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June 16, 2017

Friends of Simcoe Forests Inc.
c/o Bob and Mary Wagner
2928 Horseshoe Valley Road West
Phelpston, Ontario, L0L 2K0

Re: Peer Review of Scoped Environmental Impact Study, Proposed Environmental Resource Recovery Center, Springwater, Ontario prepared by GHD

Dear Mr. and Mrs. Wagner:

Dougan & Associates (D&A) was retained by Friends of Simcoe Forests Inc. in March 2017 to complete a peer review of the terrestrial resources information contained within the report *Scoped Environmental Impact Study, Proposed Environmental Resource Recovery Center, Springwater, Ontario* prepared by GHD Ltd. (November 17, 2016).

This peer review applies Dougan & Associates standard approach for reviews of natural heritage planning reports, which focuses on whether the EIS adequately reflects relevant protocols and interpretation as required under the Provincial Policy Statement (OMMAH 2014) and its guiding documents, such as the Natural Heritage Reference Manual 2nd Ed. (OMNR 2010), Significant Wildlife Habitat Technical Guide (OMNR 2000), and other provincial references, as well as the Simcoe County Official Plan (2007) and other local documents, including the Simcoe County Forest Plan (2011) and the Simcoe County ONE SITE – ONE SOLUTION (2016) document. D&A peer review authors also completed a site review on May 3, 2017 to review existing conditions on the site.

GOALS AND OBJECTIVES OF SCOPED ENVIRONMENTAL IMPACT STUDY

Goals and objectives for the EIS report are not clearly stated in a stand-alone report section. In Section 1.1 Introduction, the GHD goal is "*…to complete a Scoped Environmental Impact Study (Scoped EIS) for the proposed co-located development of a Materials Management Facility (MMF), an Organics Processing Facility (OPF), and related support activities, collectively referred to as the Environmental Resource Recovery Centre (ERRC).*" Two inferred objectives include "*…to include an evaluation of all relevant natural features and species within the Study Area.*" and "*This report has been prepared to address the requirements stipulated in the Simcoe County OP to satisfy the requirements of Provincial and County OP policies, as well as other relevant legislation.*"

MAJOR COMMENTS

In our review of the Scoped EIS document (hereafter referred to as the "EIS") and based on site conditions observed on May 3, 2017, D&A have identified the following major inadequacies and/or inconsistencies in the report:

1. **Significant Wildlife Habitat (SWH)**
   SWH is protected under the Provincial Policy Statement (OMMAH 2014). Based on the data provided GHD (2016a), the site meets criteria for several more SWH categories than are indicated in the EIS, and there are some weaknesses in the data required to assess SWH. Specifically:

   - Amphibian data is incomplete as it does not indicate calling species abundance levels per the Marsh Monitoring Program (MMP) protocols, which are required to asses SWH status; further, no documentation of the weather conditions during surveys is provided which would clarify if MMP protocols have been addressed;
   - Spotted Salamander egg masses were found by GHD in 2016, and the Amphibian Breeding Habitat (Woodland) criterion is met, triggering SWH. Additional Spotted Salamander egg masses were documented by Friends of Simcoe Forests Inc. in 2017 from other locations within the Simcoe County Forest "Freele Tract" site;
   - Presence of Western Chorus Frog (an S3 provincially ranked species) triggers SWH;
   - Twenty-one (21) area-sensitive bird species were documented, and the affected forest is sufficiently large to warrant SWH designation as Woodland Area-Sensitive Bird Breeding Habitat, which would be directly and indirectly impacted by the facility;
   - Woodland Raptor Nesting Habitat may be present as three of six SWH indicator species were documented by GHD during the bird surveys, but no raptor nest surveys were apparently conducted. Two of the same species were observed on May 3, 2017; and
   - The EIS opines incorrectly that cultural plantations cannot qualify as SWH; the SWH Ecoregion 6E Criteria Schedule does not exclude cultural plantations, and in some cases, highlights them as potential habitat (*e.g.* raptor nesting).

   The facility would cause significant fragmentation of the forest patch where it is proposed; the EIS does not adequately address the impact on both quantity and quality of forest interior on the site (see also Comment 5 below). The use of this site as proposed would result in loss of forest interior functions over a much larger area than the simple footprint of the facility; we estimate that approximately 18 ha of forest interior would be eliminated, based on the definition that interior forest habitat is at least 200 m from the forest edge (OMNRF 2015).

2. **Significant Woodlands**
   The report notes that the site qualifies as Significant Woodland but the implications of this designation are not brought forward into the impact assessment. In fact, the EIS downplays the value of the Significant Woodland without speaking to functional attributes which underlie the concept of "significance" as defined under the Provincial Policy Statement (PPS). The presence of a diverse group of area-sensitive forest bird species (21 species based on MNRF criteria), and other Significant Wildlife Habitat (SWH) indicates that this is currently highly functioning habitat, irrespective of the presence of planted conifers.

3. **Species at Risk (SAR)**
   Species at Risk findings and impact assessment are insufficient. According to the EIS, no Eastern Whip-poor-will habitat is present within the study area. However, our review of the literature and our May 3rd 2017 visit to the site indicate otherwise. Potential habitat for Jefferson Salamander complex is present given the vernal pools on site. Also, no systematic bat surveys were conducted although up to three Endangered bat species could be present based on the habitats present; the Executive Summary of the EIS states that no SAR are present, but this is incorrect as several Special Concern species are present and discussed elsewhere in the EIS.

4. **Vegetation Classification**
   Dougan & Associates is concerned with the accuracy of the vascular plant identification and Ecological Land Classification (ELC) vegetation classification completed for the Freele Tract, based on both the adequacy of the vascular plant list and the accuracy of the ELC classification. Appendix B, Vegetation Inventory has several errors and inconsistencies, and the ELC community descriptions in Section 2.2 downplay the extent of naturalization that is occurring in the 'naturalizing plantation' polygons. Based on our single spring visit, we noted species on the study site that are not listed in Appendix B, and observed that the plantation communities exhibit relatively rich native understory regeneration and a low proportion of non-native species. In particular, the community described as FODM5 is arguably FOD5-1, a natural forest community. The inadequacies in the vascular plant list and the ELC community descriptions understate the significance of impacts of the proposed facility on the ecological features and functions of the site.

