

Whitby Sustainable Neighbourhood Action Program (SNAP)

Whitby SNAP Pilot Neighbourhood Screening Analysis Executive Summary

The Neighbourhood Screening Analysis (NSA) for the Whitby Sustainable Neighbourhood Action Program (Whitby SNAP) Pilot Project is a process for capturing information and data on existing conditions using indicators that are scored to provide a baseline. Comparisons are made of the baseline information to select a Neighbourhood that would benefit the most from projects and programs that provide social, economic, and environmental benefits for a more climate ready community. The NSA as a framework, can now be applied to other Neighbourhoods in the Town of Whitby or other municipalities within the Central Lake Ontario Conservation Authority's jurisdiction to further expand the SNAP model in urban communities to better respond to and prepare for the impacts of climate change.

The NSA uses a standard scoring system under six (6) sustainability categories with fifty-one (51) indicators identified overall.

Note: data was not available for all fifty-one (51) indicators for this NSA, however, rationale and scoring criteria were established to accommodate future screenings and opportunities to expand on the indicators in new neighbourhoods where the data may be available or in some cases, more relevant.

Each neighbourhood was scored based on a point system which considers SNAP alignment opportunities for implementing actions. For example, one indicator measured the Urban Tree Canopy (UTC) for each neighbourhood and compared that to the Town of Whitby's current UTC. Scoring was assigned using four grades, High (3 points), High/Medium (2.5 points), Medium (2 points) and Low (1 point). A neighbourhood with less than 25% UTC would score high compared to a neighbourhood with more than 40% UTC which would score low. A backyard tree planting program could in fact increase UTC for a neighbourhood, which could be part of a SNAP Action Plan, which is the implementation deliverable for the Whitby SNAP Pilot Project. An existing program offered by the Region of Durham and LEAF (Local Enhancement and Appreciation of Forests Program) could be offered through the Whitby SNAP Pilot Project if the community identifies improving the UTC as a priority for action.

The NSA reviewed three priority neighbourhoods as per the mapping of Neighbourhood Boundaries (NB) in Appendix A. Reports, mapping resources, studies, strategies and other relevant data from local, regional, provincial, and federal government, NGO's, and post-secondary institutions were reviewed to provide a current snapshot of existing conditions. These were further organized as indicators under the six (6) sustainability categories to provide a fair and equitable comparison and evaluation of each neighbourhood. This furthered our perspective and helped to determine where the need for the Whitby SNAP Pilot was the greatest and presented the most opportunities.

Sustainability Categories for the Neighbourhood Screening Analysis

- 1.0 Built Environment
- 2.0 Infrastructure & Mobility
- 3.0 Flood Safety & Erosion Reduction
- 4.0 Natural Environment & Watershed Systems
- 5.0 Parks, Recreation & Culture
- 6.0 Health & Wellbeing

Background

Two primary documents have been created to articulate the process and outcomes of the Neighbourhood Screening Analysis (NSA). A full Whitby SNAP Pilot Neighbourhood Screening Analysis Report has been prepared to detail the framework and assessment process for each of the indicators. The report provides an explanation regarding the relationship of the indicator within the context of the SNAP model to support climate action and sustainability objectives. The report also explains the scoring system and outcomes which provide the basis for the Whitby SNAP Pilot project neighbourhood selection. The report complements the second document, a comprehensive database of existing conditions and their sources, which further informs the scores for each of the indicators. Some data was not available at this time or is pending, so this review is specific to what was known about the forty-two indicators when this summary was prepared in August, 2024.

1.0 Built Environment

The indicators for this sustainability category include energy consumption, in addition to retrofit opportunities presented by community centres, libraries, social housing, schools and early childhood education facilities. None of the three neighbourhoods have social housing in their communities, therefore a score was not calculated for this indicator.

All three neighbourhoods are scoring similarly out of a possible score of nine points. Information is pending on the residential water consumption hotspot indicator from the Region of Durham. The most significant opportunity for the Meadowcrest Neighbourhood under this sustainability category is a small portion of homes older than 60 years and a library community centre within the Neighbourhood Boundary (NB). Similarly, the West Lynde presents homes built between 1961 and 1980 which aligns well with retrofitting opportunities through the SNAP model.

