

September 27, 2016

Sent via email

SEE DISTRIBUTION LIST

Thank you for delegation and/or correspondence at Authority Meeting #7/16, of Toronto and Region Conservation Authority (TRCA), held on September 23, 2016. Amended Resolution #A139/16 in regard to the Provincial Four-Plan Review was approved as follows:

WHEREAS the Province of Ontario is undertaking a 10 year review of the provincial land use plans for the Oak Ridges Moraine, the Greenbelt, the Niagara Escarpment and the Growth Plan for the Greater Golden Horseshoe;

AND WHEREAS Toronto and Region Conservation Authority (TRCA) supported many of the recommendations for amendments to the four plans as detailed in the report entitled “Planning for Health, Prosperity and Growth” as produced by the provincially appointed “Crombie” Advisory Panel on the Coordinated Review of the Four Plans;

AND WHEREAS many of the Advisory Panel recommendations and prior TRCA comments have been incorporated into the proposed amendments to the four plans;

THEREFORE LET IT BE RESOLVED THAT the Authority recommends to the Province that:

1. *the policies for Building Complete Communities be amended such that:*
 - *the definition of “Complete Communities” be revised to add an environmental component;*
 - *the policies for restricting development and infrastructure in areas of natural hazards be strengthened;*
 - *Growth Plan sections 2.2.1 Managing Growth, 2.2.2 Built-up Areas and 2.2.3 Urban Growth Centres be amended with a stronger emphasis on flood management, remediation and their integration with green infrastructure and low impact development techniques for existing Flood Vulnerable Areas; and*
 - *new policies be added requiring the completion of an urban Master Environmental Servicing Plan for areas of major urban redevelopment and revitalization to comprehensively address in an integrated manner, issues such as urban flooding and natural hazard remediation, water balance, infrastructure risk assessments and the incorporation of ecological design principles to integrate green infrastructure into an enhanced open space system;*
2. *the policies for Supporting Agriculture be revised, clarified and harmonized such that:*
 - *the potential natural heritage/hydrologic evaluation (NHE/HE) requirements of other approval authorities be recognized;*

- *clear direction be provided as to what constitutes a “demonstration” of compliance with the criteria that must be met to be exempt from an NHE/HE; and*
 - *on-farm diversified uses, large scale buildings and structures that meet the threshold for “major development” and the placement/dumping of large amounts of fill (i.e. > 500 m³) should continue to be subject to a full NHE/HE, when proposed adjacent to KNHF/KHF;*
3. *the policies for Protecting Natural Heritage and Water be revised such that:*
- *the definition, scope and content of Watershed and Subwatershed Plans is harmonized among the four plans and that they be integrated with clear goals for the protection, enhancement and restoration of natural heritage systems;*
 - *the role and expertise of conservation authorities in undertaking watershed plans be acknowledged, especially as it relates to stormwater management and the protection from and remediation of natural hazards;*
 - *Growth Plan policies for Natural Heritage Systems, Key Natural Heritage and Key Hydrologic Features and Lands Adjacent to those Key Features be simplified as much as possible and that provincial guidance for understanding and implementing these policies be prepared as soon as possible; and*
 - *Excess Soil and Fill policies be strengthened to prohibit filling within Key Natural Heritage and Key Hydrologic Features, and that a natural heritage/hydrologic evaluation be required for filling adjacent to these features;*
4. *the policies for Growing the Greenbelt be amended such that:*
- *areas of shallow groundwater and high artesian pressure be included as components of Key Hydrologic Areas to be assessed through watershed planning for additions to the Greenbelt;*
 - *headwater areas of the rivers and creeks within TRCA watersheds be designated as Greenbelt lands, especially those areas that are almost fully surrounded by other Greenbelt lands, such as those in the headwaters of the Carruthers Creek and the Rouge and Humber rivers watersheds;*
 - *conservation authorities be recognized as critical partners in the Greater Golden Horseshoe (GGH) for providing trails and outdoor recreational opportunities and that flexibility is provided for the enhancement to facilities and uses permitted on conservation authority lands, to meet the needs of a growing population, accessibility standards and financial sustainability;*
5. *the policies for Addressing Climate Change be amended such that Growth Plan section 4.2.10:*
- *is strengthened to require official plan policy implementation;*
 - *consolidates, integrates and/or cross-references all other climate change related policies and actions in the four plans;*
 - *identifies the role integrated watershed planning should play in planning for climate change mitigation and adaptation;*
 - *ensures coordination with other provincial climate change documents, programs and activities;*

6. *the policies for Integrating Infrastructure be amended such that:*
 - *a new policy be added to the Growth Plan requiring the applicable recommendations, standards or targets within a subwatershed plan and water budgets are complied with;*
 - *policies for green infrastructure and low impact development be clarified to state that these techniques should be considered on both private and public lands;*
 - *infrastructure policies be strengthened to require restoration and enhancement plans to offset negative impacts and that accessory uses to infrastructure corridors be located outside of key environmental features and hazardous lands;*
 - *infrastructure policies are clarified with respect to implementation roles and legislative authorities;*
 - *policies be clarified and strengthened to increase restoration and enhancement requirements and limit the types and amounts of stormwater management and other infrastructure uses allowed in the connecting major river valley “fingers” and Natural Heritage System of the Greenbelt Protected Countryside;*

7. *the policies in the four plans be amended and other means for Improving Plan Implementation be addressed such that:*
 - *the role of conservation authorities in implementing the four plans be more strongly identified in the plans as well as in the concurrent review of the Conservation Authorities Act;*
 - *municipal official plan conformity amendments to implement the four plans be shielded from appeals to the Ontario Municipal Board (OMB);*
 - *the transition provisions in the Oak Ridges Moraine Conservation Plan (ORMCP) and Act be strengthened and that the lapsing provisions included in the Growth Plan for approved but unbuilt plans of subdivision, also be included in the Greenbelt and Oak Ridges Moraine plans;*
 - *strong guidance materials and requirements for the content, timing and completeness of technical reports in support of development applications be developed by the Province and adhered to during an OMB process;*
 - *Advisory Panel recommendations to create guidance materials and technical bulletins to improve clarity and consistency in plan implementation be acted upon immediately, with involvement from implementation partners, including conservation authorities;*

8. *the applicable recommendations from the Advisory Panel report for Measuring Performance, Promoting Awareness and Increasing Engagement be acted on by the Province as quickly as possible, with involvement from and building on similar programs undertaken by conservation authorities;*

9. *the definitions included in the four plans be amended to be consistent among each of the plans and that they be refined or corrected as identified in the attached table of detailed comments (Attachment 2);*

THAT the staff report be sent to the Province as TRCA’s comments on the proposed amendments to the four provincial plans;

AND FURTHER THAT Conservation Ontario, TRCA's municipal partners and the provincial ministries of Natural Resources and Forestry, Municipal Affairs and Housing, Environment and Climate Change, Agriculture and Rural Affairs and the Ontario Growth Secretariat be so advised.

Enclosed for your information and any action deemed necessary is the report as approved by the Authority. If you have any questions or require additional information, please contact David Burnett at 416-661-6600 extension 5361, dburnett@trca.on.ca.

Sincerely



Kathy Stranks
Senior Manager, Corporate Secretariat
CEO's Office

cc. David Burnett, Senior Manager, Policy And Regional Policy, TRCA
Colleen Jordan, Regional Councillor, Wards 3 & 4, Town of Ajax

/Encl.

DISTRIBUTION LIST

Pat Brown, Councillor, Ward 4, Ajax
David Hogg
Mark Holland, MP, Ajax
Burkhard Mausberg, CEO, Friends of the Greenbelt Foundation
Gordon McKay, Past Co-Chair of Citizens for Caruthers (**Sent via mail**)
Jennifer O'Connell, MP, Pickering-Uxbridge
Judith Wright

Section I – Items for Authority Action

RES.#A139/16 - PROVINCIAL FOUR-PLAN REVIEW

TRCA Comments on the Four Plan Review. Toronto and Region Conservation Authority comments in response to the coordinated review of the Growth Plan for the Greater Golden Horseshoe, Greenbelt Plan, Oak Ridges Moraine Conservation Plan and Niagara Escarpment Plan (EBR Notice #s: 012-7194, 012-7195, 012-7197, 012-7228)

Moved by: Colleen Jordan
Seconded by: Glenn De Baeremaeker

WHEREAS the Province of Ontario is undertaking a 10 year review of the provincial land use plans for the Oak Ridges Moraine, the Greenbelt, the Niagara Escarpment and the Growth Plan for the Greater Golden Horseshoe;

AND WHEREAS Toronto and Region Conservation Authority (TRCA) supported many of the recommendations for amendments to the four plans as detailed in the report entitled “Planning for Health, Prosperity and Growth” as produced by the provincially appointed “Crombie” Advisory Panel on the Coordinated Review of the Four Plans;

AND WHEREAS many of the Advisory Panel recommendations and prior TRCA comments have been incorporated into the proposed amendments to the four plans;

THEREFORE LET IT BE RESOLVED THAT the Authority recommends to the Province that:

- 1. the policies for Building Complete Communities be amended such that:**
 - the definition of “Complete Communities” be revised to add an environmental component;
 - the policies for restricting development and infrastructure in areas of natural hazards be strengthened;
 - Growth Plan sections 2.2.1 Managing Growth, 2.2.2 Built-up Areas and 2.2.3 Urban Growth Centres be amended with a stronger emphasis on flood management, remediation and their integration with green infrastructure and low impact development techniques for existing Flood Vulnerable Areas; and
 - new policies be added requiring the completion of an urban Master Environmental Servicing Plan for areas of major urban redevelopment and revitalization to comprehensively address in an integrated manner, issues such as urban flooding and natural hazard remediation, water balance, infrastructure risk assessments and the incorporation of ecological design principles to integrate green infrastructure into an enhanced open space system;
- 2. the policies for Supporting Agriculture be revised, clarified and harmonized such that:**
 - the potential natural heritage/hydrologic evaluation (NHE/HE) requirements of other approval authorities be recognized;
 - clear direction be provided as to what constitutes a “demonstration” of compliance with the criteria that must be met to be exempt from an NHE/HE; and
 - on-farm diversified uses, large scale buildings and structures that meet the threshold for “major development” and the placement/dumping of large amounts of fill (i.e. > 500 m³) should continue to be subject to a full NHE/HE, when proposed adjacent to KNHF/KHF;

3. the policies for Protecting Natural Heritage and Water be revised such that:
 - the definition, scope and content of Watershed and Subwatershed Plans is harmonized among the four plans and that they be integrated with clear goals for the protection, enhancement and restoration of natural heritage systems;
 - the role and expertise of conservation authorities in undertaking watershed plans be acknowledged, especially as it relates to stormwater management and the protection from and remediation of natural hazards;
 - Growth Plan policies for Natural Heritage Systems, Key Natural Heritage and Key Hydrologic Features and Lands Adjacent to those Key Features be simplified as much as possible and that provincial guidance for understanding and implementing these policies be prepared as soon as possible; and
 - Excess Soil and Fill policies be strengthened to prohibit filling within Key Natural Heritage and Key Hydrologic Features, and that a natural heritage/hydrologic evaluation be required for filling adjacent to these features;

4. the policies for Growing the Greenbelt be amended such that:
 - areas of shallow groundwater and high artesian pressure be included as components of Key Hydrologic Areas to be assessed through watershed planning for additions to the Greenbelt;
 - headwater areas of the rivers and creeks within TRCA watersheds be seriously considered for additions to the Greenbelt, especially those areas that are almost fully surrounded by other Greenbelt lands, such as those in the headwaters of the Carruthers Creek and the Rouge and Humber rivers watersheds;
 - conservation authorities be recognized as critical partners in the Greater Golden Horseshoe (GGH) for providing trails and outdoor recreational opportunities and that flexibility is provided for the enhancement to facilities and uses permitted on conservation authority lands, to meet the needs of a growing population, accessibility standards and financial sustainability;

5. the policies for Addressing Climate Change be amended such that Growth Plan section 4.2.10:
 - is strengthened to require official plan policy implementation;
 - consolidates, integrates and/or cross-references all other climate change related policies and actions in the four plans;
 - identifies the role integrated watershed planning should play in planning for climate change mitigation and adaptation;
 - ensures coordination with other provincial climate change documents, programs and activities;

6. the policies for Integrating Infrastructure be amended such that:
 - a new policy be added to the Growth Plan requiring the applicable recommendations, standards or targets within a subwatershed plan and water budgets are complied with;
 - policies for green infrastructure and low impact development be clarified to state that these techniques should be considered on both private and public lands;
 - infrastructure policies be strengthened to require restoration and enhancement plans to offset negative impacts and that accessory uses to infrastructure corridors be located outside of key environmental features and hazardous lands;
 - infrastructure policies are clarified with respect to implementation roles and legislative authorities;

- policies be clarified and strengthened to increase restoration and enhancement requirements and limit the types and amounts of stormwater management and other infrastructure uses allowed in the connecting major river valley “fingers” and Natural Heritage System of the Greenbelt Protected Countryside;
7. the policies in the four plans be amended and other means for Improving Plan Implementation be addressed such that:
 - the role of conservation authorities in implementing the four plans be more strongly identified in the plans as well as in the concurrent review of the *Conservation Authorities Act*;
 - municipal official plan conformity amendments to implement the four plans be shielded from appeals to the Ontario Municipal Board (OMB);
 - the transition provisions in the *Oak Ridges Moraine Conservation Plan (ORMCP)* and *Act* be strengthened and that the lapsing provisions included in the Growth Plan for approved but unbuilt plans of subdivision, also be included in the Greenbelt and Oak Ridges Moraine plans;
 - strong guidance materials and requirements for the content, timing and completeness of technical reports in support of development applications be developed by the Province and adhered to during an OMB process;
 - Advisory Panel recommendations to create guidance materials and technical bulletins to improve clarity and consistency in plan implementation be acted upon immediately, with involvement from implementation partners, including conservation authorities;
 8. the applicable recommendations from the Advisory Panel report for Measuring Performance, Promoting Awareness and Increasing Engagement be acted on by the Province as quickly as possible, with involvement from and building on similar programs undertaken by conservation authorities;
 9. the definitions included in the four plans be amended to be consistent among each of the plans and that they be refined or corrected as identified in the attached table of detailed comments (Attachment 2);

THAT the staff report be sent to the Province as TRCA’s comments on the proposed amendments to the four provincial plans;

AND FURTHER THAT Conservation Ontario, TRCA’s municipal partners and the provincial ministries of Natural Resources and Forestry, Municipal Affairs and Housing, Environment and Climate Change, Agriculture and Rural Affairs and the Ontario Growth Secretariat be so advised.

