Welcome!

- Please sign in at the front.
- We encourage you to review the display boards and take a handout.
- Members of the project team are available to answer your questions.

Today’s Agenda

6:00 pm – 6:30 pm: Open House

6:30 pm – 7:00 pm: Presentation

7:00 pm – 8:30 pm: Continuation of Open House
The main purpose of this study is to complete the required studies that will allow for future development within portions of the “Stage 2 Lands” of the East Side Lands. A Master Environmental Servicing Plan and a Secondary Plan will be prepared.

What is a Master Environmental Servicing Plan (MESP)?

- An MESP identifies the required infrastructure needed to support future urban development of a large area.
- The MESP will identify:
  - The roads and other infrastructure that is required to support development
  - What natural heritage features and systems need to be protected
  - Lands that are prone to flooding hazards and other natural hazards and not suitable for development
  - General locations and requirements for infrastructure and how is to be financed
- A component of the MESP is a Subwatershed Study, which is being presented in draft at this PCC.

What is a Secondary Plan?

- A Secondary Plan identifies permitted land uses and policies to guide future development
The purpose of this Public Consultation Centre (PCC) is to provide information about the study and present the work completed to date for public input.

- This is the second public consultation event:
  - A Public Information Centre (PIC) was held on June 16, 2016
  - The Purpose of the PIC was to kick off the study and present the Background Review & Gaps Analysis Report

- This PCC will include:
  - The Draft Subwatershed Study
  - Identification of preliminary development constraints and opportunities
  - Identification of preliminary transportation and infrastructure constraints and opportunities

The PCC display panels cover the following topics:

| Panels #1-#5 | Study Purpose, Purpose of the PCC, Study Area and Study Process |
| Panels #6-#11 | Draft Subwatershed Study • Purpose and status of the study • Methodology and survey results • Conclusions and recommendations |
| Panels #12-#13 | Transportation Network Opportunities & Constraints |
| Panels #14-#16 | Infrastructure (Water/Wastewater/Stormwater) Opportunities & Constraints |
| Panels #17-#19 | Land Use & Planning Context • Background and history of planning in the East Side Lands • Development constraints and policies that will guide the land use options |
| Panel #20 | Next Steps |
The MESP and Secondary Plan’s **Project Study Area** is within a broader area known as the **East Side Lands**.

- The Project Study Area includes lands within both the City of Cambridge and the Township of Woolwich.
- The Project Study Area reflects the subwatershed boundaries of the Randall Municipal Drain and the Breslau Municipal Drain.

The **Stage 2 Lands** represent the more detailed study area within the Project Study Area. This is the area in which future land uses and development potential will be determined.

- The delineation of the Stage 2 Lands is intended to align with the Region of Waterloo’s Official Plan policies. The policies contemplate an urban area expansion within lands in Breslau and the northerly portion of Cambridge, which was to be initiated by the Region in 2016.

Note that the **Secondary Plan** will only be prepared for the portion of the Stage 2 Lands within the City of Cambridge.
**Study Process & Timeline**

1. **Introduction / Background**
   - Reports: Background Review & Gaps Analysis Report
   - Other On-going Work and Analysis:
     - Review of land use and density options
     - Review of infrastructure constraints and opportunities

2. **Draft Subwatershed Study and Preliminary Assessments**
   - Reports: Draft Subwatershed Study
   - Other On-going Work and Analysis:
     - Public Consultation Centre #2 (December 5, 2016)
     - Public input into the Draft Subwatershed Study considered into early 2017

3. **Draft MESP and Technical Appendices**
   - Reports: Draft MESP & Technical Appendices - Identification of Infrastructure Options
   - Other On-going Work and Analysis:
     - Identification of Land Use Concept for the Secondary Plan

4. **Draft Secondary Plan and Revised MESP**
   - Reports: Draft Secondary Plan
   - Draft Staging & Implementation Strategy
   - Revised MESP & Technical Appendices - Evaluation of Alternatives

5. **Finalization**
   - Reports: Final Secondary Plan
   - Final MESP & Technical Appendices
   - Final Staging/Implementation Strategy

Consultation:
- Notice of Project Commencement
- Launch of Project Website
- Public Information Centre #1 (June 16, 2016)
- Public Consultation Centre #3 (Date TBD)
- Public input into the Draft MESP considered and addressed
- Public Consultation Centre #4 (Date TBD)
- Public input into the Revised MESP and Draft Secondary Plan considered and addressed
- Notice of Project Completion (MESP)
- Secondary Plan brought forward for adoption by City of Cambridge Council

**We are here**

Region of Waterloo
CAMBRIDGE CAMBRIDGE TOWNSHIP
WWL WWL WSP MMM GROUP

**Food & Water Watch**

**Finalization**

**Notice of Project Completion (MESP)**

**Secondary Plan brought forward for adoption by City of Cambridge Council**
The Subwatershed Study for the Randall and Breslau Drains is a key component to the Master Environmental Servicing Plan process.