5. **Invasive Species and Predatory Species**
   The facility will handle compostable waste in the Organics Processing Facility, which would include invasive plant species and pests affiliated with waste materials, which could then invade the surrounding forest. There will also likely be effects on local wildlife, with increases in populations of species such as mice, rats, skunks, raccoons and coyotes, which can predate sensitive species such as ground-nesting area-sensitive forest birds. Based on facility experience elsewhere, pests will be introduced in waste delivered to the site; this could include mice and rats, non-native insects, and infectious organisms. Control techniques used by existing resource recovery facilities include poison baits and live trapping. These agents and their effects are neither identified nor discussed in the EIS; they would likely have implications into woodland habitats well beyond the site.

   Notably, recovery facilities are considered an industrial use, and would normally be sited on designated industrial lands; the choice of a quality forested site for such a facility will undoubtedly create conflicts with natural biodiversity, which could be further exacerbated by operational management practices.

6. **Adjacent Lands**
   There is no clear discussion of Adjacent Lands in the EIS. The PPS defines Adjacent Lands as "*those lands contiguous to a specific natural heritage feature or area where it is likely that development or site alteration would have a negative impact on the feature or area. The extent of the adjacent lands may be recommended by the Province or based on municipal approaches which achieve the same objectives* (OMMAH 2014). MNRF recommends Adjacent Lands extend a minimum of 120 m beyond the limit of the following natural heritage features: Significant Habitat of Endangered and Threatened Species, Significant Wetlands, Significant Woodlands,

and SWH, (OMNR 2010). The proposed facility will create changes to ecological functions on a larger footprint, likely in the order of 200+ m, and with potential for greater impacts due to future expansion, fundamental changes to habitat quality, and introduction of invasive species.

7. Vehicular Impacts Associated with Facility

The EIS does not adequately address road and traffic impacts of the facility. The required internal road system for the facility includes the main entrance road, and an emergency access route which will be located along the existing trail to the north of the facility. Section 3 (Preliminary Development Plan) indicates that the site will also be a "*Truck Servicing Facility – a location for servicing the County's fleet of industrial Solid Waste Management vehicles.*" With respect to construction of the facility, Section 5.2.2 (Mitigation) recommends that "*Vehicle fueling, storage, and maintenance should occur outside of the Study Area (off site)*"; this concern seems contradictory given the order of magnitude of eventual operations which is not adequately discussed, quantified, or mitigated. Vehicular traffic including waste management trucks, as well as private vehicles engaged in drop-offs, will undoubtedly produce a heavy traffic load, possibly including truck movements outside the normal drop-off hours. The Facility Characteristics Report (GHD 2016b) for the site states that the clearing for the access road will be 15 – 20 m (not including turn lanes); this clearing is not addressed or quantified in the EIS.

8. Lack of Site Plan

Environmental Impact Studies normally include a site concept plan which allows a clear understanding of the proposed development; the GHD EIS does not include any graphic representation of the project apart from the generic mapping of the current proposed development footprint shown on Figures 4 and 5.

9. Water Balance Impacts

The GHD EIS only makes passing reference to the GHD Hydrogeological Assessment for the ERRC, without a summary of its key findings. That assessment determined that there will be a significant reduction in infiltration due to the impervious character of the proposed development; it provided only generic mitigation measures but did not specifically address how the existing wetland features are sustained today, and will be sustained after development (GHD 2016c). Our field visit confirmed that the proposed footprint of the facility is within a topographically complex portion of the overall tract, where significant infiltration is a factor given that the proposed facility will be located on a glaciofluvial sand deposit, that behaves as an aquifer (GHD Hydrogeological Assessment, 2016). The EIS should include a fulsome discussion of the existing ecosystem features and their reliance on ground and surface water sources; the potential impact to these resources; and a detailed mitigation strategy (including reference to a site plan showing the location(s) of potential mitigation).

10. Cumulative Effects

The EIS does not address potential cumulative effects. EIS Section 3 (Preliminary Development Plan) indicates that the facility may be expanded in the future; the EIS considers a 4.5 ha development site, however the County's "ONE SITE, ONE SOLUTION" (2016) document identifies the size specification as 20 ha, and also promotes this preferred site on the basis of its size (84 ha) described as "large usable space", accommodating potential expansion. Given the high likelihood of expansion, and the constraints identified outside of the proposed 4.5 ha development site, it is likely that further effects will occur in the future; however cumulative effects are not identified, discussed or addressed in the EIS.

DETAILED COMMENTS

In addition to the major comments summarized above, D&A staff have other comments that support or supplement our major comments, organized according to section and page of the EIS.

Section 2 – Existing Conditions, Natural Features and Resources

Section 2.1 – Background Review

Section 2.1.1 – Secondary Sources, Page 2

1. The Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Information Centre should have been contacted for information on file.
2. Ontario Breeding Bird Atlas (OBBA) data should have been reviewed; point count information may have been available for the site. OBBA data could also provide additional context when assessing the diversity of breeding birds documented from the site.
3. Potential sources of additional natural heritage data, such as the York-Simcoe Naturalists or individual naturalists familiar with the area, were apparently not consulted. Given the presence of trails for public access, potential users are worth consulting for background.

Section 2.1.2 – Previous Studies, Page 2

4. This section refers to "relevant documents" obtained from the County related to tree inventories and tree health surveys. These documents should have been described in more detail and sourced in the EIS report, as the report states in several places that the significance of the forests on this site are limited by their management as plantation.

Section 2.2 – Field Investigations, Page 3

5. This section contains methods, findings, and in some cases, conclusions. This is contrary to standard EIS practice, which should summarize the characterization methods and findings, examine the policy basis of findings that represent constraints, describe the proposed undertaking in sufficient detail, and then identify the potential impacts (direct, indirect, cumulative). Insertion of opinions on impacts into the characterization is inappropriate, and detracts from the objectivity of the EIS.

Section 2.2.2, Natural Heritage Features, Page 3

6. This section describes available natural heritage mapping, policy analysis, timing of field visits and findings related to the watercourse on site. The policy findings should have been addressed in a discrete policy focused section elsewhere in the report.

