

Cold Creek Conservation Area Management Plan



Prepared by:
The Cold Creek Conservation Area Management Plan Advisory Committee
&
Toronto and Region Conservation

December, 2002



www.trca.on.ca

TABLE OF CONTENTS

Vision Statement and Values.....	iii
The Cold Creek Conservation Area Management Plan Advisory Committee	iv
Executive Summary.....	v
Chapter 1: Introduction	
1.1 Towards a Living City Region.....	1
1.2 The TRCA and Conservation Lands.....	2
1.3 Cold Creek Conservation Area.....	2
Chapter 2: Developing the Management Plan	
2.1 TRCA Direction	4
2.2 Purpose	4
2.3 Location, Site Description and Land Use.....	6
2.4 Process for Developing the Management Plan.....	7
2.5 The Advisory Committee.....	7
2.6 Public Consultation	8
2.7 Approval of the Management Plan	8
Chapter 3: Background Studies	
3.1 TRCA Planning Studies, Policies and Legislation.....	9
3.2 Municipal Land Use Planning.....	13
3.3 Provincial Plans and Other Studies	16
Chapter 4: Resource Inventory and Analysis	
4.1 Natural Heritage	18
4.1.1 Landform	18
4.1.2 Ground and Surface Water.....	19
4.1.3 Aquatic Habitats.....	23
4.1.4 Terrestrial Habitats.....	26
4.2 Human Heritage.....	41
4.2.1 Archaeological Resources	41
4.3 Past Recreation and Education Developments	43
4.3.1 Recreational Facilities.....	43
4.3.2 Conservation Education Programs.....	43
4.3.3 Attendance and Users	44
4.4 Infrastructure.....	44
Chapter 5: Management Zones	
5.1 Management Zone Definitions.....	47
5.2 Determining the Management Zones	47
5.3 Management Zone – Permitted Activities	51
5.4 Analysis of Land Use	52
5.5 Revenue Generation Opportunities	52
Chapter 6: Management Recommendations	
6.1 Resource Management Recommendations for Cold Creek Conservation Area.....	54
6.1.1 Natural Heritage	54
6.1.2 Human Heritage	58
6.1.3 Public Use	58
6.1.4 Infrastructure	59
6.2 Recommendations for “Supporting Areas” Surrounding Cold Creek Conservation Area.....	59
6.2.1 Surrounding Land Use.....	59
6.2.2 Groundwater and Source Protection	60

Chapter 7: Future Management of Cold Creek Conservation Area

7.1	Implementation of the Management Plan.....	61
7.1.1	Agency and Municipal Stewardship.....	61
7.1.2	Community Stewardship	61
7.2	Safety and Security	62
7.3	Plan Review and Amendment.....	62
7.4	Future Integration with the Cold Creek Subwatershed Plan	62

List of Appendices

Appendix 1	Benthic Invertebrate Survey Results.....	63
Appendix 2	List of Fauna Species	64
Appendix 3	Vegetation Community Scores.....	66
Appendix 4	List of Flora Species	67

MAPS

Map 1	Cold Creek Conservation Area – Context Map	1
Map 2	Cold Creek Conservation Area – Site Map	5
Map 3A	Cold Creek Conservation Area – Valley and Stream Corridors	10
Map 3B	Cold Creek Conservation Area – Areas of Special Designation.....	15
Map 4	Cold Creek Subwatershed – Baseflow Data Collection and Surface Water Quality Monitoring Stations	21
Map 5	Cold Creek Subwatershed – Priority Source Contribution Areas	23
Map 6	Cold Creek Conservation Area – Aquatic Features	25
Map 7	Cold Creek Conservation Area – Terrestrial Habitats	29
Map 7A ₁	Known Flora Species of Concern	31
Map 7A ₂	Known Fauna Species of Concern	32
Map 7B	Terrestrial Habitat – Size, Shape and Matrix	35
Map 7C	Vegetation Communities and Forest Types	37
Map 8	Cold Creek Conservation Area Management Zones	48
Map 8A	Management Zone Targeted System Analysis Step 1.....	49
Map 8B	Management Zone Targeted System Analysis Step 2.....	50
Map 9	Cold Creek Conservation Area – Priority Thinning and Restoration	56

FIGURES

Figure 1	Management Plan Development Process	6-7
Figure 2	Land Use Designations, Township of King Official Plan	14
Figure 3	Hydrogeology: Cold Creek North-South Cross Section.....	20
Figure 4	Historical Land Ownership	42
Figure 5	Visitors Origin by Municipality	44
Figure 6	Past and Existing Land Uses in Cold Creek Conservation Area	52
Figure 7	Proposed Land Uses.....	52
Figure 8	Past Revenue Generation (2001)	53

TABLES

Table 1	Water Quality Data from Cold Creek.....	21
Table 2	Relative Pollutant Contributions – Cold Creek Subwatershed	22
Table 3	Results of Temperature Sampling.....	24
Table 4	Fish Species Captured Near Cold Creek Conservation Area.....	26
Table 5	Terrestrial Natural Heritage Approach	28
Table 6	Permitted Activities at Cold Creek Conservation Area.....	51
Table 7	Priority Thinning Areas	57



This Vision Statement was developed by the Cold Creek Conservation Area Management Plan Advisory Committee and is accompanied by six values which should guide our actions.

