The following are the minutes of the Lake Erie Region Source Protection Committee meeting held on Thursday, June 4, 2009 at the Italian Canadian Club, 135 Ferguson Street, Guelph, ON.


Members Regrets: M. Ceschi-Smith, P. General, A. Henry, K. Hunsberger, B. LaForme, I. Macdonald, C. Martin, L. Perrin, D. Woolcott,


Liaisons: A. Dale, Source Protection Authority Liaison

Region Management Committee: T. Marks, KCCA

Staff: S. Cooke, GRCA; P. Dragunas, CCCA; J. Etienne, GRCA; S. Glauser, GRCA; C. Linwood, GRCA; L. Minshall, GRCA; J. Robertson, LPRCA; T. Ryan, GRCA; T. Seguin, GRCA; S. Shifflett, GRCA; E. Vanhooren, KCCA; C. Walsh, City of Guelph; G. Wheeler, City of Guelph; A. Wong, GRCA

Also Present: A. Davidson, Brant County; R. Maric; J. Pickering; P. Wilson, Haldimand County

1. **Call to Order**

   C. Ashbaugh called the meeting to order at 1:10 p.m.

2. **Roll Call and Certification of Quorum – 17 Members Constitute a Quorum (2/3 of members)**

   The Recording Secretary called the roll and certified quorum.

3. **Chairman’s Remarks**

   C. Ashbaugh welcomed members, staff and guests and noted the following:

   - The Lake Erie Region Management Committee met on May 21, 2009.
• The quarterly Chairs’ meeting took place on June 1 and 2, 2009. The meeting included a workshop to evaluate concerns and perceptions regarding the Source Protection Planning process. C. Ashbaugh concluded that the Lake Erie Region is operating under an impressive model. He summarized that this region has been developing a solid foundation for Source Protection Planning since 2003, and because of the positive relationships and solid framework, this region is operating well.

• The committee was provided with a copy of the letter sent from C. Ashbaugh to Ian Smith, Director of the Source Protection Programs Branch, in response to the Long Point Region and Grand River Terms of Reference modifications.

• The Lake Erie Region will have an interim provincial liaison for the next several meetings. C. Ashbaugh noted that the inconsistency with Ministry liaison representation has not been ideal.

• EcoFest is taking place on June 5, 2009 at 6:30 p.m. at the Centre for International Governance Innovation in Waterloo.

4. Review of Agenda

C. Ashbaugh noted that a revised agenda was distributed with additional correspondence in section 9. a).

\[
\text{Moved by: R. Krueger} \\
\text{Seconded by: J. Laird carried unanimously}
\]

THAT the revised agenda for the Lake Erie Region Source Protection Committee Meeting of June 4, 2009 be approved.

5. Declarations of Pecuniary Interest

There were no declarations of pecuniary interest made in relation to the matters to be dealt with.

6. Minutes of Previous Meeting – May 7, 2009

J. Oliver asked if the final Tier 2 Water Budget report for Long Point Region has been submitted to the Ministry. J. Etienne replied that Ministry submission of the report is pending final sign-off from the peer review team. J. Oliver asked if the report can be sent to the Ministry without their sign-off. J. Etienne responded that the guidance indicates that the report must be peer reviewed; J. Etienne will provide J. Oliver with confirmation once final signoff and Ministry submission is complete.

\[
\text{Moved by: B. Ungar} \\
\text{Seconded by: J. Oliver carried unanimously}
\]

THAT the minutes of the previous meeting of May 7, 2009 be approved as circulated.
7. Hearing of Delegations

None

8. Presentations

a) Guelph Wastewater Treatment Plant Optimization Process, Gerry Wheeler, Optimization Program Facilitator

G. Wheeler provided a follow up presentation to the committee’s Guelph Wastewater Treatment tour. He emphasized that the optimization process focuses on the need for consistent process control.

J. Harrison asked if, after having closed half of the plant to discover its bottlenecks, the wastewater treatment plant intends to close the other half of the plant to identify similar opportunities for optimization. G. Wheeler responded affirmatively, and expanded that wastewater treatment plants are expected to demonstrate that their facilities can adjust to change and switch to standby. The Guelph Wastewater Treatment Plant has demonstrated that it can be fully back in service after 24 hours.

