

High Conservation Value Forest (HCVF): Grey County Forest

Summary

Grey County owns 3,386.3 hectares of forested land. The location of these properties can be found on the Grey County website at <https://www.grey.ca/forests-trails> or at the Grey County office. The Community Forest also maintains a detailed GIS inventory of the forests and natural heritage values for each property. Grey County Forest is managed according to the principles of the Forest Stewardship Council (FSC). FSC certification provides the assurance that the forests are sustainably managed to a world-recognized standard.

FSC principle 9 addresses High Conservation Value Forests. It states that “Management activities in High Conservation Value Forests shall maintain or enhance the attributes which define such forests.” The Forest Manager has evaluated the Community Forest using a framework which identifies six potential categories of HCVF. Sources of information for identifying HCVF include the OMNRF’s Forest Resource Inventory and Natural Resources and Values Information System (NRVIS), Natural Heritage Information Centre (<https://www.ontario.ca/page/natural-heritage-information-centre>), natural heritage inventories, Endangered Species Act, <https://www.ontario.ca/laws/statute/07e06> and the knowledge of the forest manager and members of the community. The HCVF report has been reviewed by the Grey County Forest Manager, the EOMF Certification Working Group and peer reviewed by an independent expert. The Forest Management Plan provides guidance for conservation of HCVFs when a timber harvest operation is planned and are consistent with OMNR habitat guidelines, <https://www.ontario.ca/page/forest-management-guides>. HCVF include a mapped area of 1,492.7 hectares, and additional unmapped areas of species at risk habitat. The full HCVF report is available for review on the Grey County Web site at <https://www.grey.ca/forests-trails>. The results are summarized in the following table.

Appendix E High Conservation Value Forest Assessment Framework – GLSL

This framework is designed to be used in order to help identify potential High Conservation Value Forests (HCVF) in the context of achieving certification to FSC Canada’s Great Lakes/St. Lawrence Standard. It is based on a framework originally developed by ProForest and since that time it has been applied in many forest regions around the world.

The framework is organized as a table covering six categories derived from the definition of HCVFs from the FSC standards. The six categories are:

- Category 1: Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g., endemism, endangered species, refugia);
- Category 2: Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance;
- Category 3: Forest areas that are in or contain rare, threatened or endangered ecosystems;
- Category 4: Forest areas that provide basic services of nature in critical situations (e.g., watershed protection, erosion control);
- Category 5: Forest areas fundamental to meeting basic needs of local communities (e.g., subsistence, health); and,
- Category 6: Forest areas critical to local communities’ traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).

Each category has a question or questions (the left-hand column below) that aim to identify whether the management unit contains any of the values relevant to each category. Negative answers to these questions mean that the forest operation likely does not include High Conservation Values (HCV) in that category. Positive answers lead to further investigation. The second column explains the rationale for the conservation of the particular value. The third column provides sources of information on these values (e.g., COSEWIC lists in Canada, Conservation Data Centre lists, etc.). The fourth column provides further guidance to help determine whether or not a particular area might be considered a High Conservation Value Forest.

Scale and diversity in the Great Lakes/St. Lawrence region: This toolkit is designed to be used across the GLSL region, and applied in small private forests, on community forests and in large public forests. The manager may be operating in a highly fragmented landscape, where the stands with exceptionally high conservation value may be very small and require a high degree of protection, or in a much more intact landscape, where the HCVF toolkit can help to identify relatively broad features across the landscape in which the changes to management activities may be relatively modest although nevertheless significant

at the landscape level. Furthermore, these diverse management regimes occur across a range of ecosystem types, from the Carolinian forests of southwestern Ontario through the mixed wood forests of southern Ontario and Québec and northwards to forests that are in the boreal transition zone. This diversity means that HCVF assessments will be carried out differently on these various forests, and will produce vastly different results. In developing a toolkit that is intended to apply across this diversity it is not possible to provide specific thresholds or numerical responses to questions such as “What is the minimum size of a HCVF area?” or “What percentage of a management unit should be designated as HCVFs?”

