

Oxford Natural Heritage Study

Implementation Advisory Committee

Final Report

August 2006

Prepared by:

Upper Thames River Conservation Authority

Prepared for:

The ONHS Steering Committee

Table of Contents

Section	Page
1.0 Introduction	1
2.0 Formation of the Implementation Advisory Committee	1
3.0 Process	1
4.0 Implementation Recommendations	2
5.0 Priorities	6
Appendices	10
A: IAC Membership List	11
B: Invitation Letter	12
C: Summary of IAC Meetings	14
D: IAC Member Organizations and their Interest in the ONHS	15
E: IAC Terms of Reference	17
F: Evaluation Criteria for Implementation Measures	19
G: Pros & Cons of Implementation Measures	20
H: Aquatic and Terrestrial Technical Recommendations	21

1.0 Introduction

The Oxford Natural Heritage Study (ONHS) was initiated in the spring of 2005 to identify the significant terrestrial and aquatic natural heritage features in the County and to develop strategies and recommendations for the long term maintenance and enhancement of these features. The Upper Thames River Conservation Authority took the lead on the project and worked as the project consultant. A Steering Committee, made up of representatives from the County of Oxford, Ducks Unlimited Canada, Stewardship Oxford, local Conservation Authorities and the Ontario Federation of Agriculture (see Appendix), oversaw the project.

2.0 Formation of the Implementation Advisory Committee

The Steering Committee recognized the need for input from many perspectives to address the question of how the significant natural areas can be protected for the benefit of the entire region while respecting landowners and the rural and urban economies. The Steering Committee decided to form an Implementation Advisory Committee (IAC) made up of a wide range of groups and agencies to consider the range of options for implementing the findings of the Oxford Natural Heritage Study (ONHS).

The Steering Committee invited representatives from agriculture, environmental stewardship agencies and groups, municipalities, tourism, provincial agencies and the land development industry to sit on an Implementation Advisory Committee (IAC). Twenty-three groups accepted the invitation and agreed to send a representative to sit on the IAC. A list of the members of the IAC is provided in Appendix A and a copy of the invitation letter is in Appendix B.

Jim Hayes, County Councillor and Mayor of South-West Oxford Township accepted an invitation from the Steering Committee to Chair of the IAC. Kim DeKlein from the Ministry of Agriculture, Food and Rural Affairs worked as Facilitator. Staff from the UTRCA and the County of Oxford worked as support and technical staff, assisting the IAC.

3.0 Process

A total of eight IAC meetings were held from September 2005 to July 2006. A summary of the IAC meetings is included in Appendix C.

The organizations participating on IAC were asked to outline their interest in Natural Heritage Planning and this information is summarized in Appendix D. A Terms of Reference for the IAC was approved by the Steering Committee and accepted by the IAC at the first meeting. The Terms of Reference is included in Appendix E. Meeting notes were recorded and approved by the IAC at each meeting.

The first few meetings of the IAC were spent familiarizing the committee with each other, their role and the ONHS's goals and objectives. Speakers were brought in to explain various implementation measures.

Several meetings were spent in small working groups, discussing advantages, disadvantages and applicability of a number of Beneficial Management Practices (BMPs) and Implementation Measures. The list of Evaluation Criteria developed by the IAC is included in Appendix F. The list of Pros and Cons of Implementation Measures is included in Appendix G. The broad background of the members gave much depth to these discussions.

The IAC meetings then moved from reviewing implementation measures in a general way into reviewing the specific results and recommendations of the Aquatic and Terrestrial Technical Teams. A copy of the terrestrial and aquatic technical recommendations is included in Appendix H.

This detailed review of the technical recommendations and discussion of specific recommendations was done with the IAC divided into two groups: a group for terrestrial and a group for aquatic. This process was followed to respond to the feedback of IAC members and progress made. The groups reviewed a matrix table that summarized the various implementation measures and the table was filled in with comments and recommendations.

After three meetings, the tables were complete and a draft final report was produced that summarized the recommendations and discussions. The IAC reviewed the document at the last meeting, made further refinements. The IAC asked support staff to merge the terrestrial and aquatic recommendations in the final report and remove duplication to make the document shorter more readable. The resulting recommendations and discussion notes are presented in the following section.

4.0 Implementation Recommendations

The recommendations that follow are divided into three parts.

- § Part A summarizes the technical recommendations and are referenced in brackets beside the measure that they refer to or are impacted by.
- § Part B summarizes the Beneficial Management Practices that can be used to achieve the technical recommendations. These BMPs are tactics or on-the-ground stewardship projects that have been shown to improve aspects of terrestrial and aquatic health.
- § Part C summarizes the recommended Implementation Measures that can be used to encourage or mandate good stewardship.

Implementation Recommendations

Part A -- Summary of Technical Recommendations

Terrestrial

- T1 Maintain existing natural vegetation patches
- T2 Protect natural vegetation patches that meet 1 or more ONHS criterion
- T3 Increase natural cover

Aquatic

- A1 Protect, enhance and restore stream buffers
- A2 Protect and improve stream habitat
- A3 Control sediment inputs and siltation
- A4 Protect and enhance water quality and quantity

Part B – List of Beneficial Management Practices (BMPs)