West Lynde 6.5/9	Meadowcrest 6.5/9	Fallingbrook 6.0/9
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2.0 Infrastructure & Mobility

Indicators for this sustainability category include the presence and retrofits for Storm Water Management (SWM) Infrastructure, culverts and bridges, roads, active transit, recreational trails, municipal transit, public and private rail transit projects, and provincial infrastructure. Note: data for watermain and sewer retrofits were not included, pending further discussions with Region of Durham staff.

The West Lynde neighbourhood is scoring significantly higher than the Meadowcrest and Fallingbrook neighbourhoods primarily due to aging infrastructure (bridges & culverts) but also due to active transportation capital project opportunities presenting in the 1-3 year period within the Town of Whitby’s Strategic Growth Area along the Dundas Rapid Transit Corridor. This could influence active transit for residents in this neighbourhood as part of the Whitby SNAP Pilot action plan to reduce GHG emissions. The other opportunity in the West Lynde neighbourhood, is the impact and opportunities presented by improvements to the public and private rail transit culvert improvement priority associated with the GO/CN rail line, adjacent to the Neighbourhood Boundary.

West Lynde 22.0/27	Meadowcrest 18.0/27	Fallingbrook 16.0/27
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3.0 Flood Safety & Erosion Risk Reduction

The indicators for this sustainability category include urban and riverine flooding, flood remediation priority areas, erosion problem areas, Flood Damage Centres (FDC) and impervious surfaces.

The West Lynde and the Fallingbrook neighbourhoods score similar with a number of flood safety & erosion risks identified within their respective Neighbourhood Boundaries (NB), however the West Lynde neighbourhood scores higher, due to a flood remediation priority area (Michael Boulevard) within its NB. The Meadowcrest Neighbourhood scores lower, but still identifies urban and riverine erosion flooding vulnerable areas within its NB. Data for the impervious surface percentage indicator is pending and was not used in scoring at this time.

West Lynde 15.0/18	Meadowcrest 9.0/18	Fallingbrook 13.0/18
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4.0 Natural Environment & Watershed Systems

The indicators for this sustainability category include CLOCA’s targeted natural heritage system, significant natural heritage features, significant groundwater recharge areas, ecologically significant groundwater recharge areas, highly vulnerable aquifers, high volume and

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ecological and hydrological connectivity improvements, aquatic restoration opportunities, Species at Risk (SAR) and instream barrier.

The West Lynde neighbourhood is scoring significantly higher than Meadowcrest and Fallingbrook neighbourhoods which scored second and third, respectively, under this sustainability category. The West Lynde neighbourhood offers some opportunities for terrestrial and aquatic restoration with its proximity to the Lynde Creek Marsh, a Provincially Significant Wetland. This neighbourhood also has an important function as an ecologically significant groundwater recharge area, and its inclusion of a highly vulnerable aquifer. Highlights for the Meadowcrest neighbourhood include records of Species at Risk in this tributary of Lynde Creek and an instream barrier, which would provide significant opportunities for removal and subsequent improvements to water quality and fish habitat. The Fallingbrook neighbourhood scored lower for the indicators within this sustainability category, except for the prominence of a highly vulnerable aquifer within its Neighbourhood Boundary (NB) for which it scored the same as the West Lynde neighbourhood.

West Lynde 26.5/30	Meadowcrest 24.0/30	Fallingbrook 21.0/30
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5.0 Parks, Recreation & Culture

The indicators for this sustainability category include retrofits and improvements to parks and playgrounds, urban tree canopy (UTC), access to splashpads, pools and cooling centres, and places of worship. An indicator was developed for Cultural Heritage Conservation Districts in the NSA; however, this did not apply in this instance.

All three neighbourhoods scored equal however park retrofits in the Meadowcrest and Fallingbrook neighbourhoods are scheduled to occur later in the Town of Whitby Capital Budget schedule. Interestingly, the UTC for all three neighbourhoods scored high as they averaged a 20% UTC which is significantly less than the existing average UTC for Whitby of 25%. As noted above, opportunities will exist for increasing the UTC in support of the pending Town of Whitby's Urban Forestry Management Plan through tree planting programs on private and public land to reach the recommended target for cover. Each neighbourhood scored high for their limited access to cooling centres, splashpads and pools, which are key features to address the anticipated increase in un-natural heat waves in the future.

