

02 September 2018

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40 Huron Street, Suite 301  
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***By E-mail***

Brittany,

**Re: Waterstone Development - EIS Addendum**

This letter is submitted to serve as an addendum to an Environmental Impact Study<sup>1</sup> (EIS) that was prepared in 2007 to address environmental impacts potentially associated with the Waterstone development on Dawson Drive. That EIS was focused on the impacts of stormwater discharge to Cranberry Creek, located close to the western boundary of the property. At this time, an update of the original EIS is warranted to account for possible changes in site conditions and also a number of regulatory changes. The potential for impacts on Species at Risk (SAR) is the main issue that should be subject to update. The possible presence of SAR, and any potential for adverse effects on SAR, is the primary focus of this addendum. This addendum also provides a brief review of the broader general scope of potential environmental concerns, based on current conditions and regulations.

Changes in Species at Risk Regulations

Since the completion of the 2007 EIS, there have been a number of advances in regulations pertaining to SAR, both provincially and federally. In Ontario, the Endangered Species Act (ESA) came into effect in 2008, as did the specific regulation (O. Reg. 230/08) which designates the SAR in the province. Federally, the Species at Risk Act (SARA) came into effect in 2002, but the formal list of SAR has been subject to regular revisions since that time. Since 2007, there have been a number of new SAR listings consisting of species that are actually still relatively common and widespread, and often encountered in or near urbanized environments.

This EIS addendum gives consideration to the current or pending SAR listings for both Ontario and Canada. This includes all species listed, or recently recommended for listing, as *Threatened* or *Endangered*, and thus subject to legal protection. Species identified as *Special Concern* are not subject to the same legal protections, but their consideration as a natural heritage concern is warranted in an EIS, and they have therefore been considered as part of this addendum.

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<sup>1</sup> Gartner Lee Limited. 2007. Environmental Impact Statement for Waterston Development Stormwater Discharge.

**Reference: Waterstone Development - EIS Addendum**

Potential SAR at or Near Property

For the purpose of preparing this addendum, the possible presence of SAR on or near the Waterstone Property was partly assessed through an initial review of existing information. The review of existing information included the following:

- the Natural Heritage Information Centre (NHIC) on-line database,
- the Ontario Breeding Bird Atlas (OBBA) (Cadman et al, 2007) and associated database (Bird Studies Canada (BSC) et al., 2018), and
- the Ontario Reptile and Amphibian Atlas on-line database (Ontario Nature, 2018), and
- Other Environmental Studies conducted in recent years in general proximity to this Property<sup>2</sup>

Element Occurrence (EO) records from the NHIC were obtained for the 1-km grid segments encompassing or immediately adjacent to the Waterstone Property (three squares in total). A total of three species are listed, including two *Special Concern* and one *Threatened*. A summary of the EO listings for these squares is provided in Table 1 (attached).

The Waterstone Property lies close to the boundary between Ontario Breeding Bird Atlas (OBBA) squares 17NK52 and 17NK53, each square with an area of 100 km<sup>2</sup>. The most recent OBBA surveillance of these two squares in 2005 has identified the presence of 11 species that are currently identified as either *Endangered*, *Threatened* or *Special Concern* (see Table 2, attached).

From review of other sources, other SAR determined to be present in the general vicinity of the Waterstone Property include:

- Butternut (*Juglans cinera*) - *Endangered*, both federally and provincially,
- Barn Swallow (*Hirundo rustica*) - *Threatened*, both federally and provincially, and
- Eastern Milksnake (*Lampropeltis triangulum*) - *Special Concern* both provincially and federally.

SAR Habitat Suitability

SAR presence and habitat suitability within and near the Property were assessed through direct site surveillance conducted on 20 August 2018. During that surveillance, a variety of common plants were observed, none of which were SAR. The observed plants are typical of sites that are significantly affected by human activity. Many of the species observed during site surveillance are typical of disturbed sites, and over half are

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<sup>2</sup> R.J. Burnside. 2014. Environmental Study Report: Highway 26 from 280 m west of Princeton Shore Boulevard to Harbour Street Improvements - Municipal Class Environmental Assessment. Prepared for the Town of Collingwood. April 2014.