Section 2.2.3, Ecological Land Classification (ELC), Page 4

7. The specific dates and methods of ELC surveys are not provided. As such, it is difficult to determine whether the surveys were carried out according to normal protocols (*i.e.* surveys in all three seasons of spring, summer, fall).
8. The rationale for using the 2008 ELC codes instead of the codes contained in the 1998 ELC Manual, which is the manual formally in effect and published by the MNRF, is not given. The ELC manual (Lee *et al*., 1998) is referenced in the text but is not included in the Reference section.
9. No areas are provided for the ELC communities, nor are coefficients of conservatism or ratios of native to non-native species calculated. This data is important for quantifying the ecological quality of a vegetation community in an objective manner.

10. The ELC data sheets for the field work are not provided in the EIS, therefore no review of the data collected can be undertaken.
11. The EIS notes that plantation trees were introduced to the study area approximately 65 years ago, and that these communities are undergoing natural succession, "*developing some characteristics of a naturalized woodlot*" (p. 4) . The EIS notes that the woodlot is managed, but does not expand on how this impacts the ELC and vascular plant findings. D&A used the data in the species list (Appendix B) to generate a Floristic Quality Index (FQI) rating for the site as a whole; FQI is defined as "an evaluation procedure that uses measures of ecological conservatism (expressed numerically as a coefficient of conservatism or C value) and richness of the native plant community to derive a score (I) that is an estimate of habitat quality" (Miller *et al*., 2006, Oldham et al 1995). The FQI calculation for GHD's data is 36.07 (native) and 30.82 (with adventives), and non-native species constitute 19% of the flora observed. These calculations indicate a moderate to high-quality vegetation composition, indicating a system towards the natural end of the `naturalization` spectrum.
12. The ELC community descriptions given in Section 2.2 are generally consistent with our own observations on May 3, 2017, except that all of the 'naturalizing plantation' descriptions tend to understate the extent of naturalization that is occurring. The plantation communities are dominated by native understory regeneration and a low proportion of non-native species. In particular, we observed that the community mapped as FODM5 (which covers most of the proposed facility footprint), contains the richest flora of spring ephemeral species on the site, as well as the most complex topography (a factor contributing to species richness). The remainder of communities identified as naturalized plantation had characteristics more indicative of cultural disturbances, including an overstory of conifers planted in rows, and trails. Based on the 1998 ELC system, we believe that the FODM5 community should be redefined as FOD5-1, Dry-Fresh Sugar Maple Deciduous Forest Type, a natural forest community, based on the following characteristics, which are indications of deciduous forest communities from the ELC Manual (Lee *et al*., 1998):

• Tree cover >60%	• Almost entirely dominated by Sugar Maple
• Deciduous tree species >75% of canopy cover	• Limited observation of anthropogenic disturbances

Section 2.2.4, Watercourse Verification, Page 7

13. The EIS notes that GHD and Nottawasaga Valley Conservation Authority (NVCA) reviewed the site for the mapped watercourse that is identified on the NVCA mapping, but no methods are given for how it was determined not to be present.
14. There was no discussion of the potential effects of widespread drought conditions in the spring and summer of 2016, which could explain the lack of flowing water. During our site visit on May 3, 2017, we did note active surface flows across the extensive complex of wetland pools in the southeast area of the site. The EIS mapping only included 5 m contour intervals on selected maps (Figures 1, 2, 3, 6) and discussed topography only in very general terms.

Section 2.2.5, Wetland Delineation, Page 7

15. The wetland boundaries were located using handheld Garmin GPS devices, and the accuracy of the devices used was not provided. Wetland boundaries are a significant constraint for the facility siting, and forest cover affects accuracy of GPS readings; therefore, clarity on the accuracy of these boundaries is very important. On our site visit, we were surprised at the extent and complexity of vernal pools in the southeast and north sections of the site; in our opinion the EIS does not provide an adequate account of this complexity.

Section 2.2.6, Wildlife

Section 2.2.6.1 – Amphibian Surveys, Page 8

16. Western Chorus Frog (*Pseudacris triseriata*) was one of the five species of calling amphibians detected during the amphibian surveys. However, the EIS does not indicate how many were documented and exactly where.
17. In Table 2.3, the S-Rank for Western Chorus Frog was incorrectly depicted as S4. Great Lakes/St. Lawrence - Canadian Shield population, to which these individuals would belong, is listed as S3. Furthermore, it is a Species at Risk, designated "Threatened" in Canada but not in Ontario.
18. The S-Rank for Western Chorus Frog (S3) and its federal status (Threatened) would trigger Significant Wildlife Habitat designation (OMNRF 2015). According to MNRF's Ecoregion 6E Criteria Schedules, Confirmed SWH is defined as the area of the habitat to the finest ELC scale that protects the habitat form and function.
19. It is not possible to determine whether the "Amphibian Breeding Habitat (Woodland)" SWH criterion is present (with respect to calling frogs) because the EIS Table 2.4 does not provide any abundance information and levels of calling that are normally assessed under the Marsh Monitoring Program (MMP) protocol. However, the presence of Spotted Salamander triggers SWH.
20. EIS Table 2.4 does not provide information on the weather conditions at the time of the surveys, including temperature at the beginning and end of the survey, wind speed, cloud cover etc. Given the information provided, it isn't possible to verify that surveys were conducted according to the standardized MMP methodology, and that the results adequately capture the diversity and numbers of individuals present.

Section 2.2.6.2 – Breeding Bird Surveys, Page 8

21. Forty-nine (49) species of birds were documented during the surveys, 48 of which are possible breeders. In our experience, the list is very diverse for an entirely forested site, suggesting high quality and diversity of habitats present.
22. Twenty-one (21) area-sensitive species were documented based on the Significant Wildlife Habitat Technical Guide (SWHTG) (OMNR 2000). We would consider this an exceptionally high number, indicative of the size and high quality of the habitats present. This quality was not acknowledged in the EIS.
23. Table 2.3 (Wildlife Observations) only includes the names of the species documented, as well as their provincial and national conservation status. The EIS should consider regional conservation information (*e.g*. Environment Canada's (2014) priority species for conservation in Bird Conservation Region 13). Eight of the species documented in the EIS fall under this category.
24. Table 2.3 should include polygon-specific breeding bird data to help assess potential impacts.
25. Additional tables or appendices should be included that include point count breeding bird data, to inform which species were documented within and adjacent to the proposed facility footprint, adjacent to the proposed access road, and in the vicinity of the proposed emergency access road.
26. The EIS indicated that three 'Species at Risk' were documented, Eastern Wood-Pewee, Wood Thrush and Red-shouldered Hawk. It also indicated that Species at Risk are discussed in greater detail in Section 2.2.7. However, aside from listing these species in Table 2.5, they are not discussed in Section 2.2.7. The EIS should indicate where these birds were observed in relation to the proposed facility footprint and main access road, so that potential impacts on these species can be adequately assessed.