“Critical habitat” and “Essential Habitat.” In this Toolkit, and elsewhere in this standard, the term “Critical habitat” is used only in the context of Species at Risk that have been listed by federal or provincial agencies. It is used in this narrow sense in order to align the use of the term in this Standard with the legal requirements that exist in federal and provincial legislation pertaining to maintaining and restoring critical habitat for species at risk. “Essential habitat” has the same meaning as “critical habitat,” but applies to all wildlife species, and not only to rare, threatened or endangered species.

HCV Summary for _____ Grey County Forest _____		Total (Hectares)
HCV1	Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).	889.2
HCV2	Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.	0.0
HCV3	Forest areas that are in or contain rare, threatened or endangered ecosystems.	319.7
HCV4	Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).	253.8
HCV5	Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).	0.0
HCV6	Forest areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).	30.0
	Total area	1,492.7

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
Category 1) Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g., endemism, endangered species, refugia)										
1. Does the forest contain concentrations of species at risk as listed by international, national or provincial authorities?	An HCVF designation can support and enhance the measures to protect species at risk that are described under Criterion 6.2, especially in encouraging integrated approaches across the landscape where there are multiple species at risk or a concentration of attributes (populations or habitat) for specific species.	Species are designated as rare, threatened or endangered federally by COSEWIC and provincially by the Centre de données sur le patrimoine naturel du Québec and equivalent for Ontario. Consult the most up-to-date lists, usually available on the web.	<ul style="list-style-type: none"> - Are any of the rare, threatened or endangered species in the forest a species representative of habitat types naturally occurring in the management unit? (GUIDANCE) - Do any of the identified rare, threatened or endangered species (individually or concentration of species) have a demonstrated sensitivity to forest operations? (GUIDANCE) - Does the forest contain critical habitat for any individual species or concentration of species identified in the above questions? (GUIDANCE) - Does the forest contain potential critical habitat that could facilitate the recovery of listed species? (GUIDANCE) 	All	Species at Risk Butternut	NA	Grey County Forest	Management Plan Table 15 Page 35	Harvest areas in 2014 – 2018 Operating Plan Prescription based on OMNR guidelines	NA
				Comp # 5, 6, 9, 10, 22, 23, 24, 25, 27, 29, 31, 36, 41, 44	Hart's Tongue Fern	NA	Grey County Forest	Management Plan Table 15 Page 35	As Compartments come up for harvest, will do ground prescription and cruise data.	529.0
2. Does the forest contain a concentration of species having a restricted geographical range?	Ensures the maintenance of vulnerable and/or irreplaceable elements of biodiversity.	WWF Ecoregion Conservation Assessment (www.panda.org). Conservation International 'hotspot' areas (www.conservation.org)	<ul style="list-style-type: none"> - Is there a concentration of regionally endemic species in the forest that includes species representative of habitat types naturally occurring in the management unit? (DEFINITIVE) - Do any of the identified endemic species have a demonstrated sensitivity to forest operations? (GUIDANCE) - Does the forest contain essential habitat of species identified in the above questions? (GUIDANCE) 	Comp # 38	Deer Yard area	NA	Grey County Forest	Management Plan Page 43	Many observed eating on cedar browse left over from our timber harvest this winter	149.5
				Comp # 35 & 37	Deer Yard area	NA	Grey County Forest	Page 43	Operations planned this summer will monitor areas in Comp 37	210.7

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Category 1) Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g., endemism, endangered species, refugia)				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
3. Does the forest include regionally significant seasonal concentration of species?	Addresses wildlife habitat requirements critical to maintaining population viability (regional “hot spots”).	National and local agencies with responsibility for wildlife conservation; Results from habitat models; Local experts; traditional knowledge	<ul style="list-style-type: none"> - Is there an area of the forest which provides essential habitat for a variety of species? (GUIDANCE) Is there an area of the forest in which there are high concentrations of wildlife populations, including seasonal concentrations? (GUIDANCE) - Is there an Important Bird Area in the forest? (DEFINITIVE) - How protected are similar wildlife concentration areas within the region? (GUIDANCE) - Is it a wildlife concentration area for more than one species? (GUIDANCE) - Are there any landscape features or habitat characteristics that tend to correlate with significant temporal concentrations of species (e.g., where species occurrence data is limited)? (GUIDANCE) 	None						