West Lynde 10.5/12	Meadowcrest 8.0/12	Fallingbrook 10.5/12
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6.0 Health & Wellbeing

The indicators for this sustainability category include community health and wellbeing, social vulnerability and community health priority neighbourhoods as identified by the Region of Durham. It also looks at heat vulnerability during unnatural heat events, walkability, active transit opportunities for all ages, access to public transit, greenspace, urban agriculture, farmers markets, and proximity to food banks.

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West Lynde scored significantly higher than Meadowcrest and Fallingbrook. Much of the data used for assessing health and wellbeing is derived from the online tool developed for Durham Region’s Health Neighbourhoods (2023). The Region has 50 Health neighbourhoods which presents ninety-six indicators by neighbourhood and municipality to determine the demographics and health of its communities. The intention of this study was to support strong, safe, and equitable neighbourhoods to improve the health and well-being of all residents across Durham Region.

The West Lynde neighbourhood is located within one (1) of seven (7) priority neighbourhoods identified by the Region as communities that require focus to build on health and wellbeing. While these priority neighbourhoods have the lowest income levels, they also have many positive attributes, community assets, resources, and strengths. We know from data (sourced from Environics platform) that the West Lynde neighbourhood has a higher population of seniors (65+) living alone, higher unemployment and lower median income. This along with Durham Health’s data indicate more health and well-being challenges exist in the West Lynde neighbourhood when compared to Meadowcrest and Fallingbrook.

There are a number of indicators in the West Lynde neighbourhood that align well with the Whitby SNAP Pilot Project objectives including a number of residents of all ages who choose active transportation options for attending school and work. Proximity to the GO station and a major bus route along the Dundas Transit Corridor contributes to more active transit options that would support improving sustainable practices even further in this neighbourhood.

Meadowcrest has a farmers market located within its Neighbourhood Boundary (NB) and the West Lynde neighbourhood has a farmers’ market just outside its NB, both of which could support more sustainable behaviour and associations with local food and community gardening. Opportunities for urban agriculture exist for all three neighbourhoods as there are no identified community gardens. It was also noted that a number of food banks are located adjacent to the West Lynde NB, which may be further complemented with community gardens to address local food insecurity.

West Lynde 29/33	Meadowcrest 24.5/33	Fallingbrook 21.5/33
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Final Scoring Summary