- § Create, protect and enhance vegetated riparian buffers (treed, grass, or hay) (T3, A1-4)
- § Plant or seed native trees, shrubs, native grasses and wildflowers (T3, A1)
- § Retire fragile or unproductive land (T3, A1-4)
- § Undertake wildlife enhancement projects (T1, T2, A1, A3)
- § Undertake wetland creation and restoration projects (T1, T2, A2, A4)
- § Maintain & enhance groundwater recharge areas & protect discharge areas (T1-3, A2, A4)
- § Protect wellhead areas (T1, T2, T3, A4)
- § Utilize sustainable drain cleanout procedures (T1, T2, A1-4)
- § Harvest trees in a sustainable manner (T1, T2)
- § Undertake good forest stewardship (T1, T2, A4)
- § Maintain existing woodlots and natural vegetation (T1, T2)
- § Treat milkhouse washwater (A2,A4)
- § Divert clean water away from manure yards (A4)
- § Limit livestock access to watercourses (A1-4)
- § Prepare and implement nutrient management plans (A1,A2,A4)
- § Improve manure storage and handling (A4)
- § Improve fertilizer, chemical or fuel storage and handling (A4)
- § Repair faulty septic systems (A4)
- § Decommission unused wells (A4)
- § Control stream bank erosion (A1-4)
- § Implement soil conservation measures (A1,A3,A4)
- § Assess and mitigate watercourse barriers (A2,A3,A4)
- § Undertake fisheries enhancement projects (A2,A4)
- § Restore natural channel processes (A2,A3)
- § Treat and manage urban stormwater (A3,A4)
- § Prepare and implement sediment and erosion control plans for urban development (A1-4)
- § Treat urban sewage (A4)

Summary of comments/considerations

- Generally, BMP's are voluntary actions, however, when land use changes from rural to urban, BMP's may be mandatory.
- Some debate about pros and cons of limiting livestock access to watercourses as row crops may replace pasture if farmers forced to fence.
- Debate about the recommended width of vegetated buffers. The scientific literature recommends 30-50 metres but landowners may view this as futile. Message to landowners should be that they are encouraged, but not required, to establish a 3 metre buffer along their watercourses to protect water quality and aquatic habitat.

Part C – Recommended Implementation Measures

Incentive Measures

Cash Incentives

- Adjust the County's Clean Water Program to include more money for projects such as land retirement, tree planting, woodlot management and buffer strip planting. Build in flexibility to allow for various methods of planting/seeding and various forbs/grasses including hay/pasture. (T1-3)
- Provide a higher incentive to achieve certain priority recommendations or to achieve targets. For example, provide a higher incentive for the first 3 metres of a buffer and less for the next 3 m and so on. Also, there could be a higher incentive for tree planting next to significant patches (sites that meet 1 or more ONHS criteria) (T2, A1, A2)
- Allow for combining of grant/incentive programs (A1-4, T3)
- Prohibit incentives for development-related BMPs.
- Factor in the value of the in-kind or technical assistance as part of the incentive (A1-4)
- Factor in the value of the land taken out of production as part of the incentive package.
- Reduce incentives to landowners who benefit from a project. For example, if a farmer gets a grant to create natural grasslands that could be used for grazing, some of the ongoing incentive (tax relief) for the owner should be reduced.
- Use existing county funds to leverage additional funds from outside sectors and foundations.

Subsidized Technical Assistance (e.g. services of a professional forester, ecologist, engineer)

- Provide technical assistance to landowners regarding the various approaches of creating new natural areas (e.g. self seeding, direct seeding, tree planting, weed control, etc.) (T3)
- Provide owners of significant patches (sites that meet 1 or more ONHS criteria) subsidized or free services for projects such as tree marking by a non-biased forester. (T1)
- Encourage outside groups and non-governmental organizations to provide their technical assistance programs to Oxford landowners (e.g. Ducks Unlimited Canada's Wood Duck Box Program) (T1, T2)
- Petition MNR to resume their woodlot marking services for landowners (T1, T2)

Recognition Programs

- Recognize developers who protect natural areas or re-plant areas (T1, T2, T3)
- Establish and promote demonstration sites (T1-3, A1-4)
- Recognize and promote success stories to educate others (T1-3, A1-4)

Tax Exemptions, Incentives, Rebates, Reductions

- Council should advocate for revisions to the Conservation Land Tax Incentive Program so that: (a) more lands are eligible, specifically, those that meet one or more ONHS criteria and (b) there is better cost sharing within the province so small municipalities with a lot of natural cover are not bearing a disproportionate cost.

Summary of comments/considerations

- Strong support for incentive measures as a means of encouraging a shift in practices. Incentives make sense since society as a whole benefits from the preservation of the environment, so the cost of tax exemption should be funded by society as a whole, not just the landowner.
- Some concern that good projects can be undone by future landowners.

- The County's Clean Water Program is a shining example of a great incentive program.
- Incentives and recognition programs need to consider both rural and urban landowners.
- Further analysis is needed to map out high priority or target areas for rehabilitation.
- Tax exemptions for significant patches are a first priority and a fundamental step to get landowner buy-in.
- Recognition programs for areas of Provincial significance - could have a similar tax incentive program to recognize locally significant wetlands, buffers etc. – can go hand in hand
- There are few incentives for the ongoing maintenance of natural areas that already exist (i.e. could work well with fragile land retirement component of current Clean Water Program).
- Ecogifts Program may be more appealing to landowners now given the recent change in Federal Budget making land donations Capital Gains exempt.

