



Rouge Park

Management Plan

 Ontario

May 1994

PREFACE

"A New Partnership"

The Province of Ontario is pleased to release the Rouge Park Management Plan.

The Management Plan will serve to guide the establishment and development of the Rouge Park through the cooperative efforts of all its partners.

The central thrust of the Plan is to maintain and enhance the ecological and cultural integrity of the features within the park. In support of this, the Plan is based on principles, concepts and management policies that emphasize an ecosystem approach.

This Plan is the result of an extensive park planning process which began in March, 1990, when the Province announced the intent to establish a major park in the Rouge River Valley, in the Greater Toronto Area.

The planning process was overseen by the provincially appointed Rouge Valley Park Advisory Committee. The Advisory Committee undertook a four phase process with opportunities for public input provided at the end of each phase. In August, 1992, the Advisory Committee submitted its park recommendations to the Minister of Natural Resources.

The Province reviewed the recommendations of the Advisory Committee and in January, 1993, released its Draft Rouge Park Management Plan for public input. The Draft Plan was based on the concepts and recommendations suggested by the Rouge Valley Park Advisory Committee. Modifications were made to some of the Advisory Committee recommendations to address significant public and agency comments.

Based on input and comments received on the Draft Plan, appropriate revisions have now been made and the Rouge Park Management Plan has been released in its present form. This is the starting point for the park partners to develop management programs to implement the park goal and objectives.

Park planning to date has concentrated on that portion of the Rouge Park south of Steeles Avenue. The preparation of a management plan for the proposed park from Steeles Avenue to the Oak Ridges Moraine is still required. That planning exercise will be undertaken by the Rouge Park management entity as an early priority and will be based on the park concepts and directions identified in this park management plan.

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1. CONTEXT

The Rouge watershed is 337 square kilometres in size. Its headwater source areas are found in the Oak Ridges Moraine, and it drains into Lake Ontario. The Rouge watershed is situated within the south-central portion of the Greater Toronto Area (GTA) and specifically lies within the City of Scarborough and the Towns of Markham, Pickering, Richmond Hill and Whitchurch-Stouffville (Figure 1).

The GTA is one of Canada's leading urban, economic and cultural centres. In the context of Ontario, the scale of development in the GTA is unprecedented. The GTA presently houses some 4.25 million people. Over the next 25 years, this population is expected to increase to more than 6.5 million.

As with many areas in the southern portion of the GTA, the Rouge watershed is experiencing a change from rural to urban uses. The lower and middle reaches of the Rouge system have become increasingly surrounded by largely continuous low density development.

The Rouge Park can be divided into two main sections -a southern section from Lake Ontario to Steeles Avenue, and a northern section from Steeles Avenue to the Oak Ridges Moraine. The southern portion is a triangular block containing the well-defined valleys of the main Rouge River and the Little Rouge Creek, plus a sizeable area of tableland. The northern portion is more linear in nature, centering around the valley systems of the main Rouge River, the Berczy Creek, the Bruce Creek, the Little Rouge Creek, and a small portion of the Morningside Creek.

The overall concepts, vision, goal, objectives, principles and criteria identified in this management plan apply to the entire Rouge Park from Lake Ontario to the Oak Ridges Moraine. However, specific emphasis has been placed, at this time, on that portion of the park located south of Steeles Avenue. The natural and cultural heritage features and uses of the area have been examined, and programs and policies specific to those resources have been developed and incorporated into this park management plan.

A detailed examination of the resources and the preparation of a management plan for the proposed park from Steeles Avenue to the Oak Ridges Moraine is still required. It is anticipated that this exercise will be undertaken as an early priority, once a Rouge Park management entity has been established.

The Rouge Park is often seen as a provincial initiative. However, opportunities exist to develop new types of partnerships in park management. A variety of public agencies, landowners and groups already have significant interests in the Rouge Park area, whether it is the extensive holdings of the Metropolitan Toronto and Region

Conservation Authority that are managed by the Metropolitan Toronto Parks and Property Department, the sizeable land base owned by the Province, the land use controls exercised by the area municipalities, or the extensive local knowledge of interest groups on the park's flora and fauna. These and other groups all have an integral role to play if the management plan is to be effectively implemented and the park is to ultimately be successful.

As a result, this management plan has not defined a specific management or funding structure for the park. There is a need for detailed discussions and negotiations between potential park partners to identify appropriate management and funding mechanisms. It is clear however, that there are opportunities for the development of innovative approaches to park management befitting the unique nature and setting of the Rouge Park.

2. PARK VISION, GOAL, OBJECTIVES AND PRINCIPLES

2.1 The Park Vision

The park vision reflects the essence of existing park values and sets a definite direction for what the park should become, as follows:

The Rouge Park will be a special place of outstanding natural features and diverse cultural heritage in an urban-rural setting, protected and flourishing as an ecosystem in perpetuity. Human activities will exist in harmony with the natural values of the park. The park will be a sanctuary for nature and the human spirit.

The primary focus of the vision centres on the protection and appreciation of the park ecosystem. The vision is based on the premise that the functioning of significant natural systems forms a vital part of the natural environment, and that their continued health is dependent on the integrity of their habitats and on the physical connections between habitats. Where appropriate, interpretation of natural, scenic, historic, archaeological and architectural values will be provided.

2.2 Park Goal, Objectives and Planning Principles

The park vision establishes a framework for a series of goals, objectives and planning principles. The integrity and health of the park and its environs over time will be guaranteed to the extent to which the partners adhere to these initial foundations.

The goal for the Rouge Park is:

To protect, restore and enhance the natural, scenic and cultural values of the park in an ecosystem context, and to promote public responsibility, understanding, appreciation and enjoyment of this heritage.

2.2.1 Park Objectives

- Natural Heritage Objective

To protect, restore and enhance the natural ecosystem of the park by ensuring the health and diversity of its native species, habitats, landscapes, and ecological processes.

- Cultural Heritage Objective

To identify, protect and conserve the cultural heritage features of the park for their inherent value and depiction of the long term human use and occupancy of the area.

- Land Use Objective

To ensure protection of the ecological integrity and cultural values of the park through innovative planning, management, and land use in the park and its environs.

- Management Objective

To manage the park to ensure the achievement of all park objectives and to provide for ongoing public involvement in park planning and management.

- Interpretation Objective

To promote knowledge and understanding of the natural and cultural values of the park, their protection and management requirements, and their significance, sensitivities and interrelationships.

- Recreation Objective

To provide opportunities for appropriate recreational enjoyment consistent with all other park objectives.

2.2.2 Park Planning Principles

Natural Heritage

- Biodiversity

Sustain and, where appropriate, restore and enhance the biodiversity of the park. The diversity of the park's natural landscapes, native species and biological communities will be maintained, restored and enhanced in concert with maintaining the physical conditions (i.e. water, soils, geology) and ecological processes of change (i.e. succession, species migration, water and nutrient cycles) of the area.

- Sustainable Functions

Sustain the biological and physical functions of the park which are important to the long term integrity of the park ecosystem. Some of the biological functions of the park depend on maintaining large tracts of forest cover and special plant communities, as well as linked natural systems. Important physical functions in the park include water storage and buffering to protect sensitive species.

- Restoration

Enhance the natural heritage of the park through the restoration and reconnection of natural communities, and the reintroduction of native species, if appropriate. Terrestrial habitats, for instance, should be restored by reconnecting plant communities located on naturally forested uplands, valley slopes and bottomlands. Aquatic habitat should be restored through such means as river corridor revegetation and upstream water management programs.

- Health and Change

Monitor the biological and physical conditions of the park so that changes, especially in ecosystem health and the impacts of internal and external activities, can be assessed and managed appropriately.

Cultural Heritage

- Broadly Defined

Heritage should be considered in the broadest perspective including structures, sites, areas, objects and documents, and less tangible aspects such as: values, speech, way of life and traditions.

- Relevance to the Park

Only heritage features that are located within the park or are directly related to the park, will be considered for purposes of management and interpretation.

- Identification and Protection

All significant archaeological, built and landscape heritage features require identification and protection on a priority basis. Requirements for interim and long term monitoring and research must also be determined.

First Nations Involvement

- First Nations should be involved at all stages of planning and development for interpretation of Aboriginal heritage in the park and in the management of archaeological sites.

Land Use

- Holistic View

A key component in the planning and management of the park is the understanding of the behaviour of the river and watershed as a whole. The impact on the watershed in terms of water quality, plants, animals, natural history and history of human use must be addressed in the preparation of preservation, restoration and land use policies and implementation strategies.

The Rouge ecosystem is within a mosaic of natural, rural and urban areas. This area in turn is one part of a larger system: The Greater Toronto bioregion. The interrelationship of the Rouge Valley system, the Oak Ridges Moraine, and other natural and cultural features must always be recognized. The park can not be viewed in isolation; an integrated approach to land use planning must be adopted.

- Integrity of the Park Environment

Uses and/or activities occurring in or beyond the park must be viewed in the context of the park and must ensure that the park's ecological integrity, scenic and cultural values are protected, restored and enhanced. The cumulative effects of land use and activities upon the park environment must be monitored, assessed and managed to protect, restore and enhance the Rouge ecosystem to meet park objectives.

- Respect for Natural and Cultural Heritage

Land uses/activities/facilities within the park and its environs must protect ecosystem integrity and contribute to the restoration and enhancement of its natural, scenic, historic and cultural values, where needed.

- Linkages and Natural Systems

Protection and enhancement of natural systems within the urban-rural fabric of the park must form a fundamental basis of community planning. The linkages and connections to, and within, the Rouge Valley system must be maintained and enhanced and, where possible, linked with other parks, greenways and natural features.

