Summary of ONHSS Recommendations (2023 and 2006)

ONHSS Study	Recommendation	Implementation Status/ Notes
	Land Use Planning Recommendations	
2023	**1. Oxford Natural Heritage Systems Study (ONHSS) Role.** It is recommended that the County utilize the ONHSS 2023 as the scientific basis for identifying Natural Heritage Features and Areas and the broader Natural Heritage System (NHS) within the County of Oxford in the OP, as required by the 2020 PPS. The most effective and appropriate approach for identifying the natural heritage features, areas and system in the Official Plan (e.g. designation and/or constraint overlay) will need to be assessed and determined through the OP update process. Also, the OP should include policies governing the protection of natural heritage features and areas and the protection of the NHS through land use change and the policies should require assessment that is appropriate to the scale of the proposed land use change. In other words, more comprehensive studies (e.g., a subwatershed study or equivalent) should generally be required for settlement area expansions, larger plans of subdivision and similar matters, whereas an Environmental Impact Study (EIS) should be appropriately scoped for smaller site specific applications or where applications are only adjacent to features to ensure they are appropriately designed and mitigated.	Being considered as part of the update of the Official Plan.
2023	**2. Environmental Impact Studies (EISs).** The OP policies regarding EISs should be reviewed and updated to clarify integration into the planning process, ensuring appropriate scoping at the outset, and support the development of related guidance materials. An EIS guideline document should also be developed to provide more specific guidance on the implementation of the ONHSS through the land use planning and development process, including initial consultation, EIS submission requirements, review process and scoping and/or waiver criteria. A patch validation process should be developed as part of an EIS guideline document. The patch validation process can assist with confirming patch attributes (i.e., criteria met, including the three un-mapped criterion/features) and boundaries.	Being considered as part of the update of the Official Plan.

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	Patches that do not meet any criteria can be viewed as Candidate Ecologically Important. Where development is proposed, preparation of an EIS could be requested to confirm that the patch does not: • meet any of the 12 mapped landscape criteria or 3 unmapped criteria, • contain an unevaluated or unmapped wetland, • contain any natural heritage features and areas that need to be identified at the site level including: Significant Wildlife Habitat, Groundwater Discharge /Dependent Wetlands, Bluffs and Depositional Areas (see Appendix N), and rare vegetation communities, and • contain fish habitat or habitat of endangered or threatened species in accordance with provincial and federal requirements as per the PPS, 2020. Note: It should be recognized that development and site alteration may not be permitted in fish habitat and habitat of endangered species and threatened species except in accordance with provincial and federal requirements per the PPS 2020. These features need to be confirmed to be consistent with the PPS.	
2023	**3. Natural Heritage System Linkages**. If agricultural or other similar lands are proposed to be developed for settlement or other non-agricultural land uses, the system linkages that would have been provided in the working agricultural or other pre-development landscape may be disrupted or eliminated by the post development landscape. In such cases, it is necessary that natural heritage system linkages be studied at an appropriate level of detail and that appropriate system linkages be identified (e.g., through an EIS) and provided as part of the development review process. This process should build from using existing criteria and guidance regarding the potential size and scale necessary to maintain these linkages and their functions post development. Some specific guidance is provided through the document How Much Habitat is Enough? (Environment Canada 2013).	Being considered as part of the update of the Official Plan.
2023	**4. Significant Valleylands.** Significant valleylands have been identified in this study. OP policies should: • address EIS study requirements for development where proposed within or adjacent to vegetation patches that are significant or ecologically important, including those that have met criteria due to their location within or adjacent to significant valleylands,	Being considered as part of the update of the Official Plan.