AMENDMENT
RES.#A140/16

Moved by: Colleen Jordan
Seconded by: Glenn De Baeremaeker

THAT the second bullet of item #4 be amended to read as follows:

- headwater areas of the rivers and creeks within TRCA watersheds be designated as Greenbelt lands, especially those areas that are almost fully surrounded by other Greenbelt lands, such as those in the headwaters of the Carruthers Creek and the Rouge and Humber rivers watersheds;

THE AMENDMENT WAS CARRIED

THE MAIN MOTION, AS AMENDED, WAS CARRIED

THE RESULTANT MOTION READS AS FOLLOWS:

WHEREAS the Province of Ontario is undertaking a 10 year review of the provincial land use plans for the Oak Ridges Moraine, the Greenbelt, the Niagara Escarpment and the Growth Plan for the Greater Golden Horseshoe;

AND WHEREAS Toronto and Region Conservation Authority (TRCA) supported many of the recommendations for amendments to the four plans as detailed in the report entitled “Planning for Health, Prosperity and Growth” as produced by the provincially appointed “Crombie” Advisory Panel on the Coordinated Review of the Four Plans;

AND WHEREAS many of the Advisory Panel recommendations and prior TRCA comments have been incorporated into the proposed amendments to the four plans;

THEREFORE LET IT BE RESOLVED THAT the Authority recommends to the Province that:

1. the policies for Building Complete Communities be amended such that:
 - the definition of “Complete Communities” be revised to add an environmental component;
 - the policies for restricting development and infrastructure in areas of natural hazards be strengthened;
 - Growth Plan sections 2.2.1 Managing Growth, 2.2.2 Built-up Areas and 2.2.3 Urban Growth Centres be amended with a stronger emphasis on flood management, remediation and their integration with green infrastructure and low impact development techniques for existing Flood Vulnerable Areas; and
 - new policies be added requiring the completion of an urban Master Environmental Servicing Plan for areas of major urban redevelopment and revitalization to comprehensively address in an integrated manner, issues such as urban flooding and natural hazard remediation, water balance, infrastructure risk assessments and the incorporation of ecological design principles to integrate green infrastructure into an enhanced open space system;
2. the policies for Supporting Agriculture be revised, clarified and harmonized such that:
 - the potential natural heritage/hydrologic evaluation (NHE/HE) requirements of other approval authorities be recognized;
 - clear direction be provided as to what constitutes a “demonstration” of compliance with the criteria that must be met to be exempt from an NHE/HE; and
 - on-farm diversified uses, large scale buildings and structures that meet the threshold for “major development” and the placement/dumping of large amounts of fill (i.e. > 500 m³) should continue to be subject to a full NHE/HE, when proposed adjacent to KNHF/KHF;

3. the policies for Protecting Natural Heritage and Water be revised such that:
 - the definition, scope and content of Watershed and Subwatershed Plans is harmonized among the four plans and that they be integrated with clear goals for the protection, enhancement and restoration of natural heritage systems;
 - the role and expertise of conservation authorities in undertaking watershed plans be acknowledged, especially as it relates to stormwater management and the protection from and remediation of natural hazards;
 - Growth Plan policies for Natural Heritage Systems, Key Natural Heritage and Key Hydrologic Features and Lands Adjacent to those Key Features be simplified as much as possible and that provincial guidance for understanding and implementing these policies be prepared as soon as possible; and
 - Excess Soil and Fill policies be strengthened to prohibit filling within Key Natural Heritage and Key Hydrologic Features, and that a natural heritage/hydrologic evaluation be required for filling adjacent to these features;

4. the policies for Growing the Greenbelt be amended such that:
 - areas of shallow groundwater and high artesian pressure be included as components of Key Hydrologic Areas to be assessed through watershed planning for additions to the Greenbelt;
 - headwater areas of the rivers and creeks within TRCA watersheds be designated as Greenbelt lands, especially those areas that are almost fully surrounded by other Greenbelt lands, such as those in the headwaters of the Carruthers Creek and the Rouge and Humber rivers watersheds;
 - conservation authorities be recognized as critical partners in the Greater Golden Horseshoe (GGH) for providing trails and outdoor recreational opportunities and that flexibility is provided for the enhancement to facilities and uses permitted on conservation authority lands, to meet the needs of a growing population, accessibility standards and financial sustainability;

5. the policies for Addressing Climate Change be amended such that Growth Plan section 4.2.10:
 - is strengthened to require official plan policy implementation;
 - consolidates, integrates and/or cross-references all other climate change related policies and actions in the four plans;
 - identifies the role integrated watershed planning should play in planning for climate change mitigation and adaptation;
 - ensures coordination with other provincial climate change documents, programs and activities;

6. the policies for Integrating Infrastructure be amended such that:
 - a new policy be added to the Growth Plan requiring the applicable recommendations, standards or targets within a subwatershed plan and water budgets are complied with;
 - policies for green infrastructure and low impact development be clarified to state that these techniques should be considered on both private and public lands;
 - infrastructure policies be strengthened to require restoration and enhancement plans to offset negative impacts and that accessory uses to infrastructure corridors be located outside of key environmental features and hazardous lands;
 - infrastructure policies are clarified with respect to implementation roles and legislative authorities;

- policies be clarified and strengthened to increase restoration and enhancement requirements and limit the types and amounts of stormwater management and other infrastructure uses allowed in the connecting major river valley “fingers” and Natural Heritage System of the Greenbelt Protected Countryside;
7. the policies in the four plans be amended and other means for Improving Plan Implementation be addressed such that:
 - the role of conservation authorities in implementing the four plans be more strongly identified in the plans as well as in the concurrent review of the *Conservation Authorities Act*;
 - municipal official plan conformity amendments to implement the four plans be shielded from appeals to the Ontario Municipal Board (OMB);
 - the transition provisions in the *Oak Ridges Moraine Conservation Plan (ORMCP)* and *Act* be strengthened and that the lapsing provisions included in the Growth Plan for approved but unbuilt plans of subdivision, also be included in the Greenbelt and Oak Ridges Moraine plans;
 - strong guidance materials and requirements for the content, timing and completeness of technical reports in support of development applications be developed by the Province and adhered to during an OMB process;
 - Advisory Panel recommendations to create guidance materials and technical bulletins to improve clarity and consistency in plan implementation be acted upon immediately, with involvement from implementation partners, including conservation authorities;
 8. the applicable recommendations from the Advisory Panel report for Measuring Performance, Promoting Awareness and Increasing Engagement be acted on by the Province as quickly as possible, with involvement from and building on similar programs undertaken by conservation authorities;
 9. the definitions included in the four plans be amended to be consistent among each of the plans and that they be refined or corrected as identified in the attached table of detailed comments (Attachment 2);

THAT the staff report be sent to the Province as TRCA’s comments on the proposed amendments to the four provincial plans;

AND FURTHER THAT Conservation Ontario, TRCA’s municipal partners and the provincial ministries of Natural Resources and Forestry, Municipal Affairs and Housing, Environment and Climate Change, Agriculture and Rural Affairs and the Ontario Growth Secretariat be so advised.

BACKGROUND

On February 27, 2015, the Province initiated a coordinated review of the Greenbelt Plan, Oak Ridges Moraine Conservation Plan, Niagara Escarpment Plan and Growth Plan for the Greater Golden Horseshoe. An Advisory Panel led by Mr. David Crombie was appointed to coordinate this review and recommend necessary plan amendments. TRCA staff developed strategic recommendations in response to the discussion questions posed by the Province and submitted formal comments on May 28, 2015, as approved by Resolution #A99/15 at Authority Meeting #6/15, held on June 26, 2015. The Advisory Panel provided recommendations to the Province on December 7, 2015 through a report entitled, “Planning for Health, Prosperity and Growth in the Greater Golden Horseshoe: 2015-2041”. TRCA staff reported on the recommendations from the

Advisory Panel at Authority Meeting #11/15, held on January 8, 2016, as approved by Resolution #A245/15.

Provincial staff assessed the Advisory Panel's report and released proposed amendments to the four plans on May 10, 2016, for a further round of public and agency consultation. Of the Panel's 87 total recommendations, all 56 of the core recommendations were incorporated into the revised plans, to varying degrees. TRCA staff provided a summary of the key themes of the amended plans and identified important changes warranting additional analysis prior to the issuance of formal comments, as approved by Resolution #A119/16 at Authority Meeting #6/16, held on July 22, 2016. In particular, staff highlighted policy changes related to: integrating natural heritage systems in watershed planning; sustainable management of large-scale fill; the transition provisions of the ORMC Plan and Act; agricultural exemptions for natural heritage evaluations; climate change; provincial plan implementation; defining complete communities; recognizing the role of conservation authorities; and, complementary recommendations from the Advisory Panel report that must be addressed outside the plans.

The Province initially set a September 30, 2016 deadline for feedback on the proposed plans. However, due to high interest in the review and in response to requests made by several municipalities and stakeholder organizations (including TRCA, as per Resolution #A119/16 approved at Authority Meeting #6/16) the deadline has been extended to October 31, 2016.

RATIONALE

Many of TRCA's previous comments are reflected in the four amended plans and the enhanced policies and concepts espoused generally align well with TRCA's 10 Year Strategic Plan (2013-2022) and The Living City Policies documents. In particular, the following key issues previously raised by TRCA, have been addressed to varying degrees in the plans:

- Recognizing the value of, and strengthening requirements for watershed planning to ensure growth occurs in a sustainable manner;
- New policy language promoting a "systems approach" to natural heritage and water resource planning, including the addition of a new class of features to be identified, managed and protected as "Key Hydrologic Areas";
- Harmonized terminology across the four plans and with the Provincial Policy Statement;
- Increased support for agricultural lands and related rural uses;
- Stronger policy requirements for integrating infrastructure and land use planning;
- New policies to help ensure large-scale fill activities are sustainably managed;
- New policies to reduce greenhouse gas emissions and address climate change; and
- New policies to incorporate the use of green infrastructure and low impact development techniques.

TRCA staff generally support the proposed policy changes. However, staff does have recommendations that staff believes, if implemented, could further strengthen and support the progressive intent of the plans. Of these, staff identified the following issues to be paramount and strongly advocate that they be incorporated into the Province's amended plans immediately:

1. New policies are needed to require the completion of an "urban MESP (municipal environmental servicing plan)" for areas of major urban redevelopment, especially in flood vulnerable areas;

2. The Climate Change policies in the Growth Plan must require official plan implementation and should be enhanced to tie-back the policies to other climate change references throughout the plans, especially to highlight the role that watershed planning can play in developing mitigation and adaptation strategies;
3. The definition, scope and content of watershed and subwatershed plans needs to be harmonized and fully integrated among the four plans, with clear goals to protect, enhance, and restore natural heritage and water resource systems; and
4. The role of conservation authorities in implementing the plans should be more clearly recognized and conservation authority expertise fully utilized and leveraged in the creation of guidance materials for plan implementation, as well as for monitoring and measuring performance of the plans in achieving their environmental objectives.

The attached comment letter (Attachment 1) and table of detailed comments (Attachment 2), expand upon these recommendations as part of TRCA's formal response to the Province's (Environmental Bill of Rights Registry) EBR postings regarding the coordinated ten-year review of the plans. This response reflects knowledge gained from provincial technical workshops and open houses; discussions with various provincial, municipal and conservation authority staff; and, internal consultations with senior management, planning and technical staff to assess the integration of previous comments, identify new changes relevant to TRCA and formulate new recommendations for enhancing the policies in the plans.

FINANCIAL DETAILS

Staff is engaged in this policy analysis work as per the normal course of their duties. No additional funding is proposed.

DETAILS OF WORK TO BE DONE

- Incorporate feedback, if any, from the Authority meeting on September 23, 2016 into formal comments;
- Submit formal comments to the Province, in accordance with their deadline of October 31, 2016;
- Review the final amendments to the four plans and report back to the Authority in 2017.

Report Prepared by: Jeff Thompson, extension 5386

Emails: jthompson@trca.on.ca

For Information contact: David Burnett, extension 5361

Emails: dburnett@trca.on.ca

Date: September 6, 2016

Attachments: 2

September 9, 2016

Land Use Planning Review
Ministry of Municipal Affairs and Housing
Ontario Growth Secretariat
777 Bay Street,
Toronto, ON M5G 2E5

emailed to:
landuseplanningreview@ontario.ca

Re: Toronto and Region Conservation Authority Comments in Response to the Co-ordinated Review of the Growth Plan for the Greater Golden Horseshoe, Greenbelt Plan, Oak Ridges Moraine Conservation Plan and Niagara Escarpment Plan (EBR Notice #s: 012-7194, 012-7195, 012-7197 & 012-7228)

Thank you for the opportunity to provide comments in response to the EBR posting regarding the ten-year review of the four Provincial Plans (the Plans). The Toronto and Region Conservation Authority (TRCA) has been active in the ten-year review process from its beginning in several ways including partnering with the Conservation Authorities Moraine Coalition to produce the *Report Card on the Environmental Health of the Oak Ridges Moraine and Adjacent Greenbelt Lands* (www.morainecoalition.ca). The *Report Card* demonstrates the strengths and weaknesses of the Plans for those landscapes, based on the monitoring programs of the conservation authorities (CAs) and found degraded water quality in almost half of the streams monitored. TRCA also responded in May 2015 to the initial consultation questions posed by the province and expressed our views directly to Advisory Panel members and provincial staff on several occasions. We appreciate the opportunities provided to TRCA to contribute to the four Plans review and, in general, we are pleased that our comments have been heard and that many of them have been reflected in the proposed amendments.