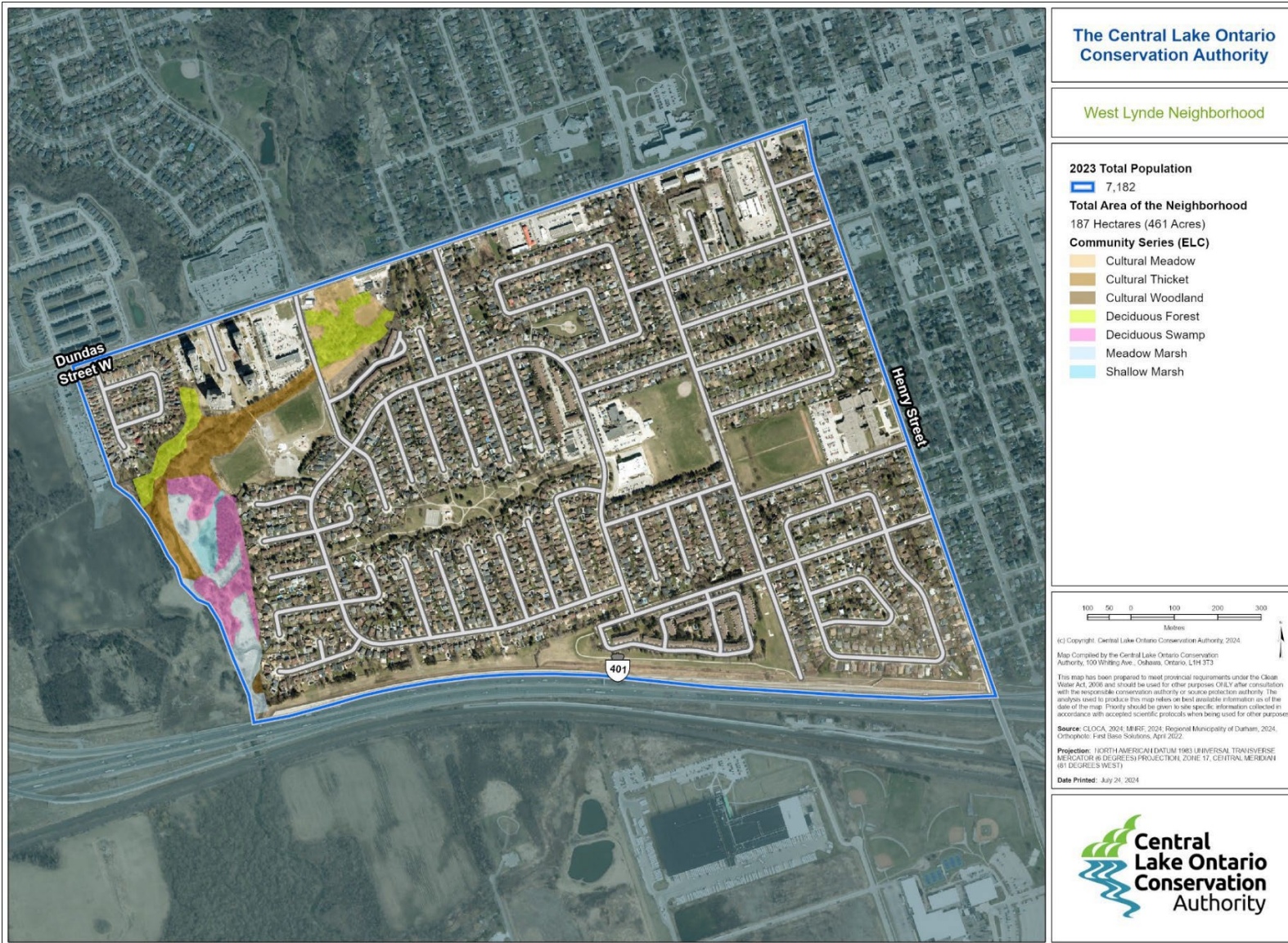
The final scoring summary below rolls up the points for each of the six (6) sustainability categories and the forty-two (42) indicators used for this Neighbourhood Screening Analysis to identify one priority neighbourhood for the Whitby SNAP Pilot. The West Lynde neighbourhood indicates a greater need with a combination of challenges and opportunities for supporting a more sustainable and climate ready community for the Whitby SNAP Pilot when compared to the Meadowcrest and Fallingbrook neighbourhoods. Both the Meadowcrest and Fallingbrook neighbourhoods are still challenged, and in some cases their scores were the same as the West Lynde neighbourhood and so should not be left behind. Efforts by the Town of Whitby to address their unique challenges need to be ongoing so they don't decline further. Targeting them with opportunities under existing programs offered across the municipality should be a priority. For example, to address the poor score of each neighbourhood under the indicator, Residential Energy Consumption, an effort to engage homeowners in the Durham Greener Homes program would be extremely beneficial and further support the Whitby Climate Emergency Response Plan Phase 2: Mitigation. Likewise, as mentioned in this summary, all three (3) neighbourhoods scored poorly for the indicator Urban Tree Canopy and will benefit from actions identified by the Urban Forestry Management Plan once developed. As well programs like the partnership with LEAF (Local Enhancement and Appreciation of Forests Program) and the Backyard Tree Planting Program for homes and businesses, could help improve the UTC for both neighbourhoods. This in turn contributes to climate adaptation and mitigation at a neighbourhood and community level. The table below shows the maximum and individual scores for each sustainability indicator in the three (3) neighbourhoods providing a high-level comparison.

Category	Maximum Points	West Lynde	Meadowcrest	Fallingbrook
Built Environment	9.0	6.5	6.5	6.0
Infrastructure & Mobility	27.0	22.0	18.0	16.0
Flood Safety & Erosion Risk Reduction	15.0	15.0	12.0	12.0
Natural Environment & Watershed Systems	30.0	26.5	24.0	21.0
Parks Recreation & Culture	12.0	10.5	8.0	10.5
Health & Wellbeing	33.0	29.0	24.5	21.5
TOTAL SCORE	126.0	109.5	93.0	87.0