- Environmental Standards

All park-related land use and development deemed appropriate to achieving park objectives, must demonstrate high environmental standards.

- Innovation, Demonstration and a View to the Future

The land use and resource management approach adopted for the park should encourage a level of scientific research compatible with attaining the park goals and objectives. These research and demonstration efforts should contribute to an increased understanding of the park to ensure ecological health and longevity.

Interpretation and Education

- Comprehensive and Integrated

"A comprehensive and integrated approach to interpretation of the park's natural values, ecological processes, and the relationship over time between its inhabitants and nature, should be adopted. This includes promotion of natural heritage education to foster an understanding and appreciation of nature and our environmental responsibility.

- Evolutionary in Focus

Park management and heritage interpretation should include a strong emphasis on evolving cultural landscapes, including the "layers" of change in landscapes, sites, and structures, and the influencing forces in their evolution. The relationship of people and the natural environment within the Rouge Valley system (inclusive of Aboriginal, Euro-Canadian, and more contemporary inhabitation), and the influences and dependencies of one on the other, should be reinforced in all interpretive efforts.

- Understanding and Protection

All site specific interpretive/educational proposals for the park must consider the sensitivity of sites to human intrusion.

- Community Involvement

The design of the interpretative, educational and monitoring programs for the park should encourage the participation of individuals, groups and institutions. Contributions from the community in directing and participating in programs which further the park goal and objectives will reinforce a comprehensive approach to education within the park.

Recreation

- Suitability Within a Unique Park Vision

The range and type of recreational use permitted within the park must be consistent with the park goal and objectives and the carrying capacity of the ecosystem.

- Respect for Natural and Cultural Heritage Values

No recreation activity will be allowed which adversely impacts the health of the park ecosystem and its special habitats and cultural features.

- Respect for Residents and Neighbours

Any recreational park use must not adversely affect residents and local neighbourhoods within or adjacent to the park.

Management

- Orderly and Evolutionary Plan for the Future

The administrative and management framework for the park must provide for the implementation of park objectives and associated policies over reasonable planning time-frames.

- Partnership Commitment

The park management plan must strive for the full support and cooperation of all levels of government, and should seek the commitment of the community and volunteer organizations which could assist in program implementation.

Effective partnership arrangements are encouraged to help realize park objectives.

- Experienced Leadership

The administration and management of the park requires experience in areas of resource management and research, land use regulation and monitoring, recreational management and programming, park administration, agency negotiation, etc. Community talent, experience and energies will also be integrated in implementing the park management plan.

3. PARK BOUNDARY

The park boundary delineates the area where the Rouge Park objectives will be applied (Figure 2). Various uses presently occur within these limits. A certain number of these uses may be compatible with park objectives while others are not. Where existing or proposed uses are considered to be incompatible with park objectives, the lands will be acquired on a priority basis, in conformity with the securement policies of this plan. Other privately owned lands deemed critical to the achievement of park objectives may also be acquired on a priority basis. Where the use of privately owned land is deemed compatible with the park objectives, stewardship agreements will be encouraged.

At any given time the Rouge Park will only consist of lands that are publicly owned or leased. Therefore, no private lands will formally be considered part of the park. When private lands are publicly acquired or leased, they will then be incorporated into the park. The park will be managed to respect the rights of private landowners.

3.1 *Boundary Definition Criteria*

The park boundary has been defined using five criteria: natural values, cultural heritage values, aesthetic values, recreational values and administrative boundaries. Of these criteria, the greatest weight has been applied to the natural values, reflecting the goal and objectives of the park. Land ownership and land costs were also considered when applying all boundary definition criteria. The five boundary definition criteria are generally described in the following paragraphs, followed by the park boundary policies which complement the criteria.

Natural Values

The park contains natural values which require protection including both site specific natural areas, and the valley and stream corridors which extend along the waterways within the park. These corridors include the valley lands and some adjacent tablelands as an integral part of the valley corridor with adequate provision for wildlife habitat and restoration.

The boundary must also consider the protection of natural areas including Areas of Natural and Scientific Interest (ANSIs), Environmentally Significant Areas (ESAs), wetlands, woodlots, meadows, areas containing either significant vegetation or wildlife habitat, significant geological features and areas with a significant hydrological function.

Cultural Heritage Values

The boundary definition has considered cultural heritage values such as archaeological sites, heritage structures and cultural landscapes.

Aesthetic Values

This criterion recognizes that the park has very important aesthetic values which must be considered in defining boundaries. Specific factors to be considered include the protection of important vistas.

Recreational Values

This criterion recognizes that the park has very important recreational values which must be considered in defining boundaries. Specific factors to be considered include provision or control of access and trails.

Administrative Boundaries

This criterion is basically applied on tableland areas where no other specific criteria is applicable. In some instances, administrative boundaries or features, such as roads, are utilized.

3.2 Park Boundary

That portion of the Rouge Park south of Steeles Avenue consists of approximately 5,800 acres of land.

It is generally bounded by Lake Ontario to the south, the Rouge Valley, including the Morningside Creek to the west, and the Scarborough-Pickering Townline and the Rouge Valley to the east.

The Park boundary is more specifically defined on figures 3 and 4.

3.3 Park Boundary Policies

Based on the preceding values, specific park boundary criteria have been developed. These are outlined in the following sections.

3.3.1 Park Boundary in Undeveloped Areas

In undeveloped areas adjacent to the valley, the park boundary will be defined as 30 metres from the stable top-of -bank to the extent possible. Stable top-of -bank is

defined by a projected 2:1 slope or as otherwise determined by geotechnical investigation as stable. In sites where there is active toe erosion, the stable top-of-bank is the 100 year erosion limit.

The 30 metres is an area adjacent to the stable top-of-bank which helps to protect the ecological integrity of the valley and also provides for compatible park functions if applicable.

While it is desirable to actively pursue a 30 metre park component adjacent to the valley, this may not be possible in all cases. The guiding principle concerning discussions on the 30 metre area will be the protection of park objectives and values. In decreasing order of preference, this may involve:

- (1) Public acquisition/dedication for park
- (2) Public ownership for park in combination with adjacent other public uses such as schools, institutions, natural design stormwater facilities, etc.
- (3) Structural setbacks in combination with (1) and (2).

3.3.2 Park Boundary in Developed Areas

In developed areas adjacent to the valley, the park boundary will be the landowner's rear property line. However, where a private landowner owns a large section of valleyland (i.e. watercourse, valley floor, valley slope) the proposed park boundary will be the stable top-of-bank. Of particular note in this regard are the lands in the general area of Boydwood Lane, John Graham Court and Sheppard Avenue East.

Where comprehensive redevelopment occurs in developed areas resulting in a change in municipal land use designation or zoning, the boundary will be 30 metres from the stable top-of-bank to the extent possible. In the case of single lot severances, the park boundary will be the stable top-of-bank. Where new development occurs, the objective will be to secure these lands through the municipal planning process. It is recognized, however, that this may not be possible in all circumstances.

Where the rear property line extends into the valley, the park management entity will work cooperatively with the land owner in maintaining and enhancing park values.

3.4 General Policies for Land Securement

The following section outlines policies for land securement within the park. The term "securement" encompasses a variety of techniques for obtaining land or rights/conditions on land, including purchase, exchange, dedication and donation. In addition, it

includes alternatives to outright purchase, such as the purchase of an easement and various forms of private land stewardship agreements.

3.4.1 Basis of Purchase

Land considered essential for acquisition will normally be acquired on a willing seller- willing buyer basis. Any acquisition is contingent on the availability of funding.

The option of land expropriation will only be considered as a last resort where all other means of land securement have failed and where the lands in question are essential to meet park objectives. It is anticipated that this extraordinary measure will rarely be used to acquire lands for the park.

3.4.2 Dedication

In areas of new development, the objective will be to maintain and enhance ecological integrity and park values through the dedication provisions of the municipal planning process or through agreement. It is recognized that this may not be possible in all circumstances and that other approaches to land securement may be necessary.

3.4.3 Slope Failure

Where tableland properties within or adjacent to the park boundary are threatened by slope failure, or slope failure actually occurs, and where non-structural solutions are not feasible, acquisition to the stable top-of-bank will be assessed as an option to engineered solutions.

3.4.4 Securement Based on Priorities

Securement of property (i.e. acquisition, dedication, or leases and easements) will occur, with the priorities based on park values. The park value priorities in order, are:

1. provincially significant Areas of Natural and Scientific Interest and Provincially significant cultural heritage sites;
2. valley and stream corridors;
3. primary natural areas outside the ANSIs;
4. restoration, enhancement or linkage areas;
5. other cultural heritage sites;
6. key recreation and interpretation sites;
7. incompatible land uses.

The following factors will also be considered in the development of land securement strategies:

- alternatives to fee simple acquisition such as easements and dedication;
- type and immediacy of threats to the land;
- possible willingness to sell;
- cost effectiveness;
- specific program interests of potential funding partners;
- alternative protection approaches (i.e. municipal planning).

3.5 Existing Land Uses Within The Park

A range of uses can be found within the park including: residential, industrial, institutional, recreation/open space, agriculture and utilities. The uses and activities in the park reflect the many layers of human influence over the past several hundred years.

3.5.1 Land Use Policies

The park management entity will not be assigned powers to control the use of private lands. Such controls will continue to be exercised by the area municipalities under the Planning Act and through the regulatory powers of other agencies.

All public agencies which own or control land within the park boundary will be encouraged to ensure their activities conform to, and are consistent with, the Rouge Park Management Plan.

3.5.2 Existing Residents and Private Lands

There will be on-going communication and consultation with private landowners and tenants within the park boundary to encourage private stewardship of natural and cultural heritage features, and to develop understandings and agreements in support of private land stewardship. The development of a comprehensive stewardship program (see Section 3.7) for both private and leased lands will be a high priority.