We note further that many of the policies and concepts align well with The Living City Policies, TRCA's own policy document that guides staff in its roles in land use and infrastructure planning and the TRCA's regulatory permitting process. The proposed changes to the four Plans help to advance our collective efforts to reduce sprawl, maximize our infrastructure investments, develop compact, transit supportive complete communities, protect valuable natural and agricultural lands and address climate change. CAs provide significant support for the implementation of the four provincial Plans. CAs help the Province and municipalities to reach the objectives of the provincial Plans through their delegated responsibilities around flooding and other natural hazards; their resource management agency role; as plan review service providers to municipalities; as a public commenting body for applications under the *Planning and Environmental Assessment Acts*; and, as one of the largest landowners in Ontario. We are pleased to note the following issues previously raised by TRCA that have been addressed to varying degrees in the proposed amendments:

- Recognizing the value of, and strengthening the requirements for watershed planning to ensure that growth occurs in an environmentally sustainable manner;
- Adding into the Greenbelt Plan and Growth Plan a new class of features, "Key Hydrologic Areas", to be identified, managed and protected as part of the Water Resource System;

- Harmonization of terminology;
- Increased support for agricultural lands and related rural uses;
- Strengthened policy requirements for integrating infrastructure and land use planning;
- Addition of policies to manage large-scale fill activities;
- Addition of policies for the use of Green Infrastructure and Low Impact Development (LID) techniques; and
- Recognition of the need and direction to be planning for climate change adaptation and mitigation.

Comments are based on TRCA's extensive experience working within the framework of the four provincial Plans that are under review. CAs are the experts when it comes to watershed planning and management. The Province is urged to recognize this expertise and increase the integration of CAs in the implementation of these Plans. This is particularly important for: facilitating watershed planning; defining natural heritage systems; natural hazard delineation and mapping under individual CA regulations; stormwater management (including green infrastructure and low impact development); protection of municipal drinking water sources; protection of environmentally sensitive lands; and, partnering and providing technical advice to planning authorities and the Province. Conservation authorities add value to the growth planning process by bringing a regional perspective to cross boundary/watershed issues and across legislative review and approval processes (high level through to detailed design for both development and infrastructure).

Our comments are also informed by formal and informal discussions with staff from other conservation authorities, Conservation Ontario and municipalities. Due to the harmonization of the plans done to date, many of the comments are applicable to more than one plan. The attached table also provides supplementary detailed comments and plan-specific references as to where the theme comments from this letter apply. The key themes for TRCA's comments follow a format similar to that used in the provincial guide to the proposed changes to the four Plans – *Shaping Land Use in the Greater Golden Horseshoe*:

1. Building Complete Communities
2. Supporting Agriculture
3. Protecting Natural Heritage and Water
4. Growing the Greenbelt
5. Addressing Climate Change
6. Integrating Infrastructure
7. Improving Plan Implementation
8. Measuring Performance, Promoting Awareness and Increasing Engagement
9. Definitions

1) Building Complete Communities

TRCA supports the proposed policy direction for building complete communities with increased transit-supportive densities and increased intensification targets, as this helps to decrease pressures to expand the urban footprint further into rural, agricultural and natural areas. We also appreciate the clarification provided in the Growth Plan (GP) stating that, despite provincial direction for intensification, "growth should be generally directed away from hazardous areas, including those that have been identified as special policy areas in accordance with the PPS". Further, we strongly support the proposed policies for settlement area boundary expansion that require the preparation of master plans for water, wastewater and stormwater, as informed by watershed planning, in order to demonstrate that the proposed expansion and associated servicing would not negatively impact the water resource system.

Complete Communities

TRCA generally supports the phrase in the definition that “Complete communities may take different shapes and forms appropriate to their context”. This is particularly appropriate given the great diversity of settlement areas in TRCA watersheds ranging from major cities to rural hamlets. We believe, however, that this definition is too narrow in scope. The definition of “Complete Communities” should be expanded to include an environmental component that describes the aspects of healthy and sustainable communities such as public health and safety, and the contributions of a healthy environment (clean air and water; resilient natural systems; access to a low-carbon lifestyle) to the overall health and well-being of residents.

Protection from Natural Hazards

TRCA is supportive of increased intensification targets in the Growth Plan to assist Ontario in reaching its climate change objectives as outlined in the Climate Change Strategy, 2015 as well as to build complete communities. However, stronger policies are required to ensure that increasing intensification targets do not lead to increased pressure to develop lands adjacent to or within natural heritage or natural hazard areas or drinking water vulnerable areas in order to meet the density targets. Further, the policies should address mitigation and remediation requirements for redevelopment and intensification where buildings and infrastructure are already located within hazardous lands. For example, the context section of GP 2.1 has greater clarity and detail than the policy itself (2.2.1.2 j), which states only that growth should be generally directed away from hazardous lands. Other than unavoidable crossings for public infrastructure, there should be no further new development or new infrastructure approved within hazardous lands, as this will only compound future risks from climate change and make infrastructure less resilient. Where historical development and infrastructure already exist in hazardous lands, and these vulnerable areas are proposed for redevelopment and expanded infrastructure, risk assessments should be required to demonstrate that new hazards are not created and existing hazards are not aggravated, consistent with PPS policy 3.1.7 c. The Growth Plan policy should be strengthened and amended accordingly.

Greenfield v Urban Redevelopment

The policy focus on managing for settlement area boundary expansions through the various master plan studies noted above is entirely appropriate, as the upstream protection of natural heritage and water resource systems is critical to downstream flood protection and mitigation of cumulative impacts. We still have concerns, however, that the GP is too focused on “greenfield” development and that sufficient policy direction is lacking for the need to manage the impacts of intensification and redevelopment in the existing urban areas. We are now reaching a threshold capacity in TRCA watersheds where communities, in particular redeveloping communities in urban growth centres and built-up areas, will increasingly be put at risk from the combined impacts of intensification, new growth in headwaters areas and climate change. The GP needs to be strengthened with additional policies for continuous improvement in how we manage stormwater and invest in infrastructure and hazard remediation for redevelopment and intensification areas. These policies need to include direction for incorporating ecological design in the restoration and enhancement of the natural heritage system and water resources system and other urban green infrastructure, to provide an enhanced open space system and reduce the risk of flooding and erosion where it currently occurs in existing flood vulnerable areas.

Urban MESP and Flood Vulnerable Areas

Given provincial direction for intensification levels moving to 60%, TRCA sees advantage to applying the Master Environmental Servicing Plan (MESP) concept to large urban redevelopment areas through a Growth Plan mandated “urban MESP”. The secondary planning process for large areas of existing

development undergoing urban revitalization is often challenged by disparate land ownership, uncoordinated timing and the need to remediate flooding and erosion hazards and to restore and expand natural areas to provide resilience for a growing population. These lands could especially benefit from a municipally-led urban MESP process that advances ecological design and a systems approach to natural heritage restoration and natural hazard remediation on a comprehensive (sub)watershed basis. The proposed policies for Built-up Areas and Urban Growth Centres are too strictly focused on targets for density and intensification. These areas also need to be liveable, with high quality urban design that addresses stormwater retrofits, urban flood and hazard management and which seeks to mitigate future climate change impacts by planning for a system of open space, urban forest and the incorporation of green building technologies and green infrastructure. The urban MESP approach would be an ideal mechanism to achieve integrated planning for water and hazard management, infrastructure renewal, climate change adaptation and mitigation and natural heritage systems restoration at the broader scale with the implementation of green infrastructure and low impact development at the local scale.

The TRCA jurisdiction has a number of flood vulnerable areas (FVA) of existing development that are designated for redevelopment in accordance with the Growth Plan. Through the urban MESP process, opportunities for remediation need to be actively sought and planned for, to manage the risk that comes with more intensification in these FVA. To just "generally direct development away from hazardous lands" is not a realistic option in these situations.

TRCA recommends that policies for Building Complete Communities be amended such that:

- **The definition of “Complete Communities” be revised to add an environmental component;**
- **The policies for restricting development and infrastructure in areas of natural hazards be strengthened;**
- **Growth Plan sections 2.2.1 Managing Growth, 2.2.2 Built-up Areas and 2.2.3 Urban Growth Centres be amended with a stronger emphasis on urban flood management, remediation and the integration with green infrastructure and low impact development techniques for existing Flood Vulnerable Areas; and**
- **New policies be added requiring the completion of an urban Master Environmental Servicing Plan for areas of major urban redevelopment and revitalization to comprehensively address in an integrated manner, issues such as urban flooding and natural hazard remediation, water balance, infrastructure risk assessments and the incorporation of ecological design principles to integrate green infrastructure into an enhanced open space system.**

2) Supporting Agriculture

TRCA has previously commented on the need for increased flexibility for the agricultural community to promote and enhance rural livelihoods, as well as the need to harmonize the definitions of agriculture and its related activities, with the language used in the Provincial Policy Statement (PPS) 2014. We are pleased to see that this has largely been captured in the proposed plan amendments, along with other policies to strengthen the viability of the agricultural industry, such as adding new policies for: the identification by the Province of the agricultural system for the Greater Golden Horseshoe (GGH); the identification and promotion of an agricultural support system; and recognizing and providing opportunities to support local food, urban and near-urban agriculture.

Clarify the Policy Framework regarding Agricultural Uses and Natural Heritage/Hydrologic Evaluation Exclusions

CAs have regulatory requirements where NHE/HE or environmental impact studies could still be required to demonstrate compliance with permit applications submitted under section 28 of the *Conservation Authorities Act*. These study requirements benefit the farmer by helping to ensure that a farmer's investment in new buildings is protected from natural hazards such as flooding and erosion. Similarly, Source Protection Plans under the Clean Water Act, 2006 may also require hydrological and hydrogeological assessments for certain future development and buildings, which helps to ensure the safety and quality of public drinking water systems. The policies of the four Plans need to clearly state that requirements of other regulatory agencies may still require environmental studies to be completed. Policies in the Greenbelt Plan that address this need to be added into the Growth Plan.

In reviewing the details of the proposed policies, we find that some of the wording and concepts as written, especially in the Growth Plan, are very complex and may lead to unintended consequences and challenges during implementation (policies 4.2.2, 4.2.3, 4.2.4). In particular, we have identified several issues with respect to the policies that appear to exempt new buildings or structures for *agricultural uses, agriculture-related uses and on-farm diversified uses* that are proposed within the NHS and/or adjacent to key hydrologic features or key natural heritage features, from the requirements of completing a natural heritage evaluation or hydrologic evaluation (NHE/HE). Those uses appear to be subject to demonstrating compliance with a number of criteria, but this too poses several problems.

The policies require “demonstration” that a number of criteria be met in order to be exempt from completing an NHE/HE, but no direction is provided on how compliance with the criteria is to be demonstrated. The Province needs to clarify if the required “demonstration” of meeting the criteria is to be achieved through submission of a scoped environmental study, a detailed site plan or some other means.

Including *on-farm diversified uses* in this policy is problematic in that these uses are secondary to the principal agricultural use of the property, and may be totally unrelated to the agricultural operations. TRCA has seen instances of environmental impacts taking place from non-agricultural uses such as structures for the storage of heavy machinery or landscaping equipment. The policies that exempt requirements to complete an NHE/HE should be limited to *agricultural uses* and *agriculture-related uses*. *On-farm diversified uses* should not be included in this exemption.

TRCA recommends that the policies for Supporting Agriculture be revised, clarified and harmonized such that:

- **The potential natural heritage/hydrologic evaluation requirements of other approval authorities be recognized;**
- **Clear direction be provided as to what constitutes a “demonstration” of compliance with the criteria that must be met to be exempt from an NHE/HE; and**
- **On-farm diversified uses, large scale buildings and structures that meet the threshold for “major development” and the placement/dumping of large amounts of fill (i.e. > 500 m³) should continue to be subject to a full NHE/HE, when proposed adjacent to KNHF/KHF.**

3) Protecting Natural Heritage and Water

TRCA strongly supports the additional text in the Context section of the Growth Plan, Chapter 4 Protecting What is Valuable, which identifies the importance of water resource systems, natural heritage systems and the agricultural system in providing essential ecological goods and services and resilience to climate change. TRCA also strongly supports the new policies requiring municipalities to undertake

watershed planning to identify and protect a water resources system, including both *key hydrologic features* and the newly introduced *key hydrologic areas*.

Watershed Plans – Definition and scope need to be clarified and made more robust

We find that some of the wording and concepts as written, may lead to unintended consequences and challenges during implementation, and could benefit from refinement, clarity and/or strengthening of the language in various policies. Watershed plans can not only inform the protection of water resources and stormwater management plans, but also help to inform the creation of complete communities by integrating planning for the protection and enhancement of natural heritage systems and addressing climate change mitigation and adaptation strategies. Further, watershed plans can identify vulnerable infrastructure and development at risk from flooding and erosion hazards, and inform the creation of strategies to reduce risk and protect the investments made in provincial and municipal infrastructure and private developments.