J. Harrison inquired what the cost implications are for undertaking this optimization process. G. Wheeler replied that the cost is the expertise and staffing to undertake the optimization. The end cost of the additional staffing is offset by the cost savings of the optimization; so the cost to treat the water remains the same. Optimization is an investment in human infrastructure as opposed to building infrastructure. The cost of building a new plant is $20 million. With optimization, the building of a new plant will not be necessary.

J. Oliver asked if the additional monitoring resulting from the optimization is temporary, or a permanent part of the process. G. Wheeler confirmed that the daily monitoring process will remain more substantial than in the past. However, staff have become accustomed to the additional requirements and now concur this approach is a best practice. Further, operators have been provided with a program that requires only one data entry site which has reduced the demands of the additional monitoring expectations. C. Walsh elaborated that the data previous to the optimization was not in a useful format; operators now have 1600 data points available for interpretation in a useful, real-time manner.

R. Krueger wondered if there were any customer complaints during the eight month capacity demonstration. G. Wheeler responded that there were no adverse odours or physical treatment conditions. R. Krueger asked how much notification the municipality requires when industries bypass their pretreatment prior to discharging to the sanitary sewer. G. Wheeler suggested that it is best if the wastewater treatment plant can be notified in advance when possible.

G. Rae asked G. Wheeler to relate his current work to the Composite Correction Program in the United States. G. Wheeler elaborated that the optimization work being undertaken is based on a relative Composite Correction Program being done in the United States. The U.S. government was providing money to build wastewater
treatment facilities; however, the auditor general discovered that up to 60% of facilities were not achieving quality targets. This prompted a study to review the process. The study concluded that the cause of the lower quality discharge was not related to facility design; they discovered that the plants were not being operated optimally. The Composite Correction Program originates in the United States Environmental Protection Agency, and has since been brought to Canada.

G. Rae inquired if this program could be applied elsewhere in the watershed. G. Wheeler identified that the Guelph Wastewater Treatment Plant is working towards achieving quality targets from their secondary treatment capability, which would demonstrate that the targets achieved are not reliant on tertiary treatment, and could be applied at other plants that have only secondary treatment capacity.

D. Parker wondered what implications a 100 year storm event would have on the wastewater treatment plant. G. Wheeler advised that this past spring the Speed River was higher than the outfall. In an instance such as this, the stepfeed can be used to respond to high flow conditions. Normally water comes in through the primaries and then through an aeration basin. In stepfeed, it allows the water into the third pass of the aeration basin only. Because the water is primarily snow melt, which is low in contaminants, this does not deteriorate the quality of the water. D. Parker asked if the tanks are sufficiently elevated that they would not be flooded during a storm event. G. Wheeler replied affirmatively.

M. Goldberg suggested that the City of Guelph provide a presentation to the water managers’ group regarding the opportunity for optimizing wastewater treatment plants in the Lake Erie Region. T. Schmidt confirmed that water managers have had ongoing communication regarding wastewater treatment optimization.

G. Rae advised that Haldimand County has been working with G. Wheeler, and is beginning implementation of a Composite Correction Program. Guelph is an excellent demonstration of how this kind of optimization can affect wastewater treatment.

G. Wheeler suggested that he would be supportive of providing further information or a presentation. He elaborated that the initiative to undertake a program such as this comes from influential decision makers and requires the commitment of senior management.

M. Goldberg pointed out that the bypass trend for Guelph demonstrates that downstream water quality concerns can be addressed if upstream municipalities could apply this program. He further suggested that this initiative could filter to other source protection committees.

A. Dale suggested that the Ministry of the Environment should also be involved. G. Wheeler advised that the Minister of the Environment was given a tour of the Guelph Wastewater Treatment Plant, and that he believes they are supportive of this approach.
C. Ashbaugh stated that he would like to see a submission forwarded to Ian Smith at the Ministry of the Environment supporting this worthwhile initiative. This may stimulate a discussion at the Chairs' level for other Source Protection Committees to endorse this program.

