Centre Wellington Scoped Tier 3 Water Budget and Risk Assessment Study
Community Liaison Group Meeting #5

Wednesday, May 20, 2020
6:30pm – 8:30 pm
Zoom Webinar & YouTube Livestream

Meeting Summary

Welcome, Introductions, and Agenda Review

Susan Hall of LURA Consulting welcomed attendees as the lead facilitator for this meeting.

Martin Keller, Program Manager, Lake Erie Source Protection Region, also welcomed attendees in the Zoom meeting and the public observers following along on the YouTube livestream. Mr. Keller then introduced the Tier 3 Study's project team members in attendance. The list of project team members who attended the meeting can be found in Appendix B.

Ms. Hall led a round of introductions for the Community Liaison Group (CLG) members. A list of the CLG members in attendance can also be found in Appendix B.

Ms. Hall explained the Zoom Webinar format of the meeting and that members of the public were observing the meeting via the YouTube livestream being simulcast on the CLG website. She reminded CLG members that the meeting was being recorded and would become part of the public record. She also noted that the recording of the meeting would be available on the CLG website and Grand River Conservation Authority's YouTube channel for two weeks following the meeting. Ms. Hall reviewed the meeting's purpose and roles and responsibilities of all groups involved in the CLG.

Jim Faught, Director of Community Engagement at LURA Consulting and co-facilitator, reviewed the meeting's agenda, which can be found in Appendix A. He explained that during the discussion portion of the meeting, CLG members would be called upon in turn, to discuss their questions and comments. Mr. Faught reminded CLG members to abide by the code of conduct in their remarks during the discussion.

Presentations

The Project and Consulting Team provided presentations on the threats assessment and climate change assessment, as well as the draft policy approaches. A combined PDF copy of both presentations is available on the project website.

Overview

Mr. Keller reviewed the components of the Tier 3 Study:

1. Data Collection & Review
2. Characterization/Conceptualization
3. Groundwater Flow Model Development/Calibration
4. Risk Assessment

He pointed to additional relevant studies, assessments, and discussion papers beyond the Tier 3 Study as they relate to policy development, climate change assessment, water quantity threats analysis, and legislated frameworks.

He reviewed the Tier 3 Study's CLG input cycle and the project timeline.

Water Quantity Threats Analysis
David Van Vliet, Vice President, Technical Practice Areas, Matrix Solutions Inc.

Mr. Van Vliet presented the Study's Water Quantity Threats Analysis. He reviewed the following topics:

- What a risk assessment is and why it is conducted;
- Risk assessment scenarios;
- WHPA-Q delineation (with a map of delineations in and around Centre Wellington);
- The Study's risk assessment results (available on the project website in the materials for CLG meeting #4);
- Objectives of a Water Quantity Threats Analysis;
- Various water-taking scenarios; and
- How scenario analysis is conducted.

Mr. Van Vliet concluded by presenting the results of the Study's analysis of various scenarios:

1) Largest influence on future groundwater levels is from increased municipal pumping to meet population growth (i.e., 1.5 to 24.2 m of aquifer drawdown)
2) Cumulative effect of unserviced domestic water well pumping on water supply aquifer is minimal (i.e., 0.1 to 0.4 m of aquifer drawdown)
3) Effect of land development on future groundwater levels in the water supply aquifer is minimal (i.e., 0.1 to 0.2 m of aquifer drawdown)
4) While effect of existing permitted, non municipal takings on water supply aquifer was minimal (i.e., < 0.05 to 0.1 m of aquifer drawdown), increased or new large groundwater takings may affect groundwater levels at municipal wells depending on location and pumping rate
5) Effect of livestock watering on water supply aquifer is minimal (i.e., < 0.05 m of aquifer drawdown)

Climate Change Assessment
David Van Vliet, Vice President, Technical Practice Areas, Matrix Solutions Inc.

Mr. Van Vliet provided an overview of the objective of the Climate Change Assessment followed by the basics of climate change, hydrologic, and hydrogeologic modelling for Southern Ontario and the Centre Wellington Area. He used various maps, charts, and diagrams to aid in the visualization of these concepts; many of them illustrated future climate scenarios.

He concluded with a summary of key findings from the Climate Change Assessment and their implications for policy development:

- Focus on management and optimization of municipal water takings using insights from Water Supply Master Plan
    - Decrease future demand –water conservation and demand management
    - Increase future supply –optimize/redevelop existing wells and install new wells
- Assess potential interference with municipal wells to mitigate impacts from new or expanded non-municipal takings
- Maintain recharge to support existing water budget, water quality and ecological functions
- Consider ongoing model maintenance and funding
- Consider maintaining groundwater and surface water monitoring program
- No climate change risk predicted to quantity of municipal groundwater supply to 2050 time horizon

Draft Policy Approaches

Kyle Davis, Risk Management Official, Wellington Source Water Protection

Martin Keller, Program Manager, Lake Erie Source Protection Region

Mr. Keller provided context on the Study's next policy steps to address water quantity.