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 1) Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g., endemism, endangered species, refugia)				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
4. Does the forest support regionally significant species (e.g., species declining regionally, culturally important species)?		Regionally significant species are determined using the sources below. 1. Conservation Data Centre G3, S1-S3 species and communities 2. Range and population estimates from national or local authorities and local experts for: a) red listed species (see sources above); b) species at risk (in existing legislation and/or policy); c) results from habitat models, d) species representative of habitat types naturally occurring in the management unit or focal species; and, e) species identified as ecologically significant through consultation.	- Is the regionally significant species in significant decline as a result of forest management? (DEFINITIVE) - Is the population of regionally significant species locally at risk (e.g., continuing trend is declining rather than stable or improving)? (GUIDANCE) - Does the forest contain limiting or essential habitat for regionally significant species? (GUIDANCE) - Are there any ecological or taxonomic groups of species or sub-species that would together constitute a regionally significant concentration? (GUIDANCE)	None						

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 1) Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g., endemism, endangered species, refugia)				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
5. Does the forest support concentrations of species at the edge of their natural ranges or outlier populations?	Relevant conservation issues include vulnerability against range contraction and potential genetic variation at range edge. Outlier and edge of range populations may also play a critical role in genetic/population adaptation to global warming.	See above	<ul style="list-style-type: none"> - Are there naturally occurring outlier populations of commercial tree species? (GUIDANCE) Are any of the range edge or outlier species a species representative of habitat types naturally occurring in the management unit? (GUIDANCE) - Are there any ecological or taxonomic groups of range edge and/or outlier species/sub-species that would together constitute a globally, nationally or regionally significant concentration? (GUIDANCE) - Are the species potentially negatively impacted by forest management? (GUIDANCE) - Is the population of ranged edge and /or outlier species? (GUIDANCE) 	None						
6. Does the forest lie within, adjacent to, or contain a conservation area: a) designated by an international authority, b) legally designated or proposed by relevant federal/provincial/territorial legislative body, or c) identified in regional land use	Ensures compliance with the conservation intent of a conservation area and that regionally significant forests are evaluated for consistency with the conservation intent.		<ul style="list-style-type: none"> - Are there forest areas important to connect conservation areas in order to maintain the values for which the conservation areas were identified? (GUIDANCE) - Are there forest areas important to buffer conservation areas in order to maintain the values for which the conservation areas were identified? (GUIDANCE) 	None						

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 1) Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g., endemism, endangered species, refugia)				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
plans or conservation plans?										

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 2) Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
7. Does the forest constitute or form part of a globally, nationally or regionally significant forest landscape that includes populations of most native species and sufficient habitat such that there is a high likelihood of long-term species persistence?	The forest must not only be large enough to potentially support most or all native species, but long-term, large-scale natural disturbances can take place without losing their resilience to maintain the full range of ecosystem processes and functions (i.e., naturally functioning landscape). Forests meeting the threshold for intactness will be rare or absent throughout most of the GLSL area. In these cases refer to the following question, which focuses on identifying “remnant intact forests” that exemplify some of the attributes of intact forests	Global Forest Watch Canada maintains information on large-scale intact forest areas in Canada	Are there forest landscapes unfragmented by permanent infrastructure (including roads) and greater than 30,000 ha, with less than 5% of the area affected by non-permanent human disturbances;? (DEFINITIVE)	None						

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 2) Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
8. Are large landscape level forests (i.e., large unfragmented forests) rare or absent in the forest or ecoregion?	In regions or forests where large functioning landscape level forests are rare or do not exist (highly fragmented forest), forest areas that have had significantly less anthropogenic impact than surrounding areas may warrant consideration as HCVMs, so that the distinctive qualities in those forests can be sustained. While there is a size threshold in considering intact forests (#7 above), there is no minimum size threshold when considering remnant intact forests.		<p>Are there areas that support viable populations of most species, and which have significantly lower anthropogenic impacts than surrounding regions? (GUIDANCE)</p> <p>To assist in the development of management prescriptions, the description of the high conservation value should include measures of forest quality to be maintained or enhanced. The questions below provide guidance to help identify some of the potential qualities.</p> <ul style="list-style-type: none"> - Does the remnant intact forest include suitable habitat for native species (e.g., range of habitats and ecosystems) or more natural forests in terms of structure and function? - Does the remnant include an appropriate proportion of climax species (i.e. not dominated by pioneer species)? - Does the remnant include a relatively high proportion of late seral stands? 	None						