Existing land uses which are identified as being compatible with the park plan will be permitted to remain indefinitely. Where the owners of such land offer to sell their property to the park management entity, the potential purchase will be evaluated in relation to the land securement priorities (see section 3.4.4) and the availability of funds.

Long term leases for provincially owned properties may be entered into, particularly for actively farmed areas. The current leasing conditions of the Management Board Secretariat (MBS) will be reviewed by the park management entity, in consultation with MBS, and revised, if necessary, to ensure they conform with park objectives.

The continuation of existing private residences, farms and associated community facilities will be supported.

The creation of new residential lots is generally not supported. However, it is recognized that situations may arise where one or two new residential lots may be proposed through the severance process. Such situations will be evaluated in relation to the land securement priorities (see section 3.4.4) and assessed against potential impacts on park values.

The creation of new residential lots through the plan of subdivision process is not supported.

There are some land uses which are either incompatible with the directions proposed for the park, or where the park management plan identifies a preferred use. Where the incompatible use is privately owned, the long term objective will be to acquire the property and remove the use. In the interim, the park management entity will seek to work with the property owners to minimize any -negative impacts. Where the park plan recommends a change in the use of publicly owned land, the change in use will be phased in at an appropriate point in the lease arrangement for the property.

Notwithstanding the desire to remove or minimize the incompatibility of certain uses, it is recognized that the Planning Act permits the continuation of legal, non-conforming uses, and given certain restrictions, allows for the possible expansion of these uses. Where such situations arise, the park management entity will review the matter and determine the most appropriate course of action.

3.5.3 Transportation and Utility Corridors

The Rouge Park is set within a transportation grid which is both urban and rural in character. The regional transportation network is under increasing pressure as travel demand increases. There is substantial commuter traffic on the existing two lane roads within the park. Highway 401 is being widened in the vicinity of the Rouge Valley. In addition, Steeles Avenue is proposed to be expanded from two lanes to four.

At the time of the original park announcement in March 1990, it was announced that no new roads would be permitted in the proposed park area south of Steeles Avenue. Transportation authorities are seeking means of responding to travel demands in the east end of Metropolitan Toronto, Durham, and York with this restriction in place.

Meadowvale Road to the Metropolitan Toronto Zoo is the only interior park road that is served by public transit. Several other transit routes exist along the western edge of the park and in proximity to the park.

A number of rail lines, hydro corridors pipelines, and sewer and water right-of-ways also currently exist within the park boundary.

The park will not preclude these utilities and services from continuing to exist or new facilities being permitted in existing right-of-ways, nor will it affect their ability to be properly maintained in an environmentally acceptable manner.

From the perspective of municipal servicing for possible future park facilities, the park area has adequate services along its urbanized perimeter and in the area of the Metropolitan Toronto Zoo. Future facilities requiring services would logically locate in nodes that already are serviced, thus avoiding further servicing intrusions into the park, and certainly saving costs over major extension of new services.

The siting of any park facilities should consider the location of existing services so as to minimize further disruption to the park.

As major expansions of non-park development are not anticipated, the extension of services for non-park facilities is discouraged. The possible exception to this is improvements/extensions that may be required for the Metropolitan Toronto Zoo.

3.6 Ensuring Compatible Adjacent Land Uses

Strategies, voluntary land stewardship programs (see Section 3.7), and controls need to be considered to reinforce positive relationships, ameliorate current impacts and avoid possible future impacts to park values.

Lands adjacent to the park may frequently reinforce certain park values. Privately owned lands - both residential and industrial - are often well monitored and access-controlled; this security is passed on to adjacent parklands. When well set back from a vegetated valley brow, low density, low rise uses tend to be visually discreet from a park interior perspective.

In the case of established residential areas, the primary objective is to maintain the existing low rise residential character. In undeveloped areas as well, it would be a desirable objective to limit the height of any future development, while ensuring adequate setbacks.

In addition, and most importantly, the park management entity will seek to work closely with all landowners near the park in identifying and implementing voluntary land stewardship agreements, in order to promote park objectives and enhance natural processes on private lands.

The park management entity will not be assigned the power to control land use on private lands adjacent to the park. However, it will work in consultation with the province, municipalities, and the public to bring Official Plans and Zoning By-laws into conformity with the approved Rouge Park Management Plan.

The Rouge Valley Park Background Report (1991) identified a number of existing or potential, negative impacts from beyond the boundaries, primarily visual obtrusiveness and stormwater runoff.

Upstream lands can also have significant effects on downstream areas. Primary concerns are associated with changes in water quality and quantity. It is essential that adequate natural corridors and habitat be assured throughout the watershed.

Based on the foregoing, the lands adjacent to the Rouge Park should be managed according to the following principles:

- development adjacent to the park should not disturb or degrade the park's natural environment;
- municipal and provincial land use planning policies for immediately adjacent lands should specifically address the relationship to the park;
- the design of development adjacent to the park should complement and enhance park values;
- public access to the publicly used portions of the park should be enhanced, but in a controlled manner.

3.7 Stewardship Approaches

The Rouge Park exists in an urban and rural context with many ongoing interactions between the park and neighbouring lands. It is important to identify and enhance the positive relationships between the park and its neighbours. This calls for a mutual support program which:

- furthers the goal and objectives of the park;
- permits public involvement in the park;
- permits the on-going enjoyment of park benefits by adjacent landowners within the framework of the goal and objectives;
- recognizes and enhances natural values on private lands, as well as increases landowners' understanding and appreciation of natural processes.

In recognizing that private landowners around and within the park will have a major role to play in its 'health and integrity, the park management entity will promote a comprehensive, private land stewardship program to the greatest extent possible. Essentially, this entails a focus on "good neighbour" policies and programs, Stewardship programs may include options such as the provision of technical advice on ecologically-based property management, an awards program, and assistance with natural landscaping.

Stewardship agreements may take a variety of forms, from informal handshakes to voluntary registration of conservation easements on land titles. Incentives may range from something as simple and rewarding as watching the park restore itself, to awards and various types of assistance. In addition, the park management entity will explore the applicability of existing stewardship programs such as the Conservation Land Tax Rebate, as well as, the possible creation of new stewardship incentives and programs for private lands within and adjacent to the park.

4. PARK CONCEPT AND ZONING

4.1 Park Concept

The concept for the Rouge Park has been guided by the vision, goal and objectives set out in section 2 of this document. Essentially, the park concept involves the preservation of natural areas, linkages, cultural heritage features and scenic landscapes. The park management plan and its policies protect and enhance the values of the park and maintain its ecological integrity, while providing for various recreational and public use opportunities including those identified in figure 5. In addition, the plan recommends major expansion of natural areas and the rehabilitation of degraded landscapes.

The key elements of the general concept for the park are:

- a natural heritage management strategy should provide protection and a high level of site restoration, stream rehabilitation and other habitat improvement programs throughout the park;
- acreage between old Finch Avenue and Steeles Avenue should be reforested to ensure the provision of a continuous natural valley corridor and a vegetated link between the Rouge and Little Rouge Valley Systems;
- natural vegetation or wildlife corridors should have minimal disruption;
- existing facilities within the park should not be allowed to expand, if deemed incompatible with the park objectives;
- facilities and activities should be provided in the most appropriate and least sensitive locations in the park;
- representative agricultural landscapes should remain;
- trails should be sited to minimize impacts on natural features. The park trails should link into a future system of regional trails. Existing routes within the park which are detrimentally affecting natural values should be closed;
- a new facility for a shared natural and cultural interpretation centre should be located in the park. Programs should emphasize education for school groups and other target groups, as well as research/outreach programs for the broader community. Education and interpretation objectives should also be achieved through a comprehensive self-guided trail program;

- access points for pedestrian entry and vehicular parking (see Figure 5) should be provided;
- cooperative stewardship/volunteer agreements with local residents and interest groups should be vigorously encouraged to establish natural area protection and conservation practices for farms within the park;
- ecological linkages associated with the valley corridors should be protected and restored from the lakefront northward, ultimately to the Oak Ridges Moraine, and with other valley systems and corridors in the area;
- a watershed management strategy should be developed and implemented to protect and restore the integrity of ecological linkages and aquatic ecosystems throughout the watershed.

Further description of the park plan and associated policy statements is provided in the following sections.

4.2 Park Zoning

Lands within the park are designated into zones which are defined by their natural and cultural heritage values and associated management requirements (Figure 6). The five zones (Nature Reserve, Restoration, Agricultural Heritage Reserve, Access and Special Management) are distinguished by their different ecological protection and management needs, and permitted levels of recreational use and development.

Some of these zones are similar to those approaches used in provincial parks. However, the recommended park zoning categories and policies more closely address the requirements of this site.

Management policies associated with park zoning would only apply to private lands within the park boundary following either land acquisition or negotiation of agreement between the park management entity and the landowner.

Management policies associated with park zoning would only apply to rail lines, hydro corridors and pipelines, roadways, sewer and water main right-of-ways currently with- in the park boundary following an agreement between the park management entity and the utility body(s).

4.2.1 Nature Reserve Zone

Nature Reserve (NR) zones encompass all lands within the park which have been identified as Areas of Natural and Scientific Interest (Ecological Survey of the Rouge Valley

Park (1991) and Earth Sciences Survey of the Rouge Valley Park (1991)) as well as other primary natural areas within the park. River and stream corridors, upland woodlots, wetlands and critical linkage areas which were identified in the background studies are included in this zone. These lands (approximately 53% of the total park area between Lake Ontario and Steeles Avenue) are of greatest ecological sensitivity, requiring the highest degree of protection in order to ensure their continued health.