Moved by: M. Goldberg  
Seconded by: J. Laird  
carried unanimously

THAT the Lake Erie Region Source Protection Committee encourages the City of Guelph to provide information regarding their success in the optimization of the Guelph Wastewater Treatment Plant to the Grand River Water Managers Group;

AND THAT the City of Guelph provide a brief submission summarizing the optimization program and results for the Ministry of the Environment and other Source Protection Committees across the province.

b) Grand River Tier 2 Water Budget, James Etienne, GRCA

J. Etienne provided an overview of the Grand River Tier 2 Water Budget and Stress Assessment.

J. Harrison asked what the difference is between volume pumped and volume consumed. J. Etienne replied that a large percentage of municipal water is returned to the watershed, although, much of the groundwater supplies are returned to a surface water system. An example of low consumption versus volume pumped is in an aggregate washing operation where water is pumped out of an onsite pond and returned to the pond after washing. Only a small portion of the water is consumed by evaporation or shipped out on the washed aggregate. It is important to maintain a healthy groundwater/surface water interaction to ensure that groundwater removed from a system is replenished by recharge.

J. Oliver asked if the stress levels or thresholds are the same as the criteria set by the ministry. J. Etienne replied affirmatively.

J. Harrison requested an estimate of what the anticipated costs are for the Guelph and Region of Waterloo Tier 3 projects. J. Etienne advised that Guelph has received $1.2 million and the Region of Waterloo received $2 million of Ministry funding. J. Etienne elaborated that the Tier 3 studies are expected to be very detailed studies identifying all the wells and how the systems are interacting.

M. Goldberg asked if each of the subwatersheds identified as stressed will undergo a Tier 3 assessment. J. Etienne replied that only those subwatersheds with municipal supplies and identified as moderate or high potential for stress will require a Tier 3 study. Tier 3 studies are municipal projects that take the information learned in a Tier 2 study and look specifically at a source area around the municipal well or intake.
D. Parker inquired how water takings for profit are addressed by the water budget. J. Etienne responded that water takings such as water bottling are defined as high consumptive use. High consumptive water takings are defined by how they impact all other takings within that subwatershed and are modelled as part of what is happening with the takings. T. Schmidt clarified that many people take water for profit: the aggregate industry, golf courses, and agricultural irrigation. He suggested that profit is not a defining criteria.

D. Parker asked how increased wastewater as a result of watershed growth will be addressed by source protection planning. L. Minshall replied that the Clean Water Act does not currently address the cumulative effect of increased wastewater due to municipal growth; this is addressed through watershed management planning.

M. Goldberg wondered if the peer review team had commented on the approach of modelling by subwatershed as opposed to aquifer. J. Etienne responded that the modelling looks at the whole watershed, broken into subwatersheds, The Tier 3 work, for example, is not confined to subwatershed; upstream areas are studied for more information. Boreholes assist with defining movement to determine how much is supplying municipal wells and how sustainable supplies are outside of the city.

L. Minshall notified the committee that the Long Point Region, Kettle Creek, Catfish Creek and Grand River stress assessments will require an important risk communication component when posted. It will be important to communicate that stress assessments are only screening tools, and only refer to the potential for stress, rather than actual stress. The thresholds for the stress assessment are set very low. The Tier 3 water budget studies are intended to provide a more detailed assessment of the sustainability of the water supply.

The stress assessment will be posted on the www.sourcewater.ca website after the peer review is complete. The municipal partners’ are concerned that these maps will be misinterpreted without the important context underlying the thresholds. The committee may get questions; in the case where a map says there is the potential for significant stress, it doesn’t mean that the subwatershed or the municipal supply is stressed at all. This identification simply means that there is the need to do technical work with more detail.

R. Haggart asked if the posting will include a preamble to provide context. L. Minshall responded affirmatively.

T. Schmidt stated that he anticipates that at some point the maps will be misinterpreted. He emphasized that the stress levels and numbers were picked arbitrarily, and the implication of an area being identified as having the potential for significant or moderate stress simply means that the assessments should take a closer look. Throughout the Region of Waterloo's technical work, there has been no indication that there is any stress, yet most areas have been listed as having the potential for moderate or high stress.

J. Oliver suggested not using the colour red on maps; red is considered an alarming colour.
W. Wright-Cascaden suggested that if you are going to do an explanation regarding how the information should be interpreted, it would be best placed on the map.