Regulatory Measures

Planning Act (Provincial Policy Statement, Comprehensive Municipal Official Plans and Zoning By-laws, requirements related to Planning Act amendments)

- Designate Significant Natural Areas (patches that meet one or more ONHS criteria) in the Official Plan along with a range of incentives and possibly in partnership with various partners. (T2)
- Designate Significant Natural Areas and other natural areas in the OP at the pre-annexation phase to prevent OMB challenges and price inflations (T1, T2)
- All non-significant patches (e.g. sites that do not meet one ONHS criteria) that are annexed into an urban growth area should be assessed as part of a secondary plan process. (T1)
- Establish policies to mandate the creation or protection of vegetated buffer strips along watercourses when there is a land use change from rural (agriculture) to urban (residential, commercial or industrial). (T1, T2)
- Calculate residential density on land area excluding natural features (watercourses, woodlands, etc.) so the developer is not penalized for the presence of the natural features. (T1, T2)
- Use density bonusing to augment existing woodland or riparian lands or for creating new natural cover (T1, T2, T3)
- When land use changes, require certain Beneficial Management Practices to be implemented as part of land use planning and development (A1-4, T3)
- Lobby the Province to allow for the inclusion of natural heritage protection in development charges (A1, A2, A4, T1-3)
- Allow severances for woodlot/natural area protection purposes so that someone can purchase only the woodlot portion of a property but not the buildings or farm fields. (T1, 2). (i.e. Conservation Authorities can create and acquire land-locked parcels for preservation purposes without going through the severance process.)

Trees Act – Woodland Protection By-Law, Forest Management

- § Review the Woodland Protection By-Law in a few years to incorporate the newest forestry science and review the exemptions in Section 3. (T1, T2)
- § Require an Environmental Impact Study if clear-cutting is proposed. (T1, T2)
- § If clear-cutting is permitted, mandate a replacement at 2:1 where twice as much area is planted to trees/vegetation as is cleared. Ensure the planting site has suitable soil for tree growth. (T3)
- § Apply the by-law equitably to all sites whether rural or urban, private or public. (T1, T2)
- § Ensure there is public input for municipal works that may impact natural areas. (T1, T2)

Conservation Authorities Act

- Require applicants to address habitat and sediment issues when applying for a Permit. (A2, A3)

Municipal Act, Topsoil Preservation By-Law

- Under the Topsoil Preservation By-law, do not permit removal of peat from wetlands (T1, T2)
- Require monitoring and assessment of the effects of peat extraction on groundwater subject to legislative authority (A4)
- Address problems associated with topsoil removal and compaction in urban developments that limit the ability of trees to grow.

Drainage Act

- Update protocols for cleanouts to proactively address woodlot/habitat issues so that vegetation removal is minimized. (T1, T2)
- Municipality should do its own study to develop science-based protocols for evaluating specific requests (T1, T2)
- Require vegetated buffers in drainage reports for new drains and updates (A1)
- Consider in-stream habitat improvements in drainage reports for new drains and updates (A2)

Fisheries Act

- Utilize a peer review committee approach before pursuing charges. (A1-4)

Ontario Water Resources Act (Permit to Take Water)

- Continue with the Irrigation Advisory Committee review process (A4)

Other Applicable Acts

- Species at Risk Act (T1, T2, A1-4)
- Environmental Protection Act (e.g. spills, A3, A4)
- Nutrient Management Act (A1, A4)
- Clean Water Act (Draft) (A2, A4)
- Environmental Assessment Act (A1-4)
- Aggregates Act (A3, A4)

Summary of comments/considerations

- The IAC decided not to recommend the designation of buffers as it may be counter productive and act as a disincentive. (A1)
- Trees Act could be used to protect treed buffers, however, concern that may be counter productive and act as a disincentive to planting trees along watercourses. Landowners should be educated about the reasons to maintain buffers in terms of shading/cooling the water and groundwater recharge. (A1, A2, A4) Trees Act does not apply to non-treed buffers.
- Conservation Authority Act has the ability to protect hydrologic function of wetlands and this is seen as a positive for water quantity and water quality (A4)
- Fisheries Act: Not a lot of local say over the implementation as senior level of government sets the policy. (A1-4).
- Feeling that dilution option is acceptable for municipalities but not to livestock access (A4)
- Regulation has a place in protecting the environment, but it is not popular as people feel over-regulated. Need to find strategies to make it more palatable and fair.

- Regulatory requirements for change in land use (urban development) are needed and justified. Most of the forest cover is lost when land goes to urban development so regulation is most effective here. (Some compensation from designation in the near urban fringe may be needed.)
- Generally, if a property is designated “environmental protection”, there should be tax exemptions or incentives that go along with it.
- Very important to inform landowners of any designation of their property.
- There is a need for “one window” access for permits
- When there’s a permit for selective cutting or other permits required, a process should be triggered whereby the landowner is given information on stewardship services available.
- The Woodland Protection By-law is effective if applied strictly
- The Drainage Act is a good piece of legislation if used properly.
- Urban means all settlement areas, not just large cities.

Education and Outreach (T1-3 & A1-4)

Workshops

- Host yearly workshops related to natural heritage protection or natural stewardship to allow interest to grow. Or, tie in with other workshops such as the Woodstock Integrated Pest Management Workshops.

Education

- Educate and update the skills of Drainage Superintendents regarding mitigation techniques to minimize impacts of drainage on wetlands.
- Educate Oxford County residents about rare species, what they are, how they are designated, etc.

Trade Shows

- Promote natural stewardship to rural and other residents at for example the Outdoor Farm Show, Outdoor Expo, and Fall Fairs
- Promote natural stewardship to recreational users at for example the Great Canadian Outdoor Expo (e.g. impacts of ATV’s on natural areas and private land)

Media

- Publish articles on stewardship in farm magazines and newspapers

Official Plan - Open House Process

- Notify public of any designations.
- Invite IAC members to attend Open Houses

Notification of landowners with designated patches

- Inform landowners by letter with explanation and any incentives (T2)

Natural Heritage Advisory Committee for Oxford

- Form a county advisory committee that could meet twice a year to help set targets, time lines, measureables, prioritize projects, monitor uptake and outcomes and report to council on progress

Summary of Comments/ Considerations

- A variety of forms of education and outreach are needed, some of which are already happening. Education and outreach involves many agencies and organizations.