The general policies of the Nature Reserve zone are:

- protect all the primary natural areas of the park and manage them for the continuation of natural processes;
- protect and manage existing cultural heritage features and sites in association with the protection of natural areas;
- limit development to a system of restricted walking/hiking and cross country skiing trails. Limited interpretive facilities, and scenic or wildlife viewing locations may be provided in selected locations;
- remove the Nature Reserve lands from agricultural leases. In the few areas where small portions of the Nature Reserve zone are currently being actively farmed, every effort should be made to seek changes in the agricultural leases to take them out of production.

4.2.2 Restoration Zone

Restoration (R) zones include tablelands and stream corridors which form potential Nature Reserve zones. The R zone encompasses approximately 15% of the park area between Lake Ontario and Steeles Avenue. These lands could provide forest links between the Little Rouge Creek and the Rouge River. Some lands may already exist in various stages of natural regeneration or may provide strategic opportunities to expand the forest coverage to create large expanses of linked forest between Old Finch Avenue and Steeles Avenue. The Restoration and Nature Reserve zones represent an opportunity to improve the health and diversity of the park ecosystem and beyond, through the creation of a relatively large, contiguous forest within the southern Rouge River water- shed. It is anticipated that as these lands are renaturalized, they will be rezoned as Nature Reserve.

The policies for this zone are:

- implement a vegetation management strategy primarily based upon natural regeneration of native species to create the necessary forest linkages and buffer lands over the long term;

- use managed succession sparingly to establish forest cover to create critical linkages and buffers in the short term; also, use managed succession where degraded lands inhibit naturalization; -consider methods of minimizing possible incompatibilities between residents and nearby naturalization initiatives;
- maintain cultural landscape heritage values within a functioning forest ecosystem (i.e. retention of rural hedgerows, farmstead plantings);
- in consultation with the agricultural tenants, modify leases to encourage environmentally positive changes in agricultural practices to provide suitable setbacks from streams, wetlands, etc.;
- allow the continued retention of residential and farm building complexes;
- allow trail use for recreational and educational purposes and where feasible and appropriate, permit other recreational uses;
- permit the construction of a visitor centre, subject to feasibility studies and detailed site considerations.

4.2.3 Agricultural Heritage Reserve Zone

The purpose of Agricultural Heritage Reserve (AHR) zones (approximately 10% of the park area between Lake Ontario and Steeles Avenue) is to maintain several significant agricultural areas for ongoing farming and to protect farm complexes which contain important cultural heritage values and contribute to the local rural identity.

Within this zone there are a number of general policies:

Agricultural Practices

- maintain agricultural operations and promote land management techniques which conserve soil, water and ecological functions over the long term (i.e. adequate set backs/buffers from streams, wetlands, and significant natural areas, and reduction in the use of chemicals).

Rural Landscape and Built Heritage

- conserve existing heritage structures; -relocation of heritage structures should be considered only if the alternative is demolition;
- protect, restore and enhance the rural landscape features including barns, fencerows and fields;
- conserve, where feasible, and/or render safe, other important heritage elements within the Agricultural Reserve;
- permit the establishment of a demonstration farm

4.2.4 Access Zone

There are several Access zones proposed for the park which will allow for controlled pedestrian access at key locations. They comprise approximately 2% of the park area between Lake Ontario and Steeles Avenue. The park management entity will examine the feasibility of each proposed access point and the existing access points and parking areas at Caper Valley and the Finch Meander.

The policies of the Access zone are listed below:

- provide visitor access to the park on sites at the periphery in areas that can sustain the impact of development and have limited to no negative ecological or visual impacts on the adjacent park lands;
- provide limited facilities and services to support trail and educational activities that will occur in adjacent zones; -primary access sites will include parking, including access for the physically challenged, washroom facilities, drinking water, interpretative and trail orientation displays and telephone emergency facilities. Where appropriate, lighting provisions may also be provided;
- ensure that all development occurs with approved site plans and development plans which address issues of visual impact, size and extent of parking and building facilities, neighbourhood impacts and planting requirements;
- permit the construction of a visitor centre, subject to feasibility studies and detailed site considerations.

Since the access zones would be limited in terms of the number of visitors that they can accommodate, some spillover parking on nearby roads may occur. In order to avoid overcrowding of certain sites and conflicts within local neighbourhoods, prohibition of street parking should be enforced by local municipalities. In carrying out detailed planning for trailheads and parking areas, the park management entity will involve local municipalities in the design process.

Primary access zones include the following existing and proposed locations:

Meadowvale Access

This site would provide a trailhead location with new or shared parking facilities with the Metropolitan Toronto Zoo (near the east overflow parking area). Detailed site review would be required to determine site specifics and compatible use with the Metropolitan Toronto Zoo operations in this location. This central site would provide easy vehicular access from Meadowvale Road and convenient access to some of the most interesting natural and cultural heritage sites of the park, such as the Mill ruins, Kirkham's site and the historic Rouge Trail.

Old Finch Access

This trailhead site is situated on public land holdings on Old Finch Avenue just west of Sewells Road. It would provide direct access by vehicle, and the potential for improved public transit access from Old Finch Avenue.

The need to establish this trailhead will be determined in conjunction with an examination of the feasibility of retaining the Finch Meander Access.

Finch Meander Access

This existing access and parking area will be retained at present. However, the park management entity will review the long term feasibility of this site in relation to the development of the proposed access areas and a review of the park's internal road system.

Consideration would need to be given in detailed site investigations and planning to redirecting park visitors away from fragile (and potentially dangerous sites) like the Finch meander bluffs.

Lower Rouge Marsh Access

This southerly access zone will provide a parking area for day use activities and access to the Waterfront Trail. A detailed site review is necessary to determine the best route for the Waterfront Trail and ways of reducing the impact of the existing access and parking on the sensitive Rouge Marsh.

Within this zone, beach-oriented day use and canoe club activities will be encouraged to continue. However, canoeing may need to be restricted to avoid waterfowl breeding habitat during the spring.

The park management entity should investigate these issues in conjunction with Metropolitan Toronto and the Metropolitan Toronto and Region Conservation Authority.

Glen Rouge Access

This existing access/parking area adjacent to Highway 2 will be retained.

Caper Valley Access

This existing access/parking area will be retained at present. However, the park management entity will actively work to reduce the impact of this access point on the Little Rouge River. In addition, the park management entity will review the long term feasibility of this site in relation to the development of the proposed access areas and a review of the park's internal road system.

Little Rouge Access

This northerly trailhead location will be located on Steeles Avenue relatively near the Little Rouge tributary. Further site investigation is required to locate a suitable site, possibly a heritage farm complex. In future phases of park implementation, this site would serve as a strategic Access zone linking trails north and south of Steeles Avenue.

Townline Access and Beare Road/Finch Avenue Access

Both of these trailheads serve the Pickering side of the park. They require further investigations to determine appropriate, specific locations. Both sites would provide opportunities for trail connections from Townline to the Little Rouge Creek and Petticoat Trail system. The Beare Road/Finch Avenue access would also provide a suitable bicycle drop-off spot.

Sites should be selected which do not negatively impact on adjacent sensitive sites or agricultural/residential lands. In addition, a route from the proposed parking area of the zones to the main trail systems and park corridors should be implemented for user ease and safety.

Local Secondary Access

The location of a limited number of local neighbourhood access points will need to be considered by the park management entity which allows for potential pedestrian access beyond those provided in the main Access zones. These local access zones will adhere to the following policies:

- provide local pedestrian, and where appropriate, bicycle access to the park. No parking or vehicular access will be provided;
- the sites will be small and suitably landscaped to minimize the visual and environmental disruption to the park edge;
- the site will be suitably selected for convenient neighbourhood use without increasing the level of use in sensitive areas of the park.

4.2.5 Special Management Zone

The purpose of Special Management (SM) zones is to ensure that specific management policies are implemented on those lands within the park that either need special remedial/enhancement attention or require altered management/operation practices. Key sites recommended for this zoning include: the Metropolitan Toronto Zoo, Ontario Hydro corridors, rail corridors, Beare Road landfill site, Metropolitan Toronto Nursery property, Glen Rouge Campground and the auto wrecking yard. Where agricultural uses are located within hydro corridors, relevant agricultural policies from the Agricultural Heritage Reserve Zone will be applied. The SM zone comprises approximately 20% of the total park area between Lake Ontario and Steeles Avenue.

The general policies of this zone are listed below:

- provide special site design or management, where required, to integrate existing development or remedy existing problems (i.e. visual impact, biophysical impact) and to bring practices in conformity with park goals and objectives;
- implement special guidelines for these zones on a site-by-site basis through agreements between the park management entity and other agencies and private landowners;
- recreational uses that may be permitted will be undertaken in an environmentally acceptable manner.

5. MANAGEMENT POLICIES

5.1 *Natural Heritage Management*

The Rouge Park is composed of a diverse, linked network of natural forests, swamps and marshlands, meadows, streams and rivers, shorelines, bluffs and human landscapes. The park is an operating, substantially healthy, ecological unit worthy of protection and cautious cherishing. Its ecosystem-wide function is of utmost importance, a key link in the larger pattern of bioregional processes.

This highly significant ecosystem influences, and is influenced by, external forces. It serves as a vital ecological link between Lake Ontario and inland areas. It functions as a corridor for seasonal migratory birds, fish, and mammals, as well as for the long term migration of diverse species of plants and animals. Eastward extension of the linked natural systems could improve connections between the park and Petticoat Creek and Duffin Creek systems, which themselves are mostly naturally vegetated downstream to the lakeshore.

The park contains a high diversity of plant and animal species as identified in the Ecological Survey of the Rouge Valley Park, 1991. The continuation and enhancement of park habitats over time require a comprehensive approach to management focusing on protection and restoration.