The definitions for *watershed plans*, *watershed planning* and *subwatershed plan* need to be harmonized and integrated equally into all four of the documents under review. Most importantly, this needs to include the integration of natural heritage systems (NHS) into all scales of watershed planning. Some definitions are included in some plans and not others. Where definitions are included in multiple plans, they are not always consistent, which may lead to confusion and challenges in implementation. In particular, we are most concerned that the definition for watershed planning does not reference the need to integrate natural heritage systems, as does the definition for subwatershed plan. The identification and integration of natural heritage systems must be done at multiple scales – first at a landscape scale (new proposed policies assign this task to the province, likely to be done as a desk-top level analysis); then refined at the watershed scale (to be done by municipalities in partnership with conservation authorities) based on more detailed assessments including scientific modelling of various natural systems and climate change impacts; and then at the subwatershed scale based on detailed fieldwork and refinement and testing of models for various development scenarios. The identification, protection and enhancement of natural heritage systems and the relationship to natural hazards (flooding and erosion) must be integrated into all scales of watershed planning.

There is also a need to recognize the benefits of the NHS in managing water resources and cross-reference to its role in providing green infrastructure and climate resiliency. There should be greater clarity and consistency provided for the expected goals and outcomes of watershed and subwatershed plans, such as requiring the identification of thresholds for unacceptable impacts related to climate change or future growth. The existing language for the goals for watershed plans should be consistent and harmonized across all four Plans to “protect, enhance and restore” the natural environment. There should also be greater recognition of the role of CAs in undertaking the plans and a strengthening of implementation actions through a requirement for provincial approval of watershed plans and municipal approval of subwatershed plans. There is a need for the watershed planning process to recognize the importance of monitoring in adaptively responding to the results of implementation actions. We recognize that some of these suggestions can be addressed within the four Plans, while others may be best addressed in the guideline documents to be prepared by the province. In any event, CAs have a wealth of experience in undertaking integrated watershed plans. We would be pleased to assist the province in the preparation of the guidance documents for integrated watershed planning.

Complex Policy Framework for Natural Heritage Systems

Sections 4.2.2 (Natural Heritage Systems), 4.2.3 (Key Hydrologic Features, Key Hydrologic Areas and Key Natural Heritage Features) and 4.2.4 (Lands Adjacent to Key Hydrologic Features and Key Natural

Heritage Features) appear to be overly complex, confusing and filled with multiple exemptions, alternative approaches and cross-references to multiple other policies. We recommend that these sections be simplified as much as possible and/or that provincial guidance documents address these policies as soon as possible.

As an example, Growth Plan policy 4.2.3.2 permits large scale development such as secondary plans, plans of subdivision and condominiums within key hydrologic areas, based on meeting various tests and criteria. However, this policy is then negated by policy 4.2.3.3 which states that the above policy does not apply within settlement area boundaries. It is not clear if this policy relates back to GP policy 2.2.9 Rural Areas, and begs the question as to why new plans of subdivision and condominiums are being permitted outside of settlement areas. Never-the-less, further policy direction is needed when large-scale development is being proposed in key hydrologic areas or natural heritage systems, such that the siting of more pervious land uses in these areas (i.e. parks, schools, open space, natural heritage system enhancement and restoration) is actively considered.

It appears that the Ministry of Natural Resources and Forestry (MNRF) is assigned the task of mapping a natural heritage system for the Greater Golden Horseshoe. Much of this work, at least in the inner ring, has already been completed by a number of municipalities and conservation authorities. TRCA would be pleased to share our data and hope to have the opportunity to collaborate with MNRF during this process. We would also appreciate confirmation that provincial staff will be available to defend this provincial system should it be challenged at the OMB.

Excess Soil and Fill

The proposed policies that “encourage” municipalities to develop soil reuse strategies and integrate sustainable soil management practices into planning approvals, as well as require the use of best practices for the management of excess fill, amount to the status quo. This continues to be a serious issue for municipalities and CAs alike due to the potential for related environmental, social and traffic impacts, and consideration should be given to strengthening these proposed policies. We understand that the Ministry of Environment and Climate Change (MOECC) has been studying this issue and developing a regulatory framework or guidelines to assist planning authorities. This should be completed as soon as possible to assist in dealing with this issue and incorporated into strengthened policy direction in the four Plans. Further, clarity should be provided if the placing of excess fill on agricultural lands would be classified as an *on-farm diversified use*, and thus be exempt from an NHE/HE, which would be contrary to the new proposed policy. Fill placement should require some means to determine that the activity will cause no adverse environmental effects.

TRCA recommends that the policies for Protecting Natural Heritage and Water be revised such that:

- **The definition, scope and content of Watershed and Subwatershed Plans is harmonized among the four Plans and that they be amended to include clear goals for the protection, enhancement and restoration of Natural Heritage Systems;**
- **The role and expertise of conservation authorities in undertaking watershed plans be acknowledged, especially as it relates to stormwater management and the protection from and remediation of natural hazards;**
- **Growth Plan policies for Natural Heritage Systems, Key Natural Heritage and Key Hydrologic Features and Lands Adjacent to those Key Features be simplified as much as possible and that**

provincial guidance for understanding and implementing these policies be prepared as soon as possible; and

- **Excess Soil and Fill policies be strengthened to prohibit filling within Key Natural Heritage and Key Hydrologic Features, and that a natural heritage/hydrologic evaluation be required for filling adjacent to these features.**

4) Growing the Greenbelt

TRCA supports the proposal to grow the Greenbelt by adding coastal wetlands, in addition to the 21 urban river valleys added to the Greenbelt. Further, we support an ongoing process to identify and add additional ecologically and hydrologically significant lands to the Greenbelt, as identified through watershed planning. Currently within TRCA watersheds, growth and development is moving further and further up into the headwaters of our major rivers and creeks, with potential serious implications resulting.

Downstream Impacts from Headwaters Development

Increased impervious surfaces result from continued growth in the upper watersheds, which leads to increased flows in watercourses during major storm events. This in turn increases the risk to downstream communities and infrastructure from natural hazards such as flooding and erosion. We have experienced severe storms, which are likely to increase in frequency due to climate change. These storms have eroded the bed and banks of watercourses, exposing buried gas and oil pipelines, water mains and sanitary sewers. Once exposed, this infrastructure is vulnerable to surface flows and potential damage and rupture from in-stream rocks and other objects moving in the strong current. Rupture of and subsequent spills from these pipelines and sewers can cause environmental degradation, contamination of drinking water or the potential for gas line explosions or fires. Streams in the upper reaches of watersheds have limited ability to assimilate the additional flow generated by urbanization. Flood lines downstream are likely to expand due to the increased flows, increasing the number of homes, people, and businesses at risk from the higher depths and velocities of flood flows included within the expanded areas subject to flooding.

Areas of Shallow Groundwater

Some areas of current growth in the upper reaches of watersheds are vulnerable to shallow groundwater levels of the aquifer that are present near the toe of the south slope of the Oak Ridges Moraine. Because shallow groundwater is often not identified until later planning stages (i.e. site plan, building permit), these new developments often require permanent dewatering to limit the interaction between groundwater and basements, foundations or underground parking structures. When groundwater issues are only identified at these late planning stages, permanent dewatering of the aquifer is usually the only feasible solution. Permanent dewatering is a wasteful use of the valuable groundwater resource, and can also increase flooding and erosion downstream as the groundwater is pumped and discharged to surface streams. Further, the lowered water tables that result from permanent dewatering can affect the water availability in the rooting zone of natural features such as woodlands and wetlands, resulting in ecological degradation.

Parks, Open Space and Trails

TRCA is a leader in the development of trail systems in its watersheds. We currently have developed more than 700 km of trails linking parks, valley systems, the waterfront and communities. This trail system, along with trails of other CAs, should form the foundation of a GGH trail system. These trails provide outdoor recreation linking people to nature and promote healthy lifestyles. Trails should be included as a component of “Complete Communities”.

The Plans should also provide flexibility for CA lands to respond to changing demands for nature-based recreation and tourism uses, including education and eco-tourism opportunities. Many CA facilities are aging and in need of refurbishment and upgrades to meet new accessibility standards and increased demands from a growing population. CAs require flexibility in the ability to offer public uses complementary to its objectives, in order to generate revenues and achieve financial sustainability to maintain and upgrade its facilities to ensure they operate at the highest standards for environmental protection and accessibility to people of all abilities.

TRCA recommends that policies for Growing the Greenbelt be amended such that:

- **Areas of shallow groundwater and high artesian pressure be included as components of Key Hydrologic Areas to be assessed through watershed planning for additions to the Greenbelt; and**
- **Headwater areas of the rivers and creeks within TRCA watersheds be seriously considered for additions to the Greenbelt, especially those areas that are almost fully surrounded by other Greenbelt lands, such as those in the headwaters of the Carruthers Creek and the Rouge and Humber River watersheds; and**
- **Conservation authorities are recognized as critical partners in the GGH for providing trails and outdoor recreational opportunities and that flexibility is provided for the enhancement to facilities and uses permitted on CA lands, to meet the needs of a growing population, accessibility standards and financial sustainability.**

5) Addressing Climate Change

TRCA strongly supports the integration of climate change and the related policies throughout the amended Plans. We are pleased to see the proposed policies that require municipalities to incorporate climate change policies in their official plans and undertake comprehensive stormwater management (SWM) planning for settlement areas. We also support the proposed policies that encourage municipalities to increase infrastructure resiliency, use green infrastructure and LID techniques and develop greenhouse gas inventories, emission reduction and adaptation strategies and related targets and performance measures. We also support including as an additional purpose of the Natural Core and Natural Linkage Area designations in the amended ORMCP, the protection and restoration of natural areas to help mitigate and reduce the impacts of climate change.

Climate Change Section of Growth Plan Needs Strengthening

We note in section 4.2.10 of the Growth Plan that municipalities are required to develop official plan policies addressing climate change mitigation and adaptation, but only encouraged to actually implement them, which creates a potential gap in effective implementation. Further, given the importance the province is placing on climate change adaptation and mitigation, resiliency planning and risk vulnerability assessments, section 4.2.10 appears to be too brief and minimizes, rather than adds to the provincial messaging around climate change. There are many policy references to climate change in the amended Plans which would have more power and urgency if they were to be consolidated into this section and integrated in a comprehensive manner.

Need to Integrate Watershed Planning with Climate Change Resilience

There is a need to align and coordinate the strategies outlined in Ontario's Climate Change Action Plan (CCAP) 2016 - 2020, with the GP requirements for watershed planning. There also needs to be a stronger link made in the four Plans between watershed planning and climate resiliency (e.g. Growth Plan 4.2.10).

For example, watershed planning will identify strategies to help address the impacts of extreme weather events. In addition, watershed planning can play an important role in identifying land-based carbon sequestration and storage opportunities, and in protecting lands with high potential for supporting carbon offset projects through the Province's Climate Change Action Plan, such as land based carbon sequestration in forests, wetlands, grasslands and agricultural areas. These linkages between watershed planning and climate resiliency need to be made much stronger in the proposed policies.

Additionally, GP section 4.2.10 appears to emphasize mitigation actions over adaptation actions. A reference to the forthcoming Ontario Climate Adaptation Strategy, Climate Ready, would help to remedy this imbalance.

TRCA recommends that policies for Addressing Climate Change be amended such that Growth Plan section 4.2.10:

- **Is strengthened to require official plan policy implementation;**
- **Consolidates, integrates and/or cross-references all other climate change related policies and actions in the four Plans;**
- **Identifies the role integrated watershed planning should play in planning for climate change mitigation and adaptation; and**
- **Ensures coordination with other provincial climate change documents, programs and activities.**

6) Integrating Infrastructure

TRCA supports the proposed amendments to the Greenbelt Plan section 4.2.3 Stormwater Management and Resilient Infrastructure Policies. This section promotes the use of LID and provides the strong direction that *applicable recommendations, standards or targets within a subwatershed plan or equivalent and water budgets are complied with* (4.2.3.4 c). Similarly, we support the proposed amendments to the ORMCP that require infrastructure studies to assess actions to reduce greenhouse gas emissions and to adapt to climate change impacts, and which also references the need to implement erosion and sediment controls during construction. We also strongly support the proposed new Growth Plan policies for integrated planning for infrastructure that require: vulnerability risk assessments; developing stormwater master plans informed by watershed planning, including examining the cumulative environmental impacts; incorporating LID and green infrastructure; and considering the impacts of climate change. The hydrologic modelling and floodplain mapping of Conservation authorities will be very useful to municipalities for these assessments.

Minimizing Impacts from Infrastructure

It has been TRCA's experience that the mission of all infrastructure providers is ultimately the same: to provide a public service. These providers look to CAs as partners to ensure their environmental risks are managed. TRCA also views the natural heritage system as an essential public service with equal weight and value among all of the considerations that are a part of city building. The introduction to the Growth Plan speaks to the importance of adapting communities and infrastructure to be more resilient to the impacts of climate change. Policies in the Plan encourage green infrastructure and low impact development in order to move toward resilience. Therefore, adding greater emphasis in the Plan on the environmental and climate change risks associated with infrastructure, as well as development, on both private and public lands, is appropriate and needed for meeting the intent of the Growth Plan as outlined in its introduction, principles and policies.

TRCA supports the hierarchy identified in Growth Plan policy 3.2.5.1 d related to infrastructure corridor development and impacts to natural heritage and hydrologic features and systems – avoid, minimize, mitigate. Unfortunately, it has been our experience that residual negative impacts and outright net losses to natural heritage and water resources features and functions continue to occur. We are starting to see a number of progressive municipalities and other infrastructure providers recognize these residual net negative impacts and incorporate a restoration component into their infrastructure plans. A similar policy should be included in each of the four Plans, with a fourth component to be added to the hierarchy – to compensate for, or offset the residual negative impacts through a restoration and enhancement plan as part of the infrastructure development.

