

GREEN SPACES IN URBAN PLACES



Ottawa Stewardship Council (OSC)

Urban (Forestry) Natural Area Stewardship Program



GREEN SPACES IN URBAN PLACES URBAN (FORESTRY) NATURAL AREA STEWARDSHIP PROGRAM

BACKGROUND

Woodlands and other urban natural areas, commonly referred to as the “urban forests”, are an important part of the urban ecosystem. In evaluating the ecological value of urban natural areas, it is important to consider the landscape as a whole. For example, a woodland becomes more ecologically valuable when connected with wetlands, creek corridors, ravine systems or other woodlands.

Connected natural areas of significant size and shape combined with an absence of human disturbance create ideal habitats for natural communities of flora and fauna. The physical disturbance of natural habitats by humans significantly reduces native biodiversity, the quality of ecological functions and ecological integrity within natural habitats.

Mature habitats have a higher ecological value because of their ability to create habitats for site specific/sensitive species which in turn helps to increase the biodiversity of the area. Mature habitats are also more resistant to disease and can regenerate themselves more easily when disturbed. Unfortunately, due to time dependence they are more difficult to replace.

In expanding urban greenspace by creating new woodlands or by expanding or connecting existing natural areas, it is important to consider the ecological design. Ecological design recognizes that nature is the project designer. It necessitates learning how to read the landscape through observation and interaction, to understand the natural features and processes that have shaped your site.

In order to ensure that these and other critical factors are taken into consideration when planning environmental stewardship programs, it is important to adopt a strategic perspective, and to consider not just the individual project site, but also the potential interactions with other project sites. In addition, with an understanding that human and financial resources will always be limited irrespective of project needs, it is essential that a stewardship program be based on a clear set of priorities.

OBJECTIVE

The objective of the OSC *Urban Natural Area Stewardship Program (Green Spaces in Urban Places)*, is to help ensure that the limited resources available are directed towards those stewardship projects which provide the best overall return on investment from an economical, social, and ecological perspective.

Scope

The program is being undertaken in order to better evaluate urban natural areas for stewardship projects. The program will determine which urban natural areas have the highest priority for potential stewardship work, based on program criteria for the City of Ottawa.

INTRODUCTION

The Urban Natural Area Environmental Evaluation Study (UNAEES) was commissioned by the City of Ottawa in 2002. The study was mandated to identify woodlands, wetlands and ravines throughout the urban area that are worthy of protection.

The purpose of the study was to identify and assess the relative environmental value of these natural areas across the entire urban area, and make recommendations for management of these lands aimed at their long-term sustainability. The study evaluated 187 natural areas, covering approximately 2,660 hectares of the City's urban area, or 7.7 percent of total land surface area within the urban boundary (not including significant water bodies).

The urban natural areas evaluated by the UNAEES present numerous opportunities for environmental stewardship projects at the municipal, community, and private property owner level, as indeed do the innumerable smaller areas that were not included in the study. The Ottawa Stewardship Council (OSC) is uniquely positioned, as part of the Ontario Stewardship Program, to be a leading partner with individuals, organizations and communities throughout the Ottawa area in order to implement these projects.

At present, most stewardship projects are undertaken at the initiative of a local community group or council member. While most of these projects are of considerable value in their own right, it was becoming increasingly evident that a project-by-project approach, while rewarding at the individual project level, was arguably not the most effective means of using limited resources available to the stewardship program ('bang for the buck').

Therefore, in 2008, the OSC took its first steps toward the development of a more strategic approach in order **to strategically deliver on greening projects that will promote, create, or sustain urban green infrastructure in the City of Ottawa.**

An improved methodology for assisting decision-making was determined to be an essential component of this strategic approach.

The Greenspace Master Plan

The City of Ottawa Greenspace Master Plan, approved in 2006, is one of the key supporting documents for the City's Official Plan. The plan describes the lands that can be considered as greenspace and sets strategic directions for managing and extending these lands in order to achieve the community's vision for greenspace.

The UNAEES, which is an important contribution to the Greenspace Master Plan, defined and assessed the environmental value of selected urban natural areas within the City, with the objective of developing management recommendations (ecological, stewardship and recreational) for each evaluated site.

The Greenspace Master Plan and the UNAEES are key building blocks for the OSC *Urban (Forestry) Natural Area Stewardship Program*. The OSC program differs from the Master Plan and the UNAEES in that it focuses specifically on prioritizing and planning stewardship projects, and not necessarily located on lands covered by the Greenspace master plan and the UNAEES.

Related Key Documents

In addition to the Greenspace Master Plan and UNAEES, resources that were reviewed in the process of preparing this report included:

Neighbourhoods - Inventory Protocol or Strategic Management Planning Tool? An assessment of community implementation in Southern Ontario (Louise Potts, 19 December 2008): This research paper provided insight into community-based stewardship initiatives based on the Neighbourhoods urban forest inventory protocol developed by Dr. Andy Kenney. The paper noted the key relationships between strategic and community level planning as components of a successful project.

Neighbourhood Health Study (University of Ottawa): This study determined that communities with a lower quality of life often had less greenspace than communities with a higher quality of life.

Community Experiences in Urban Forestry (Eastern Ontario Model Forest): This report and other reports by the Eastern Ontario Model Forest and the Eastern Ontario Natural Heritage Working Group provided useful background on the value of woodlands and green spaces.

METHODOLOGY

As mentioned above, an improved methodology for assisting decision-making was determined to be an essential component of this strategic approach. This methodology was based on the following:

Data collection - information was extracted from the Greenspace Master Plan and the UNAEES. Site data were mapped using Geographic Information Systems GIS.

Site selection - determination of an appropriate methodology for the selection of sites to be included in the program

Evaluation criteria - the development or adaptation of criteria for evaluating the various sites.

Site Evaluation - using the data extracted from the GIS mapping and from the UNAEES reports, each site was evaluated according to the OSC criteria and the results tabulated.