5.1.1 *Vegetation*

The objective of vegetation management within the park is to ensure the on-going health of native plant communities, and to restore the park's vegetation to as close to a "natural state" as possible. A vegetation management plan will be prepared to guide the specific management policies and initiatives that will contribute to this goal.

Protection of Existing Vegetation

Vegetation protection will be a priority of the vegetation management plan. The vegetation of the park will be managed to:

- allow the natural succession and evolution of the various vegetation communities in the park;
- protect native vegetation from the impacts of human activities;
- where appropriate, carry out active vegetation management to achieve ecological or other park objectives.

The protection of the park's native vegetation will necessarily entail the management of people and related land uses. Thus the primary means of protecting vegetation will be through park zoning and the definition of detailed park development and management policies. Within the Nature Reserve (NR) and Restoration (R) zones (see section 4), human influences will be controlled to minimize disruption of native flora and natural processes. The policies set forth in the park zoning and the vegetation management plan will guide other related planning and management efforts, including facility plans and interpretive strategies.

Commercial timber harvesting will not be permitted in the park, except in conformity with park objectives and vegetation management policies.

Natural Restoration and Managed Succession

Natural restoration, and where necessary managed succession, go hand-in-hand with natural heritage protection as a top priority for future park management. Restoration efforts will:

- provide ecological linkages;
- increase the size and viability of natural areas;
- improve the health of disturbed areas increase biological diversity
- improve general landscape quality.

The park supports numerous linked and unlinked natural areas, and the linkages generally become more remote and lacking towards the Steeles Avenue area. The rivers themselves, the numerous tributary streams and intermittent streams, and the now-isolated woodlots provide a skeleton of natural features which can be linked by restoring forest and wetland conditions in planned corridors and core areas. This will strengthen river and stream corridors, enhance the ecological viability of the tableland woodlots, and infill disturbed areas within otherwise continuous forested tracts.

The following policies will guide vegetation restoration within the park:

- the general priority for restoration and enhancement will be rehabilitating degraded habitats and linking fragmented natural areas;
- the preferred approach will be passive vegetation restoration based on natural regeneration and active planting may take place using native species of local origin;
- vegetation restoration strategies will build on and imitate existing local vegetation communities in the park;

- where it can be demonstrated that native species once existed in the park, and are now no longer present, consideration can be given to their reintroduction. A thorough feasibility study would be required prior to any reintroduction;
- lands within the R zone will be managed to minimize residents' concerns regarding naturalization. For instance, appropriate cover species may be used as an early successional stage to limit the growth of noxious weeds;
- vegetation maintenance and restoration on private and agency lands (i.e. Ontario Hydro) within the park boundary will also be encouraged, following the general principles outlined here. Partnerships in planning, implementation and monitoring should be sought.

Specific priorities and underlying principles for vegetation restoration areas include:

First Priority

- Deforested stretches along the bottomland and side slopes of the two river corridors between Old Finch Avenue and Steeles Avenue ("This would strengthen riparian animal corridors and improve aquatic habitat and water quality;
- a major upland linkage between the two river valleys across cleared tablelands between Finch Avenue and the Passmore Avenue road allowance;
- other riparian habitat and smaller stream corridors, with particular emphasis given to Morningside Creek and the two large tributaries of the Little Rouge Creek;
- corridors between isolated upland woodlots and the valleys to reduce the ecological "island" effect;
- small areas of human-induced erosion
- natural corridors adjacent to proposed trails.

Second Priority

- Expand natural areas to form large blocks of forest and buffering of existing natural areas from non-compatible land uses.

Third Priority

- Underplanting of utility corridors, and managing the corridors as wildlife habitat and possible trail routes, buffering of landscapes and land uses currently inconsistent with the park, strengthening of the agricultural tableland fencerow system and small-scale wetland restoration projects.

In managed succession areas, planting by volunteer groups -particularly school groups -will be welcomed and coordinated within the overall planting strategy of the vegetation management plan.

5.1.2 Other Vegetation Management Issues

Besides the larger issues of protection of native vegetation and species and vegetation restoration, there are a number of other special issues that should be detailed in the vegetation management plan. These are discussed below.

Elimination or Control of Invasive Alien and Noxious Species

Where alien or noxious plant species occur within the park and threaten natural heritage values, particularly in Nature Reserve zones, a control program will be undertaken if feasible. Dog-strangling Vine, Purple Loosestrife, Garlic Mustard and Common Buckthorn are examples of non-native, damaging species that have invaded several areas of the park and should be controlled or, if possible, eliminated.

There are a number of plants which could affect the health of visitors. In particular, poison ivy is very common in some areas of the park. Since poison ivy is native to the park, the preferred approach is public education and avoidance by people using the park. Direct, focused control might be considered outside of Nature Reserve zones where conflicts with park users may arise.

Species Reintroductions

Any introduction of plants into the park will take place within the context of the vegetation restoration efforts outlined by the vegetation management plan. The possibility has been raised frequently of reintroducing plants documented historically, but no longer present, or re-establishing specialist vegetation communities -particularly wetlands, prairies, and Carolinian forests. If not modeled on existing, local communities, such initiatives will be considered as separate, controlled projects within the vegetation management plan, not to be located in Nature Reserve zones. Guidelines for such initiatives will be developed in consultation with groups such as the Canadian Botanical Association, the Canadian Wildflower Society, the Field Botanists of Ontario and the Federation of Ontario Naturalists.

Maintaining Community Types

In some instances it may be desirable to become actively involved in maintaining vegetation communities or specific species. This might be the case, for example, where natural succession, in the absence of natural disturbances such as fire, threatens some forest types. The drier Oak savannas in the park may require controlled burns to be maintained. Any such actions, however, will be conducted only after comprehensive study and with full consideration for public safety.

Fire Management

Due to the urban location of the park and the ongoing presence of internal park residences and facilities, fires started by human activities or natural causes and not intended for vegetation management will be extinguished.

Pest Management

Insects and diseases that attack the vegetation of the park should be considered a natural process, and will not be controlled, except in the instances where they threaten the values for which the zone has been established or where heritage structures or vegetation are threatened.

Where control of infestations is desirable, it will be directed narrowly to the specific problem, to have minimal impacts on the natural ecosystems of the park. Biological, rather than chemical control, should be used wherever feasible.

Infestations by the non-native Gypsy Moth have been recorded throughout the region, and may threaten certain climax forest communities in the near future. A bacterial spray program may be considered, but only where park values are threatened over the long term, since such spraying is usually indiscriminate and may affect native butterflies and moths.

5.1.3 Fauna

The main objective of the management of terrestrial animal life in the park is to ensure the healthful perpetuation and diversity of native species. A supporting, primary objective is the restoration of the park's faunal habitat to as close to a "natural state" as possible. A faunal management plan will be prepared. The following policies will guide faunal management within the park:

- native animal populations will exist with as little human intervention as possible;
- rare species will be monitored. Specific protection or recovery programs to ensure their continued presence in the park may be undertaken as necessary. Native species will not be disturbed or removed unless under an approved research permit to achieve park objectives or, in the case of sportfishing, by normal licensing;
- in addition to the general program for vegetation restoration, special habitat needs may be addressed for certain species once present within or which are experiencing a reduction in number due to habitat losses;
- to protect the long term integrity of the park's ecosystem, non-native animal species will not be introduced. However, the reintroduction (i.e. translocation) of native species known to have occurred historically in the park may be considered, although this will not be the normal orientation of faunal management;
- hunting and trapping will not be permitted within the park. However, control of particular species may be required for public safety, protection of property or perpetuation of natural values.

5.1.4 Aquatic Ecosystems -Surface Water and Groundwater

The goal of aquatic ecosystem management is to achieve a fully functioning, clean and healthy stream system and associated riparian habitat within the park. Key specific objectives include:

- the presence of a full range of self -sustaining populations of native species indicative of a healthy ecosystem;
- water free from abnormal algal growth, sediment and turbidity and uncontaminated by industrial, agricultural or domestic wastes;
- swimming in permitted areas throughout the summer season, without fear of illness.

An aquatic ecosystem management plan will be prepared to address detailed policies and procedures relating to water quality and quantity, aquatic and riparian habitat and fish within the park.

Protection and Management of Park Aquatic System

Natural river and lakeshore dynamics should continue to operate and evolve within the park without interference. It is recognized that in certain cases intervention will be required to restore aquatic processes or habitats which have experienced human-induced impacts. In such cases, remedial or restorative tactics should work with natural processes (i.e. bioengineering) to the greatest extent possible, in coordination with other detailed management plans.

Recreational activities that degrade water quality and aquatic habitat will be prohibited. In certain instances, prohibitions may be seasonal or may come into force during specific weather conditions; for example, some trails may be restricted during the spring thaw or during extended wet spells to avoid trail erosion and subsequent stream sedimentation.

For lands immediately surrounding the park, stormwater management practices which may unacceptably impact aquatic or terrestrial ecosystems in the park should be strongly discouraged.

Private septic systems in and adjacent to the park should be monitored on an ongoing basis by the park management entity, in cooperation with the local Health Unit and the Ministry of the Environment and Energy to determine any potential impacts on local groundwater.

Surface and groundwater impacts due to agricultural activities will also be monitored, with particular emphasis on the Little Rouge Creek. The park management entity should actively seek partners to implement monitoring, remediation and restoration programs to reduce and eventually eliminate these detrimental impacts. The cooperation of

area farmers, the Conservation Authority, relevant Provincial and Federal agencies and non-government organizations will be sought.

The Lake Ontario shoreline will be allowed to evolve naturally, permitting natural regeneration of native plant communities, subject to the recommendations of the vegetation management plan. The sandy beach will continue to be managed for recreation.