Following on the point above, we suggest that the permissiveness given to infrastructure corridors regarding impacts to natural heritage/hydrologic features and systems be applicable only to the corridor itself, due to its limited locational flexibility. The accessory uses to the corridor (i.e. parking lots, pumping stations, transmission towers, transit stations, highway interchanges, etc.) have greater flexibility in their location and should be held to a higher standard. TRCA suggests that a policy be added to the Growth Plan that is similar to ORMCP policy 41 (3), which exclude the accessory uses to the infrastructure corridor from being located in the most environmentally sensitive areas.

Implementation Clarity for Infrastructure

Although integrating infrastructure with land use planning is an imperative for sustainable growth management, the implementation challenge is that infrastructure falls under an array of legislative processes and is under the purview of a number of different approval authorities. Therefore, the Growth Plan should be clear in its references to infrastructure, development, and environmental assessment, distinguishing between and to where it applies: i.e. public infrastructure that falls under an *Environmental Assessment Act* process; privately constructed infrastructure that falls within the *Planning Act* process; or where it applies to both. The policies should also be clear as to which proponent(s) the implementation of the policies rest with: the Province (e.g., MOECC, Metrolinx), municipalities (e.g., upper, single or lower tier) or both; and in the case of conflict, be specific about which body's plans prevail, (e.g., Metrolinx, versus upper tier municipal master plans, versus lower tier municipal master plans). GP policy 5.2.3.1 states that a coordinated approach will be taken to implement the Plan among all public agencies for issues that cross municipal boundaries. We suggest that coordination is also needed across different legislative processes that affect growth such as the *Planning Act*, the *Environmental Assessment Act* and the section 28 regulations of the *Conservation Authorities Act*. Growth Plan implementation would further benefit from specific reference in 5.2.3 to coordination across these processes. It is important to point out that under section 14 (1) of the *Places to Grow Act*, decisions pursuant to the *Environmental Assessment Act* must conform to the Growth Plan.

Stormwater Management in the Connecting Major River Valleys of the Greenbelt Protected Countryside

TRCA sees policy 4.2.3.3 in the Greenbelt Plan, regarding the location of stormwater management ponds, as unclear and which would benefit from further guidance, including locational mapping, as well as much stronger policy direction. We believe that the lands subject to this policy are the Greenbelt “fingers” which extend through the “whitebelt” lands of potential future urban areas. These lands are differentiated from Urban River Valley (URV) lands in that they are designated as Protected Countryside and are almost fully overlaid by the Natural Heritage System. On the ground, these lands include the major connecting river valleys as well as additional lands on either side of the natural feature, which are currently often active agricultural lands. We understand the purpose of these important Greenbelt “finger” natural corridors is for several reasons: protection of the existing features and functions; connecting the Greenbelt to the Lake Ontario shoreline; restoration opportunities to enhance the natural system and buffer it from

future adjacent urban development; and, to increase resilience to both the natural system and the downstream communities from potential flooding and erosion impacts due to climate change and urban development in headwater areas.

In the way that GB policy 4.2.3.3 is currently being interpreted and implemented, these additional GB natural heritage system lands adjacent to the valley feature, are facing increasing pressures to accommodate uses such as stormwater ponds and their outfalls, trails, low impact development facilities, access roads and infrastructure crossings, most of which require significant amounts of grading and compaction of soils. The Greenbelt is a landscape where urban development is not supposed to take place. TRCA suggests that it is necessary to place limits on the type and amount of accessory infrastructure uses and facilities serving the adjacent future urban development that can/should be permitted in these major river valley corridors. We suggest that this policy be revised and clarified to require the majority of these natural heritage system lands to be restored and enhanced to natural self-sustaining vegetation; and to specify that stormwater pond locations are subject to siting criteria such as being located above the stable top of bank and outside of KNHF, KHF and their vegetation protection zones and hazardous lands.

TRCA recommends that policies for Integrating Infrastructure be amended such that:

- **A new policy be added to the Growth Plan requiring the applicable recommendations, standards or targets within a subwatershed plan and water budgets are complied with;**
- **Policies for green infrastructure and low impact development are clarified to state that these techniques should be considered on both private and public lands;**
- **Infrastructure policies are strengthened to require restoration and enhancement plans to offset negative impacts and that accessory uses to infrastructure corridors be located outside of key environmental features and hazardous lands;**
- **Infrastructure policies are clarified with respect to implementation roles and legislative authorities; and**
- **Policies are clarified and strengthened to increase restoration and enhancement requirements and limit the types and amounts of stormwater management and other infrastructure uses allowed in the connecting major river valley “fingers” and Natural Heritage System of the Greenbelt Protected Countryside.**

7) Improving Plan Implementation

TRCA generally supports the harmonization that has been done among the four Plans and the PPS as this will help to create consistency and minimize confusion in policy interpretation where the geography of several Plans overlaps. We also support the intention by the province to produce guidance materials for several topics including watershed planning, stormwater management, identification of Key Hydrologic Areas and for developing greenhouse gas inventories, targets and emissions reduction strategies.

TRCA believes that there are a number of additional changes needed both within the four Plans and to other legislation to facilitate effective implementation of the Plans. This includes recognizing within the four Plans the roles of Conservation Authorities in Plan implementation. It also requires changes to other Acts and the implementation of the “complementary recommendations” from the provincially appointed Advisory Panel.

Recognizing the Role of Conservation Authorities in Plan Implementation

The role of conservation authorities in helping to deliver various aspects of the implementation of the four Provincial Plans is not specifically stated. CAs are active in: facilitating watershed planning; defining natural heritage systems, natural hazards and mapping under individual Regulations; climate change

vulnerability risk assessments; stormwater management, flood and erosion management, and the protection of environmentally sensitive lands and aquatic systems. In addition, the role of CAs in facilitating collaborative watershed planning through all of its phases (building partnerships, watershed characterization, impact assessment, developing mitigation and implementation strategies, monitoring, evaluating and updating) should be recognized. Conservation Authorities should be specifically identified as partners in helping to implement these Plans.

As an example, Growth Plan *section 4.2 Policies for Protecting What is Valuable* should recognize the role that CAs play in natural heritage and hazard protection, and acknowledge that it is a shared responsibility and not solely undertaken by municipalities. The Growth Plan provides one reference to conservation authorities (section 4.2.1 Water Resource Systems) indicating that “*municipalities, partnering with conservation authorities as appropriate, will ensure that watershed planning is undertaken...*” As numerous amendments will impact the operational roles of CAs, CA expertise and information will be increasingly relied upon to implement these Plans. To ensure better integration and operationalization of the plans, the role of Conservation Authorities should be clearly acknowledged throughout the four Plans.

The Province is encouraged to consider and acknowledge the CAs in the Greater Golden Horseshoe (GGH) as partners in achieving the complex and integrated objectives of the four Plans, and to leverage CA knowledge and expertise for greater efficiencies in Plan implementation. Further, conservation authorities have close and unique relationships with the municipal governments and communities of the GGH, which the GGH CAs can utilize to support implementation of the four plans through outreach activities. The GGH CAs can support the Government of Ontario in implementing both the objectives outlined in the amended Plans, as well as many of the recommendations in the Advisory Panel Report that need to be operationalized in other ways. In this context, some examples of activities that GGH CAs could lead on behalf of the province include the following:

- Design and implementation of monitoring programs to measure outcomes of the four plans, and analysis of monitored data;
- Reporting and communication regarding the outcomes of the four plans including inventorying activities being undertaken towards plan outcomes;
- Development of technical guidance for activities and innovations prescribed in the plans, such as watershed planning, innovative stormwater management and Low Impact Development, green infrastructure, and natural heritage systems; and
- Delivery of outreach and education programs to various groups and audiences on the intent, interpretation and application of the four plans, including municipal governments, community groups and stakeholder organizations.

Amendments to Other Acts, Plans

As described above, many of the proposed amendments to the Plans focus on, and will rely on, conservation authority knowledge and expertise. It is important that the current review of the *Conservation Authorities Act* results in recognizing and supporting CAs as one of the valuable implementation agents of the four Plans. The concurrent review of the *CA Act* and the four Plans (as well as the upcoming review of the environmental assessment process) presents an ideal opportunity to harmonize policy and regulation frameworks to most effectively facilitate the outcomes that the Provincial Plan revisions intend.

Further, CAs have an interest in ensuring that the proposed enhanced policy direction in the Provincial Plans related to watershed planning, ecological and hydrological protection, natural hazards and climate change adaptation and mitigation are implemented efficiently and without the need to participate in costly and potentially numerous Ontario Municipal Board hearings. As the proposed Provincial Plan amendments will not be appealable, municipal conformity amendments to incorporate the policies into Official Plans and zoning by-laws should be similarly shielded from appeal.

The transition provisions of the ORMCP Plan and Act need to be amended. Applications submitted under the *Planning Act* prior to the promulgation of the ORMCP (2001), where no decision has been made, should no longer be exempt from complying with the full suite of policies in the ORMCP. More importantly, the *ORMC Act* should also be amended to require that approvals issued prior to the ORMCP coming into effect and not yet acted upon, be revised and subject to the full Plan, or at minimum the section 48 prescribed provisions. Examples continue to arise across the ORM of subdivisions approved in the 1970s, '80s and '90s that permit development in wetlands and other significant environmental features.

Further to the above point, policies 5.2.8.2 and 5.2.8.3 of the Growth Plan contain provisions for including a “lapsing date” for draft plans of subdivision approved under the *Planning Act* and for deeming approved plans not to be a registered plan after eight years if they remain unbuilt and do not meet the growth management objectives of the Growth Plan. A similar policy should be included in the ORM and Greenbelt Plans, and applied retroactively, requiring plans to be deemed not to be a registered plan of subdivision, and to amend site-specific designations and zoning accordingly, if the environmental objectives of those Plans are not met.

Additionally, strong provincial guidance is required related to the timing, submission and integration of technical reports necessary to support the approval of *Planning Act* applications in accordance with the four Plans and the PPS. We are finding increasingly that technical report submissions are incomplete, uncoordinated or deferred to later stages in the planning process where decisions have already been made, with little opportunity to address the environmental issues associated with an application. This rushed timeline for approvals, that often leads to “planning by OMB”, without sufficient technical detail to understand the environmental issues associated with an application and to recommend alternative solutions, undermines public faith in the development approvals process and leads to preventable, future remediation costs being borne by public agencies.

Addressing Advisory Panel “Complementary” Recommendations

TRCA appreciates that the Province has made serious efforts to address in some manner all of the primary recommendations from the Crombie Advisory Panel report. Recognizing that many of the other recommendations will need to be made outside of the policies of the four Plans, we strongly recommend that the Province act as quickly as possible to implement the “complementary” recommendations from the Advisory Panel report. Significant Provincial support is required for effective and consistent Plan implementation. CAs have considerable experience in many of these areas and we strongly recommend that the Province involves and consults with CAs in acting on these complementary recommendations. Topic areas of greatest urgency to address include the creation and issuance by the Province of: “Practitioners Guidance” to assist with implementation and interpretation challenges; technical bulletins and guidelines, particularly with regard to watershed planning, natural heritage and water resources system identification, mapping and policy interpretation; and, guidance for alternative development standards for both greenfield and intensification lands, including the incorporation of green infrastructure and low impact development techniques on both private and public lands.

TRCA recommends that policies in the four Plans be amended and other means for Improving Plan Implementation be addressed such that:

- **The role of Conservation Authorities in implementing the four Plans is more strongly identified in the Plans as well as in the concurrent review of the *Conservation Authorities Act*;**
- **Municipal official plan conformity amendments to implement the four Plans be shielded from appeals to the Ontario Municipal Board;**
- **The transition provisions in the *Oak Ridges Moraine Conservation Plan and Act* be strengthened and that the lapsing provisions included in the Growth Plan for approved but unbuilt plans of subdivision, also be included in the Greenbelt and ORM Plans;**
- **Strong guidance materials and requirements for the content, timing and completeness of technical reports in support of development applications be developed by the Province and adhered to during an OMB process; and**
- **Advisory panel recommendations to create guidance materials and technical bulletins to improve clarity and consistency in Plan implementation be acted upon immediately, with involvement from implementation partners, including Conservation Authorities.**

8) Measuring Performance, Promoting Awareness and Increasing Engagement

TRCA agrees strongly with the need to measure performance of the policies in the Plans, including for the outcomes of policy implementation such as changes to environmental quality. We also agree with the need to promote awareness of the Plan policies, as well as the impacts of growth and the measures needed to achieve complete, sustainable and healthy communities. We further agree that all segments of civil society need to be engaged in the implementation of the Plans and the monitoring of outcomes.

Many Conservation Authorities have considerable experience in monitoring environmental conditions and delivering outreach, education and locally tailored stewardship and engagement programs to multiple client groups. Provincial programs for the four Plans should build on existing monitoring and outreach efforts being undertaken by Conservation Authorities, including CA watershed report cards. These programs should also include provincial funding and be consistent across the geography of the four Plans. TRCA would be pleased to offer our assistance and experience to the Province in the development and implementation of these types of programs.

TRCA recommends that the applicable recommendations from the Advisory Panel report for Measuring Performance, Promoting Awareness and Increasing Engagement be acted on by the Province as quickly as possible, with involvement from and building on similar programs undertaken by Conservation Authorities.

9) Definitions

Clear, concise and accurate definitions are critical to ensure the Plans are implemented as intended. It is also very important that the terminology be consistent across all four Plans, in order to eliminate confusion and challenges to policy interpretation at the OMB. In that regard, we have identified in the attached table of detailed comments a number of problematic definitions, along with suggested revisions.

TRCA recommends that the definitions included in the four Plans be amended to be consistent among each of the Plans and that they be refined or corrected as identified in the attached table of detailed comments.

Further information and specific recommendations relating to the comments above are detailed in the attached table. Should you have any questions or require clarification on any of the comments submitted, please contact David Burnett, at 416-661-6600, ext. 5361, or email to dburnett@trca.on.ca.