9. Correspondence

a) Copied
   
i) Correspondence from Louisette Lanteigne to the Lake Erie Source Protection Committee Re: Waterloo Moraine

b) Not Copied
   
None

Res. No. 20-09  Moved by: J. Harrison  Seconded by: M. Goldberg  carried unanimously

THAT the correspondence be received as information.

10. Reports

a) SPC-06-09-01 Grand River Tier 2 Water Budget

Res. No. 21-09  Moved by: D. Murray  Seconded by: G. Rae  carried unanimously

THAT Report SPC-06-09-01 Grand River Tier 2 Water Budget Report be received as information.

b) SPC-06-09-02 Terms of Reference Update

Res. No. 22-09  Moved by: B. Ungar  Seconded by: M. Wales  carried unanimously

THAT Report SPC-06-09-02 Terms of Reference Update be received as information.

c) SPC-06-09-03 Assessment Report Preparation Update (verbal)

L. Minshall advised that the technical studies are all underway with only a few exceptions. Once all studies have started she will provide a written summary of the Assessment Report preparation status. Six municipalities are taking the lead on their studies: Elgin Primary, Haldimand, Oxford, Guelph, Waterloo Region, and Brantford. The remaining thirteen studies are being administered by Conservation Authority staff on behalf of the municipality. Once the studies are complete, the Conservation Authority will provide the outputs to the municipalities for their ownership.

The costs for the technical studies will be lower than proposed in the Terms of Reference. It appears as though the expenditures will be closer to the amount that was suggested as desirable.
d) SPC-06-09-04 Background on Waterloo Moraine Review

S. Glauser and L. Minshall provided an overview of the report.

J. Oliver asked how a potential threat immediately adjacent to the wellhead would be defined. L. Minshall responded that those immediately adjacent would be in the drawdown areas of the well. If an area were to be paved such that it would cut down the water available to the supply, then it would be considered a municipal threat.

J. Oliver suggested that he is referring to water takings and asked if there is any potential that water taking permits would be restricted if they affect the water supply. L. Minshall responded that if there is an identified area of moderate or significant quantity risk around a municipal system, and there are scenarios suggesting that the supply could not provide the required amount of water, all takings in that vicinity, or in those drawdown cones, would be considered a significant threat. J. Oliver asked if that would be a small geographic footprint, particularly compared to the time of travel. L. Minshall responded that this may be the case in some areas; however, in the City of Guelph, for example, the wellhead protection areas overlap and affect each other.

Res. No. 23-09 Moved by: J. Laird
Seconded by: R. Krueger carried unanimously

THAT Report SPC-06-09-04 Background on Waterloo Moraine Review be received as information.

NOTE: Information pertaining to Significant Groundwater Recharge Areas on page 2 of report SPC-06-09-04 Background on Waterloo Moraine Review required correction. A correction report has been submitted as report SPC-07-09-01 Correction – Significant Groundwater Recharge Areas in the July 9, 2009 Lake Erie Region Source Protection Committee Meeting Agenda.

11. Business Arising from Previous Meetings

B. Ungar asked if the Ministry had replied to the request for information sharing between Stewardship program delivery partners. S. Glauser advised that there has been no response. T. Ryan elaborated that guidance pertaining the communication sharing between delivery partners may be forthcoming with the new communication modules expected from Ministry in May.

C. Ashbaugh asked if the status of tree planting eligibility had been provided. T. Ryan responded that she spoke to ministry regarding her request for $1.2 million for 2008-2009 funding for Early Actions. The Ministry is expected to grant the Lake Erie Region approximately $965,000 for Early Actions. Confirmation of this funding is forthcoming. The Lake Erie Region has had a positive uptake for this program since the eligibility area has expanded to the two year time of travel. The $579,000 from the 2007-2008 funding will be completely spent within the coming months. It is expected that the 2008-2009 funding
allocation will also be spent completely. S. Glauser noted that the Lake Erie Region is expected to be granted approximately 1/5 of the early action funding available throughout the province.

12. Other Business
   a) Question and Answer Period
      None

13. Closed Meeting
    Not applicable

14. Next Meeting – Thursday, July 9, 2009, 1:00 pm,
    Paris Grand Country Club, 150 Paris Links Road, Paris, ON

15. Adjourn
    The Lake Erie Region Source Protection Committee meeting of June 4, 2009 adjourned at 3:25 pm.

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Chair                                              Recording Secretary