**Reference: Waterstone Development - EIS Addendum**

non-native (see Table 3, attached). The Property is effectively devoid of woody vegetation cover. There are young scattered and isolated trees and shrubs found in a few spots, particularly the margins of the property adjacent to treed areas. The tree and shrub species found within and near Property are typical early succession species encountered at sites that have been relatively recently disturbed (e.g. Trembling Aspen, Balsam Poplar, Red Ash, Red-osier Dogwood, Staghorn Sumac, and non-native Honeysuckle).

Overall, the plant communities found within and adjacent to the Property do not provide preferred habitat conditions for any of the SAR potentially present in the area. The conditions within Cranberry Creek, to the west of the property, are also not suited to any of the aquatic SAR that could be in the area.

SAR Observations

During site surveillance, the only observed occurrence of a species of conservation concern was a single observation of a Monarch Butterfly (*Danaus plexippus*) foraging in open habitat. The status of the Monarch Butterfly in both Ontario and Canada is *Special Concern*. However, it should be noted that COSEWIC reassessed the Monarch in 2016 and has reclassified this species as *Endangered*. While its regulatory status under the Species at Risk Act (SARA) currently remains as *Special Concern*, this is likely to change in the near future to reflect COSEWIC's recent decision. Subsequent regulatory reclassification under the Province's Endangered Species Act is probable. The primary focus in regard to this species' presence in Ontario is the protection of known migratory concentration areas. The Waterstone Property is not expected to support migratory concentrations of monarchs. The Property does contain common flowering species that can support foraging activity of the Monarch. In regard to Milkweed, a plant critical to the life-cycle of the Monarch, a few scattered specimens are present within the Property, but milkweed is neither abundant nor present in concentration. Overall, the characteristics of the Property are such that it is not likely to function as significant or critical habitat for the Monarch.

Other than the Monarch, there was no evidence of the presence of any other SAR within or near the Property. The conditions within and adjacent to the Property are such that the Property is not expected to provide meaningful habitat function for any SAR. The surrounding area has been subject to significant anthropogenic modification (residential development, roads, trails, golf courses, etc.), and the property itself is occupied by a culturally modified plant community that is devoid of the features (wetlands, forest cover, expansive grassland) that generally support the SAR that occur in the area. While the occasional presence of some of the SAR with a known presence in the area is possible (e.g. Snapping Turtle, Eastern Milksnake), there is no expectation that the Property would be a place of permanent residence or that it would play a meaningful role from a life-cycle or population perspective.

**Reference: Waterstone Development - EIS Addendum**

Other Environmental Considerations

As noted, the Waterstone Property lies within an area that has been subject to considerable development. As a general result, there is a relative absence of natural heritage features and functions in the general area. However, there are still features in close proximity to the Property which warrant consideration from an EIS perspective.

There are several wetland areas along the Highway 26 corridor near the Waterstone Property, and much of the wetland area is part of the Silver Creek Provincially Significant Wetland (PSW) complex. Figure 1 (attached) depicts the PSW areas in close proximity to the Property. Under Provincial and Municipal policies, development is prohibited where it may adversely affect PSWs, and any development within 120 m of a PSW must be shown not to have any potential for such effects. At the most proximate points, the Waterstone Property is more than 120 m from the nearest PSW feature. Further, there is no significant hydrological connectivity between the Property and the PSWs, and there is also no meaningful ecological connectivity owing to the largely altered landscape between the Property and the PSWs. The lack of connectivity effectively precludes the potential for adverse effects on those wetlands.

The woodland areas adjacent to the east and west ends of the Property are small and comprised of a mix of relatively young specimens of common early succession or plantation trees (Red and White Ash, Scots Pine, Trembling Aspen, Eastern White Cedar). The largest trees are about 25 cm diameter-at-breast-height (DBH), but most are less than 15 cm DBH. These woods do not exhibit any significant characteristics or functions, and they are not considered to be sensitive or susceptible to environmental disturbance. Development within the Waterstone Property is not expected to have any significant effects on these woodland areas.