Site Selection

Urban areas function on a smaller scale than the larger, abundant rural natural areas, but their value should not be underestimated. In the social realm, urban natural areas contribute to public health, community enjoyment, and can increase property values. In the ecological realm, urban natural areas can reduce fragmentation, provide habitat for fauna, act as a buffer against the elements, reduce water runoff, improve air quality and moderate temperature changes, sequester carbon, and harbour significant flora.

For the initial development phase of the program, the site selection was based on the UNAEES Reports (2005 and 2006). Due to the considerable differences between environmental conditions and impacts in a rural/semi-rural versus urban setting, the UNAEES study was restricted to the urban boundary. In addition, the UNAEES did not evaluate sites smaller than .8 ha in size.

For the second development phase of the program, the site selection was expanded to include sites smaller than .8 ha in size as well as sites in the villages and hamlets surrounding the urban center. These new sites did not have the benefit of being evaluated or scored by the UNAEES study. Rather, the second phase of sites were categorized according to raw data with respect to their location, size, and crude assessment of their habitat types and will most likely be integrated as part of future “corridor scenario” projects that incorporate the UNAEES evaluated sites within the urban center. The new non-evaluated sites identified within the surrounding villages and hamlets will most definitely require more field data (flora/fauna inventory) prior to considering a stewardship project for that specific urban natural area.

Criteria

Area Size: The larger an area, the greater the potential diversity and value of the ecological functions it can support. For the purposes of this study, the score for area size was based on a woodland valuation system by the Eastern Ontario Natural Heritage Working Group. It gives sites with >4ha a top score and a site <2ha a low score. Most sites evaluated were larger than 4ha.

Area Shape: A more round-shaped area is likely to support more biodiversity than a long narrow area. Long narrow areas (linear) have a greater proportion of edge habitat, which increases the opportunities for disturbance. To determine a quantitative basis for comparing areas of different shapes, the area of a site was divided by its perimeter. Sites with a linear and/or convoluted shape were given a lower score than less-linear shaped sites.

Forest Interior: Forest interior is a function of area size and shape. A greater amount of forest interior increases the potential for supporting ecological functions. In order to determine a relative value for forest interior, the forest interior was measured by using a buffer of at least 100m within each site. The highest score was given to a site that had a forest interior within the area bounded by a 200m buffer from its edge; a lower score was given if it only had forest interior if the buffer was reduced to 150m; and lower still if there was forest interior only after the buffer was reduced to 100m. No score was given to sites that didn't have forest interior.

Ecological Value: The ecological value was based on the ranking system developed by the UNAEES. The highest score was given to sites with a high ecological integrity and the lowest score was given to sites with a low ecological integrity.

Distance Separation: Distances between urban natural areas can help determine potential corridor scenarios. If two sites are in close proximity, a corridor could be an option. A higher score is given to sites that have other sites within 250m of them. If a site doesn't have another site within 1km then no score was given.

Number of Areas: This criteria is complementary to distance separation. Sites with one or more other sites within a 1 km radius will receive a correspondingly higher score than sites that have no other sites within a 1km radius.

Water Feature: describes whether a site has a water feature within its boundaries or in the surrounding 50 metres of its borders. Water features are associated with increased biodiversity and essentially provide an additional ecosystem (aquatic). If there was a water feature the site received the highest score, if there was no water feature, no score was given.

Visibility: If a site has high visibility or is located where many people will see it then it has added value as an example or catalyst for other projects and will be given a higher score. If it has low visibility such that only local residents are aware of it then it will be given a low score.

Weighting

In addition to the individual scoring, criteria were weighted as follows (rationale for weighting is explained for each criterion as applicable):

Criteria	Weighting factor	Rationale
Area size	2	Proportionate to habitat supply.
Forest Interior	2	Provides less common, specialized habitats.
Ecological Value	3	Ultimate Habitat Quality Assessment.
Water Feature	2	Provides an additional ecosystem (aquatic).

Scoring and Weighting Factors

Attribute	Weight	Scoring Evaluation		
Area Size	x2	1 (≤ 2 ha)	2 (2-4 ha)	3 (≥ 4 ha)
Area Shape	x1	1 (0-.33)	2 (.33-.66)	3 (.66-1.0)
Forest Interior	x2	1 (100m)	2 (150m)	3 (200m)
Ecological Value	x3	1 (low)	2 (mod.)	3 (high)
Distance Separation	x1	1 (1km-750m)	2 (250m-750m)	3 (250m-0m)
# of Areas	x1	1 (2 areas)	2 (3 areas)	3 (4+ areas)
Water Feature	x2	0 (none)	or	3 (there is water)
Visibility	x1	1 (neighbours)	2 (pedestrians)	3 (motorists/busy street)

Categories (for areas <.8 ha and non-evaluated natural urban areas)

Urban Area #	Geographical Township	Area (m ²)	Water Feature	Habitat Type
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SITE EVALUATION RESULTS

The results of the scoring process are at Annex A. The relative scores provide a coarse screening of areas in order to assist in prioritization and decision-making. A rough order of magnitude cross-reference confirmed a reasonably close correlation, between urban natural area sites to which rankings with and without the strongly weighted (i.e. X 3) UNAEES ecological rating scores (High, Medium, Low) and OSC scores. This correlation provides a measure of validation of the OSC criteria.

Other factors

It has been stressed throughout this report that the study methodology is intended only to assist in decision-making. Many other factors will be taken into account in deciding on individual projects and in preparing annual work plans.

Some of these factors include, but are not restricted to:

Habitat type: It is difficult to rank one habitat type over another. If available background literature does not assess a habitat type for a particular site (eg. sites not assessed in UNAEES), ground truthing may be required. In addition, a site that includes significant features and is considered an area of natural and scientific interest (ANSI) may be considered a priority candidate site for a stewardship project.

Ownership / Land Use: The ownership of the land and its designated land use is an important consideration. Is the land public or private? Is it slated for development?

Local community: Variations from neighbourhood to neighbourhood may be important factors in pursuing stewardship projects. A neighbourhood health study done by the University of Ottawa determined that across Ottawa, communities with a lower quality of life usually had less greenspace. This may suggest a higher priority for stewardship for areas that are in greater need of greenspace.