27. In our opinion, the site triggers SWH "Woodland Area-Sensitive Bird Breeding Habitat "criterioa, because:
    - Qualifying ELC Community Series include: FOC, FOM, FOD, SWC, SWM. These communities account for the majority of the site.
    - The entire 84 ha site is forested, far larger than the 30 ha size threshold. The forest on the site is also contiguous with forested habitat located east of the site.
    - It supports interior forest habitat at least 200 m from forest edge habitat.
    - It supports breeding by 10 of the SWHTG listed species (more than the 3 required). Notably, the proposed facility will eliminate at least 18 ha of existing interior forest, based on the definition that interior forest habitat is at least 200 m from forest edge habitat a 200 m (OMNRF 2015).
28. In our opinion, portions of the site may also meet the "Woodland Raptor Nesting Habitat" SWH criterion (OMNRF 2015). Although no active nests were apparently discovered, three of the six listed species in the Ecoregional 6E Criteria Schedule were documented during the surveys (Barred Owl, Red-shouldered Hawk, Broad-winged Hawk). A single active nest would trigger SWH designation, which includes a 100 m to 400 m radius around the nest. According to the Ecoregion 6E Criteria Schedule, this category "*May be found in all forested ELC Ecosites. May also be found in SWC, SWM, SWD and CUP3*". Note that cultural plantations are not excluded from consideration as SWH. We observed both Red-shouldered Hawk and Broad-winged Hawk calling and flying low over the site (*i.e.* probably not migrating) on May 3rd 2017.

Section 2.2.6.3 – Wildlife Habitat Features, Page 9

29. The EIS stated, "*Snags that had the potential to provide roosting habitat for bats were encountered throughout the Study Area*." however, no bat surveys were conducted. Although snags were documented by GPS when encountered, it doesn't appear that a systematic survey was conducted. This is a significant issue as all the listed bat species are designated Endangered in Ontario and would trigger protection under the Endangered Species Act (Government of Ontario 2007). If snags containing cavities are proposed to be removed, acoustic surveys would need to be conducted to determine presence or absence of Endangered bat species. Appropriate documentation of consultation with MNRF should be provided if consultation has determined that no acoustic surveys are required.
30. Spotted Salamander egg masses were observed in a vernal pool in 2016 by GHD. EIS Figure 5 suggests that they were present in a wetland in the north end of the site. The wetland is depicted as SWMM2-1 on Figure 4 in the EIS. Applying MNRF's 2015 *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* as the guide, the vernal pool where the salamander egg masses were documented is one of the ELC ecosite types listed as Candidate Significant Wildlife Habitat (SWH). It is also exceeds the minimum size threshold for Candidate SWH. Therefore, based on the presence of a breeding population of Spotted Salamanders, Confirmed SWH status ("Amphibian Breeding Habitat (Woodland)" is present (OMNRF 2015). According to the 6E Ecoregion Schedules, "*The habitat is the wetland area plus a 230 m radius of woodland area.*" According to MNRF staff, "naturalized" plantation would be considered "woodland area" and therefore included with the 230 m area (M. Eplett pers. comm., 2017).
31. Spotted Salamander egg masses were discovered by Friends of Simcoe Forests Inc. in 2017 in a complex of wetland pools in the southeast part of the site. The wetland is generally depicted as SWCM2-1 on Figure 4 in the EIS. The presence of this breeding population also triggers Confirmed SWH status. The included 230 m radius of woodland buffer area extends across the proposed access road, into the proposed development area.

Section 2.2.7 – Species at Risk and Regionally Rare Species, Page 9

32. In addition to the sources listed, local residents and area naturalists clubs should have been consulted. Local knowledge, especially with respect to rare or cryptic species, is often more comprehensive and current than data on file with agency staff. Local residents believe that Eastern Whip-poor-will has nested within the Freele Tract in recent years.
33. Jefferson Salamander, designated Endangered in Ontario (OMNRF, 2017) and Canada (COSEWIC, 2016), should be included in Table 2.5 (Species at Risk Summary). Critical habitat for this species has been documented within approximately 50 km of this site (EC, 2015), and suitable habitat, currently supporting Spotted Salamander, is present on the site.
34. Western Chorus Frog should be included in Table 2.5 (Species at Risk Summary)
35. Eastern Milksnake was delisted as a Species at Risk in Ontario in June 2016; Table 2.5 should be corrected.
36. According to Section 2.2.6.2 of the EIS, three bird Species at Risk were documented by GHD: Eastern Wood-Pewee, Wood Thrush and Red-shouldered Hawk. However, none of them are discussed in this Section. Their observed locations with respect to the proposed development footprint and broader impact area should be discussed.
37. The EIS concluded that no habitat for Eastern Whip-poor-will was present within the Study Area due to the "relatively closed forest canopy". However, according to the Royal Ontario Museum's "Breeding Birds of Ontario Nidiology and Distribution, Volume 1: Nonpasserines" (Peck and James 1983), Whip-poor-will "*Breeds in both dense and open areas, in deciduous, mixed, or coniferous woods. Nesting habitats were large forests, small wood lots in agricultural areas, pine plantations, and tree-recovered sand dunes. Some nests were on hillsides and hilltops*." Mills (2007), in "The Atlas of the Breeding Birds of Ontario" (Cadman *et al.*, 2007) writes: "*The Whip-poor-will shuns both wide-open spaces and deep forest. In Ontario, its preferred habitats included rock or sand barrens with scattered trees, savannahs, old burns in a state of early forest succession, and open conifer plantations."* Sandilands (2010) writes, "*The Whip-poor-will appears to avoid extensive areas of pure conifers (except for plantations), preferring young poplar-birth stands, successional areas, and hardwood and mixed forest as mature at pole stage."* Sandilands further writes that *"Nests are on well-drained, dry soils, usually near the edge of a woodlot or in a forest clearing. They are usually in areas where the forest understory is sparse, but occasionally they are among dense shrubbery in open sites, or beside logs."* Based on the descriptions above, and our assessment of the site during our May 3rd 2017 reconnaissance visit, we believe that the site could provide suitable breeding habitat for this species and that nocturnal surveys per the survey protocols prepared by Bird Studies Canada (2014) should be conducted. Until such surveys have been completed, it is premature to conclude that the proposed development would not negatively affect this Threatened species.
38. Little Brown Myotis and Northern Myotis were listed in the Species at Risk Summary (Table 2.5), yet no bat surveys were conducted in support of the EIS. "GHD documented any snags that were encountered," but it is does not appear that this was part of a systematic and comprehensive inventory. Our May 3rd 2017 site visit noted numerous sizeable snags across the site that could potentially support maternity roosts.
39. Locally significant species (Ox Eye Sunflower, *Heliopsis helianthoides*; Running Strawberry Bush, *Euonymus obovatus*; Tall Goldenrod, *Solidago altissima var. altissima*) observed during the field work are identified in this section, and all three species are found in ELC communities to be disturbed by development; no avoidance or mitigation is proposed. No specific locations are given for the locally significant plants observed.