Mr. Davis reviewed the four WHPA-Q's in Willington County with the aid of maps, emphasizing that the Study's focus is on policy development for the Centre Wellington/Maplewood and Acton/Erin WHPA-Q's.

He highlighted how the Study's policy development process relates to various technical studies/assessments, discussion papers, and legislative frameworks, and where CLG input is taken into consideration during the policy development process.

Mr. Davis continued, going into more depth about what a discussion paper is, when it is created, and what purpose it serves policy makers in the policy development process for both water quantity and quality. He referenced the Guelph-Guelph/Eramosa Tier 3 Study's water quantity discussion paper as an example from 2018.

He listed various existing pieces of legislation, policies, and other programs concerning water quality and quantity at the federal, provincial, and municipal government levels.

Mr. Davis explained the interconnected nature of various regulatory processes relating to water quality and quantity, such as:

- Permit To Take Water (PTTW)
- Safe Drinking Water Act (SDWA)
- Water Supply Master Plan (WSMP)
- Provincial Policy Statement (PPS)
- Class Environmental Assessment (EA)

Mr. Davis remarked upon how the Clean Water Act, 2006 enables policy development through a "policy toolbox" composed of educational and stewardship programs, land use planning, regulatory approval processes, etc. that is available to policy makers. He provided more detail on how consumptive water takings and recharge reduction each relate to the "toolbox" for policy development and approaches, followed by

illustrative examples from approved source protection plans.

Mr. Davis concluded with some considerations and best practices policy makers use to develop water quantity policies.

Mr. Keller concluded the presentations by outlining some water quantity policy development considerations that are specific to this Study and the Project Team, followed by an overview of the policy development process timeline for this Study.

Facilitated Discussion

Ms. Hall began the facilitated discussion portion of the meeting, calling upon CLG members to provide questions or comments.

A summary of the questions of clarification is provided below. Parts of the discussion are marked by letters as indicated in the key below. Please note this is not a verbatim summary or transcript.

Q – Question
C – Comment
A – Answer/Response

C: I am hoping that the policy approaches will include specific wording that models are only as good as the data available for them. The presentations indicated that when it comes to evaluation of non-permitted municipal water users, there will be a data requirement for areas where there are currently gaps in the model.
A: When there are new applications for new water users, the Permit-To-Take-Water program's requirements are not going to change. The source protection work is in support of that program.
A: It really speaks to the monitoring and information sharing in terms of what we have and areas where we need to have additional data. It is something that we have already and are continuing to look at. Most existing plans have monitoring policies in them. We will certainly look at that and include and enhance those where possible. Monitoring is always a challenge: It needs funding and we need to figure out who will do what, but it is something that we will strongly review.

Q: In the policy approaches you are working on now, this is for the Lake Erie protection area, correct?
A: Correct.

Q: Are other source protection areas working on this as well?
A: Right now we are focusing on the Centre Wellington and Georgetown WHPA-Q. Where there are Tier 3 studies in Ontario, those policies have already been developed and some have already been approved by the province. Two areas we are currently working on, for example, are Centre Wellington and Guelph. Others are still in process and still need to be approved by the province. But ultimately, there will be water quality policies for all areas across the province where there are WHPA-Q's with significant risk levels.
A: Just as an example, I mentioned the Credit Valley-Toronto Central Lake Ontario (CTC) Plan, so that comes into the east section of Erin. Those policies are already approved in the CTC plan and cover the entirety of the Georgetown WHPA-Q and most of the Acton WHPA-Q. Because of the watershed boundary splitting that area, we are picking out that one sliver of the Acton WHPA-Q in this policy exercise for the Grand River. Halton-Hamilton is also another example close by that has already approved water quantity policies. There

are others, too: Brant County is a good example. It is in draft status right now and it went to the Source Protection Committee on April 30.
A: Yes, Brant's draft policies will probably be submitted to the province by next week.

C: I am chair of Economic Development Committee in Centre Wellington. I think it would be a great advantage to the members of that committee if we could receive a 15-minute presentation on this so that they know what is going on in their community and how these water quantity policies may affect things like street design (something we are working on), where industrial land is zoned, etc. I think it could be very useful to tie the two together.
A: Certainly, we can put something together. We will figure out who would be best to come present.
A: Yes, we could provide that presentation. We are presenting to [Centre Wellington] Council next week, so maybe that is more the level of presentation we could give to your committee.