- Farm audience has been targeted well but other audiences have not been (e.g. rural non-farm, urban, golf course operators, real estate, aggregates, municipal staff, planners and the population in general).
- Ongoing monitoring and reporting is a type of education. A report card type format could provide some ongoing education for the public. Conservation Authorities could report back to the County with a County boundary report card – perhaps tie to the OP timeline. This project (ONHS) provides the baseline for these future report cards to measure back to.
- There should be a link on the Oxford County website to the ONHS. The ONHS webpage (hosted on the UTRCA website) should include links to other sites that provide information on natural heritage and eco-friendly projects (i.e. pasture management, re-mineralizing the earth). Set up links to the Lower Tier Municipalities as well.
- Need to distinguish between “natural heritage” and “heritage”.
- Need to be careful with the confusion between short forms as IAC is both Implementation Advisory Committee and Irrigation Advisory Committee.

Securement and Protection Measures (e.g. Acquisition)

Public Ownership

- Secure some of the best natural sites (jewels). This could occur through a partnership between the county and other groups interested in natural heritage protection. (T2)

Conservation Easements

- Encourage easements for setbacks to leave agriculture or open space as the buffer between new developments and natural areas, especially natural areas that meet one or more criteria. (T2)

Summary of comments / considerations

- Acquisitions need to consider the purchase price and the cost of ongoing maintenance.
- There is a need for more publicly accessible natural areas. Public access may be a main reason for public ownership.
- Landowners should be made aware that the EcoGifts Program has been changed so that land donations are now Capital Gains exempt.

Umbrella Issues

- Need further analysis to determine target areas that are the highest priority to rehabilitate.
 - County should consider ways to top-up the funds earmarked for acquisition or natural heritage projects (e.g. revenue from logging county forests).
 - Companies need more tax breaks to make it easier for them to contribute to heritage programs.
 - The ONHS recommendations should be integrated with the Oxford County Groundwater Study to assist with assessing projects such as Aggregates Resources Act proposals. This integration could happen through the implementation of Source Water Protection and the Clean Water Act.
 - Comment about confusion between Clean Water Project (grants) and Clean Water Act (sourcewater protection legislation)
-

5.0 Priorities

At the last IAC meeting, the group identified a number of priorities from the long list of recommendations listed in the section above. These items were listed on a flip chart. Members were asked to identify their preferred options using red stick-on dots. Each person was given 3 dots and asked to place them next to their top items on the flip charts.

The results of the quick prioritization exercise are as follows: .

- #1 **Incentives** (cash and subsidized technical services). It was stressed that incentives could be provided by many partners and delivered through enhanced Clean Water Program.
- #2 **Education and Communications.** It was suggested that particular emphasis be placed on non farm rural landowners
- #3 (tie) **Communication with and Recognition** of landowners with significant patches: create an education strategy
- #3 (tie) **Compensation.** e.g. for land planted to a 3 m buffer, land within 2 year travel time of a well, extraction of topsoil
- #4 **Natural Heritage Advisory Committee** to monitor success
- #5 (tie) **Regulatory Controls (e.g. Planning Act)**
- #5 (tie) **Identify most valuable patches** and provide incentives for those landowners and target public ownership of the best of the best

The point was stressed that grants and services are **voluntary** when there is no change of landuse.

APPENDICES

Appendix A

Implementation Advisory Committee Membership List

<u>Member</u>	<u>Organization Represented</u>
Nancy Walther	Oxford County Federation of Agriculture
Barry Smith	Perth-Oxford National Farmers Union
Bill Matheson	Oxford Soil and Crop Improvement Association
Dwayne Evans	Ontario Ministry of Agriculture Food and Rural Affairs
Howard Cornwell	Oxford County Agricultural Advisory Committee
Arthur Murray	Ingersoll Nature Club
Roger Boyd	Woodstock Field Naturalists
Larry Jensen	Harrington Creek Eco Group
Chris Powell	Woodstock Environment Advisory Committee
Ed Ecker	Oxford Woodlot Owners Association
Michelle Kanter	Carolinian Canada
Kevin Dolan, Bill Gibbons	Oxford County Bass Masters
Darrell Randell	Ducks Unlimited Canada
Michael Harding	County Councillor
Jim Hayes	Councillor, Southwest Oxford
Tom Bird	Stewardship Oxford
Jim Oliver	Long Point Region Conservation Authority
Tracey Ryan	Grand River Conservation Authority
Len Reeves	Development Industry
Cliff Zaluski	Construction Industry
Cathy Bingham	Tourism Oxford
Russ Piper	Ontario Federation of Anglers and Hunters
Brad Hertner	Upper Thames River Conservation Authority
<u>Facilitator</u>	
Kim DeKlein	Ontario Ministry of Agriculture and Food
<u>Support Staff</u>	
Cathy Quinlan	Upper Thames River Conservation Authority
Jeff Brick	Upper Thames River Conservation Authority
Marg Evans	County of Oxford
Tammy Fehr	County of Oxford
Dave Depuydt	Ministry of Natural Resources

**Appendix B:
Invitation Letter**



Michael Harding, Councillor

P. O. Box 397, 415 Hunter Street

Woodstock Ontario N4S 7Y3

Phone: 519-539-2382 x 811 • Fax: 519-539-3275

Email: mayor@city.woodstock.on.ca

Web site: www.county.oxford.on.ca

May 18, 2005

Dear :

As you may be aware, the County of Oxford is undertaking a natural heritage study with the assistance of the Conservation Authorities, primarily the Upper Thames River Conservation Authority. This study will look at the health of Oxford County's woodlands, wetlands, streams and rivers and develop strategies for their long-term protection and rehabilitation. Enclosed, you will find a fact sheet that describes the study and the main reasons such a study is needed. Additional information about the study can be found on the internet at

<http://www.thamesriver.on.ca/ONHS/ONHS.htm>.