Section 3 – Preliminary Development Plan, Page 11

40. The text does not adequately describe the relative areas of disturbance; in Section 4.5 (Provincial Policy Statement) the proposed footprint of development is discussed, however the text does not confirm whether this footprint is final, given the County's specification for a 20 ha site. It is not clear if the areas of the access road and emergency road are included. Details such as access road widths, grading allowances, truck turning lanes, vehicle servicing parking, waste vehicle storage etc. are important factors to be considered, yet not provided in the EIS. No information is provided on grading required to accommodate the site development and roadways.
41. EIS normally include a site concept plan which allows a clear understanding of the proposed development; the EIS does not include any graphic representation of the project apart from the generic mapping of the currently proposed development footprint shown on Figures 4 and 5;
42. Although additional information is available in the Facility Characteristics Report, as noted in the EIS, information about the development relevant to the EIS (*e.g.* scale, grading, and features such as fencing) should be summarized and discussed in the EIS report.
43. No indication is given how the natural heritage sensitivities of the study site were used to site the facility footprint or allowances for future expansion to meet the County's defined needs.

Section 4 – Regulatory/Policy Framework, Page 12

44. The dates of the policy documents reviewed are not given in the text, nor are these documents included in the References.
45. No overall summary of policy constraints is provided.

Section 4.1 – Township of Springwater, Page 12

46. The text describes the policy restrictions within the Township's Official Plan, but does not interpret these policies with respect to the site and the proposed development; this is inadequate to understand the conformity with Township policies.
47. The text suggests that adjacent lands to Significant Wildlife Habitat (SWH) are those lands within 50 m. However, the Natural Heritage Reference Manual (NHRM) 2nd Ed., (OMNR 2010) defines adjacent lands to SWH as 120 m. The likely reason for the difference is that the Township of Springwater Official Plan (OP) has not yet undergone an OP review to bring it into conformity with the 2014 PPS. Nevertheless, Section 4.7 of the PPS (2014) directs that the policies of the current PPS apply despite less stringent policies in an OP which has not yet been updated to be in conformity with the current PPS. In other words, the 120 m adjacent lands definition provided in the NHRM should apply, regardless of the Township's OP definition.

Section 4.2 – Simcoe County, Page 12

48. The text describes the policy restrictions within the County's Official Plan, specifically the site's designation as County Greenlands, but does not interpret these policies with respect to the site and the proposed development. This is inadequate to understand the conformity with County policies.

Section 4.3 – Nottawasaga Valley Conservation Authority, Page 13

49. The text notes that wetlands are features regulated by the NVCA, and that wetlands are present in both the north-east and south-east parts of the site. The text also states that a 120 m offset for assessment of impacts has been used for this EIS, however the wetland in the south-east portion of the study area is excluded from this offset area and no rationale for this exclusion is given.

50. A statement about a mapped watercourse not being present on the site is given, however there is no discussion of the record drought conditions in the spring and summer of 2016.

Section 4.4 – Species at Risk Legislation, Page 13

51. The EIS states that "*As the Study Area is not on federal lands, and aquatic features are absent from the Study Area, SARA is not applicable to this review*." This statement is incorrect, as the identification of Significant Wildlife Habitat (SWH) requires consideration of SARA status, specifically COSEWIC status. Page 54 of the SWHTG (OMNR, 2000) states: "*Species that can be considered species of conservation concern include: species identified as nationally endangered or threatened by the Committee on the Status of Endangered Wildlife in Canada, which are not protected in regulation under Ontario's Endangered Species Act.*" This SWH criterion applies to Western Chorus Frog (*Pseudacris triseriata*); the Great Lakes/St. Lawrence – Canadian Shield population (to which those individuals documented during the EIS belong) are designated Threatened in Canada, but Not at Risk in Ontario. Therefore, habitat of the Western Chorus Frog merits designation as SWH.

Section 4.5 – Provincial Policy Statement, Page 14

52. The EIS notes that "*the Study Area is predominantly comprised of mixed tree plantation, with limited natural woodland communities in the northeast and southeast corners. Conservatively, these natural woodlands within the Study Area comprise less than 25% of the Study Area, but are associated with the contiguous communities on adjacent lands to the East*." However, according to the Ecological Land Classification information provided in the EIS (see Figure 4), this statement is incorrect. Only two of the 12 vegetation communities are "Cultural" (*i.e.* not "Natural" or "Naturalized"). They are: TAGM1 (Course Mineral Coniferous Plantation) and CVI-1 (Transportation). Of the 84 ha site, they occupy approximately 2.8 ha and 0.5 ha respectively, or just under 4% of the total site.
53. The EIS states that the proposed ERRC footprint is 4.5 ha. However, the direct impact of the proposed facility alone appears to be closer to 4.7 ha based on our own aerial photo interpretation. Regardless, the calculation of the "footprint" does not quantify the potential extent of indirect impacts, which will likely extend onto adjacent lands. The footprint should also include the indirect impacts associated with the laneway accessing the facility. Traffic, noise and other disturbances (including the introduction of potential invasive species and predators), directed into the centre of the forest, will clearly have a negative impact on resident flora and fauna. Further, the potential impacts of the County's stated intentions to expand the facility in the future are not addressed in the EIS.
54. The EIS acknowledges that the site meets one Significant Woodland criteria, *i.e.* the presence of interior forest 20 ha or greater where woodland cover is greater than 60%, however, it downplays the significance of this determination by stating: "*this function is temporary as the proposed ERRC footprint is part of a managed and actively-harvested woodlot*." However, clear-cutting is not part of the normal forest management approach identified in the Simcoe County Forest Plan (Simcoe County 2011), which identifies as high priorities sustaining forests including maintaining ecological processes, and conservation of biodiversity. Developments other than for recreation are not anticipated in the SCFP, a guiding document which recommends that "*High Conservation Value Forests*" be identified, mapped, and maintained/enhanced. Notably, the EIS does not mention the SCFP.
55. With respect to Significant Wildlife Habitat, the only potential SWH criterion discussed is "Woodland area-sensitive breeding bird habitat". The EIS states: "*As natural blocks of mature woodland within the Study Area are limited to the northeast and southeast corners, the area of the*