- **Subwatershed Study (SWS) Purpose**
  - Study relationships between groundwater, surface water and natural heritage features (both terrestrial and aquatic).
  - Provide guidance to maintain or restore natural features, their functions and to support their ecological connections and linkages.
  - Identify a Greenlands Network (Natural Heritage System), define minimum buffers and setbacks to development and provide guidelines for future development to maintain natural features.

- **Two levels of study**
  - The Project Study Area (PSA) – characterized at a high level with some field work to inform SWS recommendations.
  - The Stage 2 Lands – comprehensive field inventory and assessment of conditions; future urban development is to be considered for this area.

- **Study Status**
  - The Draft Subwatershed Study will be posted on the Region’s website in December for public comment.
Surveys have been undertaken characterize existing conditions, identify sensitivities and inform constraints.

- **Information Sources**
  - **Background data**: Region and Provincial-level data
  - **Existing studies**: Breslau Secondary Plan, Airport Master Plan, Empire Riverland EIS
  - **Field data collection**: comprehensive field surveys were undertaken, focused on the Stage 2 Lands. Collected field data included:
    - Hydrogeological
    - Hydrological
    - Natural Heritage
Draft Subwatershed Study for the Randall and Breslau Drains
Survey and Analysis Results

- **Groundwater**
  - Generally shallow and moving downwards at monitoring stations
  - Results indicate some support of wetland features by groundwater within the Project Study Area

- **Water Quality**
  - Water quality is assessed based on Ministry of Environment & Climate Change (MOECC) guidelines and standards. Water quality was assessed using 13 indicators (e.g. Conductivity, Nutrients [Nitrate, Nitrite, Chloride, Phosphorous, etc.], pH, Dissolved Oxygen, etc.)
  - Thermal Regime was analyzed to understand input sources and impacts to watercourses. Groundwater has a cooling effect; surface water has a warmer trend.
  - Results:
    - Randall Drain – very high nutrient and chloride levels and other elevated indicators indicate poor to fair water quality. Randall drain has a Coolwater thermal regime
    - Breslau Drain – elevated nutrient levels observed; fewer elevated indicators overall; poor to fair water quality range. Breslau Drain has a Coolwater thermal regime
    - Although they fall into the same range, Randall Drain generally has lower quality indicators than Breslau Drain

- **Floodplain Analysis**
  - Revised floodplain limits were developed using hydraulic modeling and are a key constraint to development
Natural Cover in the Project Study Area
- Natural Cover includes lands of natural origin or natural form including forests, wetlands, meadows, open water, hedgerows, etc.
- 23% of the study area is natural cover
- Within the Project Study Area, this includes: 16.3% forested, 15% wetland, 3.4% other (cultural meadow, open water, hedgerow). Forested wetlands are included in both forest and wetland categories.

Wetland Evaluation
- 27 Unevaluated Wetlands were assessed for complexing with (i.e. becoming part of) existing Provincially Significant Wetlands
- Wetlands not recommended for complexing were further assessed under the Grand River Conservation Authority Wetland Policy

Core Environmental Features
- Confirmation of features identified in the Regional Official Plan
- 2 new Core Environmental Features were identified (Significant Woodlands)

Linkages / Corridors
- Corridors and linkage connect the natural heritage features to form a connected Greenlands Network (Natural Heritage) system
- Linkages and Corridors were identified using field data and airphoto interpretation
• **Species at Risk**
  
  - No aquatic Species at Risk were identified within the Project Study Area (PSA)
  
  - 2 plant Species at Risk were confirmed within the PSA:
    - Butternut, Kentucky Coffee Tree
  
  - 10 wildlife Species at Risk were confirmed within the PSA:
    
    - **Birds**: Bank Swallow, Barn Swallow, Bobolink, Chimney Swift, Eastern Meadowlark, Eastern Wood-pewee, Grasshopper Sparrow, Wood Thrush
    
    - **Invertebrates**: Monarch
    
    - **Reptiles & Amphibians**: Snapping Turtle

• **Significant Wildlife Habitat**
  
  - 7 Confirmed Significant Wildlife Habitat types were identified within the Project Study Area (PSA):
    