Community Involvement/Ownership: The amount of community involvement in previous community stewardship and other environmental initiatives in that area is an indicator of the potential for finding local leadership and/or partners for new proposals.

UNAEES Recommendations: The UNAEES Report recommendations may include additional considerations.

Determination of Priority: Consideration must be given to which qualities are being prioritized for a given project. For example, according to the scoring table a high score would indicate that a site was worthy of protection from an ecological standpoint. However, the same site may not require as much stewardship intervention. Conversely, a low score would indicate a site that is not as worthy of protection but would require much more stewardship assistance.

Significant Woodlands: In 2005 a Provincial Policy Statement, under the Planning Act, indicated that it is the responsibility of each planning authority to determine woodland significance. Broadly speaking, significant woodlands are defined as: “an area which is ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history” (Provincial Policy Statement 2005). In order to facilitate a more regionally specific evaluation of

woodlot significance, the Ministry of Natural Resources, Kemptville District, has developed a regional set of criteria. This designation may also be considered when evaluating the priority of urban natural area sites for potential stewardship action.

APPENDICES:

- Annex A: Priority List of Evaluated Urban Natural Areas (& Evaluated Urban Natural Areas without UNAEES Ecological Rating applied – 2nd list)

Name of Site	Site Number	Score		
River Road Woods	148	38		
Navan Road at Page Road	97	37		
McCarthy Woods and Southern Corridor	144	37		
Airbase Woods	169	37		
Heart's Desire Forest	183	37		
Forestglen Park	82	36		
Petrie Island & Mainland	92	36		
Armstrong Road North Woods	98	36		
North of Maple Grove	32	35	Average	22.40678
Britannia Conservation Area	116	35	Mode	28
Vincent Massey Woods	136	35	Median	23
NRC Woods North	170	35		
Remer Property (Abion Wetland)	184	35		
Chapel Hill Park	83	34		
CNR Line	143	34		
Conroy Swamp/Greenboro Turtlehead Nature Area	151	34		
St. Louis Woods	187	34		
Upper Poole Creek Wetland	28	32		
Memorial Gardens Woods	58	32		
Jock River Landing	59	32		
Bilberry Creek Valley	85	32		
Taylor Creek Valley	93	32		
Britannia Bay	115	32		
Hog's Back Woods	134	32		
Graham Creek/Ottawa Beach	35	31		
Upper Duck Island	75	31		
Rideau River Islands	137	31		
Navan Road at Mer Bleue	96	30		
Champlain Bridge Woods	124	30		
Champlain Bridge Islands	125	30		
Hog's Back Woods - East	139	30		
Rockcliffe Parkway	66	29		
Armstrong Road South Woods	100	29		
Mosquito Creek Corridor	101	29		
East of Albion Road	106	29		
Mosquito Creek Valley at Limebank	112	29		
Sawmill Creek Woods	141	29		
Rockcliffe Park East	177	29		

Aviation Parkway North	67	29
Aviation Parkway South	68	29
Kanata Town Centre Core Park	14	28
Stittsville Arena Park	26	28
By-Pass Woods	77	28
St. Joseph Blvd. Woods	88	28
Lower Bilberry Creek Valley	90	28
Cardinal Creek Valley	94	28
Upper Mosquito Creek	113	28
Riverside Park	126	28
Riverwood Park Woods	147	28
Rideau River Park Woods	162	28
Mid-Sawmill Creek Corridor	142	28
Kanata South Business Park	16	27
Hazeldean Woods Park	17	27
Bridlewood Core Park	22	27
Poole Creek Corridor	27	27
Nepean Creek Corridor	44	27
Strandherd Tributary	55	27
Lemieux Island	128	27
Pleasant Park Woods	159	27
Klondike Woods	4	26
Cedarview and Cambrian Road -Not Complete	57	26
West of R.Road 31, North of Blais	108	26
Prince of Wales Woods	135	26
Beechwood Cemetery	167	26
Nivens Woods	178	26
Monterey Ravine	36	25
Arlington Woods Park	38	25
Elmhurst Park Woods	117	25
Mountain Crescent Woods	149	25
Billberry Creek Valley west of quarry woods	180	25
Poole Creek north of Hazeldean	185	25
Half Moon Bay Park	49	24
Sach's Forest	62	24
Jockvale Road Woods	63	24
Spratt Road Woods	99	24
Pinecrest Woods	119	24
Hampton Park Woods	122	24
Riverside Park Woods	123	24
Montfort Woods	171	24
McKay Lake	176	24
Chaudiere Rapids	127	24
Lower Poole Creek Corridor	30	23
Jock River at Bren-Maur	54	23
Chapman Mills - West Woodlot	60	23
Chapman Mills - East Woodlot	61	23
Sawmill Creek Corridor at Hunt Club	110	23
Parliament Hill	181	23
Johnston Street West	186	23
Katimivik Park Woods	19	23

Lower Stillwater Creek	34	22
Highway 416	50	22
East of Cedarview, South of Strandherd	51	22
Ski Hill Park	71	22
Ottertail Woods	104	22
Des Chenes Lookout	120	22
Cahill Drive Woods	150	22
Whalen Park	13	21
Palladium Interchange	33	21
Leslie Park Woods	37	21
Terry Fox School Woods	89	21
Leitrim at Limebank	102	21
Leopold Woodlot	140	21
Hospital Woods - West	161	21
Goldridge Park	23	20
Cedarview Woodlot	52	20
Rachette Park	81	20
South of Leitrim, North of Quinn	105	20
Wolf Point Woods	114	20
Hospital Woods - East	165	20
Shirley's Brook Corridor	5	19
Cattail Creek Park Woods	20	19
West Hunt Club	45	19
Louis Perrault Park	84	19
Innes Park Woods	87	19
Victoria Island Woods - West	131	19
Stonemeadow Park	25	19
Morgan's Grant Woods	10	18
Alice Wilson Woods	12	18
Tallwood Woods	40	18
Pinecrest Cemetery	42	18
Lafarge 2	80	18
Carlinton Woods	121	18
Conroy Woods	152	18
Coronation Park	163	18
Richelieu Park	175	18
Cunningham Woods	7	17
Jock River Conservation Area	56	17
Lafarge 1	79	17
Mather Award Ditch at Russell	111	17
Hawthorne Marsh	157	17
Carson Grove Woods	173	17
Bathgate Park Woods	174	17
KRPC Woods	8	16
Kindlecourt Park	70	16
Church Woods at Innes	78	16
Quarry Woods East	91	16
Arboretum	133	16
Uplands Park Woodlot	145	16
Heatherington Road Woods	153	16
Manordale Woods	41	15