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 2) Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
			<ul style="list-style-type: none"> - Does the remnant include an appropriate proportion of structural features such as woody debris and standing dead trees (i.e., structurally complex)? - Is the level of dissection and perforation in the remnant below levels that will permit the persistence of most native species? - Are levels of early seral forest from human disturbances below levels appropriate for a naturally functioning landscape? - Are levels of habitat modification from human activity below levels appropriate for a naturally functioning landscape? 							

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 3) Forest areas that are in or contain rare, threatened or endangered ecosystems				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
9. Does the forest contain naturally rare ecosystem types?	These forests contain many unique species and communities that are adapted only to the conditions found in these rare forest types.		<ul style="list-style-type: none"> - Are there ecosystems that have been officially classified as being rare, threatened or endangered by a relevant national or international organization? (GUIDANCE) - Is a significant amount of the global extent of these ecosystems present in the country and/or ecoregion? (GUIDANCE) - Are these ecosystems heavily modified? (GUIDANCE) - Are these ecosystems potentially negatively impacted by forest management? (GUIDANCE) 	None						

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
Category 3) Forest areas that are in or contain rare, threatened or endangered ecosystems										
10. Are there ecosystem types within the forest or ecoregion that have significantly declined?	This indicator includes rare forest ecosystem types (e.g. Carolinian forest, Savana Oak)		<ul style="list-style-type: none"> - Is the forest within an ecoregion with little remaining original forest type? (GUIDANCE) - Is there a significant proportion of the declining ecosystem type within the management unit in comparison to the broader ecoregion? (GUIDANCE) - Does potential vegetation mapping identify areas within the management unit that can support the declining ecosystem type (i.e., regeneration potential)? (GUIDANCE) - How well is each ecosystem effectively secured by the protected area network and the national/regional legislation? (GUIDANCE) 	None						
11. Are there sites with unique or exceptional ecological characteristics??	Sites with exceptional characteristics (e.g. ancient trees) warrant special consideration so that the conditions that produced these exceptional characteristics may continue to do so.		<ul style="list-style-type: none"> - Are there sites with unique or exceptional ecological characteristics? (GUIDANCE) - Are there important and/or unique geological areas that strongly influence vegetation cover (e.g., serpentine soils, marble outcrops)? (GUIDANCE) - Are there important and/or unique microclimatic conditions that strongly influence vegetation cover (e.g., high rainfall, protected 	Comp # 22, 23, 24, 29, 31, 32, 36, 38	ANSI's	NA	Grey County Forest	Management Plan Page 41 Table 16	Harvest will be done in winter or when ground is dry to reduce damage to stand and site.	319.7

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 3) Forest areas that are in or contain rare, threatened or endangered ecosystems				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
			valleys)? (GUIDANCE)							

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
Category 4) Forest areas that provide basic services of nature in critical situations (e.g., watershed protection, erosion control)										
Where surface water is used to supply drinking water for communities special considerations are warranted		Is there a sole available and accessible source of drinking water for a community? (DEFINITIVE) - Are there watershed or catchment management studies that identify significant recharge areas that have a high likelihood of affecting drinking water supplies? (GUIDANCE)		None						
Most or all forests have some role to play in maintaining water quantity or quality, which is addressed in Criterion 6. This question is meant to identify those areas that are particularly sensitive.	Hydrological maps; Hydrologists in government departments or local research institutions.	- Are there high risk areas for flooding or drought? (DEFINITIVE) - Are there particular forest areas (i.e., a critical sub-watershed) that potentially affect a significant or major portion of the water flow (e.g., 75% of water in a larger watershed is funneled through a specific catchment area or river channel)? (GUIDANCE) - Does the forest occur within a sub-watershed that is critically important to the overall catchment		Comp # 1, 3, 9, 15, 18, 20, 25, 27, 29, 31, 34, 36, 38, 39	Provincially Significant Wetlands	NA	Grey County Forest	Management Plan Page 35	No operations planned in vicinity of PSW	253.8