    - Seeps and Springs, Shrub / Early Successional Breeding Habitat, Amphibian Breeding (Woodlands, Wetlands), Terrestrial Crayfish Habitat, Turtle Wintering Area, Special Concern and Rare Wildlife Species Habitat
  
  - 5 Candidate Significant Wildlife Habitat types were identified within the PSA:
    
    - Bat Maternity Colonies, Woodland Area-Sensitive Bird Breeding Habitat, Raptor Wintering Areas, Waterfowl Stopover and Staging Areas, Colonially-Nesting Bird Breeding Habitat (Trees / Shrubs)
• Constraints to Development
  – Key Constraints: floodlines, recommended Greenlands Network, regulated watercourses, ecological buffers and other natural hazards
  – Groundwater does not present a constraint in the Project Study Area
  – Ecological Buffers have been identified to mitigate potential impacts associated with development from features of the Greenlands Network and watercourses – minimum buffers range from 10m to 30m

• Recommended Development Limit
  – The outer (greatest) of the Ecological Buffers, Floodlines and other natural hazards form the limit to development
  – Limits of the Greenlands Network and Floodlines are draft and may be revised prior to finalization

• Monitoring
  – Regional or System-Scale monitoring may continue to measure key indicators. Development monitoring will be developed in consideration of regional / watershed monitoring.
  – Development monitoring will be required to confirm baseline conditions (pre-development) and monitor for potential impacts associated with development (during and post construction monitoring)
    – Development monitoring may include: biological monitoring (aquatic, terrestrial), water quality and hydrologic monitoring, groundwater monitoring, erosion and sediment control, stormwater management facility function
  – Guidelines for monitoring requirements are set out in the SWS
There are many planned improvements to existing roads that will create opportunities for development of the East Side Lands (see map).

- To date, we have assessed existing capacity of the road network.
- Once the land use concept is identified, we will be able to identify future traffic forecasts.
- The Transportation Assessment will involve identification and evaluation of alternative improvements to support development. The outcome will be a list of recommended projects along with costs.
  - A component of the Transportation Assessment is consideration for alternatives to just accommodating vehicles, such as providing for active transportation and transit.
The maps at right illustrate existing traffic capacity constraints in the AM and PM peak hours. Some of these constraint areas are already planned for future widenings and improvements.

Our next steps in the Transportation Assessment will include modelling future conditions, to ensure that any future development will be supported by any necessary improvements.
Water servicing is not anticipated to be a constraint to development within the Stage 2 Lands.

- Water servicing is currently provided to portions of the East Side Lands via existing Regional and Local watermains from Kitchener and Cambridge, creating a disjointed system.

- Planned improvements will connect the existing mains within the East Side Lands to provide a more robust and redundant supply of water and form a new East Side Pressure Zone.

- Additional future watermains will provide water servicing to the Stage 2 Lands.
  - The Region of Waterloo 2015 Water and Wastewater Monitoring Report indicates that the Regional water system has sufficient supply capacity to accommodate development within the Stage 2 Lands.
  - Previous studies indicate that the existing water distribution infrastructure is sufficient to support expansion in order to service the Stage 2 Lands.
Future development of the East Side Lands will be subject to the capacities of Regional collection and treatment systems, which are currently under review.

- Wastewater servicing is currently provided to portions of the East Side Lands via existing collection systems.
  - These systems convey flows from the north area to the Kitchener Wastewater Treatment Plan (WWTP) and from the south area to the Preston WWTP.

- Ultimately, a regional trunk collection system will convey flows from the East Side Lands to the Kitchener WWTP.
  - The Region is currently undertaking an EA process to determine the long term scenario for conveyance to the Kitchener WWTP.

- In the interim, the Preston WWTP has sufficient capacity to service a portion of the East Side Lands.
  - The available capacity is being reviewed through the Region of Waterloo Wastewater Master Plan that is currently underway. As such, the Stage 2 Lands may depend on the long term Regional trunk collection system for wastewater servicing.

- Additional wastewater collection sewers will be required to provide wastewater servicing within the Stage 2 Lands.
A Master Drainage Plan will be prepared in early 2017 as a component of the MESP.