The Oxford Natural Heritage Study (ONHS) got underway in March, 2005, lead by a Steering Committee of which I am Chair. Steering Committee members include representatives from agriculture, environmental stewardship agencies and the Conservation Authorities. In addition to the Steering Committee, the study will be guided by a Technical Committee and an Implementation Advisory Committee, both of whom will report to the Steering Committee. The Technical Committee is composed of the "science people" who will conduct the fieldwork and assess the County's natural heritage resources. We are currently looking for people to might be interested in taking a position on the Implementation Advisory Committee. During our discussions, the Steering Committee had identified you as an ideal candidate for this Committee. Let me explain why.

The Implementation Advisory Committee (IAC) is tasked with considering a range of options for *implementing* the study. Typically people relate implementation of such a study to a regulatory approach, and while we don't deny that this is one implementation tool, there are also many others. We are looking to the IAC to identify a range of options, including education, stewardship, incentives, acquisition and taxation exemptions that can be used to enhance and protect our natural resources. We are optimistic that the IAC will recommend a '*made in Oxford*' approach to implementation that will consider the concerns of affected private landowners. This is the fascinating part of the study – designing the implementation of science with a selection of appropriate tools.

We are approaching a number of organizations to invite onto the IAC – agriculture, our biggest land owner group; environmental stewardship agencies, our potential implementation partners; municipal

Councillors and provincial staff, our potential funding partners and regulatory agencies; and the development industry, representing our urban interests. We would be very pleased to have your expertise on the IAC.

The IAC will commence in the fall of 2005 and work over the winter to make recommendations for the final study report to be completed in the spring of 2006. We anticipate monthly meetings over that period, with some homework in between. The IAC will be supported by Conservation Authority and County staff and will have its own facilitator. We anticipate bringing in guest speakers and external expertise, as required, in order for the IAC to prepare informed recommendations. The pay is lousy – however, this is volunteerism at its best!

I sincerely hope that I have piqued your interest in serving on the IAC. We would be most appreciative of your time and expertise on this exciting project and, very much, look forward to working with you. Should you have questions about the study you can contact me or any of our partners noted below. The Upper Thames C.A. is assisting us in our search. Please respond to Cathy Quinlan, Project Manager, UTRCA, 519-451-2800 extension 234, quinlanc@thamesriver.on.ca regarding this invitation by the end of May, earlier if possible. If you are unable to commit the time, but can identify another person from your agency that is willing, please let us know who that is.

Sincerely,



Michael Harding
Oxford County Council
Chair, Oxford Natural Heritage Study
Tel: (519) 539-2382 x 11
Fax: (519) 539-3275
mayor@city.woodstock.on.ca

Contacts:

Tom Bird
Stewardship Oxford
456 Wilkins Street
London, ON N6C 5B2
Tel: (519) 681-7959
E-mail: birdland@sympatico.ca

Jeff Brick
Upper Thames River Conservation Authority
1424 Clarke Road
London, ON N5V 5B9
Tel: (519) 451-2800 ext. 228
E-mail: brickj@thamesriver.on.ca

Jim Magee
OCFA
R.R. # 2
Drumbo, ON N0J 1G0
Tel: (519) 463-5433
E-mail: mageefarms@look.ca

Dave McLachlin
Ducks Unlimited Canada
566 Welham Road
Barrie, ON L4N 8Z7
Tel: (705) 721-4444 ext. 231
E-mail: d_mclachlin@ducks.ca

/Encl.

Appendix C

Summary of IAC Meetings

No.	Meeting Date	Topics Covered
1	Sep 28, 2005	<ul style="list-style-type: none"> - Introduction of members - Review of IAC's Role and Terms of Reference - Presentation on ONHS goals and objectives (Jeff Brick and Marg Evans)
2	Nov 2, 2005	<ul style="list-style-type: none"> - Each member summarized their group's interest in the work of the ONHS - Brief review of Worksheet outlining various Best Management Practices (BMPs) and possible Implementation Measures (IM) - Presentations on various implementation measures: <ul style="list-style-type: none"> a) Provincial Policy Statement - Scott Oliver (MMAH) & Fiona Walker (MNR) b) Oxford's Official Plan Policy Framework – Marg Misk-Evans (County) c) Clean Water Program - Craig Merkley (UTRCA)
3	Dec 14, 2005	<ul style="list-style-type: none"> - IAC worked in three small groups and discussed advantages, disadvantages and applicability of each Best Management Practice and Implementation Measure (stewardship, regulation, education, acquisition, taxation)
4	Jan 31, 2006	<ul style="list-style-type: none"> - IAC worked in small groups to: add to notes from the previous meeting, identify areas where more information is needed and, develop a list of evaluation criteria to guide IAC in making recommendations - Aquatic findings were presented by John Schwindt (UTRCA) who focussed on the fish species found, habitat types and condition present, and draft maps.
5	Apr 11, 2006	<ul style="list-style-type: none"> - Presentations by Technical Teams: <ul style="list-style-type: none"> - Aquatic Findings and Recommendations - Cathy Reeves - Terrestrial findings and recommendations- Tara Tchir - IAC broke into an aquatic group and a terrestrial group and discussed how the technical recommendations could be implemented by going through the worksheet listing all the implementation measures;
6	Apr 25, 2006	<ul style="list-style-type: none"> - IAC broke into the aquatic and terrestrial groups to continue discussing implementation options by going through the revised worksheet
7	May 30, 2006	<ul style="list-style-type: none"> - IAC broke into the aquatic and terrestrial groups and finished up discussions on implementation options by reviewing the summary sheets - IAC reconvened as a whole. Jeff Brick summarized the aquatic implementation recommendations and Cathy Quinlan summarized the terrestrial. Discussion followed.
8	July 17, 2006	<ul style="list-style-type: none"> - IAC reviewed the draft IAC Report as a whole - IAC prioritized the recommendations to go to the ONHS Steering Committee - IAC was thanked for their valuable contributions

