake.

The unusually high water levels in the Salt Lakes region have been a concern of landowners and the Rural Municipality of Strathclair for several years. Both sides for and against the concern and the resolution of it have contacted the Little Saskatchewan River Conservation District for assistance. It is, however, not within the Little Saskatchewan River Conservation District mandate to conduct drainage. Drainage being one of several tools in surface water management. The Little Saskatchewan River Conservation District also has no regulatory authority and in fact, has to acquire the same licenses and approvals as any other organization or landowner.

The Little Saskatchewan River Conservation District supports the timely resolution of this problem acknowledging the efforts taken by the Rural Municipality of Strathclair. In the absence of any alternative solution, the Little Saskatchewan River Conservation District supports the application as a workable solution recognizing that it will take buy-in and commitment from all stakeholders.

**COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

**Manitoba Conservation – Sustainable Policy and Resource Management Branch and Land Programs Branch** No concerns.

**Manitoba Conservation - Parks and Natural Areas Branch** No comments.

**Manitoba Conservation – Aboriginal Relations Branch** Even though the Salt Lake water level control project only affects private land owners, ARB maintains that every department that undergoes an activity must fill out the consultation initial assessment form attached.

Disposition: Consultation requirements are considered prior to advertising a project for public and TAC comment, and are addressed later in this project summary.

**Manitoba Conservation – Air Quality Management Section** No air quality-related comments.

### **Manitoba Water Stewardship – Planning and Coordination Branch**

Manitoba Water Stewardship has reviewed the referenced file, forwarded for comment on September 15, 2011.

- Manitoba Water Stewardship requires an Environment Act Licence to include the following:
  - The Licencee is required to submit an application for a Water Rights Licence to Construct Water Control Works, prior to the commencement of any construction.
    - A contact person is Mr. Ed MacKay, C.E.T., Senior Water Resource Officer, Water Control Works and Drainage Licensing, Manitoba Water Stewardship, 1129 Queens Avenue, Brandon, Manitoba R7A 1L9, telephone: (204) 726-6226, email: ed.mackay@gov.mb.ca.
- Manitoba Water Stewardship submits the following requirements:
  - The proponent must obtain written consent from all affected landowners before an Environment Act Licence is issued. A map displaying the affected lands and their owners must be produced to assist in securing appropriate consent from affected landowners.
  - A detailed plan of the proposed control structures (penstocks), their operating rules, and channel slope and erosion control methods must be provided.
  - All field drains that will be tied into the proposed project through culverts C2, C3, C4, and C6, must be licensed before the commencement of the installation of the culverts.
  - A reference is made to using excavated material to fill in low areas. Wetland filling is not permitted without authorization, the designated spoil sites must be identified.
- Manitoba Water Stewardship submits the following recommendations:
  - Manitoba Water Stewardship recommends retrieving water quality samples in the main channel of the Oak River upstream and downstream of the current outflow from the South Salt Lake basin.

- Manitoba Water Stewardship recommends that water quality analysis shall be conducted by a laboratory accredited by the Canadian Association for Laboratory Accreditation Inc.
- Manitoba Water Stewardship recommends omitting proposed culverts C2 and C4 until drainage is authorized, as it is not part of this proposal.
  - Note: There is reference to providing better drainage for the Winstone property on the NW 22-16-22. The proposed culverts C2 and C4 appear to convey water into the proposed outlet via unauthorized drainage channels.
- On page 35, the proposal advocates plugging or removing the existing culvert through Bakers Road, Manitoba Water Stewardship recommends removal. If the culvert becomes “unplugged” outside of an agreed period of operation, impacts to agriculture could result. Manitoba Water Stewardship recommends that any culverts installed through the road or berm adjacent to the channel south of Bakers road shall be implemented at prairie elevation and shall not facilitate unauthorized drainage from the NW 22-16-22.
- Manitoba Water Stewardship submits the following concern:
  - With respect to water quality: In the absence of the analysis of the effects of elevated levels of Aluminum, Iron, Manganese, Uranium, Calcium, Sodium, Sulphur, Potassium, Magnesium, Salinity, and conductivity, the proposal indicates conducting years of monitoring after construction is completed. The limited water testing that was conducted does not properly explain the effects of adding several hundred acre-feet of water into South Salt Lake and downstream into the Oak River system. The significance, stating the tolerable level of glyphosate, is not clear without elaborating on the test results, if they are available. The proposal does not adequately explain the location where the water samples were retrieved on the Oak River system.
  - With respect to the proposed target water level of 566.00 metres above sea level, how does this level compare to the levels of the railroad crossing and Provincial Truck Highway No 16 culvert? How does it compare with the historic median water level (based on photo history)? What does the abbreviation HAE mean?
  - Under the explanation of alternatives, Route No. 5 was discarded because Manitoba Water Stewardship does not allow underground systems. This statement is not correct. Manitoba Water Stewardship has licensed several tile drainage systems in the recent past.