- Urban development will result in increased impermeability, so there is a need to identify the measures used to manage stormwater runoff.
- Appropriate stormwater management mitigation measures are critical to protecting water resources.
- We will be continuing to monitor water levels, flow and quality across the Project Study Area into 2017, to inform our recommendations.
- The Master Drainage Plan will consider various approaches to alternative stormwater management measures, such as:
  - Low impact development (LID) principles, such as bioswales, pervious pavement, infiltration, such as examples shown at right
  - More conventional end-of-pipe controls such as stormwater management ponds

### Stormwater Management Objectives

- Where possible, prevent increases in contaminant loads
- Minimize changes in water balance and erosion
- Do not increase risks to human health, safety or to property
- Maximize extent and function of vegetative and pervious surfaces
- Promote stormwater best practices (e.g. stormwater attenuation and reuse, and LID)
- Implement federal, Provincial and Regional guidelines for managing stormwater

A combination of conventional techniques and low impact development solutions will be considered:

- Stormwater management ponds are a conventional end-of-pipe control for managing stormwater quality and quantity.
- Bioswales help manage stormwater sustainably at the conveyance stage.
- Rainwater harvesting and greenroofs can help manage the stormwater quantity at the source.
The Region of Waterloo is growing, and we must plan to accommodate this growth. This includes identifying new areas that are suitable to accommodate urban development in the future.

2003-2006
Regional Growth Management Strategy & the East Side Structure Plan

A Master Environmental Servicing Plan has been completed for the Stage 1 Lands portion of the East Side Lands. The necessary infrastructure projects to support future development in the Stage 1 Lands are currently proceeding through more detailed study.

2014
Completion of the Stage 1 MESP

The Region of Waterloo Official Plan contemplates an Urban Area expansion within the northerly portion of Cambridge and in proximity to Breslau. Accordingly, the Stage 2 Lands MESP and Secondary Plan, including Subwatershed Study, was initiated to implement these policies.

2015
New Regional Official Plan Policies

The Stage 2 Lands MESP and Secondary Plan processes now focus on identifying the land uses and the required infrastructure within the Stage 2 Lands.

2016
Initiation of the Stage 2 MESP & Secondary Plan Processes

The East Side Lands has been considered an opportunity to accommodate future urban development since 2003, when the Regional Growth Management Strategy was completed.
There is a wide range of applicable legislation, Provincial policy, Regional and local policy that will guide this study, and the recommendations made must be consistent with the applicable policies.

- A detailed legislative/policy review is included in the Background Review & Gaps Analysis Report.
- The MESP and Secondary Plan will need to be consistent with or conform to Provincial planning policy, including:
  - The Provincial Policy Statement (2014)
    - The Province’s ongoing review of the Growth Plan for the Greater Golden Horseshoe will need to be considered. The new Growth Plan is expected to be approved in early 2017.
- The Region’s Official Plan establishes guiding policies for land uses within the Stage 2 Lands, as indicated in the map to the right.
  - The Stage 2 Lands MESP will help to support the Regional Official Plan Amendment to expand the Urban Area. The Regional Official Plan Amendment has been commenced by the Region and is being conducted as a separate process.
The land use designations and development that will be permitted in the Stage 2 Lands is subject to various development constraints and opportunities.

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<td>Some lands will not be developable due to the presence of important natural features and due to flooding and other natural hazards. These constraints are identified through the development of the Subwatershed Study, including floodplain mapping.</td>
<td>Provincial policy prohibits sensitive land uses (including residential) from being developed within close proximity to the Airport. A new Airport Master Plan is being prepared, which may result in changes to these noise contours as well as potential restrictions on building height in the vicinity of the Airport. Additionally, lands needed for future potential Airport expansion must be protected from development.</td>
<td>New development will also need to be serviced by water, wastewater, storm water and transportation infrastructure. The necessary improvements required to support future development are identified through the MESP process. The MESP fulfills Phases 1-2 of the Municipal Class Environmental Assessment process. The recommended improvements will proceed through more detailed design processes after the MESP process is complete, to fulfill Phases 3-5 of the Municipal Class Environmental Assessment process. A Fiscal Impact study will also be developed through this process to identify recommended approaches and tools for financing the required infrastructure.</td>
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![Map illustrating the Stage 2 Lands and noise contours](image)
Thank you for your participation!

What happens after this meeting?
- We will be posting the Draft Subwatershed Study on the website linked below following this PCC for public review and comment. Please provide your comments by January 31, 2017.
- We will implement and respond to comments on the Draft Subwatershed Study in early 2017.
- The next PCC is anticipated to be held in Spring 2017 to present the land use concept and infrastructure alternatives.

Please visit the project webpage to view materials presented today, which will be posted after this PCC:

[www.regionofwaterloo.ca/EastSide](http://www.regionofwaterloo.ca/EastSide)

To provide input, ask questions or be added to the study contact list, please contact:

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