Cranberry Creek flows parallel to the western boundary of the Property, with about 25 to 30 m separation from the Property. This creek has been identified as *Fish Habitat* in the Collingwood Official Plan (OP), and the corridor is designated as *Environmental Protection*. As described in the 2007 EIS, this is an intermittent warm-water feature that actually has a very limited capacity to function as direct fish habitat. During surveillance in August 2018, there was no flow in the creek and there was no obvious hydrological connectivity between the Property and the creek. Overall, development within the Waterstone Property is not expected to have any measurable effect on Cranberry Creek or its ecological function.

Closing Summary

Overall, conditions at the Waterstone Property are not attractive or supportive to most of the SAR that might be present in the area, and no SAR have been observed within or near the property during recent surveillance. As a result development within the Property is not expected to have any adverse effects on any SAR. In regard to other natural heritage features in the area (woodlands, wetlands, Cranberry Creek), there is no expectation that development within the Waterstone Property would have any adverse effects on these features.

**Reference: Waterstone Development - EIS Addendum**

If there are any questions or concerns regarding the content of this letter, or otherwise in general regard to the matters discussed herein, please do not hesitate to contact me at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Neil Morris".

Neil Morris, Consulting Ecologist  
2480 Olde Baseline Rd.  
Caledon, Ontario  
L7C 0J3

cc: Andrew Pascuzzo, Planner, Pascuzzo Planning Inc.  
Anthony Dicenzo Jr., Dawson Drive (Collingwood) Holdings Inc.

att: Table 1 - Summary of NHIC Element Occurrences (EO) in Vicinity of the Waterstone Property, Table 2 - OBBA Data - Squares 17NK52 and 17NK53, Table 3 - Plant Species List for the Waterstone Property, Figure 1 - Environmental Features

**Table 1: Summary of NHIC Element Occurrences (EO) in Vicinity of the Waterstone Property**

Common Name	Scientific Name	SRank <sup>1</sup>	COSSARO Status <sup>2</sup>	COSEWIC Status <sup>3</sup>	Last Observation Date
Eastern Ribbonsnake	<i>Thamnophis sauritus</i>	S4	SC	SC	7/27/1988
Snapping Turtle	<i>Chelydra serpentina</i>	S3	SC	SC	6/29/1994
Lake Sturgeon (Great Lakes - Upper St. Lawrence River population)	<i>Acipenser fulvescens pop. 3</i>	S2	THR	THR	6/29/1994

1 - Provincial Rank - S1 = Critically Imperiled, S3 = Vulnerable

2 - Provincial status - SC = Special Concern, THR = Threatened

3 - Federal Status - SC = Special Concern, END = Endangered

EO records obtained for NHIC 1-km squares 17NK5928, 17NK5929, 17NK6029

**Table 2: OBBA Data - Squares 17NK52 and 17NK53**

Species		OBBA Status - 2005		STATUS			Preferred Nesting Habitat
Common Name	Scientific Name	17NK52	17NK53	SRANK <sup>1</sup>	COSEWIC <sup>2</sup>	COSSARO <sup>2</sup>	
Alder Flycatcher	<i>Empidonax virescens</i>	Possible	Probable	S2/S3	END	END	wet thickets
Bank Swallow	<i>Riparia riparia</i>	Confirmed	not reported	S4	THR	THR	shoreline banks, artificial sand piles
Barn Swallow	<i>Hirundo rustica</i>	Confirmed	Confirmed	S4	THR	THR	variety of man-made structures
Bobolink	<i>Dolichonyx oryzivorus</i>	Probable	Possible	S4	THR	THR	hayfields and other grasslands
Canada Warbler	<i>Wilsonia canadensis</i>	not reported	Possible	S4	THR	SC	mature wet forest with conifers
Common Nighthawk	<i>Chordeiles minor</i>	not reported	Possible	S4	THR	SC	sand barrens, rock outcrops, cleared areas in forests
Eastern Meadowlark	<i>Sturnella magna</i>	Probable	Probable	S4	THR	THR	hayfields, pastures, natural grasslands
Eastern Wood-Pewee	<i>Contopus virens</i>	Probable	Possible	S4	SC	SC	deciduous or mixed woods
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Probable	not reported	S4	SC	SC	scrub patches within large forested areas
Louisiana Waterthrush	<i>Seiurus motacilla</i>	Probable	not reported	S3	THR	SC	large mature woodland areas with pristine streams
Wood Thrush	<i>Hylocichla mustelina</i>	Possible	Probable	S4	THR	SC	large mature woodland areas

