



SPC MEETING MINUTES
JUNE 14, 2013
Meeting #55

Bob Bedggood, Chair of the Source Protection Committee called the meeting to order at 9:00 a.m. on June 14, 2013 at the Upper Thames River Conservation Authority (UTRCA) Boardroom. The following members and staff were in attendance:

Members

Bob Bedggood	Don McCabe
Murray Blackie (SPA Liaison)	Earl Morwood
Brent Clutterbuck	Joe Salter
Pat Donnelly	Charles Sharina
Dean Edwardson	Pat Sobeski
Patrick Feryn	John Trudgen
Paul Hymus	John Van Dorp
Carl Kennes	Darlene Whitecalf
Joe Kerr	Jim Reffle (HU Liaison)
George Marr	Lisa Ross (Provincial Liaison)

Regrets:

Kennon Johnson
Valerie M'Garry
James Maudsley
Sheldon Parsons
Doug McGee
Hugh Moran
Darrell Randell
Augustus Tobias

Staff:

Chris Tasker	Brian McDougall
Deb Kirk	Don Pearson
Steve Clark	Ian Wilcox
Bonnie Carey	Tracy Annett
Ingrid Vanderschot	Christine Creighton
Linda Nicks	Mark Snowsell
Rick Battson	



1) Chair's Welcome

Bob Bedggood welcomed the committee and acknowledged a quorum was not achieved. It was suggested that the members present proceed as a sub-committee until quorum is achieved.

2) Adoption of the Agenda

The agenda was not approved as quorum was not achieved until agenda item 6b. Those members in attendance proceeded as a sub-committee until quorum was achieved.

3) Delegations

There were no delegations.

4) Minutes from Previous Meeting- January 25, 2013

The January 25, 2013 SPC meeting minutes were approved following item 6c. A comment was made to thank Derekica Snake and Chitra Gowda who have moved on, for all their work on SWP. Bob advised the committee that Ingrid Vanderschot is leaving her position at the end of June and thanked her for her work.

Moved by George Marr-seconded by John Trudgen

“RESOLVED that the January 25, 2013 meeting minutes be approved.”

CARRIED.

5) Declaration of Conflict of Interest

No conflict of interest was identified.

6) Business arising from the minutes

a) First Nations Update

Ingrid Vanderschot reported the FNLC had meetings on February 27 and March 19, 2013.

Workshops occurred on January 23, 30 and February 13 with the emphasis of identifying concerns to the First Nations and completing a draft discussion paper that each individual nation could adapt for their use.

The First Nations held open houses on March 6 at Aamjiwnaang First Nations, March 21 at the Oneida of the Thames and on March 27 at Chippewas of the Thames. Overall, the open houses were reported as very successful.

The “*Draft Agriculture Threat Policy Concept Discussion Paper*” was completed based on ideas from a brainstorming meeting on May 8, 2013. Policies will be drafted from the discussion paper concepts. The Chippewa of the Thames will draft the sample policies.

Staff will continue to support policy drafts on a per threat, per Nation basis. It was noted that all threats are not relevant to all FN due to local circumstances. MOE capacity funding for meetings has diminished so formal meetings will not occur.

Darlene Whitecalf noted she is pleased with how things have moved forward and that this year is the year of elections for some of the nations which will create changes. Darlene is attempting to get SW on the Chippewa of the Thames *Lands and Environment Committee Meeting* agenda and will be looking forward to presenting results from the agricultural policies. She thanked the group for their support in assisting with this work.

Bob introduced Don Pearson of the Lower Thames Valley CA as the new General Manager and thanked all three of the CA GMs for attending and for their support of the committee’s work.

b) 2013/14 Work plan approval update (presentation)

Key points:

- At the previous meeting in January the work plan proposal was reviewed. The agreement was approved and a review was provided.

- The list of eligible technical work was discussed in detail.
- A new schedule of meetings was circulated. The MOE agreement includes approval for 5 SPC meetings. Working groups/technical advisory committees will also engage people during the work.
- Review and approval process of the SPP, items related to SPP implementation and updates to the Assessment Reports/SPP was discussed.
- A series of municipal workshops have been held in each county to provide review on how the SPP will affect municipality's Risk Management Services, official plans updates and education policies. Many of the municipalities are involved in comprehensive reviews of their official plans and will be incorporating SP into their updates.
- A smaller working group will be formed by the municipalities who have started this work, specifically Stratford, Thames Centre, Sarnia, Lambton and Chatham-Kent.
- An outline of materials that should be included in the OP/By-laws was presented.
- Proposals will be sent to municipalities for RMO services this month and one to one meetings will be held.