Sincerely,

Carolyn Woodland, OALA, FCSLA, MCIP, RPP
Senior Director, Planning, Greenspace and Communications
Toronto and Region Conservation Authority

1. BUILDING COMPLETE COMMUNITIES

Urban Master Environmental Servicing Plans (MESPs)

- **TRCA recommends applying the MESP concept for large-scale development in existing urban areas through a Growth Plan mandated “urban MESP”.** Many of the (sub)watershed and stormwater management (SWM) plan requirements (GBP 3.2.3.2; GP 3.2.1, 3.2.6.2c, 3.2.71a, 4.2.1; ORMCP 24) appear to be directed toward greenfield areas and not the existing *built-up areas* subject to provincial intensification targets. Many intensifying urban areas are within flood hazards and will need significant infrastructure upgrades to accommodate growth, including flood remediation and SWM. An urban MESP would be an ideal mechanism to integrate planning for water and hazard management, infrastructure renewal and natural heritage systems at a broader scale with green infrastructure and low impact development (LID) implementation at the local scale. **Sections 2.2.1, 2.2.2 and 2.2.3 of the Growth Plan should be amended to emphasize that flood management and remediation (including integration with green infrastructure, natural heritage system enhancements and LID) are needed in many intensifying urban areas. Furthermore, additional policies should be included within these sections to require an urban MESP for large-scale development in these areas.**

Broadening the definition of "Complete Communities"

- **The definition of *Complete Communities* should include references to natural heritage and water systems.** Both systems are fundamental components of complete communities in that the ecosystem services they provide are essential to a high quality of life, particularly in urban and urbanizing areas. Other considerations that could be incorporated include: green infrastructure, greenspace, walkability and transit access, low carbon lifestyles, food security, etc.
- **The relationship between *Complete Communities* and *Net Zero Communities* needs to be clarified.** A community should not be considered "complete" unless it can meet its energy demands through low-carbon or carbon-free forms of energy sourced as much as possible from local renewable energy installations. Although both terms are important and must be captured within the text of the plans, the definitions should be integrated or cross-referenced.

Protection from Natural Hazards

- The Growth Plan requires enhanced policy direction to ensure its intensification targets do not translate into increased development pressure within or adjacent to natural features and their associated hazard lands or in areas of high drinking water vulnerability. Whereas s. 2.1 clarifies the importance of locating growth outside of hazard lands to protect public safety and mitigate flood risk (including special policy areas [SPAs], in accordance with the PPS), policy 2.2.1.2j states only that growth should be generally directed away from hazardous lands. **We recommend the policy be amended to state that, other than unavoidable crossings for public infrastructure approved within hazardous lands, new development and infrastructure should not be permitted within hazardous lands, including those designated as SPAs in accordance with the PPS.** – GP 2.1, 2.2.1.2j

Eco-Business Zones and Eco-Industrial Areas

- **The policies in s. 2.2.5 of the Growth Plan should encourage the adoption of new planning paradigms for employment lands such as eco-business zones and eco-industrial areas in growth centres and other urban areas.** Eco-business zones are areas of employment and/or industrial activity that promote environmental quality, economic vitality and social benefits through the continuum of planning, design, construction, long-term operations and deconstruction. Such developments improve inter-business collaboration and synergies, which lead to enhanced low-carbon transportation options for employees, material exchanges, district scale infrastructure projects, green technologies, and resource efficient and resilient employment areas.

2. SUPPORTING AGRICULTURE

Agricultural Exemptions for Natural Heritage and Hydrologic Evaluations (NHE/HE)

- **The Plans need to ensure that the policies align with TRCA’s regulatory authority, pursuant to the Conservation Authorities Act (CAA).** CAs have regulatory requirements where NHEs/HEs or environmental impact studies (EIS) may still be required to demonstrate compliance with permit submissions under the CAA. Many CAs also have established policies prohibiting new development (and certain forms of redevelopment) within hazardous lands associated with KNHFs/HSFs. As written, the policy language may cause confusion and frustration for landowners and CA staff alike. **TRCA staff recommends revising the policies to acknowledge that CAs have regulations that may apply within the area of influence of KNHFs/HSFs which must be considered in relation to these policies.** - GP 4.2.4.4c; ORMCP 22.4, 22.5, 26.(4.1), 26.(4.2); GBP 3.2.5.8
- Further to the above point, **GBP policy 3.2.2.6 and text from policy 5.4, paragraph 6, should be added to sections 4.2 and 5.2.1 of the Growth Plan.**
- In associated policies exempting agricultural uses from NHE/HE requirements, part of the policy properly reflects that other approval authorities may have requirements which need to be met (ORMCP 22.[5] 6 and 26.[4.2] 6; GBP 3.2.5.8f). This phrase “or other approval authority” is missing in the similar policy in the Growth Plan and should be added to GP 4.2.4.4 c) vi.
- The policies require “demonstration” that a number of criteria be met in order to be exempt from completing an NHE/HE. No direction is provided on how compliance with the criteria is to be demonstrated. This would almost seem to require a scoped natural heritage/hydrologic evaluation to justify the exemption, thus defeating the purpose of the policy. **The Province needs to clarify if the required “demonstration” of meeting the criteria is to be achieved through submission of a scoped environmental study, a detailed site plan or some other means.** - GBP 3.2.5.8; GP 4.2.4.4c; ORMCP 22.4, 22.5, 26.(4.1), 26.(4.2)
- **GBP 3.2.5.8, GP 4.2.4.4 c) and ORMCP 22.5 and 26.(4.2)** need to have text added to clarify that “all of” the following requirements must be met to be exempt from completing a NHE/HE.
- **Including on-farm diversified uses in the NHE/HE exemption policy is problematic** in that these uses are secondary to the principal agricultural use of the property, and may be totally unrelated to the agricultural operations. TRCA has seen instances of environmental impacts taking place from non-agricultural uses such as structures for the storage of heavy machinery or landscaping equipment. The policies that exempt requirements to complete an NHE/HE should be limited to agricultural uses and agriculture-related uses. **On-farm diversified uses should not be included in this exemption.**
- The policies exempting agricultural (and related) uses and associated structural development from NHEs (GP 4.2.4.4c; ORMCP 22.4, 22.5, 26.[4.1], 26.[4.2]; GBP 3.2.5.8) should be revised to emphasize that, in accordance with applicable source protection plans under the *Clean Water Act (2006)*, hydrogeological assessments may still be required and development prohibitions could still apply.

3. PROTECTING NATURAL HERITAGE AND WATER

Integrating Natural Heritage Systems (NHS) in Watershed Planning

- Best practices require *subwatershed plans* to be integrated with NHS protection, however, this linkage is not reflected in the definitions of *watershed plan* or *watershed planning*. **The NHS has a critical role in water (and ecosystem) management and should be integrated into each scale of watershed planning, including their associated definitions.** This integration should also recognize the benefits of the NHS in managing water resources and cross-reference to its role as a form of green infrastructure. - GP 4.1, 4.2.1, 4.2.2; ORMCP 24.3, GBP 3.2, 3.2.3.2
- Policies 5.2.2.2c and 5.2.2.2d of the Growth Plan indicate that the Province will identify, establish, or update NHS mapping and will provide guidance on watershed planning. However, it is not clear whether mapping of the NHS (GP 4.2.2, 5.2.2.2c) will be integrated into the (sub) watershed planning processes (GP 4.2.1). As emphasized in the GBP (3.2.1.3), ecological linkages exist between terrestrial and water-based functions and are joint components of the Natural System (3.2.1.3). Given this synergistic relationship, **NHS mapping should form an integral part of watershed planning.**

- The language used in the Water Resources Policies section of the GBP (3.2.3), i.e., that, "all planning authorities shall provide for a comprehensive, integrated and long-term approach for the protection, improvement, or restoration of the quality and quantity of water" could be integrated into the Natural Heritage Policies section (3.2.2), because water resource systems are dependent on the integrity of the natural system (and vice versa). - GBP 3.2.2, 3.2.3

Watershed Planning Scope, Implementation and Adaptive Management

- (Sub)watershed planning is required to "inform" decisions on growth, development, settlement area boundary expansions, and planning for water, wastewater and stormwater infrastructure (GBP 3.2.3.2; GP 3.2.1, 3.2.6.2c, 3.2.7.1a, 4.2.1; ORMCP 24). **Clearer goals and outcomes for (sub)watershed plans are needed to demonstrate their intended use, including stronger language and consistent thresholds for unacceptable impacts.** In the Growth Plan, certain policies speak to a goal of 'no negative impact' (4.2.1.2), while others seek to 'protect, enhance or restore' (3.2.6.4, 4.2.1.1) and, in some, a goal is not identified (3.2.1.2, 3.2.7.1a, 4.2.5viii). **We recommend a consistent goal be established for (sub)watershed plans to “protect, enhance and restore” and this goal be applied where (sub)watershed plans inform land use planning decisions.** - GP 3.2.1.2, 3.2.6.4, 3.2.7.1a, 3.2.7.2a, 4.2.1.1, 4.2.1.2, 4.2.1.3, 4.2.3.2, 4.2.4.5viii

- It is not clear what role the Province will play in (sub)watershed plan funding, approval and implementation. **Stronger implementation actions that require provincial approval of watershed plans and municipal approval of subwatershed plans are needed.** These actions could be incorporated as additional policies within the respective "Implementation" sections of the plans (i.e., s. 5.2 of the GP). The Province should also describe the funding mechanisms that will enable (sub)watershed plans to be undertaken and implemented throughout the entire planning cycle and consider providing financial support to CAs and municipalities to fund the development and implementation of these plans.

- **The role of CAs in the development of (sub) watershed plans should be clarified and acknowledged. CAs have the knowledge, experience, data and watershed jurisdictions required to support municipalities in effectively implementing the plans, as referenced in Growth Plan (4.2.1) and GBP (3.2.3.2).** As noted in policy 3.2.3.3 of the GBP, cross-jurisdictional and watershed impacts need to be considered in the development of watershed plans. A single municipality will have difficulty developing a watershed plan because watershed boundaries generally traverse multiple municipalities, whereas CAs are well-positioned to consider cumulative effects and can facilitate upstream and downstream collaboration. Policy 5.2.2.2d of the Growth Plan indicates that the Province will prepare watershed planning guidance documents. We would like to assist the Province in the development of guidance documents.

- The full adaptive cycle of Integrated Watershed Management (IWM) was emphasized by the Advisory Panel (Recommendation 41) but has not been explicitly referenced in the definition or apparent intent of (sub) watershed planning in the amended plans. IWM brings together all the components needed to make informed land use planning decisions based on a comprehensive understanding of the impacts of those decisions. IWM considers NHS planning and sustainability, climate change, natural hazard management and other related issues. Watershed plans are updated based on lessons learned from previous plans and are adjusted if previous objectives and targets are not achieved, a cycle that is critical to effective watershed planning. **The definition of watershed planning should reflect the full adaptive cycle of IWM, including planning, implementation, monitoring, reporting, and adjustments.**

Complex NHS Policy Framework

- Sections 4.2.2, 4.2.3, and 4.2.4 of the Growth Plan are very complex as they are filled with multiple exemptions, alternative approaches, and cross-references to various policies. For instance, Growth Plan policy 4.2.3.2 permits large scale development (i.e., secondary plans, subdivisions, condominiums) within Key Hydrologic Areas (KHAs), provided various tests are met. However, this policy is negated by 4.2.3.3 which states that it doesn't apply in *settlement areas*. This gives rise to the question of whether, in fact, new subdivisions, etc. are permitted outside *settlement areas*.
- Further to the comment above, additional policy direction is needed regarding large-scale development in KHAs or NHS, such that more pervious land uses in these areas (i.e. parks, open space, NHS enhancement/restoration) is considered.
- The Province needs to clarify if the required “demonstration” of meeting the criteria is to be achieved through submission of a scoped environmental study, a detailed site plan or some other means; **GBP 3.2.5.8; GP 4.2.4.4c; ORMCP 22.4, 22.5, 26.(4.1), 26.(4.2);**
- **GBP 3.2.5.8, GP 4.2.4.4 c) and ORMCP 22.5 and 26.(4.2)** need to have text added to clarify that “all of” the following requirements must be met to be exempt from completing a NHE/HE.

- In associated policies exempting agricultural uses from NHE/HE requirements, part of the policy properly reflects that other approval authorities may have requirements which need to be met (ORMCP 22. (5) 6 and 26. (4.2) 6); Greenbelt Plan 3.2.5.8 f). This phrase “**or other approval authority**” is missing in the similar policy in the Growth Plan and should be **added to GP 4.2.4.4 c) vi**.

Excess Soil/Large-Scale Fill

- The policies encouraging municipalities to develop soil reuse strategies and integrate sustainable soil management practices amount to the status quo (ORMCP 36.1; GP 4.2.9.3, 4.2.9.4; GBP 3.4.2.5, 3.4.2.6). **Policy language must be strengthened to prohibit large-scale fill within KNHFs/KHF; “require” soil reuse strategies; and/or, include a clear legislative provision requiring compliance for large-scale fill operations (i.e., CA permits, Site Plan approval).**
- Clarification is needed to confirm if placing fill on agricultural lands qualifies as an *on-farm diversified use* and, if so, whether it could be exempt from requiring an NHE/HE, as per the policies in 4.2.4.4c of the Growth Plan; 22.4, 22.5, 26.(4.1), 26.(4.2) of the ORMCP and 3.2.5.8 of the GBP. This could potentially contravene policies 4.2.4.4c (i-v) of the Growth Plan and 3.2.5.8 (a-f) of the GBP and may not align well with the new policies requiring best practices for excess soil and fill management to ensure environmental impacts are minimized (ORMCP 36.1; GP 4.2.7.3; GBP 3.4.2.5, 3.4.2.6). Depending on site-specific circumstances, the placement of “large-scale fill” (i.e., >500m³) should continue to be subject to a full NHE/HE.