Rothwell Heights Park	72	15
Brown's Inlet	129	15
Eastway Gardens Woods	164	15
Escarpment Park Woods	21	15
Hope Cloutier Park	24	14
Bell Memorial Park	31	14
East of Limebank, North of Armstrong	103	14
Jim Durrell Woods	154	14
McEwan Creek at Hawthorne	156	14
Lynda Lane Woods	160	14
Hunt Club Golf Course	179	14
Hewitt Park Woods	18	13
Tanglewood Park	43	13
Strandherd at Fallowfield	53	13
Stonebridge Golf Club	64	13
City Park Woods	74	13
Centre Park	76	13
Carriere Park	86	13
RA Centre Woods	138	13
Paul Landry Park Woods	146	13
Assaly Woods	172	13
Young's Pond Park	15	12
Severn Avenue Woods	118	12
Central Experimental Farm Woods	130	12
Klondike Road Park	9	11
Herzberg Woods	11	11
Core Park	48	11
Woods South of Innes, West of Trim	95	11
Albion Industrial Park	107	11
Swanesa Woods	155	11
Gilbey Park	39	10
Queensway Park	69	10
Presland Park Woods	166	9
Fourth Line Woods	6	7
Barrhaven Escarpment Park	47	7
Old Innes Road Woods	158	7
Abbott/Iber Woodlot	182	7
North of Hazeldean -SITE ALTERED	29	
Trillium Woods - SITE ALTETERED	1	
Marchwood/Lakeside NEA A - SITE ALTERED	2	
South Richardson Lands - NO EI	3	
Pine Glen Park - NO EI	46	
Deerfox at Woodroffe - NO EI	65	
NRC Woods South - NO EI	73	
CLC lands at Lester - NO EI	109	
Fernbank Wetland - NOT ON MAP	132	
Rockcliffe Park West - NO EI	168	

EI = ECOLOGICAL INTEGRITY

Name of Site	Site Number	Score	
North of Maple Grove	32	29	
McCarthy Woods and Southern Corridor	144	28	
Airbase Woods	169	28	
Heart's Desire Forest	183	28	
CNR Line	143	28	
Forestglen Park	82	27	
River Road Woods	148	26	
Britannia Conservation Area	116	26	
Vincent Massey Woods	136	26 Average	16.73563
NRC Woods North	170	26 Mode	12
Remer Property (Abion Wetland)	184	26 Median	17
Jockvale Landing	59	26	
Taylor Creek Valley	93	26	
Hog's Back Woods	134	26	
Klondike Woods	4	26	
Navan Road at Page Road	97	25	
Chapel Hill Park	83	25	
Conroy Swamp/Greenboro Turtlehead Nature Area	151	25	
St. Louis Woods	187	25	
Champlain Bridge Woods	124	24	
Hog's Back Woods - East	139	24	
Upper Poole Creek Wetland	28	23	
Memorial Gardens Woods	58	23	
Bilberry Creek Valley	85	23	
Britannia Bay	115	23	
Rockcliffe Parkway	66	23	
East of Albion Road	106	23	
Mosquito Creek Valley at Limebank	112	23	
Rockcliffe Park East	177	23	
Aviation Parkway North	67	23	
Aviation Parkway South	68	23	
Graham Creek/Ottawa Beach	35	22	
Upper Duck Island	75	22	
Rideau River Islands	137	22	
Stittsville Arena Park	26	22	
St. Joseph Blvd. Woods	88	22	
Lower Bilberry Creek Valley	90	22	
Cardinal Creek Valley	94	22	
Riverside Park	126	22	
Rideau River Park Woods	162	22	
Mid-Sawmill Creek Corridor	142	22	
Mountain Crescent Woods	149	22	
Rockcliffe Park West - NO EI	168	22	
Petrie Island & Mainland	92	21	
Armstrong Road South Woods	100	21	
Riverwood Park Woods	147	21	
Kanata South Business Park	16	21	
Poole Creek Corridor	27	21	
Nepean Creek Corridor	44	21	
Strandherd Tributary	55	21	
Pinecrest Woods	119	21	

Riverside Park Woods	123	21
Chaudiere Rapids	127	21
Palladium Interchange	33	21
Pinecrest Cemetery	42	21
Prince of Wales Woods	135	20
Nivens Woods	178	20
Half Moon Bay Park	49	20
Jock River at Bren-Maur	54	20
Parliament Hill	181	20
Johnston Street West	186	20
Katimivik Park Woods	19	20
Armstrong Road North Woods	98	19
Kanata Town Centre Core Park	14	19
By-Pass Woods	77	19
Monterey Ravine	36	19
Arlington Woods Park	38	19
Billberry Creek Valley west of quarry woods	180	19
Poole Creek north of Hazeldean	185	19
East of Cedarview, South of Strandherd	51	19
Shirley's Brook Corridor	5	19
Champlain Bridge Islands	125	18
Hazeldean Woods Park	17	18
Bridlewood Core Park	22	18
Pleasant Park Woods	159	18
Sach's Forest	62	18
Jockvale Road Woods	63	18
Spratt Road Woods	99	18
Montfort Woods	171	18
McKay Lake	176	18
Leslie Park Woods	37	18
Terry Fox School Woods	89	18
Lafarge 2	80	18
Sawmill Creek Woods	141	17
Cedarview and Cambrian Road -Not Complete	57	17
Beechwood Cemetery	167	17
Lower Poole Creek Corridor	30	17
Chapman Mills - West Woodlot	60	17
Chapman Mills - East Woodlot	61	17
Cedarview Woodlot	52	17
Rchette Park	81	17
Lafarge 1	79	17
Hawthorne Marsh	157	17
Lemieux Island	128	16
Elmhurst Park Woods	117	16
Lower Stillwater Creek	34	16
Highway 416	50	16
Ski Hill Park	71	16
Ottetail Woods	104	16
Cahill Drive Woods	150	16
Cattail Creek Park Woods	20	16
West Hunt Club	45	16
Victoria Island Woods - West	131	16
Whalen Park	13	15
Leitrim at Limebank	102	15