- Numerous references are made to the uncontrolled overflow of Baker Road in 2011 and how this proposal would prevent this flow from reaching South Salt Lake. In 2010, the proponent supported the construction of a channel that resulted in a significant flow to South Salt Lake.
- On page 32, the statement of a 1 metre drop in elevation over a mile is deemed to be a low slope and not prone to erosion. Manitoba Water Stewardship supports that a slope of less than 30 centimetres per mile would be considered a low slope. The proposed slope of 1 metre per mile could result in erosion if mitigation measures are not implemented. Additional erosion control measures such as drop structures or geotextile may need to be implemented.
- On page 38, the proposal refers to diversions from one watershed to another under a “social exemption.” Manitoba Water Stewardship’s current policy regarding the authorization of water control works is that approval will not be “given for drainage which crosses a watershed boundary unless substantiated by science, engineering, and social needs.”
- On page 9, it is mentioned that agricultural operations will not be affected by this proposal. Impacts may occur to agriculture, downstream of South Salt Lake as a result of this proposal. The capacity of the Oak River system downstream of South Salt Lake has been identified as poorly defined, low lying, and prone to flooding. If this is the receiving watercourse and it is prone to flooding, there is a high potential for flooding impacts. The proposal does not mention how the downstream channel will react to outflows from the proposed 90-cm outlet culvert. The proposal indicates that some pasture and cropland may be affected during the operating period of releasing floodwaters from Salt Lakes.
- An indication is made that additional freshwater being flushed through the system would become a downstream benefit; there is no evidence to support this thought.
- The proposal identifies the southern culvert, located on Riley Road, as a possible indicator pipe for outflows from the project. This culvert is located on a 1<sup>st</sup> order drain and this culvert may not serve as a good indicator.
- A statement is made that this proposal would mitigate shoreline erosion along South Salt Lake. When compared to natural conditions that would preclude outflows from North and Central Salt Lake, this does not appear possible.
- To what height would the service road be armoured to in order to maintain the integrity of the embankment?

- The proposed development plans to release of excess water from the salt lakes around Strathclair into Oak Creek. Available information indicates Oak Creek itself is not used as a source of drinking water, but it empties into the Assiniboine River at the Sioux Valley Indian Reserve. Downstream of this point, the Assiniboine River is used as the water source for several large communities including Brandon, Portage la Prairie and the Cartier Regional Water Cooperative. The limited water analysis results given with this proposal indicated that arsenic levels in the lake water are significantly above recommended background levels for surface water. Manitoba Water Stewardship has recently observed small but noticeable increases in arsenic levels in raw water in the Assiniboine River. These increased arsenic levels could cause water systems to exceed the maximum allowable concentration of arsenic in their treated water. The proposal did not mention how the discharge of Salt Lake water would increase levels of minerals such as arsenic in the Assiniboine River. While the effect may not be significant, Manitoba Water Stewardship needs this information.
- Manitoba Water Stewardship submits the following comments:
  - Manitoba Water Stewardship does not object to this proposal, at this time.
  - The proponent needs to submit an application for a Water Rights Licence to Construct Water Control Works and provide all of the requested information, soon to allow a complete assessment of the proposed development.
  - The proponent needs to be advised of the need to comply with Manitoba Water Stewardship's Drainage Policy:
    - The net loss of semi-permanent or permanent wetlands shall not occur. Wetlands are defined as areas that are periodically or permanently inundated by surface or ground water long enough to develop special characteristics including persistent water, low-oxygen soils, and vegetation adapted to wetland conditions. These include but are not limited to swamps, sleughs, potholes, marshes, bogs and fens.
      - A proponent shall establish and maintain an undisturbed native vegetation area with at least a 30-metre width.

**Disposition:**

These comments were provided to the proponent for information. Several of the requirements mentioned are requirements for a Water Rights Licence to Construct Water

Control Works, and not requirements of an Environment Act licence. A number of these comments can be addressed through licence conditions, and additional information was requested to address several design and monitoring items.