All meetings were held at the Woodstock OMAF Office except the Jan 31st meeting which was held at the Mount Elgin Community Centre.

Appendix D

IAC Member Organizations and their Interest in Natural Heritage Planning

Tourism Oxford: Part of the appeal of visiting Oxford County is the pastoral nature of our community. The combination of gently rolling countryside, streams, lakes and hiking trails provide a positive experience to those seeking outdoor experiences (e.g. flora and fauna interpretive signage, bird watching, fishing, camping, hiking, biking, cross country skiing).

Oxford County Bassmasters is committed to enhancing the natural heritage in Oxford County with a special emphasis on the fisheries, for future generations. Goal: “To be part of improving the quality of our watershed on an on-going basis. Issues: carp population, total fish populations and history, apparent lack of visibility of Conservation Officers, scheduling of raising and lowering the levels of lakes, cormorant population, and feasibility of moving pike from the river up to Pittock Lake.

The **Long Point Region Conservation Authority (LPRCA)** has among its objectives the protection and management of lands and waters across the watershed, including woodlands, wetlands, watercourses and natural habitats. Approximately 23% of Oxford County lies within the LPRCA watershed, and comprises about 16% of that regional watershed. The Authority strongly supports the protection, enhancement and expansion of natural areas within the LPRCA portion of the County in order to enhance water conservation and source protection, biodiversity and opportunities for outdoor recreation and Nature appreciation.”

Ducks Unlimited Canada conserves, restores, and manages, wetlands and associated habitats for North America’s waterfowl. These habitats also benefit other wildlife and people. This effort in Oxford County expects to see greater public appreciation of natural areas and opportunities to aid sustainable agriculture.

Carolinian Canada Coalition has coordinated a common vision of natural heritage protection among member groups in southwestern Ontario for over 20 years. The Carolinian zone is biologically the richest in the country, requiring careful attention to balance nature with a multi-use landscape and maintain a healthy environment for wildlife and people. The Coalition’s Big Picture vision of a sustainable natural heritage network calls for cooperation among a wide range of stakeholders. The Oxford Natural Heritage Study is an excellent demonstration of Big Picture conservation and an opportunity to develop a local conservation plan that will link and contribute to the overall ecological health of Canada.

As the representative for the **Oxford Agricultural Advisory Committee** I feel that our organization should be aware of any features that might impact livestock farms in Oxford. Livestock density and Nutrient Management have a potential for significant impact on natural heritage features.

Grand River Conservation Authority: Our vision is one of leadership in ensuring a healthy and sustaining relationship between the natural environment of the Grand River watershed and the demands on this environment by all forms of life. Our mission is to work with partners to conserve the natural processes and resources that support a safe and healthy environment for future generations in the Grand River watershed. A healthy river is our greatest legacy to our children and the key to our continued economic growth and future prosperity. To protect our natural areas, we:

- Own & manage about 19,000 hectares (47,000 acres) of fragile lands.
- Work with partners to ensure long-term protection of natural areas.
- Deliver conservation stewardship services.
- Carry out restoration & rehabilitation projects.
- Regulate development in natural areas
- Operate a tree nursery & plant trees (27 million to date).

The **Woodstock Field Naturalists Club** began in 1934. It continues today to acquire knowledge of Oxford County's natural history. The Club's objectives include protecting and preserving wildlife and unique natural areas.

Ingersoll District Nature Club: The natural resources of Oxford County are varied and include prime agricultural lands, wetlands and wooded areas and as the population grows in Oxford county and an ever expanding residential and manufacturing base to support it, the Ingersoll District Nature Club is interested to learn how our group may promote, educate and enhance the natural resources of Oxford County.

The **Oxford County Soil and Crop** plans to assist by contributing a member to your meetings. Our organization's interest is ensuring sustainable natural heritage features by promoting the following:

- nutrient management programs
- pesticide, fungicide, insecticide use – always follow label or less
- promote soil erosion prevention programs
- ensure natural wetlands remain in our midst.

National Farmers Union/Barry Smith: Having never been to an NFU meeting I cannot quote their stance. I was involved with the OCFA when this was brought forth. Therefore my views "The compulsory addition of the results to the Official Plan must have consideration for the landowner". If society wishes to have certain areas designated, then consideration must be given to that landowner either through purchase of that land and/or tax elimination and annual compensation. As a landowner with woodlots and one open municipal drain (Big Creek) and another stream (Otter Creek) I personally understand the ramifications

The **Oxford Woodlot Association** membership is supportive of the intent (protection and enhancement of the significant terrestrial and aquatic features within Oxford County). Most members own and are actively involved with a woodlot in the County. The membership, however, is concerned about the impact on their property: more taxes, more rules/bureaucracy, more paperwork, loss of value, and more expense.