Leopold Woodlot	140	15
Hampton Park Woods	122	14
Sawmill Creek Corridor at Hunt Club	110	14
Hospital Woods - West	161	14
Goldridge Park	23	14
South of Leitrim, North of Quinn	105	14
Hospital Woods - East	165	14
Cunningham Woods	7	14
Jock River Conservation Area	56	14
Carson Grove Woods	173	14
Bathgate Park Woods	174	14
Upper Mosquito Creek	113	13
Louis Perrault Park	84	13
Innes Park Woods	87	13
Stonemeadow Park	25	13
KRPC Woods	8	13
Uplands Park Woodlot	145	13
Des Chenes Lookout	120	12
Morgan's Grant Woods	10	12
Alice Wilson Woods	12	12
Tallwood Woods	40	12
Conroy Woods	152	12
Coronation Park	163	12
Richelieu Park	175	12
Heatherington Road Woods	153	12
Manordale Woods	41	12
Rothwell Heights Park	72	12
Eastway Gardens Woods	164	12
Escarpment Park Woods	21	12
East of Limebank, North of Armstrong	103	12
Wolf Point Woods	114	11
Hope Cloutier Park	24	11
Jim Durrell Woods	154	11
McEwan Creek at Hawthorne	156	11
Lynda Lane Woods	160	11
Hunt Club Golf Course	179	11
Herzberg Woods	11	11
Kindlecourt Park	70	10
Church Woods at Innes	78	10
Hewitt Park Woods	18	10
Tanglewood Park	43	10
Strandherd at Fallowfield	53	10
Stonebridge Golf Club	64	10
City Park Woods	74	10
Centre Park	76	10
Carriere Park	86	10
RA Centre Woods	138	10
Paul Landry Park Woods	146	10
Assaly Woods	172	10
Carlington Woods	121	9
Quarry Woods East	91	9
Young's Pond Park	15	9
Central Experimental Farm Woods	130	9
Bell Memorial Park	31	8

Severn Avenue Woods	118	8
Klondike Road Park	9	8
Core Park	48	8
Woods South of Innes, West of Trim	95	8
Albion Industrial Park	107	8
Swanesa Woods	155	8
Gilbey Park	39	7
Queensway Park	69	7
Fourth Line Woods	6	7
Brown's Inlet	129	6
Presland Park Woods	166	6
Pine Glen Park - NO EI	46	6
Barrhaven Escarpment Park	47	4
Old Innes Road Woods	158	4
Abbott/Iber Woodlot	182	4
Navan Road at Mer Bleue	96	
Mosquito Creek Corridor	101	
West of R.Road 31, North of Blais	108	
Mather Award Ditch at Russell	111	
Arboretum	133	
North of Hazeldean -SITE ALTERED	29	
Trillium Woods - SITE ALTETERED	1	
Marchwood/Lakeside NEA A - SITE ALTERED	2	
South Richardson Lands - NO EI	3	
Deerfox at Woodroffe - NO EI	65	
NRC Woods South - NO EI	73	
CLC lands at Lester - NO EI	109	
Fernbank Wetland - NOT ON MAP	132	

EI = ECOLOGICAL INTEGRITY

- Annex B: List of Non-Evaluated Urban Natural Areas & Smaller Sized (<0.8 ha) Urban Natural Areas.

Urban Area #	Geographical township	Area	Area (m2)	Water feature	Habitat Type
566	Goulbourn		17644.736	No	Wooded mature & young
567	Goulbourn		158112.87	Yes	Wooded mature & young, Fallowing La
568	Goulbourn		5181.947	No	Wooded mature & young, Fallowing La
569	Goulbourn		3591.013	No	Wooded mature & young
570	Goulbourn		2475.281	No	Wooded mature & young
571	Goulbourn		2833.827	No	Wooded mature & young
572	Goulbourn		1731.7	No	Wooded mature & young
573	Goulbourn		20869.686	Yes	Wooded mature & young
574	Goulbourn		3614.028	No	Wooded mature & young
575	Goulbourn		6136.279	No	Wooded young, Grassy
576	Goulbourn		29491.629	Yes	Wooded young, Grassy
577	Goulbourn		6035.76	No	Wooded mature & young
578	Goulbourn		3851.519	No	Wooded young
579	Goulbourn		12766.806	No	Wooded mature & young, Grassy
580	Goulbourn		10330.754	No	Wooded mature & young , Grassy
581	Goulbourn		7345.991	No	Fallowing land, Grassy
582	Goulbourn		77542.227	Yes	Fallowing land, Grassy
583	Goulbourn		7909.652	No	Wooded mature & young
584	Goulbourn		2874.093	No	Wooded mature & young
585	Goulbourn		25916.797	Yes	wooded mature & young, Grassy
586	Goulbourn		307524.28	Yes	Fallowing land
587	Goulbourn		33588.657	Yes	Wooded mature & young, Grassy
588	Goulbourn		29234.303	No	Wooded mature & young, Grassy
589	West Carleton		5243.666	Yes	Wooded mature & young
590	Kanata		14699.739	No	Wooded mature & young, Grassy
591	Kanata		3948.281	No	Wooded mature & young, Grassy
593	Kanata		41930.835	Yes	Wooded mature & young, Grassy
594	Kanata		13213.935	No	Wooded mature & young, Grassy
595	Kanata		3909.828	No	Wooded mature & young
596	Kanata		7314.988	No	Wooded mature & young
597	Kanata		2459.441	No	Wooded mature & young
598	Kanata		17035.08	No	Fallowing land
600	Kanata		18507.811	No	Fallowing land
601	Kanata		12538.363	No	Fallowing land
602	Kanata		7525.446	No	Wooded mature & young
603	Kanata		6806.114	No	Wooded mature & young
604	Kanata		2688.12	No	Wooded mature & young
605	Kanata		10688.242	No	Wooded mature & young
606	Kanata		2825.518	No	Wooded mature & young
607	Kanata		11743.787	Yes	Wooded mature & young, Grassy
608	Kanata		1610.763	No	Wooded mature & young
609	Kanata		3013.438	No	Wooded mature & young
610	Kanata		9807.444	Yes	Wooded mature & young

