

Thank you for circulating the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) on the proposed Land Evaluation & Area Review (LEAR) methodology for the Municipality of Mississippi Mills. It is understood that the LEAR as described in the attached staff report is intended to support the proposed Agricultural/Rural designations as part of the Mississippi Mills Official Plan review. As the County of Lanark is the approval authority for the corresponding Official Plan amendment (OPA), it is recommended that the municipality continue to engage with County staff on the implementation of this study. At this time, OMAFRA can provide the following technical guidance.

PPS Policy / Guidance / OMAFRA Role

As per Section 2.3.1 of the Provincial Policy Statement (PPS), prime agricultural areas are to be protected for long-term agricultural use. In addition, policy 2.3.2 indicates that planning authorities shall designate prime agricultural areas and specialty crop areas in accordance with guidelines developed by the Province, as amended from time to time.

OMAFRA guidance on the designation of prime agricultural areas has evolved over the years. The most current LEAR Guidance is titled 'Agricultural System Mapping Method. Technical Document – January 2018'. This document provides direction as to how prime agricultural areas were identified and designated as part of the provincially led geographic specific provincial plan reviews in the area of the Greater Golden Horseshoe (GGH).

Outside of the GGH, while there is no PPS requirement to undertake a LEAR study to address 2.3.1. and 2.3.2 of the PPS, municipalities may choose to do so. In these situations, the LEAR is developed by the municipality. When creating a LEAR, there may be multiple approaches that could be considered in accordance with provincial guidance.

While the 2018 LEAR document speaks to the exercise undertaken in the GGH, the guidance in that document communicates OMAFRA's most current positions regarding LEAR principles/methodology and is relevant to lands across the province. That said, it is possible that certain details of a municipal approach (e.g. use of lot parcel fabric vs. GIS raster grid as the LEAR study 'unit of evaluation'), or specifics regarding aspects of LE or AR factors (e.g. weights/scoring/thresholds, data sets etc.) may differ from the 2018 GGH LEAR documentation. For this reason, to help guide recommendations on LEAR components, direction from OMAFRA's 'A Guide to the Land Evaluation and Area Review (LEAR) System for Agriculture – Draft (2002)' is also relied upon.

The following sections are intended to provide input on the specific components for the proposed LEAR methodology as identified in Official Plan Amendment No. 29 "Prime Agricultural Area Review".

Schedule A 'Affected Lands'

As it appears the symbology used in the legend representing 'Potential Prime Agriculture' (diagonal pattern), does not match the appearance on the corresponding map (horizontal pattern), it is recommended this be revised to match.

I. What is a LEAR?

OMAFRA generally concurs with this information however would like to clarify that similar to the following statement "A parcel can receive a high LEAR score but may not be designated as a Prime Agricultural Area.", conversely there may be circumstances where a parcel with a low score may merit inclusion as part of a prime agricultural area. LEAR mapping products help identify candidate prime agricultural areas and do not necessarily represent the actual designations to be shown on an Official Plan land use schedule. Supplementary review/analysis (additional information, site visits etc.) may support further refinements.

This section makes a few references to soil 'capacity'. For consistency with Canada Land Inventory (CLI) terminology, it is recommended that these be revised to 'capability'.

** Note 'capacity' vs. 'capability' was observed in other instances throughout the report.*

III. Methodology

A) Background Research

As noted under the 4th bullet, the "Area Review factors should be mutually exclusive and selected so as to avoid 'double counting' (i.e. Conflicting land uses and parcel fragmentation represent a similar consideration and therefore should not both be included in a given LEAR model)." As the LEAR model proposes to consider lot size and a 'conflicting land use' metric, it will be important to carefully consider the appropriateness of including both, and if so, the corresponding weights/scores. Additional comments on the AR variables is found below.

OPA 29 AG Review (excerpt)

"Meanwhile, review of LEAR precedents provided insight into how said models were developed and adjusted to satisfy municipal conditions and priorities."

Details of existing LEAR's are helpful to inform the development of a LEAR, however OMAFRA would like to clarify that existing methodologies reflect local circumstances and guidance at the time of development. While details of a methodology in one study may be appropriate for other studies, it should not be interpreted as an endorsement for any LEAR study.

D) Review of Draft LEAR Approach / E) Model creation and validation

While OMAFRA has been engaged and revisions have been made to address many of the issues that have been raised, the OPA document indicates that the LEAR has been finalized. At this time there remain a few areas of concern with the structure of AR factors and corresponding weight. Additional information below.

IV. LEAR Approach

A) Score Weighting

The proposed weighting for the Mississippi Mills LE/AR is LE (70) AR (30). The GGH LEAR uses 60/40 however the traditional LEAR guidance outside (as echoed in the 2018 LEAR doc) requires that a minimum 50% be allocated to LE. As the Mississippi Mills approach proposes 70/30, OMAFRA has no objections to the LE/AR score breakdown.

B) Selected LE Criteria

The following LE scoring breakdown has been identified.

Soil Capability Class	CLI score (field crop points) FCP	Total Score (/70 points)
1	1	70
Organics	0.9	63
2	0.9	63
3	0.8	56
4	0.6	42
5	0.4	28
6	0.2	14
7	0	0

The above CLI scores assigned for the respected CLI ratings (in addition to organic soils) reflect the OMAFRA approach for the GGH LEAR and therefore there are no objections to this breakdown.

C) Selected AR Criteria

Parcel Size

The following AR scoring breakdown has been identified.