**Manitoba Innovation, Energy and Mines, Mines Branch**

No concerns.

**Manitoba Local Government – Community and Regional Planning Branch**

Please be advised that I have reviewed the above referenced proposal and offer the following comments for your review and consideration.

The intent of this project is to construct a water drainage trench (and its associated control structures, berms and access road) from the southerly limit of North Salt Lake southward across part of Sections 27 and 22 of Township 16, Range 22WPM. Said water drainage trench would terminate in an intermittent pond located immediately north and west of and feeding into South Salt Lake from which excess flows will be conveyed into the upper reaches of the Oak River system via an existing outlet on South Salt Lake.

COMMENTS:

1. According to the South Riding Mountain Planning District Development Plan By-law No. 01-DP-2010 and RM of Strathclair Zoning By-law No. 15-86, the subject lands are designated RURAL / AGRICULTURE AREA and zoned “A80” – General Agriculture respectively. The proposed development is generally consistent with the requirements of these planning documents.
2. From the TAC circulation cover letter attached to this project, it was not possible to determine whether this project proposal has been circulated to the Little Saskatchewan River Conservation District for review and comment. An integrated watershed management plan (IWMP) has been adopted for this area and the project proponent is therefore encouraged to consult with the watershed planning authority to determine if this project is consistent with the goals, priorities objectives and policies of the IWMP now in effect.
3. The preferred route identified for the proposed development would see the water drainage trench, associated berming and proposed access road located on what is at the present time privately owned lands. The proposal makes no clear indication of the means by which the proposed development is to be accommodated along the preferred route other than to mention the possibility of expropriation. This should be clarified by the project proponent. An alternative option the proponent may wish to consider is an easement agreement and plan of easement registered as a caveat on the title to all affected landowners subject to their agreement. In any case, a key consideration should be whether the proponent intends to establish, operate and maintain the proposed access road as a private gated road or an open public road.

4. The preferred route for this development will require crossing Provincial Trunk Highway No. 16, a municipal road, and a Canadian Pacific Railway right-of-way. The proponent should therefore consult with Manitoba Infrastructure and Transportation, the RM of Strathclair and Canadian Pacific Railway regarding any permits or approvals which may be required dealing with the location of all proposed crossings, timing of construction, traffic control and safety measures etc.
5. The proposed development has the potential to impact other existing or proposed above and underground utilities in the vicinity of the proposed development such as telephone, hydro and/or natural gas infrastructure and the proponent should therefore be encouraged to consult with and co-ordinate the installation of the proposed development with all other owners/operators of other infrastructure facilities in the area to minimize disruption of service, and to provide for public safety during construction.
6. The proposal does not include any plans concerning the post construction establishment of a corridor of native vegetation along the banks of the proposed drainage trench and/or its upslope riparian corridor or along the limits of the former landfill which have already been eroded as a result of previous flooding and high water events. I therefore encourage the proponent to consult with staff from Manitoba Conservation and Manitoba Water Stewardship about the potential benefits of establishing a natural shelterbelt adjacent to the proposed drainage trench as this would serve to promote bank stability, minimize erosion and promote fish and wildlife habitat.
7. The proposal suggests converting the Salt Lakes to “designed reservoirs” (see p. 13 of the proposal for further information). On this point, perhaps staff from Manitoba Water Stewardship and/or Manitoba Conservation can offer some thoughts concerning the possible benefits of having the Salt Lakes and the immediately surrounding area being regulated under the “Designated Reservoir Area” Regulation MR 22/88R. From a planning perspective, one benefit of such an approach would be that all new development within the area subject to the regulation would require a permit from the Minister of Water Stewardship. This would be useful in helping to guide and inform the location additional cottage and recreational development that may be proposed in the future bordering portions of South Salt Lake.
8. Staff from Manitoba Water Stewardship, Manitoba Conservation and possibly the Federal Department of Fisheries and Oceans are best positioned to offer comments regarding the need for flood level, fishery habitat and/or salinity monitoring instrumentation within and immediately downstream of the limits of this project area that may be useful in informing controlled releases of water into the Oak River system during high water events.