Completing Watershed Science:

Identifying threats through modeling approach in IPZ-3;

- SCRCA - Extension inland from St. Clair river, extension east on Lake Huron, Sydenham tributaries and proposed an additional parameter. Lower volumes will be considered closer to the intakes and linear dispersion calculations in reverse to estimate distance from the intake and up the watercourse where the volume of spill could deteriorate drinking water quality.
- Modeling was done for Perch Creek and Cow Creek; creeks further south of the 402 and creeks to the east will be looked at.
- A Technical Advisory Committee (TAC) will be re-formed with similar representation on the past SCRSPA IPZ-3 TAC. Girish Sankar will facilitate and the Chatham-Kent RMO will be invited.
- A question was asked of what the process will be if the RMO and landowner cannot agree. The process is intended to be a negotiation however, if this negotiation breaks down, risk management measures can then be imposed by way of orders. A "Notice of Intent to establish" would be issued first before an order is given with timelines associated with it. The landowner will have the right to appeal.

- OFEC have developed a document for agricultural land owners that require RMPs that raise awareness of the expectations and assist the landowners in preparing for RMP negotiation. The document was recently presented at the GRCA.
- Implications of extending vulnerable areas will result in policies having to be applied to the larger areas. IPZ-3 area is still limited to watercourse, drains; sewers modeled with 120 m buffer or regulated areas.

LTVCA

- Truck and rail spill modeling was done in three locations which resulted in exceedences at the intake and in some cases at the next drinking water intake on Lake St. Clair. ERCA will be delineating IPZ-3 to LTVCA based on results from the Thames. We will need to determine how far upstream to extend the area using linear dispersion analysis. Discussions with MOE are still happening.
- The TAC could explore this similar work with the RMO and local SPC representative.

Wheatley

- ERCA is doing modeling from large fuel storage in neighboring sub-watershed and it should extend to intake into LTVCA. The same TAC can be used as this work employs similar methodologies. Greenhouse operations in this area use large amounts of fuel for heating and back-up generators.
- The question was asked of how long the RMPs will be valid for and what would trigger a re-negotiation of the plans. The need to adapt to the possible effects of global warming was also noted. RMP expiry will be part of the negotiation with the effective period being a function of the level of risk management included in the plan and the need for future improvements.
- Consistency in policy within the region is important in the region as well as within the bordering Essex Region.
- General spills policies still address transportation threats although they would not be considered a significant drinking water threat.

Issues Contributing Areas (ICA)

- Work will be done in Wallaceburg to delineate an ICA for the nitrate issue. The data will be reviewed to establish whether it is coming from the Sydenham or St. Clair River and determine the extent of contributing activities. A work plan will be developed working with MOE.

- The SCRSPA IPZ-3 Technical Advisory Committee will also work on the Wallaceburg “*Issues Contributing Area*”. Where there are uncertainties around the nitrate sources contributing to the issue, education and outreach and promotion of best management practices may be more appropriate than RMPs.

Woodstock ICA

- Oxford County will be taking the lead in looking at the Woodstock nitrate issue using the Tier 3 Water budget model and information from past studies.

Tier 3 Water Budget

- Tier 3 Water Quantity Risk Assessment will be completed in July using “*Risk Management Measures Evaluation*” process in significant threat areas.
- A similar TAC was suggested to complete these projects geographically versus having separate topic based committee.

Blue-Green Algae ICA in Essex Region

- Blue-green algae are causing problems at the water systems plants in the Essex Region. ERSPC will be moving forward to identify it as an Issue, delineate an ICA and identify threats which contribute to the issue. Phosphorous will be the target and the Wheatley plant will be included in the work. Great Lakes targets may be another avenue if the issue is lake wide.

Work not funded

- WHPA updates based on Tier 3 Water Budget were not funded. Oxford and St. Mary’s will be able to review the Tier 3 Water Budget results and consider whether WHPAs may change, using the new modeling.

Updating SPP

- Revisions to the ARs may lead to changes to the SPP. Consultation will be in parallel with AR updates. The SPP is to be submitted to the Minister in March 2014.

Past “*Technical Advisory Committee*” members agreed to re-convene, with the support from the CAs. The members absent today will be notified. Brent Clutterbuck will also join the group for the Lower Thames work. The RMO from Chatham will also be invited to participate. One or two meetings to complete the work is expected and may be via teleconferences.

It was noted that quorum was reached.

c) SPP Approval Process Update

MOE is in the process of approving plans. It is anticipated the SPP will be approved sometime in the fall of this year. Meeting dates will be drawn to the attention of the MOE in order to meet the requirements of the March 2014 SPP submission date.

Now that quorum was achieved the committee returned to agenda item #4 to approve the minutes from the previous meeting.

d) MOE Response to spills letter

The committee was given a copy of the letter MOE sent which outlines their response to the spills letter sent by the SPC.

7) Business

a) Updated meeting schedule

An updated meeting schedule was circulated to the committee that includes the meetings and alternate/tentative dates based on the work will be required. The goal for the October 18th meeting is to present the technical work to the committee with November 8th being the alternate date. The December meeting is for the SPP approval to move on to consultation and March for the final submission of the SPP.