Q: There was something in the Threats Assessment and Climate Change Assessment presentation that was not in the report. You concluded that the current water system can meet future demand until 2031-2036, and you added something in your presentation that for the short-term peak demand this timeframe is going to be shorter. But the Water Supply Master Plan (WSMP) concludes that we need new water right now, that the current water system cannot meet future demand right now. So why is there this disconnect between the WSMP and this Tier 3 Study regarding this conclusion?
A: With regard to the range of 2031-2036 for the Tier 3, there is uncertainty there because of not knowing when the current system's ability to meet the peak demand will run out.
A: There is a graph in the WSMP that shows the maximum day projection over time. We know that within the coming years will need to secure additional capacity and that this process needs to start sooner rather than later. We need to get additional capacity to support the growth projections for the community. Council has supported several projects to start that process. We have the Groundwater Exploration Program, which is a capital project that will be commencing later this year, as well as the optimization of two existing wells (F2 and F5) that will be commencing later this year. There is a lot of work to be done, for sure, and it will take some time to bring on that new capacity. The good news is that these projects are approved, the funding is there, and we can proceed.

Q: But if the Ministry [of Environment, Conservation, and Parks] is reading this Tier 3 report, how are they going to know that, that the 2031-2036 is not when the demand is going to be met?
A: The WSMP is setting the roadmap for securing additional capacity. When we look at how we allocate water capacity for new development, whether it is wastewater treatment or water supply capacity, it is a much more refined calculation. It is something we watch extremely closely; we update those calculations every year. It is a two-pronged approach: The WSMP lays out the path forward, but at the same time, we are managing the currently available capacity very carefully.
A: From the ministry's perspective, regional hydrogeologists who review Permits-to-Take-Water (PTTW's) in Centre Wellington have been reviewing this Tier 3 project as well as myself, and they are aware of these projections.

C: From the perspective of the development industry and the homebuilding industry, business people are open for the most part to tools and approaches that fit into the part of the policy "toolbox" called "stewardship best management practices" and any tools that are reasonable and can be effective, that do not necessarily add too much time or money. For example, water conservation or reduction programs that would be either consistent with the Ontario Building Code or above what it requires. There is a general approach that the industry would like to see implemented in plans or through the policy tools that allow for water conservation and other ways to reduce demand.
Q: To clarify, when you mention best management practices for industry, you specifically mentioned the Ontario Building Code but you would also be open to things above and beyond the water conservation tools

provided for by the Building Code?
A: Obviously I cannot speak for every landowner, but I think the general intent is that if there are ways to keep working on that sort of approach (e.g. LIDs) and other things such as rainwater harvesting or cisterns or that kind of realm of tools (which may or may not be in the Ontario Building Code already), the industry is very open to them and supportive of using water as wisely as possible and reducing its use where possible.

Q: The Project Team received some questions from me earlier about comments about the finished Tier 3 project that, at the time, seemed to punt the question of further analysis of trade-offs among the policy options, to which the Tier 3 results could be applied. Tonight, a lot of that has been clarified and I see a lot of opportunity and options in the policy list and the discussion paper to collaborate with other levels of government on growth. My question now after reviewing the pros and cons of the policy approaches is that the land use planning approach has been untested according to the discussion paper. Do you foresee the County and the province conducting a trade-off analysis going forward to see how much additional infrastructure capacity you would have to bring on, and how fast, if we toggle the growth targets to match demand?
A: Your question with regards to the interactions and interrelations between what we can do under the *Clean Water Act* and what other agencies can do with regard to growth targets, some of those things will need to be explored more. We do not yet know what exactly is possible. We know that there are existing policies in existing approved plans that ask the ministry to consider the results of the Tier 3 Study when developing their growth targets, so we certainly have those linkages. But how far that can be pushed in terms of trying to analyze trade-offs, that still needs to be explored and discussed.
A: We are also constrained a bit in the source protection plans in terms of the types of policies we can write, so when we talk about growth targets with the province, those are usually not legally binding policies. We did not get into that difference in today's presentation, but there are different kinds of legal effects of the policies that we can write (e.g. "shall" vs. "should"). We can tell the province to consider conditions on the PTTW's, but most everything else outside of prescribed instruments are "should" policies, not "shall" policies. Growth targets would be "should" policies.