Oxford Community Partnership Specialist / UTRCA: The organizations I represent on this committee are community-based environmental groups. These are groups of Oxford County residents concerned about the natural heritage of their community, and who work with local partners to plan and implement enhancement projects directed at improving the County's forest cover, aquatic habitat, surface & groundwater quality while involving and educating the community. The information from the ONHS can help guide the restoration work we do.

The **Harrington Creek Eco Group** is interested in the Wildwood wetlands and their headwaters

Ontario Federation of Anglers + Hunters – their group worked on the Sally Creek Report (near Woodstock) and stream rehabilitation

Construction Industry – the construction industry has an interest in knowing where important features are

Ontario Ministry of Agriculture and Food – bring an agricultural perspective to natural heritage planning; it can impact farming and be impacted by it

Stewardship Oxford – would like to see county set funds aside for BMPs to better the local environment

Oxford County Federation of Agriculture – recognize the importance of the ONHS and would like to see private property rights preserved

Development Industry – land developers appreciate natural heritage and want to work with the agencies/groups instead of against them

Appendix E:

Oxford Natural Heritage Study Implementation Advisory Committee Terms of Reference

- Purpose** The Implementation Advisory Committee (IAC) will consider the range of options for implementing the findings of the Oxford Natural Heritage Study. The IAC will be encouraged to research options and make recommendations to the Steering Committee regarding the future implementation of the project findings.
- Implementation Options.* Actual on-the-ground actions or policy instruments that can be used to protect and enhance the significant terrestrial and aquatic natural heritage features within Oxford County. Options may include stewardship, grants, land use planning controls, tax incentives, education and acquisition.
- Membership** Members are volunteers and include representatives from a broad cross-section of stakeholder groups from the County of Oxford and area. The following sectors will be invited: agriculture, environment, recreation, agencies, municipal government, industry and development. Members will use their expertise and perspectives of their groups and associations to assist with the work of the IAC.
- Process**
- Phase I - Understanding**
- § Members are informed about the ONHS, its purpose, methodology, work to date, etc.
 - § Members are informed about the results/findings/trends of the ONHS to date including significant terrestrial and aquatic sites/resources, etc.
 - § Members are informed about the range of possible implementation options that could be examined. This may include workshops or presentations involving individuals and organizations with experience with different types of implementation.
- Phase II - Assessing Options**
- § With the assistance of a facilitator, members will:
 - evaluate the pros and cons of each implementation option in the Oxford County context,
 - consider any new or added options, and
 - evaluate opportunities and barriers to the use of each option.
 - § Sub-groups may be formed to explore different options to speed the work along. Further research may be assisted by bringing other technical experts to the meetings.
- Phase III - Compiling Findings and Recommendations**
- § Activities of the IAC will be summarized in a background report to the Steering Committee that will include recommendations.
- Member Role** Members of the IAC represent their affiliated group/agency and the views therein. Members are expected to communicate back with their groups for feedback. Members shall work cooperatively with each other, respecting the varying views that may emerge. Decisions will be made on a consensus basis.

Participation Imperative

Members are expected to attend meetings and carry out any >homework= assigned (e.g. research). Attendance at meetings is imperative. Members are encouraged to send a substitute or delegate from their organization if they are unable to attend a meeting

Chair

The Chair of the IAC will be a member of the Steering Committee or the Steering Committee will select a chair from the available candidates.

Recording Secretary

Staff of the UTRCA will serve as Recording Secretary. UTRCA will compile the background report for acceptance of the IAC.

Communications

All media contact will be coordinated through the chair of the committee. IAC members are asked to not speak to the media about the process without the prior approval of the chair.

Deliverables

IAC will prepare a background report to the Steering Committee that includes recommendations regarding implementation measures for the ONHS.

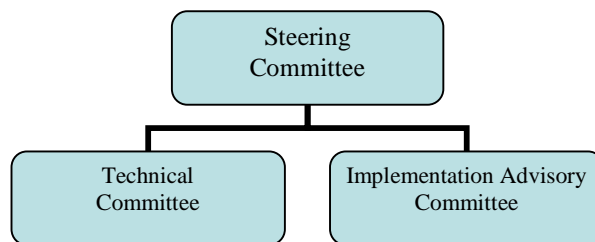
Timeline

IAC meetings will begin in September 2005. It is anticipated that meetings will be held approximately monthly until the work is complete. It is anticipated that the IAC work should be completed by the spring of 2006.

Meeting Dates

Members will select the best time/place for meetings upon mutual consent. Every effort will be made to choose meeting times that accommodate the largest number of people. Meetings will take place on weekdays and usually during the day, though some evening meetings may be arranged if agreed upon.

ONHS Governance Model



Appendix F:
Evaluation Criteria

Effective	Does it actually help meet targets for preservation? Is it effective at saving environmental jewels and preserving environmental health?
Cost Effective	Is it the best bang for the buck?
Fair	Is it fair to landowners? There should not be a penalty to landowners involved in protecting natural benefits.
Revenue Neutral	Revenue neutral or revenue positive
Justifiable	Can it be justified to society in terms of best return on investment?
Visible	Can society see their money at work?
Saleable	Will the public support it?
Flexible	Can the program be changed to adapt to new science and new information?
Balance	Is there a balance of regulatory and incentive-type measures?
Goal Oriented	Does it lead to a goal, generations down the line?
Long Term	Will the program be offered continuously?
Targeted	Is the program able to prioritize or target high priority areas?
Stream-lined	Is there a one-window approach or a minimum amount of red tape?
Tool-specific	Are there different tools for different risks or objectives?
Spin offs	Are there potential negative spinoffs (e.g. forcing landowners to abandon one bad practice for a worse one)?
Cost sharing	Can landowner labour be a contribution as well as cash?