611	Kanata	7160.279	Yes	Wooded mature & young
612	Kanata	7707.291	Yes	Wooded young
613	Kanata	8937.743	No	Wooded mature & young, Grassy
614	Kanata	41199.207	Yes	Wooded mature & young, Following land
615	Kanata	39489.286	Yes	Wooded mature & young, Grassy
616	Kanata	21588.308	No	Wooded mature & young
617	Kanata	72558.347	No	Wooded mature & young
618	Kanata	13390.947	No	Following land, Wooded young
619	Kanata	3239.192	No	Following land
620	Kanata	21281.539	No	Following land
621	Kanata	120870.4	Yes	Wooded young, Following land
622	Kanata	8029.702	No	Wooded mature & young
623	Kanata	16291.121	Yes	Wooded mature & young, Grassy
624	Kanata	7324.216	No	Wooded nature & young
625	Kanata	8692.386	No	Wooded mature & young
628	Kanata	2669.301	No	Wooded mature & young
629	Kanata	2835.971	No	Wooded mature & young
630	Kanata	11449.126	No	Wooded mature & young
631	Kanata	7973.671	Yes	Wooded mature & young
632	Kanata	40476.374	Yes	Wooded mature & young, Grassy
633	Kanata	21888.803	No	Wooded mature & young, Grassy
634	Kanata	21758.717	Yes	Wooded mature & young, Grassy
635	Kanata	7940.479	No	Wooded mature & young
636	Kanata	7584.045	No	Wooded mature & young
637	Kanata	12545.528	No	Wooded mature & young
638	Kanata	1601.78	No	Wooded mature & young
639	Kanata	4344.271	No	Wooded mature & young
640	Kanata	1265.868	No	Wooded mature & young
641	Kanata	5279.504	No	Wooded mature & young
642	Kanata	20148.201	No	Following land
643	Kanata	14247.033	No	Following land, Grassy
644	Kanata	64249.739	No	Wooded mature & young, Following Land
645	Kanata	6348.854	No	Wooded mature & young
646	Kanata	21776.901	No	Wooded mature & young
647	Nepean	11088.462	No	Grassy
648	Nepean	4874.637	No	Grassy
649	Nepean	11650.093	Yes	Wooded mature & young
650	Nepean	20543.86	Yes	Wooded mature & young
651	Nepean	5703.893	No	Wooded mature & young, Grassy
652	Nepean	15727.299	No	Wooded mature & young
653	Nepean	5831.277	No	Wooded mature & young
654	Nepean	1776.675	No	Wooded mature & young
655	Nepean	5666.906	Yes	Wooded mature & young
656	Nepean	15862.705	No	Wooded mature & young
657	Nepean	40740.277	Yes	Wooded mature & young
658	Nepean	18159.573	Yes	Wooded mature & young
659	Nepean	5237.085	Yes	Wooded mature & young

660	Nepean	4418.351	No	Wooded mature & young
661	Nepean	3315.531	Yes	Wooded mature & young
662	Nepean	8373.657	Yes	Wooded mature & young
663	Nepean	8451.825	Yes	Wooded mature & young
687	Nepean	11347.936	No	Wooded mature & young
688	Nepean	4273.945	No	Wooded mature & young
689	Nepean	16521.743	No	Wooded mature & young, Grassy
690	Nepean	2972.861	No	Wooded mature & young
691	Nepean	52,478.023	No	Wooded mature & young
692	Nepean	236775.18	No	Wooded mature & young
693	Nepean	47085.611	No	Wooded mature & young, Grassy
694	Nepean	154201.81	No	Following land
695	Nepean	88218.364	No	Following land
696	Nepean	10821.242	No	Wooded mature & young
697	Nepean	2737.793	No	Wooded mature & young
698	Nepean	3978.104	No	Wooded mature & young
699	Nepean	1514.982	No	Wooded mature & young
700	Nepean	9948.217	No	Wooded mature & young
701	Nepean	10561.484	No	Wooded mature & young
702	Nepean	4230.631	No	Wooded mature & young
703	Nepean	2615.581	No	Wooded mature & young
704	Nepean	1830.435	No	Wooded mature & young
705	Nepean	20987.554	Yes	Wooded mature & young , Grassy
706	Nepean	33609.393	No	Wooded mature & young, Following lan
707	Nepean	40091.231	Yes	Wooded mature & young
708	Nepean	14944.749	No	Wooded mature & young
709	Nepean	2481.159	No	Wooded mature & young
710	Nepean	26767.887	No	Grassy, Following land
711	Nepean	10856.215	Yes	Wooded mature & young, Grassy
712	Nepean	6109.04	No	Wooded mature & young
713	Nepean	5827.545	No	Wooded mature & young
714	Nepean	1622.877	No	Wooded mature & young
715	Nepean	10954.625	No	Wooded mature & young
716	Nepean	4274.847	No	Wooded mature & young
717	Nepean	14759.554	No	Wooded mature & young
718	Nepean	5178.437	No	Wooded mature & young
719	Nepean	372227.83	No	Following land, Grassy
720	Nepean	17250.512	No	Wooded mature & young, Grassy
721	Nepean	13547.472	No	Wooded mature & young, Grassy
722	Nepean	14253.064	No	Wooded mature & young
723	Nepean	10637.132	No	Wooded mature & young
725	Nepean	5346.759	No	Wooded mature & young
726	Nepean	3192.415	No	Wooded mature & young
727	Nepean	7731.367	No	Wooded mature & young
728	Nepean	3393.862	No	Wooded mature & young
730	Nepean	13984.926	No	Wooded mature & young
731	Nepean	39861.722	No	Wooded mature & young