proposed ERRC footprint ***does not satisfy the considerations as candidate Significant Wildlife Habitat*** *for Woodland Area-Sensitive Breeding Bird Habitat*." However, according to ELC information depicted on Figure 4, only natural or naturalized vegetation communities occupy the ERRC footprint. In fact, about 96% of the lands are categorized as natural or naturalized. Because the majority of tree planting was completed in 1949 (Simcoe County 2017), the site currently supports mature forest (*i.e.* > 60 years old), consistent with the SWH designation criteria.

56. Based on the field data provided in the EIS and our May 3, 2017 field visit to the site, we believe that additional SWH criteria are present and should also be addressed (*e.g.* Amphibian Breeding Habitat (Woodland), Special Concern and Rare Wildlife Species, *etc.).*

Section 5 – Potential Environmental Impacts and Mitigation

Section 5.1 – Impact Assessment Process, Page 15

57. As a site handling compost, the introduction and spread of invasive or otherwise deleterious species should be considered as an impact in Table 5.1.
58. Re: Table 5.1:
    - Impacts are not adequately defined (*i.e.* direct / indirect / cumulative)
    - Limiting daily construction and facility operation hours from 6 a.m. to 7 p.m. does not represent adequate mitigation, as:
        - the stated hours also reflect the hours of peak wildlife activity;
        - the public hours may not adequately reflect actual operations as the site is intended to be the County's Truck Servicing Facility and a major transfer site for the County's growing waste stream.
    - Additional options to mitigate noise impacts should be provided. Noise and disturbance associated with the access roads is an impact to be mitigated.
    - An increase in the local abundance or concentration of omnivorous and carnivorous wildlife species such as mice, rats, Striped Skunks, Raccoons, and Coyotes, (C. McCausland *pers. com*., 2017), as well as Weasels, American Crows, Blue Jays, Common Grackles, etc.) should be considered as a potential impact, which will lead to greater depredation of ground-nesting birds. Approximately 20% of the breeding bird species documented are ground-nesting.

Section 5.2 – Vegetation Communities (Including Wetlands), Page 19

Section 5.2.1 – Potential Impacts, Page 19

59. We are concerned that the inadequate vascular plant list and the ELC community descriptions downplay the significance of the ecological features, and therefore the EIS understates impacts of the proposed facility on the ecological features and functions of the site. The main footprint of the ERRC facility is proposed in the FODM5 community, which we observed to be the most 'natural' community on the site apart from the wetlands and associated lowland forests.
60. The EIS states that vegetation loss will be restricted to the proposed facility footprint and "entrance". However, it is reasonable to assume that the entire length of the access road will need to widened to accommodate inbound and outbound truck traffic, along with necessary roadside verges and grading allowances. The roadway standards (including requirements for future expansion), and for parking accommodation of the County's fleet of Solid Waste Management vehicles are not clearly described or included in the discussion of impacts.
61. Text in Section 5.3.1 indicates that the existing portion of the north access road is intended to be retained for emergency access. The standards for the emergency access road, which

presumably must be capable of handling trucks and emergency vehicles, will undoubtedly require vegetation removal and significant works to provide a full-season access road. In addition, this proposed road is very close to the SWMM2-1 community and within the 230 m SWH buffer recommended by MNRF; therefore, impacts to wetlands and ecological functions can be expected.

62. As per Section 4.3, the wetland in the south-east corner of site is excluded from discussion of impacts to wetlands.
63. There is no discussion of impacts to locally significant plant species, and the specific locations of plants found are not identified.

Section 5.2.2 – Mitigation, Page 19

64. The EIS states the vegetation communities that will be altered are not unique or locally rare/significant. However, the vegetation communities clearly trigger Significant Wildlife Habitat policy as "Woodland area-sensitive breeding bird habitat", which will be impacted.
65. There is no Mitigation Plan included with the EIS, which would normally include a figure indicating the development concept plan, ecological features and functions (*e.g.* SWH extent, including buffers) being protected, and indicating the locations for measures being applied on the development site or adjoining lands where mitigation is proposed.
66. No discussion of mitigation is provided related to locally significant plant species.
67. No specific monitoring of impacts and mitigation approaches is discussed or recommended; this is relegated to a future Environmental Monitoring Plan, however the limited detail in the EIS discussion of impacts renders it inadequate to guide design, construction and operation of the facility.

Section 5.3 – Wildlife and Habitat, Page 21

Section 5.3.1 – Potential Impacts, Page 21

68. The text should acknowledge impacts to Significant Wildlife Habitat (SWH). Based on the field data provided in the EIS and our May 3, 2017 field visit to the site, we believe that several SWH criteria are present (*e.g.* Amphibian Breeding Habitat (Woodland), Woodland Area-Sensitive Bird-Breeding Habitat, Special Concern and Rare Wildlife Species) (OMNRF 2015).