1. Provincial Rank: SE - Exotic, S2 - Imperiled, S3 - Vulnerable, S4 - apparently secure, S5 - Secure

2. COSEWIC/COSSARO Status: End - Endangered, Thr - Threatened, SC - Special Concern, NAR - not at risk

**Table 3: Plant Species List for the Waterstone Property**

Common Name	Scientific Name	Provincial Status (S-RANK) <sup>1</sup>	COSEWIC <sup>2</sup> Status	COSSARO <sup>2</sup> Status	Native vs Non-native
Alternate-leaved Dogwood	<i>Cornus alternifolia</i>	S5	-	-	Native
Asparagus-fern	<i>Asparagus officinalis</i>	NA	-	-	Non-native
Balsam Poplar	<i>Populus balsamifera</i>	S5	-	-	Native
Birdfoot Trefoil*	<i>Lotus corniculatus</i>	NA	-	-	Non-native
Black Knapweed*	<i>Centaurea nigra</i>	NA	-	-	Non-native
Black Medic*	<i>Medicago lupulina</i>	NA	-	-	Non-native
Black Nightshade	<i>Solanum nigrum</i>	NA	-	-	Non-native
Bladder Campion	<i>Silene cucubalus</i>	NA	-	-	Non-native
Bouncing Bet	<i>Saponaria officinalis</i>	NA	-	-	Non-native
Brown Knapweed*	<i>Centaurea jacea</i>	NA	-	-	Non-native
Buckthorn*	<i>Rhamnus cathartica</i>	NA	-	-	Non-native
Canada Goldenrod	<i>Solidago canadensis</i>	S5	-	-	Native
Canada Thistle	<i>Cirsium arvense</i>	NA	-	-	Non-native
Chicory	<i>Chicorium intybus</i>	NA	-	-	Non-native
Choke Cherry	<i>Prunus virginiana</i>	S5	-	-	Native
Coltsfoot	<i>Tussilago farfara</i>	NA	-	-	Non-native
Common Burdock	<i>Arctium minus</i>	NA	-	-	Non-native
Common Buttercup	<i>Ranunculus acris</i>	NA	-	-	Non-native
Common Cinquefoil	<i>Potentilla simplex</i>	S5	-	-	Native
Common Dandelion	<i>Taraxacum officinale</i>	NA	-	-	Non-native
Common Evening Primrose	<i>Oenothera biennis</i>	S5	-	-	Native
Common Milkweed	<i>Asclepias syriaca</i>	S5	-	-	Native
Common Mullein	<i>Verbascum thapsis</i>	NA	-	-	Non-native
Common Pear	<i>Pyrus communis</i>	NA	-	-	Non-native
Common Plantain	<i>Plantago major</i>	NA	-	-	Non-native
Common Ragweed	<i>Ambrosia artemisiifolia</i>	S5	-	-	Native
Common Reed*	<i>Phragmites australis</i>	S5	-	-	Non-native