Planning and Implementing a Natural Heritage and Green Infrastructure Support Network

- As LID and green infrastructure are to be incorporated into plans for SWM and *major recreational uses* (GP 3.2.7.1c, 3.2.7.2b; ORMCP 38.2f, 41.1.2d, 45.02b), guidance materials should be produced immediately to assist with implementation. Additionally, a sustainable funding model is needed to support municipal investment in the maintenance, renewal and improvement of green infrastructure and other flood remediation measures. Opportunities to incent municipalities to embrace these measures should also be explored (e.g., development charge levies, Planning Act s. 37 benefits).
- By definition, the NHS is recognized as a component of green infrastructure. Moreover, municipalities are now required to develop SWM plans for *settlement areas* “informed” by watershed planning (GP 3.2.7.1a; GBP 4.2.3.1; ORMCP 45.02a) and incorporate green infrastructure (Growth Plan 3.2.7.1c; GBP 4.2.3.1; ORMCP 41.1.2d, 45.0.2b). If the intent is to incorporate green infrastructure into (sub)watershed planning processes, clarification is needed to identify the most appropriate level of implementing green infrastructure (i.e., through watershed and/or subwatershed planning).

Ecological Enhancement/Compensation

- A substantial portion of natural cover (and ecosystem services) throughout the GGH has been impacted or significantly depleted. The loss of any feature through development and site alteration should, therefore, be taken very seriously. Removal of natural features not identified as KNHFs/KHFs can still have a negative impact on the broader Natural System. In some instances, a viable option is to compensate for the lost feature through ecological restoration or compensation elsewhere. **We recommend policies 4.2.2.4 b)iii of the Growth Plan and 3.2.2.3 of the GBP be revised to emphasize that, where removal of natural features not identified as KNHFs/HSFs cannot be avoided, restoration and/or compensation is encouraged and should be considered.**
- Policies 4.2.3 of the Growth Plan, 21-23 of the ORMCP, and 3.2.2, 3.2.5 of the GBP focus on the identification and protection of existing ecologically “significant” features within the NHS. **The plans should provide stronger protection for natural heritage features that are outside the NHS such that they should be protected, restored and enhanced.**
- Growth Plan policies 4.2.4.1 should clarify that vegetation protection zones extend 30m outward from their defined limits, in accordance with provincial guidance materials established to delineate their extent (i.e., MNRF's Natural Heritage Reference Manual).
- Weak language for the protection of KHAs and the NHS in s. 2 of the Growth Plan through the use of phrases such as “where possible” (2.2.8.2f) and “provided development is prohibited in these areas” (2.2.7.3a) potentially undermines the stronger environmental protection policies of s. 4 of the Growth Plan (i.e., “no negative impacts” [4.2.2.4bi] and “not permitted” [4.2.3.1]). This may create confusion in policy interpretation and set the stage for OMB challenges.

4. GROWING THE GREENBELT

Urban River Valleys (URVs)

- Exempting private lands from URV policies will lead to a discontinuous patchwork of lands becoming the external river valley connections from the Greenbelt to Lake Ontario. This approach does not align with the "systems" approach to NHS protection advocated throughout the PPS and GBP. As the intent of this amendment is to recognize and protect these external valley corridors as a key component of the Natural System, **TRCA recommends the URV designation includes both public and private lands.** - GBP 6.2.1
- As a result of continued growth in the upper watersheds of TRCA's jurisdiction, increased impervious surface has led to higher depths and velocities of flow through watercourses during major storms, translating into greater flood and erosion risk and higher infrastructure costs for downstream communities. Section 5.7.1 of the GBP indicates that the Province is exploring opportunities to grow the Greenbelt. **We recommend headwater areas of the rivers and creeks within TRCA watersheds be considered for inclusion into the Greenbelt, particularly those headwater areas that are almost fully surrounded by other Greenbelt lands, such as in the Carruthers Creek and Rouge and Humber River watersheds.**

Areas of Shallow Groundwater and High Artesian Pressure

- GBP policies 5.7.1.1 and 5.7.1.2 indicate that the Province will build upon the systems approach of the plans and lead a process of potentially expanding the Greenbelt by working with CAs to identify areas that could provide additional protection to sensitive areas from development pressures. **TRCA staff recommend that, prior to this process being undertaken, s. 3.2.4 be amended to identify areas of shallow groundwater and high artesian pressure as KHAs; and, that s. 5.7.1 be amended to include these areas, as assessed through watershed planning, for additions to the Greenbelt.**

Parks, Open Spaces and Trails - Developing a Comprehensive Trail Plan for the Greenbelt

- In accordance with complementary recommendations # 4 of the Advisory Panel report, a trail plan for the GBP should be developed to provide direction on locations, connections, uses and community benefits, including those in URV lands. As one of the largest title holders of natural areas within the plan areas, TRCA would be pleased to assist the Province in this work.
- Many proposed URV lands traverse urban areas that are degraded from multiple uses (i.e., parks, trails, overuse, etc.). The GBP recognizes that parks, open spaces and trails are components of *complete communities*, however the broad objectives of the GBP aimed at protecting natural systems may not be as effective within a specific urban context. In accordance with complementary recommendations # 45 and 87 of the Advisory Panel report, management plans should be developed for these areas that include funding for programs, local stewardship, and educational materials to promote their protection, enhancement, and wise use.
- S. 4.2.5 of the Growth Plan encourages municipalities, CAs and non-governmental organizations to develop public open spaces. The language within this section could be strengthened by including policies similar to those provided in s. 3.3.2 and 3.3.3 of the GBP.

5. ADDRESSING CLIMATE CHANGE

Integrating Climate Change Throughout the Plans

- **The policies in s. 4.2.10 (Climate Change) of the Growth Plan should be amended to "require" municipal implementation.** Although municipal Official Plans must contain climate change policies that will reduce greenhouse gas emissions and address climate change adaptation goals, municipalities are only "encouraged" to implement them, thus creating a potential implementation gap.
- **Given the emphasis on climate change mitigation and adaptation throughout the plans, s. 4.2.10 appears to be too brief and vague.** The importance and urgency of climate change mitigation and adaptation would be evoked further if tied back to the policies in this section. For example, the term 'resilient/resiliency' is frequently mentioned with regard to infrastructure, LID, SWM, and the protection of natural systems, yet these important policy references are largely absent in GP 4.2.10. - GP 1.1, 1.2.1, 3.1, 4.1, 4.2.10; GBP 1.2.2, 4.2.

- By definition, the Growth Plan considers ‘climate change impacts and severe weather events’, however, the importance of watershed planning in climate change resiliency does not resonate in s. 4.2.10. Watershed planning plays a pivotal role in identifying land-based carbon sequestration and storage opportunities, and in protecting lands with the potential to support projects that off-set carbon through the Province’s Climate Change Action Plan (CCAP) 2016-2020. The linkages between watershed planning, climate resiliency and the strategies outlined in the CCAP should be evident in s. 4.2.10.
- Policy 4.2.10.2 could be expanded to incorporate actions that go beyond reducing greenhouse gas emissions, such as low impact landscape-based SWM design, to help manage increased rainfall and frequency of storm events; retrofitting of SWM ponds; enhancing and restoring the NHS; mitigation of risks from hazardous where there is existing development in hazardous lands, etc.
- Growth Plan policy 5.2.2.1 should be expanded to include guidance on climate change information, requirements, modelling and decision-making.

6. INTEGRATING INFRASTRUCTURE

Policy Requirements for Infrastructure Activities

- As noted above, enhanced policy direction mandating urban MESP is needed for large-scale development and associated infrastructure in existing urban areas to ensure *built-up areas* benefit from comprehensive and integrated planning to address SWM and climate change impacts. **The phrase “or their equivalent” should be amended to require urban MESP as a component of integrated planning (i.e., GP 2.2.8.2c,d,e, 3.2.6c,, 3.2.7.1, 3.2.7.2, 4.2.1.3; GBP 3.2.3.5, 4.2.3.4c).**
- The permissive policies for Infrastructure Corridors in s. 3.2.5 of the Growth Plan regarding impacts to natural heritage/hydrologic features and systems should only apply to the corridor itself. Accessory uses (i.e. parking lots, pump stations, transmission towers, transit stations, highway interchanges) have greater flexibility in their location and should be held to more restrictive criteria, similar to those in policy 41.3 of the ORMCP. Furthermore, a fourth component should be added to the “avoid, minimize, mitigate” hierarchy of unavoidable environmental impacts identified in policy 3.2.5.1d of the Growth Plan – to “compensate for” or “offset” residual negative impacts through restoration and enhancement.
- Where possible, active transportation utilizing open space and trail systems should be incorporated into infrastructure corridors to strengthen intermodality (e.g., multi-use trails along highway corridors that link to other trail systems). - GP 3.2.5
- Policies 3.2.5.1d of the Growth Plan and 4.2.1.2e of the GBP should be revised so that once the mitigation hierarchy (i.e., avoid, minimize, mitigate) has been exhausted, environmental impacts from infrastructure development are compensated for through ecological restoration. - GP 3.2.5.1d; GBP 4.2.1.2e
- **The Growth Plan could further integrate infrastructure and land use planning by having some policies that currently apply only to development, apply to infrastructure as well.** For example, policy 2.2.1.2j could be expanded to generally direct development and infrastructure away from hazardous lands, in accordance with s. 3.1.3 of the PPS. We recognize that some development has historically existed within the NHS and some linear infrastructure must often cross the natural system, which can lead to unavoidable risk associated with natural hazards. As such, we recommend a policy be added to ensure that, where development and infrastructure must be located within hazardous lands, risk is avoided, minimized or mitigated in accordance with s. 3.1.7c of the PPS.
- Policy 41.2.2i of the ORMCP indicates that a pre-requisite of approval for infrastructure in or on land in *natural linkage areas* is demonstrating best efforts to ensure "right of way widths will be kept to the minimum that is consistent with meeting other objectives such as SWM and erosion and sediment control". The exact intent of the policy is unclear and makes no mention of LID as a method of SWM. The policy could be revised as follows, "Right of way widths will be minimized to the greatest extent possible to be consistent with: i) erosion and sediment controls and LID techniques for SWM; and, ii) locating as much infrastructure uses within a single corridor as possible".
- **The policy requirements for infrastructure activities in s. 41 of the ORMCP should have clearer direction regarding how to "demonstrate the need" for infrastructure projects and "no reasonable alternative",** key tests to allow infrastructure in *natural core/linkage areas*. An increasing number of Environmental Assessments (EAs) for large infrastructure projects (e.g., major highways, pipelines) potentially cut across natural features. These projects must be thoroughly assessed for need, location and alternatives to minimize environmental impacts and reduce urban sprawl. Additionally, policy requirements should be added to provide enhancement and ecological compensation when KNHFs/HSFs are impacted by infrastructure planning/siting.

- Policy 4.2.3.3 in the GBP, regarding the location of SWM ponds in Greenbelt “fingers” is unclear and would benefit from further guidance, including locational mapping, as well as stronger policy direction. These GB natural heritage system lands adjacent to the valley feature, are facing increasing pressures to accommodate uses such as stormwater ponds and their outfalls, trails, LID facilities, access roads and infrastructure crossings, most of which require significant amounts of grading and compaction of soils. There should be limits on the type and amount of accessory infrastructure uses and facilities serving the adjacent future urban development that can/should be permitted in these major river valley corridors. We suggest that this policy be revised and clarified to require the majority of these NHS lands to be restored and enhanced to natural self-sustaining vegetation – we suggest 75%; and to specify that stormwater pond locations are subject to siting criteria such as being located above the stable top of bank and outside of KNHF, KHF and their vegetation protection zones and hazardous lands. The policy should specify what uses are permitted in the remaining 25% and could include:

- a. Stormwater pond Outfalls;
- b. Facilities required to convey and release flows to maintain water balance to natural features; and
- c. Trails for low intensity recreational uses.

- Infrastructure falls under various legislative processes and is under the purview of multiple approval authorities. The Growth Plan should be clear in its references to infrastructure, development, and EAs, distinguishing where it applies to: public infrastructure under an EA process; privately constructed infrastructure under the Planning Act; or both. The plans should also clarify which proponent policy implementation rests with: the Province (e.g., MOECC, Metrolinx), municipalities (e.g., upper, single or lower tier) or both; and, in the case of conflict, specify which plans prevail (e.g., Metrolinx, versus upper tier municipal master plans, versus lower tier municipal master plans). In this regard, we suggest the following policy revisions to the Growth Plan:
 - Policy 2.2.4.4 should clarify what plans prevail, where conflict exists between municipal, Provincial or Metrolinx plans;
 - Policy 3.2.5.1d should be expanded to capture infrastructure that is part of private development, given that EAs are distinct to public infrastructure review;
 - Policy 4.2.3c conflicts with 3.2.5.1d, given that infrastructure is exempt from the prohibition of development and site alteration in KNHFs/HSFs through EAs;
 - Policy 5.2.3.1 states that a coordinated approach will be taken to plan implementation among all public agencies for issues that cross municipal boundaries. Coordination is also needed across different legislative processes that affect growth such as the Planning Act, the EA Act and CAA. Please note that under s. 14 (1) of the Places to Grow Act, decisions pursuant to the EA Act must conform to the Growth Plan.

- Section 3.2 of the Growth Plan should incorporate policy 4.2.3.4c from the GBP, which promotes the strong direction that “applicable recommendations, standards or targets within a subwatershed plan or equivalent and water budgets are complied with”.

- The preamble portion of policy 41.1.2 in the ORMCP should make specific reference to the NHE/HE requirements described in s. 22 and 26.

- ORMCP policies 41.2.3 and 41.2.5 should reference the Ministry of Transportation’s *Environmental Guide for Wildlife Mitigation* that is currently out for review on the Environmental Registry (EBR# 012-7980), an important tool when looking at infrastructure and NHS connectivity.