Disposition:

The Little Saskatchewan Conservation District provided comments on the project as noted above. Land acquisition for the project will be the responsibility of the proponent. Although the project regulates water through a provincial trunk highway and a railway bridge crossing, all crossing works would be constructed on road allowances owned by the proponent or on land to be acquired by the proponent. Information on other infrastructure crossing requirements will be the responsibility of the proponent, but the need to check on these requirements will be forwarded to the proponent as a reminder. Revegetation can be addressed through licence conditions. "Designed reservoirs" is a term used in the proposal by the consultant; this term is not related to Designated Reservoirs as defined in the Designated Reservoir Areas Regulation under the Water Resources Administration Act. Monitoring requirements can be addressed as licence conditions.

**Canadian Environmental Assessment Agency** I have undertaken a survey of federal departments with respect to determining interest in the project noted above. I can confirm that the project information provided has been distributed to all federal departments with a potential interest. Based on the responses to the survey the application of the *Canadian Environmental Assessment Act* (the Act) by a federal authority is required for this project. I have enclosed copies of the received responses for your file.

Transport Canada (TC) has reviewed the project information and determined it is likely a Responsible Authority for this project. Based on the information provided, the proponent will likely require an approval under Section 5(2) or 5(3) of the *Navigable Waters Protection Act* (NWPA) and TC will likely require an environmental assessment under Section 5 of the Act. TC requires additional information from the proponent and the proponent is required to submit an application to the Navigable Waters Protection Act (NWPA). Once TC has received the NWPA application and additional information it will be able to determine its role in the environmental assessment process. The contact person for TC is Jenifer Van de Vooren. She can be reached by phone at (204) 983-1140 or by email at [Jennifer.Vandevooen@tc.gc.ca](mailto:Jennifer.Vandevooen@tc.gc.ca). Please see the response from TC attached for your file.

The Department of Fisheries and Oceans Canada (DFO) has reviewed the project proposal and determined the effects of the project will not result in destruction of fish. Should fish mortality occur, a Section 32 Fisheries Act Authorization may be required. Please see the attached email from DFO. The contact for DFO is Sherri Clifford. She can be reached by phone at (204) 622-4073 or by email at [Sherri.Clifford@dfo-mpo.gc.ca](mailto:Sherri.Clifford@dfo-mpo.gc.ca).

HC has indicated it is not a responsible authority (RA) for the project; however HC could contribute expert knowledge in the area of human health to an RA if requested. The contact person for HC is Rick Grobowecky. He can be reached by email: [Rick.Grabowecky@hc-sc.gc.ca](mailto:Rick.Grabowecky@hc-sc.gc.ca).

Environment Canada (EC) has not provided a response yet to the federal review process. You will be informed in writing when EC submits a response to the Agency.

The project information was also shared with Aboriginal Affairs and Northern Development Canada. No other federal interest in this project was received.

### **Environment Canada**

Environment Canada (EC) has reviewed the Hydrological Assessment for Flood Control Planning and Environmental Impact Assessment (EIA) prepared by Bob Sheedy for the above proposed project. EC is not a Responsible Authority (RA) under the *Canadian Environmental Assessment Act (CEAA)* because:

- a) EC is not a proponent of the project and is not conducting any act or thing that commits the department to carrying out the project in whole or in part;
- b) EC is not making or authorizing any form of payment or other financial assistance to the proponent for the purpose of enabling the project to be carried out in whole or in part;
- c) EC does not administer any lands involved in enabling the project to be carried out in whole or in part; and
- d) EC does not issue a permit, license, grant an approval or take any action for the purpose of enabling the project to be carried out in whole or in part.

EC is prepared to provide specialist advice or expert information or knowledge on the proposal as per subsection 12(3) of the *CEAA* with a focus on federal statutes, regulations, policy, and associated program concerns as defined by EC's mandate. At this time EC has the following four comments:

#### (1) Migratory Birds

The section titled Impact on Wildlife Conclusions, page 20 of the EIA, states that, "All three lakes are an important area for migratory waterfowl and shore birds". The *Migratory Birds Convention Act* (MBCA) protects migratory birds and their eggs and nests. EC would like to remind the proponent that the clearing of any vegetation or construction in areas where migratory birds may be nesting should be planned outside the May 1 to July 31 time period. If clearing or construction must take place within this timeframe, the proponent must hire a qualified avian biologist or naturalist to survey the area and confirm that no active nests are present. If nests are found or indicated nests then they should be provided with a species suitable buffer until the young have fledged.

The proponent should also be reminded that the deposit of oil, oil wastes, or any other substances that are harmful to migratory birds in any area frequented by migratory birds is prohibited.