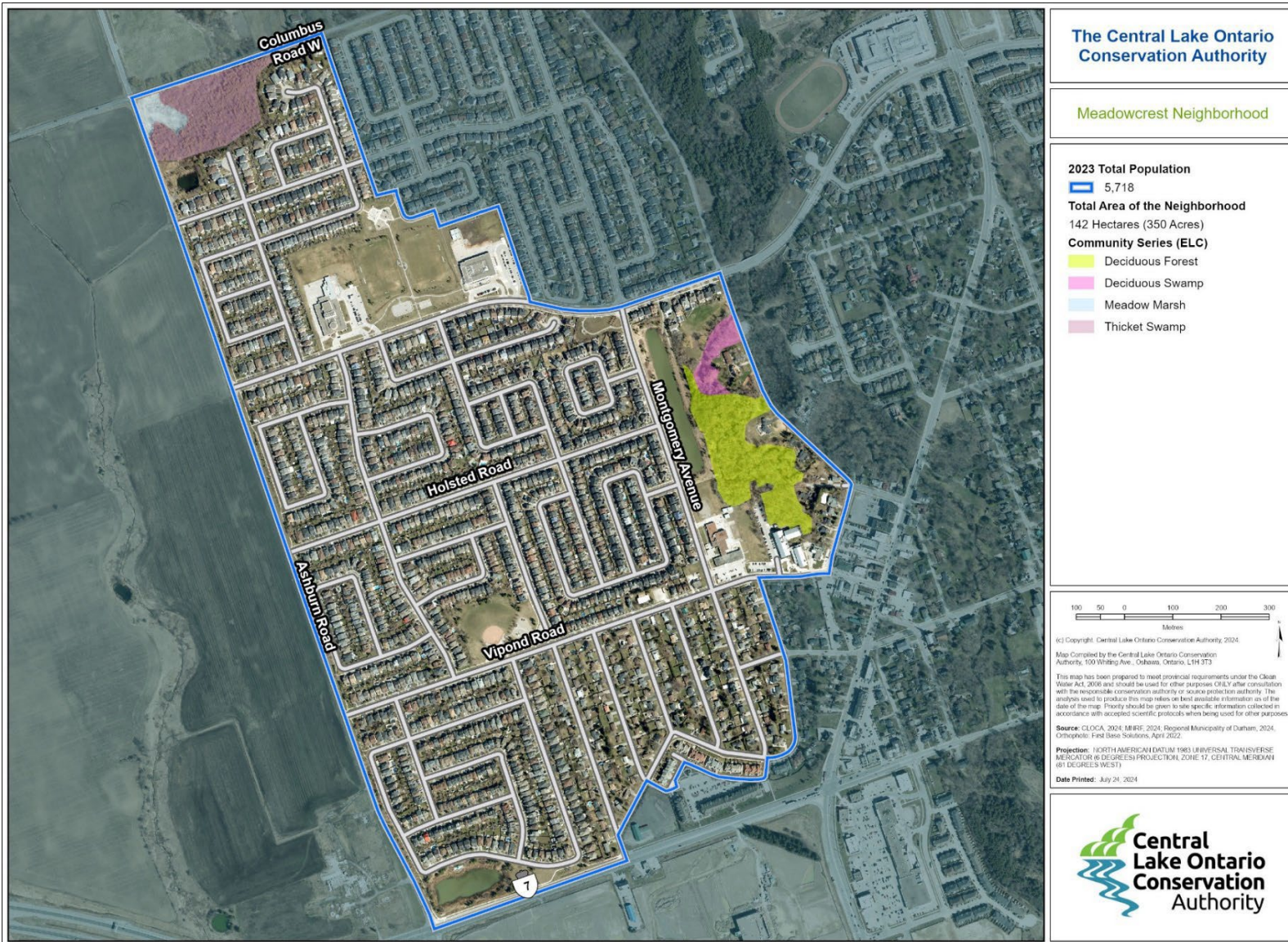
Conclusions

The intention of this process was to identify neighbourhoods having multiple urban renewal and climate action priorities. The process uses a framework of sustainable community attributes to guide comprehensive analysis. To create a more resilient neighbourhood, the collaborative, integrated approaches of the Whitby SNAP Pilot Project can bring efficiencies, opportunities for resource sharing and address critical needs by informing the delivery of many social and economic co-benefits alongside environmental projects. The process compiled input on the locations of planned capital projects, priorities identified in strategic plans and other known urban renewal or climate action opportunities, as provided by various departments within upper and lower tier municipalities, CLOCA, and data and statistics from a variety of other agencies and Not for Profit organizations and potential SNAP stakeholders.

Appendix A – Neighbourhood Boundaries



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