Green Infrastructure

- **The plans should better distinguish “infrastructure” from “green infrastructure”.** This relationship is further convoluted when considering the important role of LID on the NHS and the NHS as a component of green infrastructure. The interconnectedness of these important concepts should be emphasized in the contextual preambles preceding the "Infrastructure" sections of each plan and reinforced in their respective definitions.

- The incorporation of green infrastructure and LID are frequently referenced as requirements throughout the plans (GP 2.2.1.3f, 3.2.7.1c, 3.2.7.2b; ORMCP 38.2f, 41.1.2d; 45.0.2b). In our experience, however, municipalities rarely utilize advanced green infrastructure and LID techniques, which are typically only implemented on private lands. The policies would be strengthened by encouraging green infrastructure and LID techniques on both private and public lands. Additionally, we note that no tests, targets or goals are identified to indicate the extent of green infrastructure and LID required to be incorporated. Supplementary provincial guidance is needed, otherwise minimal implementation will result.

Low Carbon Transportation/Driverless Cars

- The newly emerging concept of autonomous vehicles could be acknowledged and incorporated into the Growth Plan. These vehicles could radically change the need for parking and for transportation planning to be focused on the peak hours. - GP Introduction, 3.2.2

7. IMPROVING PLAN IMPLEMENTATION

“Grandfathered” Applications:

- The transition provisions of the ORMCP Plan and Act need to be reviewed. **Applications submitted under the Planning Act prior to the promulgation of the ORMCP (2001) where no decision has been made should no longer be exempt from complying with the full suite of policies in the ORMCP. The ORMCP Act should also be amended to require that approvals issued prior to the ORMCP coming into effect and not yet acted upon, be revised and subject to the full Plan, or at minimum the s. 48 provisions.** Examples continue to arise across the ORM of subdivisions approved in the 1970s, ‘80s and ‘90s that permit developments in wetlands and other significant environmental features. - ORMCP 48
- Growth Plan policies 5.2.8.2 and 5.2.8.3 contain provisions for including a "lapsing date" for draft plans of subdivision approved under the Planning Act and for deeming approved plans not to be a registered plan if, after eight years, no development occurs and they no longer meet the objectives of the Growth Plan. A similar policy should be incorporated into the ORMCP and GBP, and applied retroactively if the environmental objectives of those plans are not met.

CA Recognition and Integration

- **As plan amendments will impact the operational roles and regulation of CAs, and CA expertise and information will be relied upon to implement the plans, the role of CAs should be more directly acknowledged and further integrated into revised policies.** We welcome the inclusion of policies requiring watershed planning to be undertaken by municipalities, partnering with CAs (Growth Plan 4.2.1; GBP 3.2.3), however, the role CAs have in facilitating and delivering watershed plans should be explicit. Additionally, the plans make no specific reference to CA’s role in defining and mapping natural heritage and water systems; mitigating natural hazards; and, managing stormwater effectively through green infrastructure and LID. These roles should be referenced throughout the plans (i.e., Natural System, Protecting What is Valuable) as they are within the “Water Resources System” policies.
- The GBP states that where regulations or standards of other agencies or government related to environmental protection are more restrictive than the plans, they take precedence. (GBP 3.2.2.6, 5.4). Similar wording should be applied to s. 4.2 of the Growth Plan.
- S. 5.2 of the Growth Plan should be revised to acknowledge the regulatory role of CAs, as done so in 3.2.2.6 and 5.4 of the GBP.
- The Growth Plan acknowledges the municipal role in climate change adaptation and mitigation (4.2.10) but not CAs. CAs’ strengths in adaptive watershed and ecosystem management, natural hazard mitigation, monitoring and reporting of environmental quality, and leadership in green infrastructure, sustainable building design and LID can help municipalities implement plan policies to align with the Ontario Climate Change Strategy and should, therefore, be referenced.
- Regarding coordination of plan implementation among the various agencies and approval authorities, policy 5.2.3.8 should be expanded to indicate that CAs and municipalities are to collaborate in the monitoring of natural heritage and water systems.
- The review of the Conservation Authorities Act that is currently ongoing should also reflect the roles of CAs in implementing the four Plans.

Supplementary Provincial Support

- As enhanced policy direction is to be implemented by municipalities (partnering with CAs) through a municipal comprehensive review, supplementary provincial support is needed. It is our understanding that provincial guidance documents will be issued to assist planning authorities and decision-makers beginning in 2018 (GP 4.1, 5.2.2.2, ORMCP – Implementation). **To help ensure consistency with the broader planning and regulatory frameworks of the GGH, and to capitalize on existing data, mapping, and technical expertise, CAs should be consulted during the formulation of guidance materials pertaining to watershed planning, natural heritage and water resource systems, LID and green infrastructure.** More specifically, CAs should be consulted prior to the creation of guidelines related to the following enhanced policy directions: Watershed planning guidance documents to support sections 4.2.1 of the Growth Plan and 3.2.3 of the GBP; sustainable management of excess soil/fill (ORMCP 36.1; Growth Plan 4.2.7.3; GBP 3.4.2.5, 3.4.2.6); provincial NHS mapping (GP 4.2.2.2), including if and/or how existing mapping will be incorporated, what scale mapping will be undertaken, and, if existing documents and criteria for identifying

KNHFs/HSFs will be updated (GP 4.2.2.2, GBP 5.3); actions that will reduce greenhouse gas emissions and address climate change adaptation goals (GP 4.2.10); and, incorporation of LID and green infrastructure (GP 3.2.7.1c, 3.2.7.2b; ORMCP 38.2f, 41.1.2d, 45.02b).

- The plans should reference tools that support their day-to-day implementation, including permits under the CAA, by-laws under the Municipal Act, land, tree cutting by-laws, fill by-laws, and erosion and sediment controls, as well as acquisition projects, private land stewardship, environmental farm plans (as per complementary recommendation # 45 of the Advisory Panel report). In particular, the ORMCP and Growth Plan should reference permits under the CAA as they are in s. 5.4 and 3.2.2.6 of the GBP.

Addressing Advisory Panel Recommendations

- Some of the issues brought forward from sections 9.4 and 9.5 of the Advisory Panel report have either not yet been addressed or have not been incorporated in sufficient detail. **A Provincial Secretariat should be established to coordinate and facilitate implementation of the plans (recommendation #85); An oversight forum should be created to monitor and report on implementation (recommendation # 86); additional provincial programs, technical guidelines, stakeholder involvement and funding mechanisms should be developed (recommendation # 87); and, municipal Official Plan conformity amendments should be shielded from OMB appeals to reduce the time and cost burden placed on municipalities to defend provincial policies (complementary recommendation # 77).** We recognize that, due to their nature, these recommendations may need to be addressed outside of the Plans themselves; however, we continue to express our desire to have them addressed immediately.

Mapping

- **Additional information is needed regarding the municipal incorporation of an NHS, "as mapped by the province" (Growth Plan 4.2.2.2).** Throughout the GGH, many CAs and municipalities have, at great effort and expense, collected scientific data and mapped the NHS at various scales (municipal, watershed, and subwatershed). This work has been guided by the PPS, 2014, under the definition of NHS. It is unclear if and/or how existing mapped areas will be incorporated into provincial mapping and at what scale/level. If mapping is done at too high a scale for local decision making to be effective, environmental protections could be weakened. It also is unclear whether the existing technical documents and criteria for identifying KNHFs/HSFs in the NHS will be updated. Municipalities and CAs should be consulted to ensure proposed mapping will be consistent with existing mapping. - GP 4.2.2.2, GBP 5.3
- Existing mapping of hydrologic features undertaken by CAs in accordance with the *Clean Water Act (2006)* should be consistent with the mapping requirements for KHAs established in sections 5.3 of the GBP and 4.2.1 of the Growth Plan, to support a consistent approach to water protection across Ontario.
- Under-utilized school and municipal sites should be kept in public ownership and used as public parkland. The Province should map all public open spaces owned by all public bodies (including utilities) to provide a full picture of these lands and what can be connected.

Special Policy Areas (SPAs)

- Policy 5.2.5.4a of the Growth Plan is confusing and could be misinterpreted. It should be revised to be more in keeping with the clear and concise wording used in the second bullet in the explanatory text, which states, "the intent of this policy is to clarify that intensification and density targets would not require or enable growth beyond what is permitted under the PPS for SPAs and other hazardous lands".

8. MEASURING PERFORMANCE, PROMOTING AWARENESS AND INCREASING ENGAGEMENT

Monitoring/Data

- S. 5.2.6 indicates that the Province may require CAs to provide data to the Province. More details on the type of data and information potentially requested should be provided. TRCA has undertaken extensive long-term efforts to develop regional monitoring programs, which are supported by our partner municipalities. It is important that we confirm whether any changes or additions to these programs are anticipated.

9. DEFINITIONS

Complete Communities: The definition should reference natural heritage and water systems. The relationship between *complete communities* and *net zero communities* should also be clarified as a community should not be considered "complete" if it cannot meet its energy demands through low-carbon or carbon-free forms of energy. Although both need to be captured within the text of the plans, the definitions should be integrated or explicitly cross-referenced.

Ecological Integrity: The definition includes hydrological integrity, which appears to support the NHS as a component of watershed planning. If integration is to be considered, "ecological integrity" should replace "integrity" within the context of demonstrating "no negative impacts" on KNHFs/KHFs and their functions.

Extreme Weather Event: The term is used (GP 3.2.7.1, GBP 4.2) yet no definition is provided. "Extreme weather" means different things to different groups (i.e., anything from a 2-year storm to Hurricane Hazel event). Furthermore, what is "extreme" under current climatic conditions may not remain constant as climate change continues to have worsening impacts. We recommend defining and quantifying the term.

Green Infrastructure: The definition should include soils since soils are a critical component of green infrastructure needed to manage water resources.

Intermittent streams: The definition does not describe which times of year intermittent streams are dry and for how long. It is, therefore, insufficient to guide their identification since stream permanency is a continuum from perennial to intermittent and then to ephemeral streams. We suggest that either ephemeral streams be included in the suite of *KHFs* or the broader term "headwater drainage features" be used to cover both intermittent and ephemeral streams. We recommend incorporating definitions from the *Evaluation, Classification and Management Guideline for Headwater Drainage Features Guidelines* developed by TRCA and the Credit Valley CA.

Key Hydrologic Areas (KHAs): Areas of shallow groundwater and high artesian pressure should be added to the suite of KHAs to protect below-grade development from interaction with groundwater, and to prevent the wasteful discharge of groundwater when permanent dewatering is required.

Key Hydrologic Features (KHFs): Ephemeral streams are not identified as KHFs but should be to protect their hydrologic functions. By definition, their identification and delineation will be informed by watershed planning and "other evaluations and assessments". Please consider clarifying what these other evaluations/assessments will be and who will be doing them. The *Evaluation, Classification and Management Guideline for Headwater Drainage Features Guidelines* developed by TRCA and CVC could help provide a consistent approach to assessing, clarifying and managing stream types according to their function.

Low Impact Development (LID): The definition should note that LID must be implemented within a treatment train approach in order to optimize resiliency.

Net-Zero Communities: The definition should include references to locally-sourced renewable and/or district energy sources and should stipulate that a net-zero community meets its energy demand (including transportation, electricity and heating) through a mix of carbon-free and/or low carbon energy sources such that net annual greenhouse gas emissions from the community are nil.

Public Open Spaces: No definition is provided. If a definition is provided, it could include trails, parks, and conservation areas as defining elements.

Significant Groundwater Recharge Area (SGRA): There should be standard thresholds for what constitutes SGRAs and highly vulnerable aquifers so the terms are consistently applied throughout the plans.

Significant Surface Water Contribution Areas (SSWCAs): The definition does not capture the full suite of functions associated with headwater drainage features (HDFs) and seems rather indistinguishable from "ecologically significant groundwater recharge areas" (as used in the GBP). 90% of the flow within streams can be derived from catchment headwaters; however, individually, HDFs may not contribute significantly to the baseflow volume of streams. We are concerned that this definition may be interpreted as providing protection to all or none of the HDFs within a watershed. Also, baseflow provision, as included in the definition of SSWCAs, is only one function of HDFs. Other functions such as productivity, sediment transport, water quality improvement, erosion protection, and flood attenuation should be considered. To protect these functions, the HDF features themselves need to be considered, not just the broader headwater areas.

Stable Top of Bank: The term does not appear to be accurately defined in the context in which is used. The definition of "Top of (valley) Bank (staked or physical)" used in TRCA's Living City Policies document could be incorporated.

Storm Water Management Plan: The definition provided in the Growth Plan (and policy 4.2.3.5 of the GBP) could be expanded beyond "impacts to receiving watercourse" to include impacts to natural features like wetlands and species that depend on them or could be adversely impacted by changes in land use that alter the seasonal hydroperiod, impact the quality of water entering the wetland or cause erosion.

Total Developable Area (GP and GBP)/Net Developable Area (ORMCP): The definitions are not consistent with the Growth Plan policies that exclude natural hazards and heritage features from development lands (2.2.1.2j, 2.2.7.3) and should be revised to net out hazardous lands and natural heritage features. Net Developable Area must also exclude vegetative buffers associated with KNHFs/HSFs (amend ORMCP).

Vulnerability Risk Assessment (VRA): A definition should be provided and guidance materials should be provided for their implementation. A potential definition of a VRA could be, "The analysis of the expected impacts, risks and the adaptive capacity of a region or sector to the effects of climate change".

Watershed Planning, Watershed Plan and Watershed: *Subwatershed plans* are identified as being integrated with natural heritage protection; however, this linkage is not iterated in the definitions of watershed plan or watershed planning. The definitions should be expanded to collectively incorporate the full adaptive cycle of IWM, which includes consideration of both the natural heritage and water resource systems. The definitions should also speak to the fact that subwatershed plans should nest within watershed plans.