8) Information

a) Water Budget Progress Report

Sam Bellamy was introduced from Matrix Solutions Inc. Environment and Engineering (previously AquaResource). Matrix Solutions has been retained to complete the T3WB. Sam was a peer reviewer in previous stages and has been involved in other T3WB including the Orangeville project which was much like a pilot. The firm has also written much of the guidance and data modeling. Sam was asked to speak with the committee and allow for an opportunity for the SPC to ask questions. This is an opportunity for the members to gain an understanding of the work and the process that is being followed. It will allow the members to think about the possible implications for policy development should there be quantity SDWT.

An overview of the water budget framework was given;

- Conceptual Water Budget (June 2007)
- Tier 1 (April 2010)
- Tier 2 (November 2011) and;
- Tier 3 (estimated to be complete in 2013)
- The outline of the presentation included Overview of Water Quantity Risk Assessment Framework, TSR framework and Tier 3 Risk assessment (approach, numeric modeling, risks assessment and threats).

Key points:

- Objective is to identify significant and moderate water quantity threats to municipal water supplies. A risk is where the municipality cannot meet existing water demands.
- A threat is any consumptive water use or land use activity that will affect the water quantity.
- Identified systems in Tier 2 study were in Woodstock, Ingersoll, Beachville, St. Mary's, St. Paul's, and Stratford. The approach was to refine conceptual understanding, develop or refine numeric models and assess risk. Each of the study areas and modeling calibration was reviewed. The Oxford modeling was developed for Tier 3 and OGS interpretation was included.
- Technical rules require 4 scenarios to be evaluated including the long term average demand, drought with existing demand, existing and committed demand and planned municipal water demand and land uses.
- Risk level is assigned based on a set of circumstances. Significant risk results when the well is not able to meet existing demands, the well is not able to meet allocated demand or the well can meet the allocated demand but there is an unaccepted impact on other water uses.
- Circumstances for moderate risk is the well can meet allocated demand but there is measurable and potentially unacceptable impact to other water uses.
- Water quantity threats includes all activities located in WHPA-Q1 and activities associated with recharge reduction in WHPA-Q2. Threats ranking is required if significant or moderate threats are identified and classification is assigned to threats based on risk level of the local area.
- Risk Management measures are only required where significant threats are identified. Measures to evaluate are; if there are alternate water supplies,



demand management and BMPs to ensure post-development recharge equals pre-development.

- Provincial guidance has been distributed and a pilot study testing the guidance is under way.

Questions:

- Can a wetland go dry? It would depend on wetland and its assessment. Quite often many do go dry and could impact a well. Only identified wetlands are included in the study.
- RMO will focus on threats if municipal wells pumping affect private wells use.
- What is a cold water fishery? A stream that sees a lot of groundwater discharge, brook and brown trout; identified as a fishery that is a high value fishery.
- A question was asked of the impact of tile drains on ground water recharge. There are varying results from the studies. Assessing no till or till alternatives is beyond the scope of the models. Run off events are surface water features.
- Toronto Region CA is working with MOE on a regional plan relating to climate change adaptations and SWP. MOE is the lead and MNR has done work to incorporate climate change but how it will be rolled out is uncertain as this time.
- Timeline for the final draft of the Tier 3 Water Budget is this summer.
- Next step; if a municipal supply is at risk then threats ranking is applied, the cause will be determined and reported to the SPC. Risk Management evaluation study would be completed and then something needs to be done to reduce risk. If it is a moderate risk, no RM evaluation is required but threats evaluation is. Funding for assessing moderate risks is questionable.
- Members asked for and will be provided a copy of the presentation.

Lunch Break 12:05-12:45 p.m.

Oxford County- Thames TAC

George Marr, Pat Feryn and Joe Salter agreed to be representatives on the Technical Advisory Committee for the Upper Thames ICA (Oxford) and Tier 3 Water Budget should one need to be established.

b) Greenhouse Nutrient Feedwater

Ingrid Vanderschot gave a presentation on greenhouse nutrient feedwater.