VISION STATEMENT

The Cold Creek Conservation Area is an ecologically diverse and sustainable natural area. It is a model of sustainability that can be achieved by protecting and enhancing the area's natural environment while providing outdoor education, cultural and heritage experiences and recreation. Cold Creek Conservation Area is continually improved and managed through self-sustaining revenues and community-based stewardship.

VALUES

To achieve the vision, we should:

- Ensure that this diverse ecosystem is continually protected, monitored and enhanced.
- Ensure that the lands are accessible to the public and provide a learning opportunity about the natural environment, cultural and heritage resources and sound environmental practices.
- Ensure that public uses do not negatively impact the natural environment.
- Encourage adjacent land use that results in maximum environmental benefits and contributes to the form, function and connectivity of the area.
- Ensure that the principles and goals of the Humber Watershed Management Strategy – *Legacy: A Strategy for a Healthy Humber* are supported in the Cold Creek Management Plan and activities and uses contribute to the watershed management mandate.





Photography from TRCA Archives

COLD CREEK CONSERVATION AREA MANAGEMENT PLAN ADVISORY COMMITTEE MEMBERS

C. Angelotti	Resident
Linda Boak	Girl Guides
Donna Cain	Friends of Cold Creek
Marshel Cohen	Resident
Jacquie Corneman	Resident
Gordon Craig	Resident
Judy Craig	Resident
Don Frigo	Ontario Bird and Dog Conservation Association
Dennis Ritche	The Labrador Retriever Club of Ontario
Ralph Glagau	Humberlea Church of God
Jerry Gorman	Humber Valley Heritage Trail Association
Ken Hofstetter	Boy Scouts
Vera Howlett	Friends of Cold Creek
Dennis James	Friends of Cold Creek
Judith James	Resident
Anne Kong	Resident
Luciano Martin	Action to Restore a Clean Humber
Dick O'Brien	Chair, The Toronto and Region Conservation Authority
Linda Pabst	Councillor, Township of King
Rod Powell	Boy Scouts
Vince Principato	Resident
Yamile Rijo	Friends of Cold Creek
Liz Sagermann	Resident
Brenda and Cliff Smith	Residents
Susan Swail	Humber Watershed Alliance
Paul and Sandra Venier	Residents
Bill Wilson	Humber Watershed Alliance
Eric Worsley	Oak Ridges Trail Association

CHAPTER 7

FUTURE MANAGEMENT OF COLD CREEK CONSERVATION AREA

It is anticipated that Cold Creek Conservation Area will become a model of sustainability that will be achieved by protecting and enhancing the area's natural environment while providing environmental, recreational and outdoor education benefits to the community through self-sustaining revenues and community stewardship. Hence, it is imperative that the management of the property will be based on sound environmental management principles, collaboration with partner municipalities, interest groups and the local community.

7.1 IMPLEMENTATION OF THE MANAGEMENT PLAN

7.1.1 Agency and Municipal Stewardship

The natural, cultural, and recreational resources that exist within CCCA provide benefits beyond the TRCA property boundaries. These resources extend into the surrounding landscape therefore, integration with the community was considered throughout the planning process. Existing Official Plans identify the land surrounding CCCA as agriculture or rural/residential. Some new development will take place in the adjacent communities of Bolton and Nobleton. It is also anticipated that some infrastructure (i.e., roads and highways) will also be developed to support growth in areas surrounding CCCA. Municipalities and government agencies should be encouraged to support Authority policies when planning new developments, by having regard for the following recommendations when considering community design:

- a) Protect, restore and enhance as many natural open spaces as possible to maintain terrestrial natural habitat connectivity and interior habitats.
- b) Create publicly-accessible trail systems that will connect communities to CCCA and eventually to the Oak Ridges Moraine and larger Humber River valley.
- c) Promote private land stewardship that increases awareness about Best Management Practices and creates opportunities to engage landowners in the protection and enhancement of CCCA and its valuable resources.

7.1.2 Community Stewardship

Cold Creek Conservation Area will continue to provide opportunities for outdoor recreation, conservation education, and nature appreciation to the surrounding communities. The area will also provide many health and economic benefits to the community. There are many things people can do to fulfil the goals and objectives of this Management Plan.

a) Cold Creek Conservation Area Stewardship Committee

A Community Stewardship Committee should be established to assist with the implementation of this Management Plan. This committee could assist in the review of all proposed public uses and related activities for the property. The committee could also assist with specific aspects such as trails, education, and communications. An important role of the Community Stewardship Committee will also be to assist the Authority in raising funds to implement site maintenance, environmental protection and restoration activities.