Appendix G

Pros and Cons of Implementation Measures

Incentives and Stewardship Measures

Advantages

- benefits do-gooder
- educates through example and peer pressure
- promotes community buy-in
- gets things done sooner rather than later if financial incentives available now
- allows for landowner buy-in, especially those who couldn't afford to do so on their own
- for general public, shows taxes are working to conserve environmental health, legacy aspect should be promoted to the public; healthier environment benefits human health

Disadvantages

- targets mostly agricultural and rural population
- can be a lot of red tape
- no consistency over the years; programs come and go
- no compliance back-up
- possibly increase in taxes, i.e. requires a government commitment
- potential is there to enforce landowners to have some set % of land in trees or natural cover (in return for or instead of)
- still have affordability problem where landowners can not afford his/her share

Regulatory Measures

Advantages

- Fair as it applies to all residents; democratic/British Common Law
- cheap
- forces compliance
- public process/review process available

Disadvantages

- inconsistencies between regulations (e.g. one regulation can trump another)
- policing is expensive and often not enough enforcement officers
- uncertainty about how regulation would be applied, i.e. definition of a wetland

Education and Outreach Measures:

- various options suggested: tradeshow, websites, County Arboretum as an education centre/showcase

Acquisition + Easement Measures:

Advantages

- forever; long term control over the land usage
- has teeth
- provides parkland and nature reserve for public too
- the community can be drawn together to support a cause to buy important land
- revenue possibilities for owner such as recreation uses or tree harvesting
- leasing may become an option; may keep costs down
- easements are cheap compared to acquisition
- easements have tax benefits to landowner

Disadvantages

- wills can be broken
- expensive to buy land; budget dependent
- ongoing maintenance and liability issues
- enforcement of an easement is difficult
- limits land usage
- if leasing were an option, there could be time frame issues; land title changing hands continuously, limited control of usage
- possibly limits area types that are of interest; average landscapes may be overlooked due to lack of "curb side appeal"

Taxation Incentive Measures

Advantages

- makes it more affordable for landowners
- can encourage positive development (e.g. hunting lodges)
- relatively simple
- immediate gratification, i.e. on retired lands
- available to everyone

Disadvantages

- not attractive enough for all landowners
- poorly promoted
- some don't like dealing with the government
- may have a negative effect on property value
- Municipal revenue/tax base may be affected
- lot of paperwork as must apply annually and there's a cost for documentation
- legally bonding

Appendix H Technical Recommendations

Terrestrial

- 1. All natural patches left in the county should be maintained.**
 - Each patch supports wild plants and animals to some extent and adds to the diversity of the county.
 - It is extremely costly to replant natural areas so it is best to preserve existing habitats.
 - It takes generations for forests to develop.
- 2. Any natural patch meeting at least 1 criterion is serving an ecological landscape function and needs to be protected.**
 - Each criterion reflects some aspect of habitat value and complexity. It is impossible to choose the 'best' criterion since they all measure something different.
 - With only 13.5% natural cover in the county, the best of the best need to be given the most protection to ensure the long-term survival of these ecosystems.
 - Sustainable activities such as maple syrup production, foot trails, hunting and selective tree harvesting can continue.
- 3. Natural cover should be increased to 20% (and an additional 10% into wetland / riparian cover) over the long-term**
 - The scientific literature suggests regions with low natural cover may not have sustainable ecosystems. Plant and animal species may become locally or regionally extinct unless there is a minimum amount of natural cover.
 - Wildlife need to move between habitats. One habitat is not sufficient.
 - Water quality, air quality, groundwater quality, etc. cannot be maintained in regions devoid of natural vegetation. Climate change is also linked with a loss of forest cover.
 - Any new habitat is good. However, it may be best to target restoration projects around existing woodlots and wetlands to bulk them up and increase forest interior.
 - Increasing natural cover will take generations, but it must start now.

Aquatic

- 1. Protect, enhance and restore stream buffers**
 - A buffer can consist of any permanent vegetation. Minimum width suggested as 30 metres on both sides of the watercourse (research indicates that this may be 50 m).
 - *Benefits:* shade and cool water, filter pollutants, nutrient source, improves flood connectivity, wildlife travel corridor)
 - *Examples:* plant native vegetation, land retirement, altering landuse practices
- 2. Protect and improve stream habitat**
 - Natural habitats usually consist of riffle/pool sequences and have diverse substrates (cobble, rocks, sand, gravel, clay). Streams have natural meander patterns which migrate over time.
 - *Benefits:* diverse and productive self-maintaining aquatic communities
 - *Examples:* vortex weirs, rocky riffles, bioengineering.
- 3. Control sediment inputs and siltation**
 - Urban and rural sources of nutrients, contaminants and sediment.
 - *Benefits:* improved water quality and stream habitat
 - *Examples:* conservation tillage, grassed waterways, sediment and erosion control, and storm water management
- 4. Protect and enhance water quality and quantity**
 - Reduce pollution sources, protect natural flows, increase water storage capacity and sustain baseflow
 - *Examples:* stormwater management, nutrient and waste management, wetland restoration, barrier mitigation and removal
- 5. Continue to monitor**
 - Benthic, water quality, fish community, habitat, temperature and flow
- 6. Apply adaptive management**
- 7. Regularly assess conditions** to determine success and effectiveness of projects and adjust programs accordingly