

**Environmental Assessment for a New
Landfill Footprint at the Beechwood Road
Environmental Centre (BREC)**

**Workshop #1:
Existing Conditions &
Constraints, Work Plans, and
Evaluation Criteria & Indicators**

May 2, 2012



Please tell us about yourself.

Please note that information related to this Study will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments received will become part of the public record and may be included in Study documentation prepared for public review.

Name: Click here to enter your name.

Address: Click here to enter your address.

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Overview of Workshop #1 – Purpose & Expectations

The purpose of today's workshop is to:

- Provide an opportunity for you to comment on the materials presented in Open House #1 (held on Wednesday, March 28);
- Review the preliminary baseline environmental conditions within the study area;
- Provide feedback on the proposed Work Plans for the full range of environmental disciplines included in this Environmental Assessment (EA); and
- Review the preliminary evaluation criteria and indicators that will guide the EA and eventual selection of a Preferred Alternative.

Accordingly, the remainder of this workbook is structured as follows:

- Existing Conditions & Constraints;
- Work Plans; and
- Evaluation Criteria.

At the end of each section you will be invited to provide your own comments on the materials presented. This is your opportunity to raise any issues, concerns or further suggestions you may have on these specific elements of the study.

It is our expectation that this workshop will provide a forum for structured discussion and will provide a key opportunity for meaningful input which will be used to inform the future development of the study.

Existing Conditions & Constraints

Study Area

The map presented below shows the Study Area identified in the approved Terms of Reference (ToR), within which Alternative Methods will be identified. The Study Area is bounded by Beechwood Road on the south, Deseronto Road on the west, County Road 11 on the north and Johnsons Side Road on the east.



Constraints Mapping

Constraint mapping was used to determine the preliminary land envelopes within the lands owned and optioned by WM for the possible location of the proposed alternative landfill footprints.



Baseline Conditions

A preliminary description of the existing environment at the BREC was described in the approved ToR.

The EA will address the following components of the environment that may be affected by the alternative methods of carrying out the undertaking:

- Atmosphere;
- Geology and Hydrogeology;
- Surface Water;
- Biology;
- Cultural & Heritage Resources;
- Transportation;
- Land Use;
- Agriculture;
- Socio-economic;
- Aboriginal; and
- Site Design & Operations.

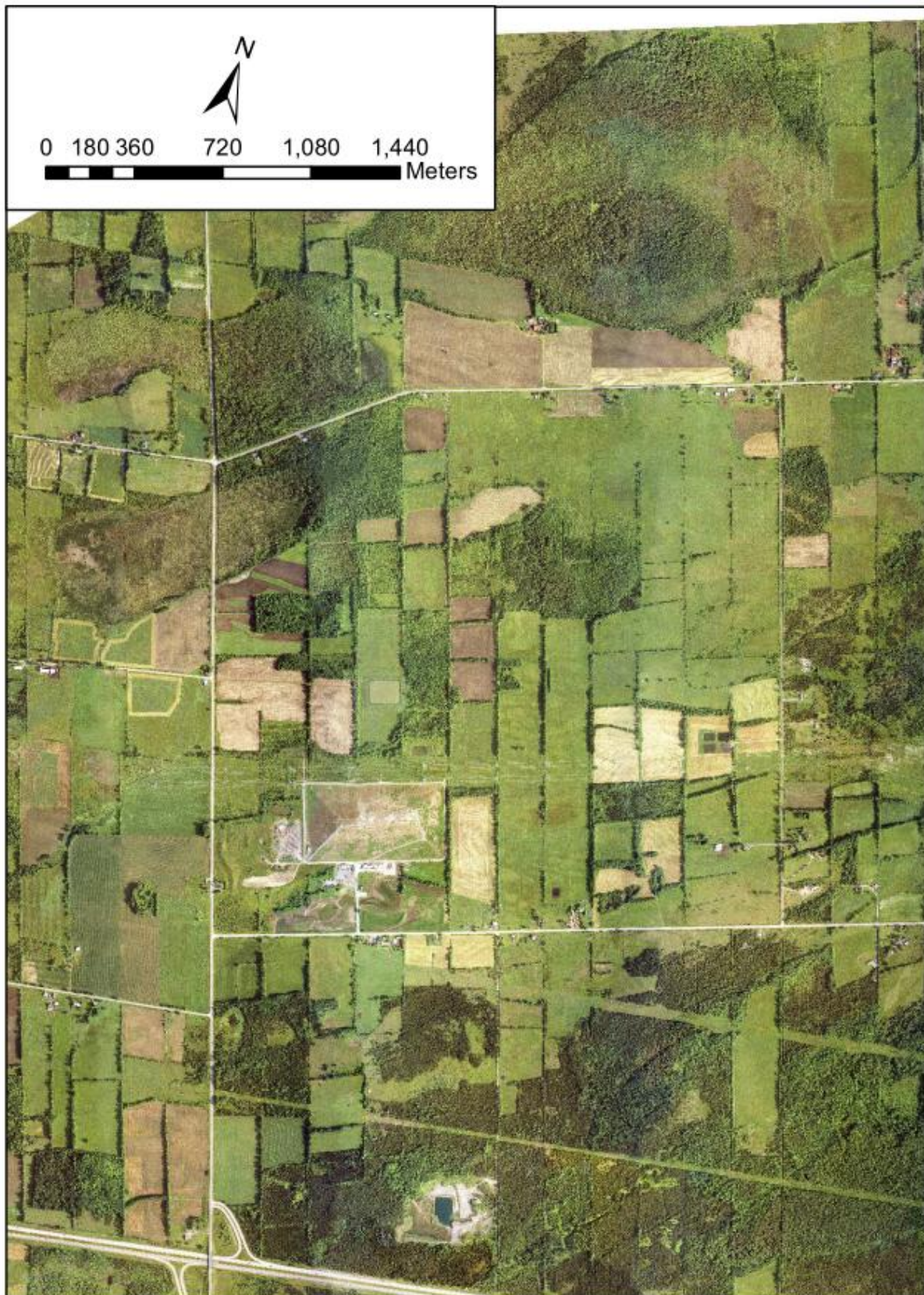
Data for the EA will be collected and analyzed for three study areas:

- **On-Site** – the lands owned and/or optioned by WM for the proposed new landfill;
- **Site Vicinity** – the lands in the vicinity of the Site extending about 500 m in all directions; and
- **Regional** – the lands within about 25 km of the Site for the Socio-economic environment.

During the EA, the project team will collect information and conduct studies (desktop and field) to describe the environmental components listed above that may be affected by the Undertaking. This will be done for each of the Alternative Methods (alternative footprints) identified.

1. Comments on features to be considered when assessing the existing conditions:

Click here to enter your answer.



Work Plans

Proposed Work Plans

The following tasks are outlined in the proposed work plans:

- Task 1** Identify Alternative Methods for New Landfill Footprint
- Task 2** Describe Environment Potentially Affected
- Task 3** Identify Mitigation Measures to be Incorporated in the Design of Each Alternative
- Task 4** Predict Environmental Effects for Each Alternative
- Task 5** Refine Mitigation Measures and Determine Net Effects
- Task 6** Compare Alternatives
- Task 7** Identify Preferred Alternative and Detailed Assessment
- Task 8** Conduct Cumulative Effects Assessment
- Tasks 9 to 12** EA Documentation

Proposed work plans for the individual technical disciplines are available for review at this Workshop.

Work Plan Outlines

The EA will address the following components of the environment that may be affected by the alternative methods of carrying out the undertaking:

Atmosphere

- Modelled air concentrations of indicator compounds (organics, particulates);
- Predicted site-related noise;
- Predicted odour emissions; and
- Number of off-site receptors potentially affected (residential properties, public facilities, businesses and institutions).

Geology and Hydrogeology

- Predicted effects to groundwater quality at property boundaries and off-site.

Surface Water

- Predicted effects on surface water quality on-site and off-site; and
- Change in drainage areas; and
- Predicted occurrence and degree of off-site effects.

Biology

- Predicted impact on vegetation communities due to project;
- Predicted changes in water quality;
- Predicted impact on wildlife and aquatic habitat due to project; and
- Predicted impact of project on vegetation and wildlife including rare, threatened or endangered species, and on aquatic biota.

Cultural & Heritage Resources

- Cultural and heritage resources on-site and in vicinity; and
- Significance of on-site archaeology resources potentially displaced/disturbed.

Transportation

- Bird strike hazard to aircraft in local Study Area;
- Potential for traffic collisions;
- Disturbance to traffic operations; and
- Proposed road improvement requirements.

Land Use

- Current land use;
- Planned future land use; and
- Type(s) and proximity of off-site recreational resources, and off-site sensitive land uses (i.e. dwellings, churches, cemeteries, parks), within 500m of landfill footprint potentially affected.

Agriculture

- Current land use;
- Predicted impacts on surrounding agricultural operations; and
- Type(s) and proximity of agricultural operations (i.e. organic, cash crop, livestock).

Socio-Economic

- Ratio of air space achieved to volume of soil to be excavated and area of cell base and leachate collection system to be constructed;
- Total optimized site capacity and site life;
- Employment at site (number and duration);
- Opportunities to provide products or services;
- Predicted changes in perceptions of landscapes and views;
- Number of residents; and
- Type(s) and proximity of off-site recreational resources within 500m of landfill footprint potentially affected.

Aboriginal

- Potential effects on use of lands for traditional purposes.

Site Design & Operations

- Complexity of site infrastructure; and
- Operational flexibility.

2. Comments on key issues to be considered in each Work Plan:

Click here to enter your answer.

Evaluation Criteria

Preliminary Evaluation Criteria and Indicators

Preliminary Evaluation Criteria and Indicators were outlined in Appendix B of the approved ToR and may be broadly grouped into Environmental components. These criteria form the basis for characterizing existing environmental conditions, for assessing potential adverse effects of the Undertaking, comparing Alternative Methods, and help to identify a preferred alternative.

Environmental Criteria	
Atmosphere	Air quality, Noise, Odour
Geology & Hydrogeology	Groundwater quality, Groundwater flow
Surface Water	Surface water quality, Surface water quantity
Biology	Terrestrial ecosystems, Aquatic ecosystems
Cultural & Heritage Resources	Cultural landscape, Built heritage, Archaeological resources
Transportation	Effects on airport operations, Effects from truck traffic along access roads
Land Use	Effects on current and planned future land uses
Agriculture	Effects on agricultural land and agricultural operations
Socio-economic	Effects on the cost of services to customers, Continued service to customers, Economic effects to local municipality, Effects on recreational resources, Visual impact of the facility
Aboriginal	Potential effects on aboriginal communities
Site Design & Operations	Site design and operations characteristics

A full description of the Criteria, Indicators, Rationale for their selection and Data Sources are available for comment at this Workshop.

3. Comments on key criteria and indicators for evaluation:

Click here to enter your answer.