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	• address EIS study requirements where development is proposed within or adjacent to significant valleylands where the development may negatively impact valleyland functions, including system linkages similar to the considerations addressed in recommendation 3 above, • ensure that existing uses (buildings or farm fields) within valleyland areas outside of significant or ecologically important vegetation patches are able to continue and are not made subject to additional planning processes unnecessarily (e.g., that existing agricultural uses are able to continue), and, • ensure that valleyland policies align and integrate with natural hazard requirements that typically apply in these areas.	
2023	**5. Maintain, Restore and Enhance the Natural Heritage System.** Policies should be included in the Oxford OP to maintain, restore and enhance the existing natural heritage system including as part of land use change and development as well as through other tools. Further, support for natural environment protection and enhancement can be advanced through community-based leadership and initiatives (e.g., corporate and community sustainability programs and strategies, Council appointed committees, education and stewardship initiatives, etc.) and can also help promote awareness around immerging issues and challenges (e.g., invasive species, biodiversity). The Oxford OP should also consider support for public private partnerships involving land securement, stewardship and related projects. Municipal initiatives that focus on land securement strategies and plans for restoration and enhancement of natural areas are also encouraged. Note: The ONHSS does not determine if there are enough natural heritage features, whether they are in the right places or of the right type. Also, this study does not determine whether the existing natural heritage system is sustainable over the long term, or that it will sustain local biodiversity.	Being considered as part of the update of the Official Plan. Further implementation tools and supporting strategies may be considered further to support implementation.
2023	**6. Maintain Water Balance**. Urbanization can cause detrimental changes to the hydrology of natural features such as wetlands, woodlands and watercourses. Depending on the form, design and construction of a development, some natural features may become wetter, while others may become drier as water is either diverted toward or away from the natural feature. Developments that extract or divert groundwater away from natural features can also be problematic and	Being considered as part of the update of the Official Plan.

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	result in serious problems for natural features and can also threaten public and private property through vegetation shifts, altered habitat conditions, flooding, and erosion. Measures to match the quantity and quality of water that reaches a natural feature (such as types of low impact development (LID)) become necessary when it is likely that a proposed development will impact its hydrological functions. A water balance analysis should be required, where development may impact hydrological functions, in order to demonstrate that the hydrology of the feature will be maintained once the development occurs. While this ONHSS has focused on the terrestrial ecology of these vegetation patches, the OP policies should also ensure requirements for water balances and the protection of their various hydrological functions. (References: https://trca.ca/conservation/lands/water-balance/ and https://sustainabletechnologies.ca/app/uploads/2013/04/SWM-Criteria-2012_Appendix-D.pdf).	
2023	7. The OP should also include policies to ensure protection of wetland features, particularly smaller ground water dependent features such as seeps and springs. This should include EIS requirements to identify and characterize and protect these special ground water dependent wetlands that cannot be recreated or compensated elsewhere.	Being considered as part of the update of the Official Plan.
	Other Implementation Measures	
2023	**1. Woodland Conservation By-Law.** The role of the County Woodland Conservation By-Law with respect to protecting the woodlands and other treed features (e.g., connected vegetation features) identified in this study should be reviewed (i.e., as part of the next regular review of that By-Law). Further, the area municipalities should consider enacting, or delegating the authority to enact, Woodland Conservation By-Laws to protect trees and smaller wooded features (i.e., < 1 ha) that are not covered by the County By-Law (similar to what the City of Woodstock has recently completed), to reduce further loss of natural cover in the County. The County should utilize the technical information in the ONHSS to help inform their review of applications for exemption made under the Woodland Conservation By-Law(s).	For further discussion with Public Works and will be brought back with additional information to inform implementation.

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2023	**2. Stewardship and Incentive Programs.** The ONHSS should be considered in the development and ongoing implementation of stewardship and incentive programs, education programs and including the management of publicly owned forests and natural areas in the County	This will be considered further and brought back as additional input to inform implementation
2023	**3. Natural Area Management.** The development of management plans for County Forests and all publicly owned natural areas is encouraged in order to ensure their long term ecological sustainability.	The 2018 Managed Forest Program for County owned forests includes management directions. For further discussion with Public Works and will be brought back with additional information to inform implementation.
2023	**4. Maintenance of Man-made Ponds.** Clean out and maintenance activities for infrastructure such as stormwater management ponds or other man-made water bodies can have negative consequences for wildlife which may take advantage of these spaces due to their proximity and similarity to other natural features. The municipalities in Oxford are encouraged to consider the development of operational protocols for identifying potential ways to minimize wildlife mortality during routine maintenance of municipally owned and operated facilities, and sharing education materials regarding best management practices for facilities that are privately owned. Ideally undertaking cleanouts and other maintenance activities should be done prior to wildlife hibernation or after fledging and should include measures to relocate wildlife found within these areas as part of an operating procedure for cleanouts or similar maintenance activities. It is not being suggested that regular maintenance activities should be subject to further study requirements (e.g. EIS), however, the updated EIS guidelines recommended above should address this issue where it may be part of development. Similarly, the County and Area Municipalities are encouraged to review their respective Certificate of Approval processes to see if there is flexibility in the timing of maintenance works outside of sensitive timing windows.	This will be considered further and brought back as additional input to inform implementation
2023	**5. Update Photography and Modeling.** The county/municipalities should continue to support the Southwestern Ontario Ortho-photography Project (SWOOP), or other similar partnerships, to obtain updated digital aerial	This will be considered further and brought back as additional input to inform implementation