Stream Restoration in the Park

River corridor vegetation restoration is a priority within the park (see section 5.1.1) and should also be pursued throughout the watershed. Recommended initiatives should be primarily documented within the vegetation management plan, as supported in the aquatic ecosystem management plan.

The previously healthy and stable Morningside Creek is now severely eroded in certain areas. Sediments from the eroding creek are still being actively transported to the Rouge River. Remedial action and subsequent restoration of the Morningside Creek is required. The City of Scarborough and the Conservation Authority should be encouraged to undertake a stormwater management study of the tributary and adopt a plan to reduce the negative impacts of stormwater discharge into this tributary, in coordination with other detailed management plans.

The park should encourage agricultural stewardship and farming practices which stress improved water quality and habitat.

Wetlands

The existing wetlands will be protected within the Nature Reserve zone of the park.

The Rouge Marsh is a provincially significant wetland, and plays a pivotal ecological role between the lake and valley ecosystems. The Ecological Survey of the Rouge Valley Park, 1991 has documented detrimental changes in the marsh ecosystem since the 1930s, resulting largely from human impacts.

The closing of portions of the lower marsh to boat traffic and nearby paths during the waterfowl breeding season may be considered in the faunal management plan. Restoration initiatives will be encouraged along the interface between the current access road and the marsh.

The Townline Swamp Complex is the second provincially significant wetland of concern. A study of hydrological characteristics is necessary to gain a better understanding of the dynamics of this complex.

The Metropolitan Toronto Zoo and citizens groups have expressed interest in wetland restoration and creation, and numerous small basins may be possibilities along existing streams and drainways. For any wetland restoration or creation project, studies will

precede implementation in order to minimize possible thermal impacts and other negative effects on coldwater fisheries. The involvement of public interest groups in both the planning and implementation of such projects will be encouraged.

5.1.5 Aquatic Ecosystem -Fish

Protection and Management of Habitat

Aquatic habitat restoration for fish communities will be based on the long term objective of ensuring naturally reproducing, self-sustaining native populations. Remedial plans to improve fish habitat will be prepared in conjunction with other detailed management plans, to ensure that other values are considered. This is particularly important with respect to changes in riparian corridors, the creation of new wetlands, removal of barriers to native fish migration, and the rehabilitation of the waterfront marsh.

Fisheries management and restoration efforts within the park will be a cooperative venture between the park management entity, the Conservation Authority, and the Ministries of Natural Resources and Environment and Energy. The involvement of public interest groups in the planning, implementation, and monitoring of such projects will be encouraged.

Recreational angling will be permitted, subject to provincial fishing regulations. In no instance should fisheries resource utilization take precedence over the mandate to protect park values. The integration of fisheries within the interpretive program of the park will be encouraged.

Species Introductions and Reintroductions

The long term objective of fisheries management in the park will be the realization of naturally reproducing, self-sustaining native salmonids in cold waters (i.e. Atlantic Salmon and Brook Trout) and native Pike, Bass, and Walleye in warmer waters. The restoration of aquatic habitat and water quality should be the preferred means of stimulating "natural" reintroductions. Atlantic Salmon will require active stocking when future water quality, temperature and habitat requirements permit. It is acknowledged that even with significantly improved water quality and moderated temperatures, there is no guarantee that Atlantic Salmon will be self-sustaining. In the interim, the management of other self-sustaining species, including naturalized species, will continue in accordance with the Rouge River Fisheries Management Plan, December 1992.

Exotic Species Control

A number of aquatic species have been documented in recent background studies as being either a current or potential threat to the values of the park. These include the Sea Lamprey, Carp and Zebra Mussel.

All available means of reducing the current or potential impact of these species on park values should be assessed. The Federal Department of Fisheries and Oceans is currently involved in the control of Lamprey, and the Department of Fisheries and Oceans and the Ontario Ministry of Natural Resources continue to investigate means of dealing with the Zebra Mussel threat. Carp barriers may offer some potential for reducing damage to the Rouge Marsh.

Any control initiatives will be as selective and ecologically benign as possible. The preferred approach to dealing with single species invasions should be ecologically based, such as the enhancement of habitats which support native predator species. Approved measures to control Sea Lamprey populations will continue.

5.1.6 Geology and Landforms

The objective of landform management is that the park's bedrock, geology, and soils be protected and carefully managed, and that negative impacts from upstream sources be minimized.

A landform and geological management plan will be prepared detailing protective measures, as well as any remedial measures that may be required. Internationally, nationally, and provincially significant earth science features are included within the Nature Reserve zone (see section 4) to protect them. Regionally and locally significant features (i.e. drumlins, flutes, moraine ridges, and drowned rivermouth valleys) will also be protected in an appropriate zone and interpreted accordingly.

Alterations to provincially, regionally or locally significant landforms, terrain types or soils will not occur, except where they conform to other overriding park management objectives. Any remedial actions required should incorporate natural processes, (i.e. revegetation and bioengineering) to the greatest extent feasible. Any required landscaping in the park should mimic native landforms. Artificial berms and out-of-character site grading will be avoided. In all cases, projects will not be undertaken unless appropriate planning, recording of baseline conditions and monitoring of changes over time is assured, with due regard for related park values.

Consideration for the safety of trail users will be a top priority. Informal trails which currently access potentially dangerous landforms will be removed and relocated to safer areas. This may include top-of-bluff trails which are too close to precipitous or unstable edges, as well as slope bottom trails which skirt unstable side slopes. Provisions will be made in the landform management plan and the park operational plan for monitoring and remedial measures, as required.

5.2 *Cultural Heritage Management*

In many respects, the history of the human occupation of the Rouge Park area is the story of a series of adaptations to an ever-changing landscape. The story of those changes and adaptations introduces two intertwining themes which are central to understanding the area:

- human adaptations to natural changes in the environment;
- changes to the environment brought about by the presence of humans.

Building on the above themes will require careful consideration of approaches to identification, protection and interpretation of cultural heritage values in the park. An integrated strategy is required to ensure that cultural heritage values are protected to the greatest extent possible.

It is both easy and natural to concentrate on the visible aspects of history. It is essential, however, to also recognize, understand and interpret the less tangible aspects of the lives of the diverse peoples who have inhabited the area.

5.2.1 *General Policies*

The Rouge Park is rich in the evidence of Aboriginal and Euro-Canadian cultures, and contains nationally and provincially significant features. It is the objective of this plan, therefore, that cultural heritage features and values be identified, protected and conserved. Where appropriate, interpretation of these features will be provided and appreciation of these values will be encouraged.

A cultural heritage management plan will be prepared to guide the management of cultural heritage features in the park, in conformity with the overall park goal and objectives. This plan will elaborate on:

- the preservation and maintenance of significant cultural structures, sites and landscapes;
- specific management techniques for conserving cultural features within the park;
- the restoration and/or adaptive re-use of significant built heritage structures and sites, including the setting of priorities;
- research needs and priorities;
- the type and scope of curatorial facilities required for the park.

The plan will also recognize the need for an integrated approach to interpretation of the park's cultural heritage, focusing on the interaction between humans and nature through the ages. Provisions for the interpretation of significant cultural heritage

features, and the development of related new facilities, will be coordinated between the cultural heritage management plan and the park interpretation strategy. Coordination between the vegetation management plan and the cultural heritage management plan will also be required for common elements such as hedgerows and old fields.

5.2.2 Protection and Management of Archaeological Sites and Collections

The Rouge Park contains archaeological features unparalleled in Metropolitan Toronto, spanning approximately 10,000 years of human occupancy. A primary mandate of the park is, therefore, to conserve archaeological features and, where appropriate, to encourage non-invasive research and interpretation of these values.

First Nations will be involved in the planning for, and management of, all Aboriginal heritage sites.

Some archaeological sites, mainly those associated with Euro-Canadian occupation (i.e. mill ruins), have potential for public visitation and interpretation. On-site interpretation of these features would be contingent on the stabilization of ruins and addressing liability and site impact concerns, as part of the detailed heritage planning process. In general, park uses will be channeled away from known archaeological sites. An archaeological assessment will be conducted prior to any park development occurring.

The Provincial Government is the trustee of all archaeological materials which originate in the park. However, culturally-affiliated artifacts will be made known to appropriate First Nations and, if considered sacred, will be returned if requested.

All other archaeological materials originating in the park will be returned to, or remain in, the park once facilities for conservation and storage are available. Until then, an inventory of such items will be prepared, and their handling and disposition will conform to the cultural heritage management plan.

5.2.3 Protection and Management of Built Heritage Features

The park contains a variety of built, heritage features which must be managed in the context of a cultural landscape which has developed over almost two hundred years. The built features include farm complexes, remains of pioneer mills, bridges and roads, rural residences, survey markers and community institutions such as a church and a school. The fundamental policy of the park with respect to built heritage is that all structures considered to be of heritage significance will be maintained and protected to the extent possible.

The cultural heritage management plan will establish priorities for conservation or restoration based on accepted heritage management principles. Any structures approved by the park management entity for conservation, will be properly maintained.

In addition, cultural heritage management in the park will:

- protect important heritage structures not used for active farming practices for interpretation or adaptive re-use purposes. Such uses may include trailheads, park office and administration;
- permit the establishment of a demonstration farm (to be implemented by an appropriate partner) within the Agricultural Reserve zone. If this use proves feasible, it could incorporate modest interpretive and educational facilities oriented to families and school groups;
- ensure that publicly owned heritage properties continue to be used, either for park purposes or by tenants.