Section 5.3.2 – Mitigation, Page 21

69. Operating the facility during 6:00 a.m. and 7:00 p.m. should not be considered mitigation, since these hours correspond to when wildlife are most active, *i.e.* the daylight hours required for foraging and feeding young.
70. To protect pond-breeding salamander species, the EIS suggests that terrestrial buffer zones should extend away from the edge of breeding ponds by approximately 160 m, as "*this distance represents the movements of 95% of the adults in a population (Savage and Zamudio, 2016.)*" However, the Significant Wildlife Habitat Ecoregion 6E Criteria Schedule defines SWH habitat as the wetland area plus a 230 m radius of woodland area. On this basis, a portion of the proposed ERRC facility footprint would overlap with the SWH.
71. The EIS states that "*Provision of permanent amphibian tunnels north of the ERRC, beneath the emergency access road, with associated drift nets along the perimeter of the emergency access road should mitigate loss of connectivity and collision mortalities of amphibians under increased road traffic*." It is not clear why this recommendation merits the required effort and expense, as the emergency access road will only be used in emergency situations. Notably, wildlife impacts and mitigation of the main access road are not considered with the same level of detail, *e.g.* the

"Amphibian Breeding Habitat (Woodland)" SWH criterion (OMNRF 2015) overlaps with the proposed main access road. The main access road will be within the 230 m buffer recommended by MNRF for this category of SWH.

72. The EIS discusses enhancing the habitat in vegetation community TAGM1 for Spotted Salamanders by placing felled logs on the ground for additional cover and hibernation habitat, however Spotted Salamanders typically hibernate underground in small mammal burrows.
73. The EIS recommendation that "*Clearing, grubbing, and tree removal works should be conducted in a manner to avoid nesting birds and wildlife where possible*." is too vague. General operational dates should be provided, with explicit reference to the Migratory Birds Convention Act (Government of Canada 1994 a,b).
74. No avoidance or other mitigation is provided for loss of habitat for bat species, *i.e.* snag removal.
75. Based on our review of the information contained in the EIS and its appendices, the conclusion that "*negative impacts to the identified natural features and ecological function are not anticipated*" is without foundation.

Section 6 – Conclusions, Page 23

76. The EIS again states that the site meets woodland significance targets under the Simcoe County Official Plan's Greenlands designation and the Provincial Policy Statement, but downplays the importance of the feature. The rationale is not supported adequately in the text, and our review indicates that the site is more significant than indicated in the EIS.
77. The statement of no negative impacts is not supported by EIS evidence, particularly given the inconsistencies, misinterpretations and exclusions noted by D&A.

Appendix A: Environmental Impact Study Terms of Reference

78. No minutes are provided confirming TOR approval at the April 1, 2016 agency meeting.

Appendix B: Vegetation Inventory

79. Our review of the vascular plant list provided in the EIS (Appendix 2) identified some inaccuracies and inconsistencies. First, several plants are identified with the incorrect botanical name (*i.e. Geum virginianum* is listed as Rough Avens, but should be Pale Avens; Common dock is listed as *Rumex* sp., this should be Dock sp.), and several plants listed to genus level have the wrong genus attributed to the common name listed (*i.e.* Sedge sp. is listed as *Scirpus* sp., and should be *Carex* sp.; Grass species is listed as *Panicum* sp. but could be one of many species of graminoid. In addition, some records have incorrect capitalization. These errors should have been addressed as part of normal reporting data quality control. Second, plants are listed which are not known to be present in Ontario (*Anemone nemorosa*, Wood anemone; *Lactuca virosa*, Bitter lettuce). Finally, during the site visit, D&A staff encountered several easily-identifiable species which would have been present during the ELC visits conducted by GHD. These species include Common Oak Fern (*Gymnocarpium dryopteris*), Wild Red Raspberry (*Rubus occidentalis*), Common Mullein (*Verbascum thapsis*), and Plantain-leaved Sedge (*Carex plantaginea*). These weaknesses are a concern given that a major conclusion of the EIS is that the vegetation communities are mostly low quality plantations.
80. The vascular plant list does not identify vegetation communities where plants were found; ELC field data is not provided; Coefficient of Conservatism (CC) values for plants are not provided. This weakens the understanding of the significance of particular ELC communities, their levels of disturbance, and the overall diversity of the site.

Figures

81. Policy constraints are not mapped *i.e.* no 'opportunities and constraints' figure is provided. A figure would clarify whether negative impacts to significant constraints (*i.e.* sensitive features and functions) are being avoided or require impact mitigation consideration.
82. The overall extent of the proposed development (*i.e.* the facility footprint, the access route, emergency access route, associated grading, future expansion area) is not shown on any of the Figures; Figure 4 and 5 do show the facility footprint and access road separately, but not the emergency access. This omission downplays the potential physical scale of these features and therefore the impacts associated with their construction and operation.
83. Figure 4 (Ecological Land Classification) does not provide numbers for vegetation communities, making references difficult between the figure, its legend, and EIS text. Where there are multiple polygons of the same ELC community, this omission makes Sect. 2.2.3 difficult to interpret.
84. No locations of locally significant plant species are provided. An understanding of the abundance and location of the plants would give a more quantified understanding of the impacts to these populations due to the proposed work.
85. No conceptual or detailed mitigation plans are provided. These plans would help to demonstrate the effectiveness of the proposed works.

CONCLUSION

Based on this review, D&A believes that the GHD *Scoped EIS* does not adequately characterize the study area, provide appropriate interpretation of policy, or discuss impacts and mitigation in sufficient detail. Figures lack sufficient detail on the proposed development, policy constraints, location and extent of impacts, and mitigation.

LIMITATION

The opinions in this letter report document are based on the *Scoped Environmental Impact Study, Proposed Environmental Resource Recovery Center, Springwater, Ontario* (GHD Ltd., November 17, 2016), other documents referenced; opinions are subject to modification if revised documents are provided.

Sincerely,

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REFERENCES

Bird Studies Canada. 2014. Guidelines for Conducting Eastern Whip-poor-will Roadside Surveys in Ontario (May 12, 2014). Available at: https://www.birdscanada.org/birdmon/wpwi/resources.jsp?dir=2014 Whip-poor-will Roadside Survey Guidelines. 12 pp.

Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and **A.R. Couturier (eds.) 2007.** Atlas of the Breeding Birds of Ontario, 2001 – 2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto. xxii + 706 pp.

COSEWIC (Committee on the Status of Endangered Wildlife in Canada). 2016. Canadian Wildlife Species at Risk (October 2016). Committee on the Status of Endangered Wildlife in Canada. Web site: http://www.cosewic.gc.ca/eng/sct0/rpt/rpt_csar_e.cfm [accessed 2 June 2017]

Eplett, M. pers. comm., 2017. Email communication between Megan Eplett (Management Biologist, Ministry of Natural Resources and Forestry, Midhurst District) and Jim Dougan (Director and Senior Ecologist, Dougan & Associates) on May 10, 2017.