732	Nepean	1619.021	No	Wooded mature & young
733	Nepean	10232.081	No	Wooded mature & young, Following lan
734	Nepean	6076.198	No	Wooded mature & young
735	Nepean	3258.068	No	Wooded mature & young
736	Nepean	4676.367	No	Wooded mature & young
737	Nepean	2893.82	No	Wooded mature & young
738	Nepean	4280.668	No	Wooded mature & young
739	Nepean	1792.306	No	Wooded mature & young
740	Nepean	3092.525	No	Wooded mature & young
741	Nepean	7048.721	No	Wooded mature & young
742	Nepean	8772.831	No	Wooded mature & young
743	Nepean	5178.341	No	Wooded mature & young
744	Nepean	7101.98	No	Wooded mature & young
745	Nepean	2944.825	No	Wooded mature & young
746	Nepean	6355.503	No	Wooded mature & young
747	Nepean	3209.191	Yes	Wooded mature & young
748	Nepean	21021.825	Yes	Wooded mature & young
749	Nepean	49305.709	Yes	Wooded mature & young
750	Nepean	6560.098	No	Wooded mature & young, following lan
751	Nepean	7293.2	No	Wooded mature & young, Following lan
752	Nepean	7284.02	No	Wooded mature & young, Following lan
753	Nepean	7042.21	No	Wooded mature & young, Grassy
754	Nepean	21625.997	No	Wooded mature & young, Following lan
755	Nepean	13959.312	No	Wooded mature & young, Following lan
756	Nepean	9604.276	No	Wooded mature & young, Following lan
757	Nepean	5552.948	No	Wooded mature & young
758	Nepean	10074.696	Yes	Wooded mature & young
759	Nepean	2886.968	No	Wooded mature & young
760	Nepean	6657.929	No	Wooded mature & young, Grassy
771	Cumberland	84250.044	No	Following land
772	Cumberland	132218.57	No	Following land
773	Cumberland	9139.59	No	Wooded mature & young
775	Cumberland	2546.668	No	Wooded mature & young
776	Cumberland	3719.847	No	Wooded mature & young
777	Cumberland	113631.41	Yes	Following land, Grassy
778	Cumberland	36237.203	No	Following land, Grassy
779	Cumberland	38291.469	No	Following land, Grassy
781	Cumberland	4272.603	No	Wooded mature & young
782	Cumberland	101310.02	No	Following land, Grassy
784	Cumberland	20497.919	No	Wooded mature & young
785	Cumberland	9293.102	No	Wooded mature & young
786	Cumberland	46193.63	No	Wooded mature & young
787	Cumberland	59970.506	No	Following land, Grassy
788	Cumberland	27239.204	No	Wooded mature & young
789	Cumberland	8129.806	Yes	Wooded mature & young
790	Cumberland	7703.838	No	Wooded mature & young
791	Cumberland	2726.356	No	Wooded mature & young

761	Gloucester	3940.211	No	Wooded mature & young
762	Gloucester	3193.739	Yes	Wooded mature & young
763	Gloucester	1788.548	No	Wooded mature & young
764	Gloucester	6219.378	Yes	Wooded mature & young
765	Gloucester	7318.073	Yes	Wooded mature & young
766	Gloucester	16860.414	Yes	Wooded mature & young, Grassy
767	Gloucester	7401.113	No	Wooded mature & young
768	Gloucester	4657.199	No	Wooded mature & young
769	Gloucester	5799.821	No	Wooded mature & young
770	Gloucester	5377.898	No	Wooded mature & young
792	Gloucester	3630.421	No	Wooded mature & young
793	Gloucester	1588.416	No	Wooded mature & young
794	Gloucester	4784.407	No	Wooded mature & young
795	Gloucester	63756.184	Yes	Grassy
796	Gloucester	6027.286	No	Wooded mature & young
797	Gloucester	9185.653	No	Wooded mature & young
798	Gloucester	10041.233	No	Wooded mature & young
799	Gloucester	15748.562	No	Wooded mature & young
800	Gloucester	16376.637	Yes	Wooded mature & young
801	Gloucester	48279.118	Yes	Wooded mature & young, Grassy
802	Gloucester	6877.353	No	Wooded mature & young
803	Gloucester	4998.376	No	Wooded mature & young
804	Gloucester	1916.472	No	Wooded mature & young
805	Gloucester	62163.469	Yes	Wooded mature & young
806	Gloucester	164978.84	Yes	Wooded mature & young
807	Gloucester	10963.063	No	Wooded mature & young, Grassy
808	Gloucester	2429.25	No	Wooded mature & young
809	Gloucester	1379.588	No	Wooded mature & young
810	Gloucester	14703.072	No	Wooded mature & young
811	Gloucester	13299.287	No	Wooded mature & young
812	Gloucester	16218.845	No	Wooded mature & young
813	Gloucester	2854.72	No	Wooded mature & young
814	Gloucester	133868.9	No	Wooded mature & young, Grassy
815	Gloucester	56764.591	No	Wooded mature & young, Grassy
816	Gloucester	24820.591	No	Wooded mature & young
817	Gloucester	3385.818	No	Wooded mature & young
818	Gloucester	9735.583	No	Wooded mature & young
819	Gloucester	7897.059	No	Wooded mature & young
820	Gloucester	3306.386	No	Wooded mature & young
821	Gloucester	3258.252	No	Wooded mature & young
822	Gloucester	3495.581	No	Wooded mature & young
825	Gloucester	18240.074	No	Wooded mature & young
826	Gloucester	2825.575	No	Wooded mature & young
827	Gloucester	2898.007	No	Wooded mature & young
828	Gloucester	10064.736	No	Wooded mature & young
829	Gloucester	5972.755	No	Wooded mature & young
830	Gloucester	3582.603	No	Wooded mature & young