5.2.4 Protection and Management of Agricultural Areas

Part of protecting cultural heritage values in the park involves the continuation of active farming. Since all activities must dwell within the framework of park goal and objectives, with the highest priority being the protection and restoration of the park's natural heritage, some reduction of farm land base is recommended to permit natural restoration goals to be met. While normal agricultural cycles of active cultivation and fallow periods will be respected, old fields showing active succession (i.e. signs of woody species regeneration) should be protected from any future cultivation. This policy will be included within agricultural leasehold provisions.

In an effort to encourage land stewardship, the park management entity will discuss the possibility of arranging longer term leases for agricultural tenants (i.e. 10- 15 years) with the Management Board Secretariat's Real Estate Division.

The principles of sustainable agriculture, as an integral part of ecological sustainability, will govern the future of farming in the park. Farming methods conforming to the best environmentally suitable practices will be encouraged.

Land stewardship initiatives combined with longer term leases in designated areas will be the primary means of attaining sustainable agriculture. Where applicable, the park management entity will enter into partnerships with farmers, government agencies and farm interest groups to implement programs which stimulate land stewardship. Sustainable approaches to agriculture such as mixed cropping, crop rotation, zero tillage, working with natural drainage patterns, minimizing of biocide application and planting of vegetated buffers along waterways will be considered within the scope of longer term lease agreements.

5.3 Protection and Management of Scenic Values and Landscapes

Buildings and structures (i.e. hydro towers, parking lots, etc.) which approach the valley brow or loom from a nearby location can degrade the visual integrity of the park and impact the experience of park users. In order to minimize these effects, the park management entity will work with provincial agencies, municipalities, and developers in finding appropriate ways and means of ensuring park scenic values are protected. Visual impact limitations, as well as full visual impact assessments, should be sought for those developments adjacent to the park boundary which have potential to affect park scenic values.

6. PROGRAMS, FACILITIES, AND OPERATIONS POLICIES

6.1 Regional Context

The vision of the park has, as its primary focus, the continuing health and integrity of natural systems and habitats. Where appropriate, the park vision and goal allow for interpretation of Aboriginal and Euro-Canadian heritage and related outdoor recreation opportunities, albeit with first priority given to the protection of natural heritage values. The relative emphasis given to information, interpretation, and recreation functions therefore reflect the capability of the park to accommodate these functions with no ill effects.

Because of its urban proximity, "intactness", and connectivity to the bioregion, the park has perhaps the highest potential for interpretive and outdoor education opportunities in the Greater Toronto Area.

6.2 Interpretation, Education, and Appreciation

6.2.1 General Policies

A comprehensive and integrated approach to interpretation of the park's natural values, ecological processes, and the relationship over time between its inhabitants and nature should be adopted. This includes promotion of natural heritage education to foster an understanding and appreciation of nature and our environmental responsibility.

Park management and heritage interpretation should include a strong emphasis on evolving cultural landscapes, including the "layers" of change in landscapes, sites, and structures, and the influencing forces in their evolution. The relationship of people and the natural environment within the Rouge Valley system (inclusive of Aboriginal, Euro-Canadian and more contemporary inhabitation), and the influences and dependencies of one on the other, should be reinforced in all interpretive efforts.

The design of the interpretative, education, and monitoring programs for the park will encourage the participation of individuals, groups and institutions. Contributions from the community in directing and participating in programs which further the park goal and objectives will reinforce a comprehensive approach to education within the park. First Nations will be involved in the interpretation of Aboriginal heritage.

6.2.2 Natural Heritage Themes

The Rouge Park has a rich natural heritage which offers great potential for interpretation and education. Its web of landscapes and habitats will provide ample opportunity for the development of interpretive and educational themes.

Natural heritage themes will always seek to illustrate and enliven the central vision for the park. Some examples include:

- Wild in the City;
- Historic Landscapes in the Rouge;
- Rouge Geology;
- River Dynamics
- Living with the Lake;
- The Upland Forests;
- The Bottomland and Terrace Forests;
- Ecosystem Restoration
- Species Recovery.

More information on these themes is presented in the Ecological and Earth Science surveys of the park.

The resource inventories of the park have identified a number of other significant themes. These could also be added as a major category of interpretive sub-themes.

6.2.3 Cultural Heritage Themes

The Rouge Park is abundant with physical evidence of many layers of human habitation, reflecting its cultural diversity. The area is rich in Aboriginal heritage, and a wide range of archaeological features exist, from ancient campsites to Iroquoian and Mississauga settlements, with associated artefacts and sacred places. Ruins of mills and intact early farmsteads from the period of Euro-Canadian settlement of the 1800s are still very much in evidence. Other varied and tell-tale cultural landscape features may also be found, from ancient and historic trails and roadways to ploughed fields and orchards.

"Intangible" cultural heritage (i.e. religion, speech, music, folklore) continue to play an important role in cultural expression in the area.

Specific themes have been identified during the park planning process which may form part of the overall interpretive program. One approach could highlight human-nature interactions chronologically, with the five principal periods being:

- the Palaeoindian period;
- the Archaic period; the Woodland period;
- European contact;
- European settlement.

Numerous other sub-themes may be developed on a chronological or period basis, including the advent of country roads and bridges, the introduction of mechanized farming and local staple milling, development of modern road and utility corridors, and early conservation movements -all affecting and being affected by the landscapes in which they occurred.

6.2.4 Educational Programs

Use of the park for formal curriculum-based natural/cultural heritage education is currently limited to the Scarborough Board of Education's Outdoor Education Centre (Hillside School). This program may be continued as planned, within the framework of the park management plan. Other school boards who currently use the park on a less formal basis have expressed an interest in using the park for natural science, cultural heritage studies and outdoor education purposes. These interests will be encouraged, with- in the limits imposed by program resources and site capabilities.

Educational program design and development will generally be carried out by those group leaders who are using park programs and facilities. It is expected that curriculum would be holistic and integrated, along the same lines as the interpretive program (i.e. an exploration of human/nature interactions).

The park management entity should discuss with the school boards the feasibility of seconding staff to the park.

6.2.5 Facilities and Programs

The primary focus for programmed interpretation and education should be at a central facility. A site feasibility study will need to be carried out by the park management entity, with public involvement, to determine the appropriate location for this facility.

Major elements which may be accommodated in the centre are as follows:

- general public interpretation information source/orientation;
- volunteer coordination;
- interpretation and education;
- curatorial space;
- audio/visual/conference/marketing area.

The centre should have full-time staff, as well as volunteers, who will assist in orienting new park visitors. Interactive, face-to-face interpretation would be a mainstay of the program. Displays, video booths and panoramas would serve to communicate various aspects of the park. A park map, pamphlets, trail guides and booklets would also be available.

Apart from the main centre, trails and trailheads will be the main focus for providing interpretive opportunities. Guided interpretive or educational events and self-guided, pamphlet-based routes should provide most of the program content. Where required and appropriate, kiosks and signs may be strategically located to explain features and park values.

Trails, interpretive nodes and associated access facilities will, wherever possible, facilitate the full participation of mobility and visually impaired park users. A specially designed, barrier free, looped trail will be specifically considered as part of the main park centre. All such features should be planned in consultation with special user groups.

Archaeological sites and artefacts will usually be interpreted off -site. A few exceptions may be pioneer sites, such as Kirkham's Shoddy Mill or Maxwell's Mill on Twyn Rivers Drive, where the site may be able to support on-site visits.

The interpretation of historic farmsteads and rural landscapes should focus on the Beare Road/Steeles Avenue corridors. While self-guided heritage trails/routes will be developed, minimal on-site interpretation of actual historic buildings is anticipated, and the privacy of existing residents will be respected. Where a heritage building may eventually be reused for park purposes -such as the park administrative centre -on-site interpretation will be encouraged.

An interpretive plan will be prepared by the park management entity.

6.3 Recreation

6.3.1 Trail Development and Management

An extensive network of trails is one of the key elements of both education and recreation roles of the park. Substantial additional planning will be required to refine the trail proposals after detailed consideration of user needs, possible environmental impacts, land ownership, projected costs and opportunities for partnerships.

The park management entity will prepare a detailed trail development and management plan for the park, based on the guidelines listed below:

- trail routes should avoid areas of vegetation which cannot sustain disturbance or are sensitive to certain levels of use at particular seasons of the year, and sensitive cultural heritage sites;
- buffers need to be established for trail routes in order to protect special fauna habitats or nesting sites (these will vary depending on the species and their specific requirements) ;
- temporary trail closures may be considered where special nesting site requirements are needed;
- trails should generally avoid sensitive terrain such as steep slopes, wetlands, etc.;
- where possible, existing trails should be used in areas of sensitive or steep physiography to avoid compounding disturbance problems;
- criteria for barrier free trails should be considered in consultation with the park users requiring such facilities;
- construction techniques of trails should vary so as to accommodate the planned level of use, while minimizing disturbance and respecting the character of the site;
- where necessary, trail rotation may be pursued to accommodate levels of use and control of certain areas of the park;
- the trail system should accommodate a variety of hiking experiences for users in relation to various levels of skill and physical capability;
- in addition to siting different trails throughout the park, the trail management plan should also examine the matter of multi-usage of trails and the potential for conflicts.

6.3.2 Regional Trails

The proposed trail system in the park is seen as a fundamental segment of a broader inter-regional trail network. The Little Rouge trail can ultimately link up with the proposed regional, east-west trail along the Oak Ridges Moraine. Other potential valley corridor connections may include a Pickering trail route via Petticoat Creek, and a linking up of the Rouge Park and the West Duffin Creek valley via the Rouge-Duffin Wildlife Restoration Corridor.

The park management plan also includes provision for the Lake Ontario Waterfront Trail. This proposed east-west combined pedestrian and bicycle route will link all waterfront public spaces in the Greater Toronto Area. The park plan includes this proposed route as an important regional trail connection. However, its implementation will require careful site planning with a view to sustainable levels of public use and sensitivity to marsh habitat.