**Table 3: Plant Species List for the Waterstone Property (cont.)**

Common Name	Scientific Name	Provincial Status (S-RANK) <sup>1</sup>	COSEWIC <sup>2</sup> Status	COSSARO <sup>2</sup> Status	Native vs Non-native
Common Sow-thistle	<i>Sonchus oleraceus</i>	NA	-	-	Non-native
Common St. Johnswort	<i>Hypericum perforatum</i>	S5	-	-	Non-native
Common Strawberry	<i>Fragaria virginiana</i>	S5	-	-	Native
Common Timothy	<i>Phleum pratense</i>	NA	-	-	Non-native
Common Yarrow	<i>Achillea millefolium</i>	NA	-	-	Non-native
Curly Dock	<i>Rumex crispus</i>	NA	-	-	Non-native
Daisy Fleabane	<i>Erigeron hyssopifolius</i>	S5	-	-	Native
Deptford Pink	<i>Dianthus armeria</i>	NA	-	-	Non-native
Dog-strangling vine*	<i>Vincetoxicum nigrum</i>	NA	-	-	Non-native
Eastern White Cedar	<i>Thuja occidentalis</i>	S5	-	-	Native
English Plantain	<i>Plantago lanceolata</i>	NA	-	-	Non-native
Field Sow-thistle	<i>Sonchus arvensis</i>	NA	-	-	Non-native
Garlic Mustard*	<i>Alliaria petiolata</i>	NA	-	-	Non-native
Late Goldenrod	<i>Solidago gigantea</i>	S5	-	-	Native
Lilac	<i>Syringa vulgaris</i>	NA	-	-	Non-native
New England Aster	<i>Symphyotrichum novae-angliae</i>	S5	-	-	Native
Northern Red Currant	<i>Ribes rubrum</i>	NA	-	-	Non-native
Orchard Grass	<i>Dactylis glomerata</i>	NA	-	-	Non-native
Oxeye Daisy*	<i>Leucanthemum vulgare</i>	NA	-	-	Non-native
Perennial Ryegrass*	<i>Lolium perenne</i>	NA	-	-	Non-native
Periwinkle*	<i>Vinca minor</i>	NA	-	-	Non-native
Philadelphina Fleabane	<i>Erigeron philadelphicus</i>	S5	-	-	Native
Poison Ivy	<i>Toxicodendron radicans</i>	S5	-	-	Native
Purple Loosestrife*	<i>Lythrum salicaria</i>	NA	-	-	Non-native
Pussy Willow	<i>Salix discolor</i>	S5	-	-	Native
Red Ash	<i>Fraxinus pennsylvanica</i>	S5	-	-	Native
Red Clover*	<i>Trifolium pratense</i>	NA	-	-	Non-native

**Table 3: Plant Species List for the Waterstone Property (cont.)**

Common Name	Scientific Name	Provincial Status (S-RANK) <sup>1</sup>	COSEWIC <sup>2</sup> Status	COSSARO <sup>2</sup> Status	Native vs Non-native
Red Fescue	<i>Festuca rubra</i>	S5	-	-	Native
Red-osier Dogwood	<i>Cornus sericea</i>	S5	-	-	Native
Reed Canary Grass	<i>Phalaris arundinacea</i>	S5	-	-	Native
Rough Cinquefoil	<i>Potentilla norvegica</i>	S5	-	-	Native
Rough-fruited Cinquefoil	<i>Potentilla recta</i>	NA	-	-	Non-native
Scotch Thistle	<i>Onopordum acanthium</i>	NA	-	-	Non-native
Self-heal	<i>Prunella vulgaris</i>	S5	-	-	Non-native
Staghorn Sumac	<i>Rhus typhina</i>	S5	-	-	Native
Sweet Pea	<i>Lathyrus latifolius</i>	NA	-	-	Non-native
Tartarian Honeysuckle*	<i>Lonicera tatarica</i>	NA	-	-	Non-native
Teasel	<i>Dipsacus sylvestris</i>	NA	-	-	Non-native
Trembling Aspen	<i>Populus tremuloides</i>	S5	-	-	Native
Viper's Bugloss	<i>Echium vulgare</i>	NA	-	-	Non-native
White Sweet Clover	<i>Melilotus albus</i>	NA	-	-	Non-native
Wild Carrot*	<i>Daucus carota</i>	NA	-	-	Non-native
Wild Grape	<i>Vitis riparia</i>	S5	-	-	Native
Wild Raspberry	<i>Rubus occidentalis</i>	S5	-	-	Native
Yellow Sedge	<i>Carex flava</i>	S5	-	-	native

1. Provincial Rank: SE - Exotic, S2 - Imperiled, S3 - Vulnerable, S4 - apparently secure, S5 - Secure

2. COSEWIC/COSSARO Status: End - Endangered, Thr - Threatened, SC - Special Concern, NAR - not at risk, - no assessment to date

\* - species marked with an asterisk are considered by various sources to be invasive



Figure 1 - Environmental Features