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	photography on a regular basis. The County should update the vegetation layers (including unevaluated wetlands) as new ortho-imagery becomes available, approximately every five years. The NHS model of the ONHSS should be re-run with the updated vegetation layers to assess vegetation change every five years. It is recommended that the ONHSS criteria be re-visited after 10 years (i.e. 2026 since the last methodology review).	
2023	**6. Update Watercourse Layer.** The watercourse layer should be updated to ensure that smaller watercourses are accurately delineated and categorized to distinguish them from other features such as swales and enclosed drains. Note: Notwithstanding the current state of the water course mapping layer shown in this study, all open watercourses are considered to be potential fish habitat, as per Federal guidance, and should be screened for at the site level as part of any development application. All open watercourses are considered part of the aquatic system, however, this study focuses on the terrestrial system.	This will be considered further and brought back as additional input to inform implementation
2023	**7. Review 2006 ONHS Recommendations.** The recommendations contained in the 2006 ONHS (see Appendix K) should be reviewed by the County and Area Municipalities to determine which, if any, may still be relevant or not already addressed and warrant further consideration.	See 2006 ONHSS recommendations below.
2006	1a. It is recommended that the County expand the current Clean Water Project (CWP) to add categories that target terrestrial and aquatic natural heritage protection and enhancement. The main additions to the program will need to be targeted to terrestrial natural heritage protection (e.g., woodlot management, expanded native species plantings). The results of the ONHS can be used by the CWP Committee to adapt the project to get the best environmental value for the dollars available.	Clean Water program was previously expanded to include natural heritage related projects (e.g., wetland creation, etc.). However, the project eligibility criteria have not been reviewed in some time and could be reviewed as part of broader implementation
2006	1b. It is recommended that opportunities for additional government and non-government funding support of the Clean Water Project continue to be pursued.	This will be considered further and brought back as additional input to inform implementation
2006	1c. It is recommended that the County continue to endorse other incentive programs provided by other agencies as a means of protecting and enhancing the natural heritage resources of Oxford County.	This will be considered further and brought back as additional input to inform implementation
2006	1d. It is recommended that the County investigate options for providing tax relief to the owners of designated patches.	Addressed in 2007 through report CS-2007-22 heritage property tax relief