Environment Canada. 2014. Bird Conservation Strategy for Bird Conservation Region 13 in Ontario Region: Lower Great Lakes/St. Lawrence Plain – Abridged Version – July 2014. Available online at: https://www.ec.gc.ca/mbc-com/default.asp?lang=En&n=F43BE8A4-1

Environment Canada. 2015. Recovery Strategy for the Jefferson Salamander (*Ambystoma jeffersonianum*) in Canada [Proposed]. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. 26 pp. + Annexes.

GHD. 2016a. Scoped Environmental Impact Study [for the] Proposed Environmental Resource Recovery Center. Springwater, Ontario. Prepared for the County of Simcoe. 26 pp. + Figures, Tables & Appendices.

GHD. 2016b. County of Simcoe Environmental Resource Recovery Center Facility Characteristics Report. Prepared for the County of Simcoe. 35 pp. + Figures, Tables & Appendices.

GHD. 2016c. Hydrogeological Assessment. Environmental Resource Recovery Center Facility (ERRC), 2976 Horseshoe Valley Road West, Springwater, Ontario. 19 pp + Figures, Tables and Appendices.

Government of Canada. 1994a. Migratory Birds Convention Act, Statutes of Canada (1994, c. 22). Retrieved from the Department of Justice Laws Website: http://laws-lois.justice.gc.ca/eng/acts/M-7.01/FullText.html

Government of Canada. 1994b. Migratory Birds Regulations, Consolidated Regulations of Canada (1994, c. 1035). Retrieved from the Department of Justice Laws Website: http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1035/FullText.html

Government of Ontario. 2007. Endangered Species Act, Statutes of Ontario (2007, c. 6). Retrieved from the Service Ontario e-Laws website: http://www.elaws.gov.on.ca/html/statutes/english/elaws_statutes_07e06_e.htm

Lee, H., W. Bakowsky, J.L. Riley, M. Puddister, P. Uhlig and **S. McMurray. 1998.** An Ecological Community Classification for Southern Ontario: A First Approximation. Southern Region Science and Technology Transfer Unit, Ontario Ministry of Natural Resources. Natural Heritage Information Centre, Peterborough, Ontario. Southern Region Site Region Planning, Ontario Ministry of Natural Resources. Terrestrial Ecosystems Branch, Ontario Forest Research Institute, Sault Saint Marie, Ont.

McCausland, C. pers. com., 2017. Telephone discussion with Catherine McCausland (Manager of Operations, Solid Waste Resources, City of Guelph) and Karl Konze (Senior Wildlife Ecologist, Dougan & Associates) on May 16, 2017.

Miller, S., Wardrop, D.H. 2006. Adapting the floristic quality assessment index to indicate anthropogenic disturbance in central Pennsylvania wetlands. Ecological Indicators 6 (2006) 313–326

Mills, A. 2007. Whip-poor-will. *Pg.* 312–313. In Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier (eds.). Atlas of the Breeding Birds of Ontario 2001-2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, xxii + 706 pp.

Oldham, M.J., J.L. Bakowsky, and **D.A. Sutherland. 1995.** Floristic Quality Assessment System for Southern Ontario. Natural Heritage Information Centre Ontario Ministry of Natural Resources Box 7000, Peterborough Ontario, K9J 8M5, Canada.

OMMAH (Ontario Ministry of Municipal Affairs & Housing). 2014. Provincial Policy Statement. 50 pp. Available at: http://www.mah.gov.on.ca/AssetFactory.aspx?did=10463

OMNR (Ontario Ministry of Natural Resources). 2000. Significant Wildlife Habitat Technical Guide. 151pp. Available at: https://dr6j45jk9xcmk.cloudfront.net/documents/3169/001285.pdf

OMNR (Ontario Ministry of Natural Resources). 2010. Natural Heritage Reference Manual. Available at: http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@lueps/documents/document/289522.pdf

OMNRF (Ontario Ministry of Natural Resources and Forestry). 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E, January, 2015. 39 pp. Available at: https://www.ontario.ca/document/significant-wildlife-habitat-ecoregional-criteria-schedules-ecoregion-6e

OMNRF (Ontario Ministry of Natural Resources and Forestry). 2017. Species at Risk in Ontario (SARO) List. Updated 7, June 2017. Available at: https://www.ontario.ca/environment-and-energy/species-risk-ontario-list

Peck, G.A. and **R.D. James. 1983.** Breeding Birds of Ontario, Nidiology and Distribution, Volume 1: Nonpasserines. Royal Ontario Museum, Toronto, Ontario. 321pp.

Sandilands, 2010. Birds of Ontario. Habitat Requirements, Limiting Factors, and Status (Nonpasserines: Shorebirds through Woodpeckers). UBC Press, Vancouver. 392 pp.

Savage, W. K. and **K.R. Zamudio. 2016.** Ambystoma maculatum. Ambhibiaweb - Information on amphibian biology and conservation. Berkeley, California. Last accessed August 17, 2016 at: http://amphibiaweb.org/cgi/amphib_query?where-genus=Ambystoma&where-species=maculatum

Simcoe County, 2007. Official Plan of the County of Simcoe – Consolidated April 2007. County of Simcoe. Available online at: http://www.simcoe.ca/dpt/pln/official-plan

Simcoe County, 2011. Simcoe County Forests 2011 – 2030. Available online at: http://www.simcoe.ca/Forestry/Documents/SCF%20final%20report.pdf

Simcoe County. 2016. ONE SITE- ONE SOLUTION. Available online at: http://www.simcoe.ca/SolidWasteManagement/Documents/One%20site%20one%20solution_FAQ_final.pdf

Simcoe County. 2017. Environmental Resource Recovery Centre – 2976 Horseshoe Valley Road West, Springwater. GET THE FACTS. January 2017. Available at: http://www.simcoe.ca/SolidWasteManagement/Documents/FAQs%20-%20January%202017.pdf

Township of Springwater, 2015. 1998 Official Plan – Consolidated October 2015. Township of Springwater. Available online at: http://www.springwater.ca/cms/One.aspx?portalId=312&pageId=4265#officialplan