Key points:

- The Ontario Great Lakes Strategy outlines challenges to Great Lakes' environmental health and identifies greenhouse discharges as contributing to compromising water quality in certain Ontario waterways. In Ontario there are approximately 1,150 greenhouses of varying sizes, approximately 500 greenhouses that belong to Flowers Canada and Ontario Greenhouse Vegetable Growers. The Thames-Sydenham and Region has no greenhouses identified within WHPA-A or WHPA-B with a score of 10 (Significant Threat policy applicability areas).
- In the proposal for land application of nutrient feedwater, the goal is to conserve and recycle water and nutrients to protect the environment, yet provide agricultural and economic benefits. It focuses on applying feedwater from plant growing media no longer usable in the greenhouse, as a nutrient source like commercial fertilizer to crops growing on agricultural land.
- Nutrient feedwater is described as:
 - as the unusable greenhouse-generated feedwater from plant growing media (no longer needed in the greenhouse) is termed "nutrient feedwater"
 - Discharges to surface or groundwater requires OWRA approval.
 - The principle of applying nutrient feedwater under the NMA is to ensure that the material is only applied to land when a crop is there to benefit from the nutrients or the irrigation water, so that none of the material leaves the land to which it is applied.
 - Land application of nutrient feedwater may therefore improve environmental compliance through farm practices which ensure better environmental outcomes.
- Options currently available to reduce the impacts of the greenhouse discharges on water quality include discharging treated wastewater and land applying treated wastewater in compliance with an Environmental Compliance Approval (ECA) required by the Ontario Water Resources Act (OWRA).
- This proposal puts forth for a potential regulation under the NMA to facilitate the responsible reuse of nutrient feedwater through land

application. The proposed regulation to manage land application of nutrient feedwater under the NMA would be complemented by a regulation under OWRA to exempt that same activity (land application of nutrient feedwater) from the requirement for OWRA approvals.

- The proposed regulation would apply to: operations that generate nutrient feedwater destined to be applied on agricultural land, those transporting or piping nutrient feedwater for land application and farmers applying nutrient feedwater to cropland.
- Proposal standards are similar to the requirements in the current General Regulation (O. Reg 267/03) and OWRA ECAs for land application and sets out standards for:
 - Nutrient management strategy and plan preparation;
 - Land application, including setbacks from surface water and wells;
 - Siting and construction requirements for new storages;
 - Nutrient feedwater transfer from the greenhouse to the land application site;
 - Nutrient feedwater storage, including the number of days the storage must be sized for;
 - Nutrient feedwater sampling; and soil sampling at the receiving land.
- A strategy would be required for the greenhouse operator who generates 5 NU or more nutrient feedwater and collects it for land application under the NMA. The strategy would cover management including information on the generation and storage of the feedwater and the plan would be consistent with current BMP for both ASM and NASM application. Well setback for land application of 100m to municipal well would also be required as is the case for ASM/NASM.
- Nutrient Feedwater and SWP: Some source protection plans may include policies to manage the activity of applying ASMs, including nutrient feedwater in vulnerable areas.
- The TSR does not have any greenhouses within areas where application of ASMs would be a Significant Drinking Water Threat. Essex is monitoring this closer due to algae blooms.
- Document was posted on the EBR with a comment period was from March 1-April 15. The decision is not posted yet.



9) In Camera Session

None.

10) Other Business

None.

11) MOE Liaison report

Lisa Ross gave the committee an update in Teresa McLellan's absence; she is currently on a leave. An update on MOE staffing changes was provided at the previous meeting. The province is currently working on funding for SW/Great Lakes Protection and how municipalities will be supported through implementation; it is uncertain how this will be rolled out.

John Van Dorp reported he recently attended a pesticide course and a University representative was interested in the list of pesticides deemed as threats. Lisa reported she is working internally to educate staff who deals with pesticides to incorporate the SWP process; this is an ongoing project currently in the development stages.

Thirteen pesticides have been identified on the threats list based on scientific facts such as how they act in the environment. Only a handful of these are significant threats and will require policies. The province went through a very extensive process to assess various chemicals to determine the level of toxicity, environment fate, modes of release, persistence etc. It was noted that the list of pesticides are not necessarily banned, rather if found to be in an area of significant threat then policies will apply such as having a RMP.

12) Members reports

Pat Donnelly- noted IJC completed a report on the Upper Great Lakes to look at whether the dredging on the Lake St. Clair caused lower water levels. Adaptive management was suggested to deal with issues such as climate change resulting in lower water levels. Some of the philosophies around building are changing when reviewing events such as hurricane Sandy.

The City of London has been involved in Education and Outreach around storm sewers and is holding a "Protect our Environment Carwash Event" being held June 15th with commercial carwashes donating a portion of their proceeds to the London Food Bank.

Paul Hymus- noted the cleanup efforts on St. Clair River acknowledging Dean Edwardson and Darrell Randall involvement in the Remedial Action Plan and Friends of St. Clair. The river is showing significant strides.



George Marr- reported UTRCA staff did a great job at the Official Opening of the new Watershed Conservation Centre on May 31.

Pat Sobeski- gave acknowledgment of George Marr's role as the UTRCA Chair of the Building Committee for the new Watershed Conservation Centre.

13) Adjournment

There being no further business, the meeting was adjourned at 1:20 p.m. The next SPC meeting is scheduled for ***October 18, 2013*** at the St. Clair Region Conservation Authority Board room. (Note: date was adjusted due to Thanksgiving).