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
Category 4) Forest areas that provide basic services of nature in critical situations (e.g., watershed protection, erosion control)										
		basin? (GUIDANCE) - Are there particular forest areas (i.e., a critical sub-watershed) that potentially affect water supplies for other services such as reservoirs, irrigation, river recharge or hydroelectric schemes? (GUIDANCE)								
See above		- Are there forest areas where the degree of slope carries high risk of erosion, landslides and avalanches? (DEFINITIVE) - Are there soil and geology site types that are particularly prone to erosion and terrain instability? (GUIDANCE) - Is the spatial extent of erosion-prone or unstable terrain such that the forest is at high risk (also of cumulative impacts)? (GUIDANCE)		None						

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 5) Forest areas fundamental to meeting basic needs of local communities (e.g., subsistence, health)				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
<p>15. Is any local community making use of the forest for basic needs/ livelihoods? (Consider food, medicine, fodder, fuel, building and craft materials, water, income).</p>	<p>There is a distinction being made between the use by individuals (e.g., traplines), whose interests are addressed in Principles 1-9, and where use of the forest is fundamental to the subsistence or health needs of local communities, in which case a HCVF designation may be warranted</p>	<p>Sources of information</p> <ol style="list-style-type: none"> 1. Consultation with the communities themselves (including women, men and elders) is the most important way of collecting information. 2. Literature sources such as reports and papers, where available, can be very useful sources of information. 3. Knowledgeable people and organizations such as local community organizations and Tribal Councils, NGOs, or academic institutions. This type of group can often provide a quick introduction to the issues and provide support for further work. 4. Review of studies of traditional land use and non-timber use of the forest. <p>Review of socio-economic</p>	<p>- Is this the sole source of the value(s) for the local communities? (GUIDANCE)</p> <p>- Is there a significant impact to the local communities as a result of a reduced supply of these values? (GUIDANCE)</p> <p>- Are there values that, although they may be a small proportion of the basic needs, are nevertheless critical? (GUIDANCE)</p>	None						

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 5) Forest areas fundamental to meeting basic needs of local communities (e.g., subsistence, health)				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
		profiles of communities.								

Item	Rationale	Sources of information	Further Guidance	EOMF HCV:						
Category 6) Forest areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities)				Comp.	Value	Year Completed	Stakeholder	Management Guidance	Monitoring	Area (Ha)
16. Is the traditional cultural identity of the local community particularly tied to a specific forest area?	<p>The difference between having <i>some significance</i> to cultural identity and being <i>critical</i> will often be a difficult line to draw and as with meeting basic needs, the way in which it is established will be very variable. However, some key points to consider are:</p> <ul style="list-style-type: none"> - To be an HCV, the forest must be critical to the culture. - For FSC certification all identified values must be addressed even if they are not critical, but will be dealt with under other principles. 	See above	<p>- Do the communities consider that the forest is culturally significant? Possible indicators for cultural importance include:</p> <ol style="list-style-type: none"> 1. Names for landscape features; 2. Stories about the forest; 3. Sacred or religious sites; 4. Historical associations; and, 5. amenity or aesthetic value. <p>- Will changes to the forest potentially cause an irreversible change to the culture? (GUIDANCE)</p> <p>- Is the particular forest in question more valuable than other forests? (GUIDANCE)</p>	Comp # 29	Area of Interest Archeological area	NA	Grey County Forests	Forest Management Plan	Manager will work with Reserve to confirm area.	30.0
17. Is there a significant overlap of values (ecological and/or cultural) that individually did not meet HCV thresholds, but collectively constitute HCVs?	Consideration of several spatially overlapping values is important in optimizing conservation management.		<p>- Are there several overlapping conservation values? (GUIDANCE)</p> <p>- Do the overlapping values represent multiple themes (e.g., species distribution, significant habitat, concentration area, relatively unfragmented landscape)? (GUIDANCE)</p>	None						