#### (2) Species at Risk

The section entitled Impact on Wildlife (Mammalian), page 17 of the EIA, states that, "No rare or endangered mammals were observed". The proponent does not indicate whether or not a species at risk survey was conducted by a qualified wildlife biologist. The proponent also fails to mention if a survey for rare and native vegetation was

conducted. **EC recommends that a survey for rare and native vegetation is conducted for the proposed project area by a qualified biologist. EC requests the opportunity to review the survey results and the corresponding proposed mitigations.**

Environment Canada reminds responsible authorities of their responsibilities under section 79(1) and 79(2) of the *Species at Risk Act*.

"Every person who is required by, or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed species or its critical habitat."

"The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans."

(3) Land and Vegetation

The section entitled 'Overview of Proposed Trenching and Maintenance Development', page 29, states that, "a trench be excavated spanning the distance from the south end of Center Salt Lake... A service road would be built with part of excess excavation material to create a protective berm along eastern flank of trench". EC is unclear as to how much land will be affected by the excavation of the trench and the construction of a service road. EC does not recognize the necessity of the protective berm along the eastern flank of the trench. **EC requests a description of the berms purpose as well as information regarding when the service road will be used and who is expected to have access to it. EC requests a project description that details, but is not limited to, : the project schedule, the amount of land that will be impacted by the project, the amount of clearing that will be done, how much vegetation will be removed, the length of the completed trench and access road, the proximity of any construction activities to water, and the necessary corresponding mitigation.**

EC would also like to draw the proponents attention to the section entitled 'About the 2 Main Maps', the two main maps referenced in this section were not included in the Hydrological **Impact** Study nor the Environmental Impact Assessment. **EC request the opportunity to review the maps described in the above mentioned section.**

(4) Water Quality

With respect to construction activities and sedimentation, the proponent is reminded of Subsection 36(3) of the *Fisheries Act* that states:

"Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or any place under

any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water."

Given that, despite any approvals that may be issued, there is no authorization for the deposit of material such as noted above under the *Fisheries Act*. The depositing of such substances would be in contravention of the general prohibition. Therefore, given further that subsection 78(6) of the *Fisheries Act* also indicates that:

"No person shall be convicted of an offense under this Act if the person establishes that the person

a) exercised all due diligence to prevent the commission of the offense...",

It would be prudent for the Responsible Authority to ensure the proponent demonstrates that all reasonable measures to prevent the deposit of deleterious substances are being exercised. As such, it is recommended that the proponent document and demonstrate the dynamic application of best practicable technology, including mitigation technology and the use of best management practices for the proposed construction. EC looks forward to continued dialogue and co-operation with respect to this Project. EC may also have additional questions and recommendations upon receipt of the above requested information. If you have any questions, please call Meghan Thomson at (204) 984 3316 or me at (306) 780-6401.

Disposition:

Most of the items discussed can be addressed through licence conditions.

Additional information on channel details are provided in Maps 1 and 2. These maps will be reviewed with EC staff and any remaining concerns will be identified for followup with the proponent.

### **ADDITIONAL INFORMATION:**

Additional information was requested on November 24, 2011 to address numerous comments received on the Proposal. A response was received in March, 2012, and further additional information was received on October 15, 2012. These responses are attached. They provide detail on outlet structures, water levels and operation for South Salt Lake. It is noted that the target level for South Salt Lake was established in October, 2012 in response to discussions with South Salt Lake landowners – the additional information of March, 2012 did not adequately address landowner concerns.

The additional information has been incorporated in a draft licence in more concise form in licence sections dealing with project scope and operation.

### **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 Salt Lakes Water Level Control Project proposes an outlet route from North and Centre Salt Lakes to South Salt Lake through privately owned agricultural land. The project works are small in size and would not affect any treaty or Aboriginal rights or resource use. The water bodies proposed to be regulated by the project are relatively small in size and surrounded by privately owned agricultural land. Their regulation would not affect treaty or Aboriginal rights or resource use.

The nearest First Nation to the project location is the Keeseekoowenin First Nation, which is approximately 11 km from the project area and in a different watershed (Little Saskatchewan River.)

As treaty or Aboriginal rights would not be affected by the project, it is concluded that Crown-Aboriginal consultation is not required for the project.

**RECOMMENDATION:**

Concerns with the original Proposal for the project have been addressed through additional information and 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 Western Region of the Environmental Compliance and Enforcement Branch.

**PREPARED BY:**

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December 1, 2011 Updated June 27, 2013  
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