A list of general tasks that the Community Stewardship Committee may implement, is identified as follows. All priorities should be reviewed and re-evaluated in terms of their feasibility, as needed.

- Employ the Community Action Site model as identified in *Legacy: A Strategy for a Healthy Humber* to encourage the community's participation in managing the Cold Creek Conservation Area.
- Prepare a communications plan to raise awareness and inform surrounding communities about the CCCA.
- Prepare a detailed restoration plan and implementation schedule.
- Establish a network of groups and individuals interested in participating in a volunteer program.
- Prepare access and trail development plans.
- Prepare and install natural and cultural heritage interpretative signs.
- Assist TRCA in implementing various stewardship programs including the Rural Clean Water Program.
- Develop educational resources and tools for private land owners and visitors.
- Build trail heads with signage and appropriate parking.
- Monitor the trail for invasive plant material and prevent their spread by using barriers and other eradication techniques.

- Monitor the presence of noxious weeds on site and remove as necessary.
- Organize celebration events to increase people's awareness of the site.
- Assist TRCA in implementing the Terrestrial Natural Heritage Monitoring Program.
- Secure financial and in-kind resources to undertake the implementation of the Management Plan.

- Gates should be installed at the entrances of all area parking lots. Parking lots should be closed to the public after dusk. Parking lots should be monitored for undesirable behaviour, garbage dumping and unauthorized access.
- Parking lots will be closed to the public if maintenance problems persist.

b) Private Land Stewardship

Adjacent landowners and users of the CCCA can contribute to ensure that the surrounding landscape does not negatively impact the environmental quality of this unique natural area:

- Plant native species on lands adjacent to Cold Creek Conservation Area instead of planting exotic vegetation species, some of which are invasive species such as Purple Loosestrife and Norway Maple.
- Leash pets on-site to minimize disturbance to wildlife and promote "poop and scoop" to prevent pet faeces from entering the watercourses after rainfall events.
- Protect and restore private lands identified for natural area regeneration through the application of TRCA's Terrestrial Natural Heritage Approach.
- Participate in a private land stewardship program, which assists landowners with agriculture Best Management Practices, preservation of woodlots and other wildlife habitat on their property.
- Participate in TRCA's Rural Clean Water Program.
- Assist with the implementation of the recommendations of the Walkerton Inquiry's Part 2 Report regarding source protection, particularly for private wells.

7.2 SAFETY AND SECURITY

Discussions will be undertaken with police and other emergency service providers to identify their concerns and questions regarding accessing the lands for patrol and emergency response purposes. As a result of the land's natural character, many areas are inaccessible by conventional response vehicles (Fire, Ambulance and Police). Special considerations are therefore required including:

- A trail locator system such as a series of distance markers along the trails to locate/orient trail users.
- Geographically integrate the trail location system into the emergency response system of the fire, police, and ambulance departments. A fully integrated map depicting all named trails and locations of markers along each trail should be installed at all major and minor trail heads.
- An emergency response plan should be developed for the area with involvement from local and neighbouring emergency service providers.

7.3 PLAN REVIEW AND AMENDMENT

The Cold Creek Conservation Area Management Plan will undergo a review every five years. If major revisions are necessary to reflect changing environmental, social, or economic conditions, they will only be made after consultation with affected groups and individuals. Revisions to the Plan will be in keeping with the original stated vision and objective of the Plan to protect the natural, recreational and educational values of the property.

The Management Plan identifies potential public use zones. Any specific uses proposed within these areas will be screened and assessed according to TRCA's *Strategy for Public Use of Conservation Authority Lands (1995)*. A community consultation process will also be employed at this later stage of planning to ensure local and regional interests have input into the concept and detailed design review. The Cold Creek Conservation Area Stewardship Committee will provide input on all such proposals. The screening process for specific public uses will ensure that all proposed uses, facilities, and landscape changes will be thoroughly examined and designed to minimize disruption, and to protect, enhance, or restore the natural values of the area.

7.4 FUTURE INTEGRATION WITH THE COLD CREEK SUBWATERSHED PLAN

To ensure that planning of future development within the watershed proceeds in an environmentally sound manner, the TRCA in partnership with the regional and local municipalities, has recently initiated subwatershed planning projects for various subwatersheds within the Humber River. The Cold Creek Subwatershed is a priority planning area and it is anticipated that an integrated subwatershed management plan development process will be initiated in 2004. This subwatershed plan is intended to guide existing resource use and new development within the context of environmental protection, conservation and restoration to ensure the long term sustainability of the natural features and functions of the subwatershed. Cold Creek Conservation Area is a very significant natural feature within the Cold Creek Subwatershed and the Cold Creek Management Plan recommendations will be integrated into the subwatershed planning process in the future.