Q: It has been hard to get a firm notion of who allocates growth targets and what kind of growth. On the one hand, I have read that the province allocates density and that affects the impervious area regarding water recharge. But then there is the absolute number of people regardless of density, and I assume that is allocated through the County's official planning process. Can we deal with these two silos of planning?
A: I can appreciate the challenges around silos. I am the policy manager for the County and I will also be part of the allocation work. The province allocates population and employment growth through the Growth Plan for the Greater Golden Horseshoe, and currently they have allocated growth targets to 2041 for Wellington County as a whole. The County goes through a process of basically allocating that amongst the seven constituent municipalities. We have policies in the provincial policy documents and the County's Official Plan that guide us on how we do that. The province is in the midst of creating a new forecast, and the County has kicked off our Official Plan review, which includes a growth management component. We have hired land economists (Watson & Associates) who we have used in the past to help us with the challenging work of allocation growth, but their work can only go so far because we will need to press the pause button and see what the province releases in terms of their new forecast. We think it is likely that they will extend the forecast period by an additional 5 or 10 years and thus get additional growth allocated to the County. So that is something we will need to consider as part of that work. We currently have a deadline of 2022 to complete our reviews under the Growth Plan. The pandemic may lead the province to extend that deadline.
A: In CTC, through municipal planning and their water budget quantity assessment process, they identified that it was possible for municipalities to take on growth without having a servicing plan, and they crafted policies to strengthen the link between growth and development and water quantity assessment. The province incorporated those policies into the 2017 update of the Growth Plan and they now require a demonstration of water supply and sewage servicing capacity with growth. The understanding was that the

system had been working and that there was an opportunity for municipalities to get feedback, but if they did not, the growth was then incorporated into the Official Plan ahead of an assessment of servicing capacity, so those ties are now strengthened.

C: My background is more in water quality and chemical management. I will review the report again to see if I have any further comments. I think where you go from here is of most interest to me and the area that I can contribute to.

Ms. Hall circled back to the beginning of the roster of CLG members in attendance to provide them with the opportunity to provide additional questions or comments, but there were none. Ms. Hall invited them to send along any questions or comments later to the project team should they have any.

Next Steps and Adjournment

Mr. Keller reviewed the next steps for:

- CLG meeting summary and commenting on it;
- Policy development arising from the Tier 3 Study; and
- Tentative scheduling of next CLG meeting for some time in summer 2020 to present draft water quantity policies.

Ms. Hall thanked CLG members for attending the meeting and contributing to the discussion. She then adjourned the meeting.

Appendix A – Agenda

Centre Wellington Tier 3 Water Budget Study

Community Liaison Group Meeting #5
Wednesday, May 20, 2020
6:30pm – 8:30 pm
Zoom Webinar & YouTube Livestream

***Meeting Purpose**:*

- Provide a refresh of the study process, scope and key participants;
- Provide an overview of the threats and climate change assessments and policy approaches;
- Receive feedback and discuss the threats and climate change assessments and policy approaches; and
- Address any questions about the process overall.

AGENDA

6:15 pm	**Log In and Set Up**
6:30 pm	**Introductions and Updates** Martin Keller, Program Manager, Lake Erie Source Protection Region Project Team
6:40 pm	**Presentation: Threats Assessment and Climate Change Assessment** David Van Vliet, Matrix Solutions Inc.
7:20 pm	**Presentation: Draft Policy Approaches** Kyle Davis, Wellington Source Water Protection Martin Keller, Program Manager, Lake Erie Source Protection Region
7:35 pm	**Discussion** Susan Hall (Facilitator), LURA Consulting Project Team
8:25 pm	**Next Steps and Wrap Up** Martin Keller
8:30 pm	**Adjourn**

Appendix B – List of Attendees

A. Community Liaison Group Members

Member	Organization
Jan Beveridge	Save Our Water
Dave Blacklock	Wellington Water Watchers
Jeremy Grant	Haylock Farm Ltd. (Granite Homes)
Janet Harrop	Wellington Federation of Agriculture
Christopher Neville	S.S. Papadopulos & Associates, Inc., on behalf of Nestle Waters Canada
Tom Nudds	N/A (Public Interest)
Victor Shantora	N/A (Public Interest)
Don Vallery	Highland Pines Campground

B. Project Team Members

Core Team	Support Team	Organization
Martin Keller Sonja Strynatka		Grand River Conservation Authority
David Van Vliet	Jeff Melchin	Matrix Solutions Inc.
Kyle Davis		Wellington Source Water Protection
Colin Baker		Township of Centre Wellington
Sarah Wilhelm		Wellington County
Susan Hall Jim Faught	Amitai Zand	LURA Consulting
Kathryn Baker		Ministry of Environment, Conservation and Parks

In addition to the participants listed above, 10 public observers viewing the YouTube livestream simultaneously was reached, although the total number of public observers tuning in to the livestream and clicking off over the course of the meeting may have been higher.