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2006	1e. It is recommended that the County contribution to the Clean Water Project (CWP) be increased from $70,000 per annum to $200,000 to support the expanded eligible categories (see Recommendation 1b).	This will be considered further and brought back as additional input to inform implementation
2006	2a. It is recommended that the County establish a Natural Heritage Advisory Committee that would report to County Council and oversee the ongoing implementation of the ONHS.	The County has an Agricultural and Planning Advisory committee whose scope includes sustainability and other planning considerations.
2006	2b. It is recommended the County hire a permanent staff person to take the lead on natural heritage. planning and implementation activities. This person would support the Natural Heritage Advisory Committee, coordinate other County efforts on natural heritage planning and implementation and assist the local municipalities with their natural heritage activities.	This is one of several considerations contemplated through CP 2023-250 and may inform future budgets.
2006	3a. It is recommended that the County of Oxford develop a communications strategy on natural heritage that builds on, and links to, existing communications programs targeted to landowners.	Being considered as part of the update of the Official Plan.
2006	3b. It is recommended that part of the communications strategy entail presentations to Oxford's local municipalities to raise awareness at this level.	Being considered as part of the update of the Official Plan.
2006	3c. It is recommended that the County work with other agencies involved in communications regarding natural heritage issues.	Being considered as part of the update of the Official Plan.
2006	4a. It is recommended that the County support the development of a recognition program for landowners who own and have conserved significant natural heritage areas.	The Oxford County Stewardship award recognizes restoration and enhancement efforts relating to natural heritage annually
2006	5a. It is recommended that the County of Oxford proceed to designate significant natural heritage areas (i.e. sites that meet one or more ONHS terrestrial criteria).	Being considered as part of the update of the Official Plan.
2006	5b. It is recommended that the County directly advise affected landowners of the designation and provide an explanation of why their land is significant, outline permitted uses, identify incentives that are available and provide information on beneficial management practices that can be undertaken to further enhance natural features. This is part of the communications strategy that is referenced in recommendation 3a and needs to be provided prior to the Official Plan Amendment public meetings.	Being considered as part of the update of the Official Plan.

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2006	5c. It is recommended that the policy for the natural heritage designation in the County Official Plan explicitly permit uses such as sustainable tree harvesting, maple syrup production, recreational trails, hunting, fishing and trapping.	Being considered as part of the update of the Official Plan.
2006	5d. It is recommended that designated properties receive first priority for incentives and tax relief. Cross reference recommendation 1e.	Addressed in 2007 through report CS-2007-22 heritage property tax relief
2006	5e. It is recommended that official plan policy be developed to protect and enhance natural heritage features, such as existing watercourses, as urbanization occurs.	Being considered as part of the update of the Official Plan.
2006	6a. It is recommended that opportunities for public ownership of significant natural heritage continue to be supported by the County of Oxford.	Being considered as part of the update of the Official Plan.
2006	6b. It is recommended that the County develop master plans for the County Forests and that as part of the process, the County determine its role in the protection of natural heritage as a landowner.	The 2018 Managed Forest Program for County owned forests includes management directions.
2006	7a. It is recommended that the local municipalities complete inventories of the remaining natural heritage areas within their urban growth centers.	This will be considered further and brought back as additional input to inform implementation
2006	7b. It is recommended that the local municipalities develop management strategies for the overall identification, ownership and management of significant and non-significant (locally important) natural heritage areas within their urban growth centers.	Being considered as part of the update of the Official Plan.
2006	7c. It is recommended that local municipalities, at a minimum, have generic master plans for the ongoing management of publicly owned natural heritage areas, particularly in urban growth areas and that specific master plans be developed for each site as resources permit.	The 2018 Managed Forest Program for County owned forests includes management directions.
2006	8a. It is recommended that the County review its Woodland Conservation Bylaw within five years.	For further discussion with Public Works and will be brought back with additional information to inform implementation.
2006	9a. It is recommended that the County of Oxford lobby the provincial government to continue to support the Provincial Water Quality Monitoring Network and Provincial Groundwater Monitoring Network programs.	Given recent changes under the C.A. Act and other related legislation this should be discussed further with the C.A.s and brought back as additional input to inform implementation

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2006	9b. It is recommended that the County of Oxford request that the Conservation Authorities identify their specific monitoring services as a budget item and that the County continue to support the monitoring programs of the Conservation Authorities.	Given recent changes under the C.A. Act this should be discussed further with the C.A.s and brought back as additional input to inform implementation
2006	9c. It is recommended that the County of Oxford work with the Conservation Authorities to enhance the existing monitoring programs by adding new sites as appropriate and improving consistency of monitoring techniques between the Conservation Authorities.	Given recent changes under the C.A. Act this should be discussed further with the C.A.s and brought back as additional input to inform implementation
2006	9d. It is recommended that the Conservation Authorities provide a coordinated comprehensive report on monitoring for the County area on a regular basis.	The County receives regular subwatershed report cards from UTRCA
2006	10a. It is recommended that the County explore tourism opportunities related to natural heritage, such as hunting and fishing outfitting, examining models from other parts of North America.	