831	Gloucester	5724.917	No	Wooded mature & young
832	Gloucester	5753.797	No	Wooded mature & young
833	Gloucester	29280.62	No	Wooded mature & young
835	Gloucester	32828.006	No	Wooded mature & young
836	Gloucester	14473.396	No	Wooded mature & young
837	Gloucester	9199.523	No	Wooded mature & young
838	Gloucester	82228.229	No	Wooded mature & young, Grassy, Fallo
839	Gloucester	5211.704	No	Wooded mature & young
840	Gloucester	9774.996	No	Wooded mature & young
841	Gloucester	2535.64	No	Wooded mature & young
842	Gloucester	2645.548	No	Wooded mature & young
843	Gloucester	6153.744	No	Wooded young
844	Gloucester	1956.516	No	Wooded young
845	Gloucester	13598.951	No	Wooded young, Grassy
846	Gloucester	3785.99	No	Wooded mature & young
847	Gloucester	7480.48	No	Wooded mature & young
848	Ottawa	6584.055	No	Wooded mature & young
849	Ottawa	46358.342	No	Wooded young
850	Ottawa	22366.773	No	Wooded young
851	Ottawa	3628.077	No	Wooded young & mature
852	Ottawa	2358.515	No	Wooded young
853	Ottawa	9193.134	No	Wooded young
854	Ottawa	13842.77	No	Wooded young
855	Ottawa	3338.465	No	Wooded mature & young
856	Ottawa	3466.904	No	Wooded young, Grassy
857	Ottawa	26914.158	No	Fallowing land, Grassy
858	Ottawa	64827.812	No	Fallowing land, Grassy
859	Ottawa	34469.488	No	Wooded young, Grassy
860	Ottawa	174869.49	No	Fallowing land
861	Ottawa	75109.132	No	Wooded young, Grassy
862	Ottawa	13177.728	No	Wooded mature & young
863	Ottawa	22256.586	No	Wooded young, Grassy
864	Ottawa	118575.27	No	Wooded young, Grassy
865	Ottawa	37815.373	No	Wooded young , Grassy
867	Ottawa	13934.224	No	Wooded young & mature
868	Ottawa	11635.197	No	Wooded young & mature
869	Ottawa	43066.022	No	Wooded mature & young, Grassy
870	Ottawa	106981.67	No	Fallowing land
871	Ottawa	29968.547	No	Wooded mature & young
872	Ottawa	359271.08	Yes	Wooded young, Fallowing land, Grassy
873	Ottawa	7755.578	No	Wooded mature & young
874	Ottawa	62352.102	No	Fallowing land
875	Ottawa	113345.15	Yes	Wooded young, Grassy
876	Ottawa	7330.149	No	Wooded mature & young
877	Ottawa	6297.074	No	Wooded mature & young
878	Ottawa	97575.304	No	Fallowing land
879	Ottawa	285597.5	No	Fallowing land, Wooded young

880	Ottawa	34481.491	No	Wooded mature & young
881	Ottawa	15682.41	No	Wooded nature & young
882	Ottawa	21357.522	No	Wooded young , Grassy
883	Ottawa	9074.531	No	Wooded mature & young
884	Ottawa	38885.032	No	Wooded mature & young
885	Ottawa	5130.37	No	Wooded mature & young
886	Ottawa	10335.619	No	Wooded mature & young
887	Ottawa	30540.667	Yes	Wooded young, Grassy
888	Ottawa	6098.869	Yes	Wooded mature & young, Grassy
889	Ottawa	60022.49	Yes	Wooded young, Grassy
890	Ottawa	6148.851	No	Wooded mature & young
891	Ottawa	3511.74	No	Wooded mature & young
892	Ottawa	76505.726	No	Wooded young, Grassy
893	Ottawa	53847.268	No	Grassy
894	Ottawa	38919.929	No	Wooded young, Grassy
895	Ottawa	34706.192	No	Wooded young, Grassy
896	Ottawa	42737.271	No	Wooded mature & young
897	Ottawa	2089.964	No	Wooded mature & young
898	Ottawa	14349.452	No	Wooded mature & young
899	Ottawa	64591.098	No	Wooded young, Grassy
900	Ottawa	5213.731	No	Wooded mature & young
901	Ottawa	56925.222	No	Wooded young, Grassy
902	Ottawa	6318.23	No	Wooded mature & young
903	Ottawa	106496.41	No	Wooded mature & young, Grassy
904	Ottawa	52725.622	No	Wooded young, Grassy
905	Ottawa	92858.994	No	Wooded young, Grassy
906	Ottawa	56011.839	No	Wooded young, Grassy
907	Ottawa	11151.433	No	Wooded young, Grassy
908	Ottawa	31926.694	No	Wooded young, Grassy
909	Ottawa	143422.25	No	Fallowing land, Grassy
910	Ottawa	131151.81	No	Fallowing land, Grassy
911	Ottawa	144634.19	No	Wooded young, Grassy
912	Ottawa	48166.201	No	Wooded young, Grassy
913	Ottawa	4568.026	No	Wooded mature & young
914	Ottawa	9359.115	No	Wooded mature & young
915	Ottawa	5984.739	No	Wooded mature & young
916	Ottawa	3739.326	No	Wooded mature & young
917	Ottawa	14929.995	No	Wooded mature & young
918	Ottawa	13563.496	No	Grassy
919	Ottawa	10876.672	No	Wooded young, Grassy
920	Ottawa	22830.551	Yes	Wooded young, Grassy
921	Ottawa	83977.264	No	Wooded young, Grassy
922	Ottawa	11083.405	No	Grassy
923	Ottawa	49511.57	No	Grassy
924	Ottawa	249466.46	No	Wooded young, Grassy
925	Ottawa	31555.413	No	Wooded young, Grassy
926	Ottawa	65824.983	No	Wooded mature & young

927	Ottawa	122443.64	Yes	Wooded young, Fallowing land
928	Ottawa	73293.26	Yes	Fallowing land, Grassy
929	Ottawa	88081.848	Yes	Wooded young, Fallowing land
931	Ottawa	96281.018	No	Wooded young, Grassy
932	Ottawa	144884.44	No	Fallowing land, Grassy
933	Ottawa	22620.24	No	Fallowing land, Grassy
934	Ottawa	155107.57	No	Wooded mature & young
935	Ottawa	46062.621	No	Wooded mature & young
936	Ottawa	75444.789	No	Wooded mature & young