Parcel Size	Score
<81 Acres	10
51-80 Acres	8
26-50 Acres	6
11-25 Acres	4
6-10 Acres	2
1-5 Acres	1
>1 Acre	0

Previous versions of the Mississippi Mills methodology addressed this AR factor by including ranges that reflect farm operation size. As the intent of this factor is to consider the size of the legally conveyable lots within the LEAR study area (not the collection of lots that are part of one operation), OMAFRA is supportive of this change as it more appropriately considers typical lot sizes in the area. In addition, the use of MPAC data on lot fabric and corresponding scores identified for the respective ranges reflect OMAFRA guidance and therefore, there are no concerns with this factor.

Conflicting Land Uses

The following AR scoring breakdown has been identified.

Number of Individual Conflicting Land Uses within 750m	0-5	6-10	11-15	16-20	21-25	>26
Score	10	8	6	4	2	0

This factor has gone through various iterations. In previous versions, the analysis proposed to divide land uses into Type A and Type B land uses (each to be given a weight of 5 for a total AR of 10) and borrowed from approaches utilized in OMAFRA’s Minimum Distance Separation (MDS) Formula Implementation Guidelines (Publication 853). While elements of the approach could be supported, there were concerns with the proposed ranges, corresponding scores, and inclusion of lands within Mississippi Mills settlement areas as part of the evaluation.

As the current approach removes the Type B component from the methodology, it addresses two areas of concern. First are the proposed scores that would have been assigned to parcels within 1.5 km of a settlement area, but secondly and most importantly, the removal of lands located within settlement area for the purposes of the LEAR analysis. This approach is consistent with the direction in both the 2002 and 2018 guidance. It is intended that a LEAR is

designed to ensure that the proximity of settlement area has a neutral effect on the quantitative results. It would be inappropriate for the proximity of settlement areas to have a negative effect on LEAR results because provincial policies do not define *prime agricultural areas* based on whether lands are subject to urban growth pressure.

With respect to the current structure of the above AR factor for Conflicting Land Uses, OMAFRA has a couple concerns. As the format of this AR factor is not a perfect match for comparable items in the available LEAR guidance, it is a little challenging to suggest specific ranges/scores to address the concerns, however when reviewing the corresponding map product (Figure 3.) it is apparent that the current breakdown over states the impact of ‘conflicting land uses’ on agricultural potential. For this reason, it is recommended that these values be reassessed to articulate a more reasonable potential impact on the agricultural capability of the area. In addition, other correspondence indicated that for the purposes of this metric incompatible land uses are based on MPAC data and include open space, industrial, residential. OMAFRA recommends that details of this data set (as well as others) be identified in the LEAR report. Furthermore, open space is likely to have a neutral impact on agriculture and has concerns with this land use type being considered incompatible with agriculture.

Active Farming

The following AR scoring breakdown has been identified.

Percentage of Evaluation Unit (Parcel) Currently Used for Agriculture	Score
0%	0
1% - 9%	1
10% - 20%	2
21% - 30%	3
31% - 40%	4
41% - 50%	5
51% - 60%	6
61% - 70%	7
71% - 80%	8
81% - 90%	9
91% or Greater	10

It is understood that this factor will utilize Agriculture and Agri-Food Canada’s (AAFC) 2019 Cropland Data. This is a common and accepted data source for such analysis and therefore there are no objections to the use of this data. However, in reviewing the proposed ranges and corresponding scores, although close, they slightly undervalue the scores that have been

attributed in OMAFRA guidance. It is recommended that the ranges and scores be adjusted to adhere to the values identified in Table 3 (page 14) of the 2002 LEAR document.

** It is noted that the corresponding map in the OPA 29 report (Figure 4), appears to display the outcome of this AR factor based upon a previously approach which utilized MPAC data and scored lands in a binary fashion (either 0 points or 10 points). Figure 4 should be updated to reflect the approach outlines in the current OPA 29 report.*

Selected Threshold Value

It is noted that a threshold score of 65/100 has been identified for the purposes of the Mississippi Mills LEAR study. While there is no set value (as it depends on total LEAR score for a respective methodology, local conditions etc.), OMAFRA recommends that guidance found on page 17 of the 2002 LEAR document, and information found on page 9 of the 2018 LEAR document be reviewed to help inform this value. This exercise may require some GIS testing/adjustments, on-site analysis, public input etc. to help verify that the value reasonably achieves the goal of identifying lands that reflect the characteristics of a prime agricultural area and by consequence, a candidate for an agricultural designation.

Other / General

Study Area

In all situations, those lands that are available for agriculture should be included within the Study Area. As it appears all lands within Mississippi Mills have been included (except for areas of substantial size that have been committed for non-farm use development (e.g. settlement areas (which aligns with OMAFRA guidance)), OMAFRA has no objection to the extent of lands included in the LEAR study.

Evaluation Unit

It is noted that the Mississippi Mills LEAR utilizes parcel fabric as the chosen evaluation unit. While the 2018 OMAFRA guidance utilizes a GIS raster approach, the raster approach is not a requirement and the use of parcels adheres to the traditional guidance found in 2002 LEAR document and follows the approach commonly used in other LEAR's undertaken across the province. For this reason, there are no concerns.

Appendix

At this time, there is no content, however OMAFRA would recommend that this section be used to help communicate/clarify a variety of LEAR components (some identified above), such as

- type and vintage of data sets and details of how used in the analysis
- definitions section to clarify intent of various terms

Although additional details can be found in the OMAFRA LEAR guidance materials, hopefully the above information assists with the development of the Mississippi Mills LEAR methodology. If you have further questions, feel free to be in contact.

Thanks

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