6.3.3 Park Trail System

Pedestrian and Hiking Trails

The park concept map (Figure 5) shows a theoretical trail network. A single main trail will link parklands north and south of Highway 401. Due to the sensitivity of the lower marshes and the extent of privately owned land south of Highway 401, it may be necessary to have a trail in this area follow local streets. Further north it will split to provide a primary trail network through the Rouge and Little Rouge corridors, as well as Morningside Creek.

A secondary looped trail system is proposed as part of the trail hierarchy to allow access to the many special site features. These short trail loops require careful siting and design in order to avoid unnecessary site impacts and channel people away from random trail creation in popular or scenic sectors of the park. These routes would be more rugged, oriented to nature appreciation and interpretation of places that are not easily reached.

The primary trail system measures almost 27 kilometres in length. It would capture many of the scenic features of the park. Trail alignments would generally be located to link points of interest associated with educational themes of natural and cultural heritage programs. A more extensive network of trails should be developed in the lands north of Old Finch Avenue, outside of the Areas of Natural and Scientific Interest (ANSI). Within the ANSI areas, users will be discouraged from deviating from the surface of the trail, in order to protect natural environments.

The park interpretive centre will serve as the focus of all trail activity in the park.

Bicycling Trails

A looped bicycle trail system will also be provided. This system would most appropriately be located between Old Finch Avenue and Steeles Avenue.

Detailed review of the bicycle trails will be required to determine the specifics of route selection, particularly related to ensuring safety in busy agricultural reserve zones and main roadways such as Steeles Avenue. Incorporation of separate designated cycle lanes may need to be provided.

Additional routes may be examined for mountain bike users that will be more rugged and challenging.

Horseback Riding Trails

Controlled recreational horseback riding will be allowed on designated trails in the area between Old Finch Avenue and Steeles Avenue. Existing horseback riding which occurs through sensitive natural areas north of Highway 2 will ultimately not be allowed to continue.

Cross-country Skiing Trails

Cross-country skiing may be allowed on designated sections of the park trail system.

6.3.4 Other Recreational Activities and Programs

Other recreational activities could be permitted in the park including:

- canoeing and kayaking will be permitted on the navigable portions of watercourses. Canoeing and kayaking in the marsh may be restricted at some times of the year due to waterfowl nesting;
- controlled, low-impact, walk-in tent camping may be permitted at designated sites outside Nature Reserve zones.

There is an opportunity to accommodate the development of a recreational facility designed for a broader range of recreational activities (ie. baseball/soccer/football fields, cricket pitches). This facility would not be managed and operated by the park management entity, but by an appropriate partner. However, the location and extent of this facility will require detailed study and approval by the park management entity.

6.3.5 Prohibited/Restricted Recreational Uses

The Rouge Park contains natural areas that are so sensitive to specific uses that in order to ensure that existing or uncontrolled activities do not degrade the park, controls must be placed on inappropriate recreational uses.

The use of all terrain recreational vehicles and other motorized vehicles will only be permitted on roads, subject to provincial and municipal regulations. Currently, motor boating is prohibited in the lower Rouge Marsh, and this policy will be continued. Launching of motor boats will not be permitted on park property.

6.4 Special Events

6.4.1 Cultural Heritage Events

Other than interpretation of cultural heritage provided within the main park centre and along selected routes and nodes, cultural heritage special events will generally not be promoted by the park. However, events initiated by the Hillside Community will be encouraged where they further goals and objectives of the park. Where special events require the gathering of large numbers of people, they should generally be located in association with existing services and parking lots, subject to the approval of the park management entity.

6.4.2 Aboriginal Ceremonial Activities

The significance of the park's archaeological features is a testament to the extremely long and rich heritage of Aboriginal peoples in the region. By virtue of this association, Aboriginal peoples have an intrinsic right of involvement with the park and its programs. There is a need, therefore, for a continuing process of contact and consultation with First Nations and specifically representatives of both the Seneca and Mississauga. One important topic for discussion will be the programming of special events.

Potentially, Aboriginal activities could be quite varied, and, where considered appropriate by Aboriginal representatives, non-Aboriginal involvement in special events may take place.

6.4.3 Other Events

There may be instances where the park management entity should encourage special events on an on-going or one-time basis. For instance, special walks and voluntary vegetation/habitat restoration projects should be encouraged and promoted by the park entity where they conform to the park management plan and interpretive strategy. Such events will require advance planning and the approval of the park entity prior to their taking place.

6.5 Access and Control

6.5.1 Access

The main visitor access to the park will be afforded through the park interpretive centre. Other access will be provided at a series of access zones/trailheads (see 4.2.4).

6.5.2 Internal Roads

Many of the roads currently passing through the park are important east-west transportation routes for many residents in the Greater Toronto Area. Future development east of the park and north of Steeles Avenue will increase traffic pressures.

The restriction of through traffic in the park may be a desirable long term objective. However, several significant transportation improvements will need to be in place prior to any consideration of restricting through traffic in the park. Any strategies for restricting through traffic will be developed in conjunction with the appropriate road authorities, municipalities and the public.

6.5.3 Entry Control

It is not intended to fence the park boundary. However, there may be certain instances where fencing may be required to control access encroachments and certain incompatible uses. In the case of new development adjacent to the park, the developer may be required to install suitable fencing along the park boundary.

6.6 Park Operation

6.6.1 Park Headquarters

A park administration centre; and maintenance yard will be required. The park management entity will conduct a site selection review, with public involvement, to find the most appropriate location.

6.6.2 Public Safety and Emergency Access

In an urban park setting such as the Rouge Valley, a highly effective network of emergency services (ambulance, fire, etc.) are potentially available through agency and municipal contact. The park management entity will work towards establishing the necessary agency arrangements for the public safety. In addition to park patrol staff, there will be the need for police surveillance.

Park users will need to be educated as to the contribution that they can make in informal surveillance of the area and the need to continue the "park neighbourhood watch" approach to public safety issues.

All trailheads will have emergency telephone services.

6.6.3 Road Maintenance

The park management entity will seek to have the road maintenance procedures (i.e. snow ploughing, re-surfacing, grading) currently provided on municipal roads within the park continued. The park management entity will discuss this issue with the affected municipalities.

6.6.4 Water and Sewer Services

The park facilities will function as much as possible on municipal servicing connections. Where alternative sewage treatment provisions need to be made for a park facility, the installations will meet all existing regulations.

6.6.5 Other Operational Policies

A park operational plan will be prepared by the new park management entity to provide staff with the necessary direction required to operate the park on a day-to-day basis. The policies and strategies provided may include such topics as budget, staffing, maintenance schedules, enforcement and emergency response.

6.7 Evaluation, Research and Information Management

6.7.1 Monitoring and Research of Natural and Cultural Heritage

The Rouge Park has the potential to become one of the Province's largest "living" ecological and cultural heritage laboratories, and can expect a significant level of interest due to its urban context. The coordination and review of monitoring and research should be the responsibility of the park management entity. Monitoring and research will only take place where it is consistent with the goals and objectives of the park and its ecosystem context.

Government agencies, the Metropolitan Toronto Zoo, academic institutions, and community interest groups will be encouraged to participate in recording, monitoring and evaluation. Partnerships and community involvement will be encouraged.

6.7.2 Monitoring of Park Use and Surrounding Influences

The management of human impacts on the park will require:

- the establishment of baseline data on current use of park trails, marsh area, and public beach (the small trail use survey conducted in the Fall of 1991 requires broadening and statistical validation);
- the monitoring of use and condition of sanctioned trails, as well as the monitoring of any closed or spontaneously created trails;
- the documentation of visual influence from surrounding development;
- water, soil, and vegetation impacts from human intervention.

7. PARK MANAGEMENT STRUCTURE

7.1 Introduction

The Rouge Park is a large and complex area, consisting of many parcels of land under different ownership having varied sensitivities to human use, a wide range of requirements for ecological restoration and management or cultural management, and differing needs for protection. Its management structure must be able to deal effectively with the whole area and its complexities, while remaining sensitive and responsive to the values for which the park was created in the first place. The park management entity must be able to encourage a high degree of communication and involvement with landowners, agencies, groups and the general public.

The specific management structure has yet to be determined. Continued discussions involving the federal, provincial and municipal governments, public agencies, community groups, etc. are needed to determine the most appropriate management structure. These discussions will also determine the mandate and reporting structure for the park management entity.

7.2 Management Structure and Function

7.2.1 Functions and Powers of the Management Entity

The park management entity will be guided by a Board of Directors, which will consist of members appointed from the various management partners. The Board of Directors should be relatively small to ensure its effectiveness.

Although the specific mandate of the park management entity has not been formally defined, it is possible to outline, in general terms, the functions and powers which may be assigned to the Rouge Park management entity. The main functions of the park management entity will be park planning, park land securement, park management, park development and operations, and financial management.

With respect to planning, the initial park management plan is this document as approved by the Province. The park management entity should be responsible for subsequent planning, including keeping the plan current by implementing a formal amendment and review process, and preparing the detailed management plans.

The park management entity will have the power to acquire lands by purchase, lease, gift or bequest. Where lands are owned by park partners, agreements can be entered into such that the lands are managed in accordance with the Rouge Park Management Plan.

Special agreements should be reached with non-park agencies which continue to hold or manage lands within the park boundary. For example, Ontario Hydro owns large areas which should be managed in a way sensitive to park objectives.

The park management entity will direct and be responsible for all park management functions, and will ensure the coordinated management of any functions carried out by its partners. With respect to park development and operations, it is not intended that the park management entity would necessarily employ sufficient staff to conduct all such operations by itself. Substantial emphasis in doing such work should be placed on involving other agencies, partner groups and volunteers. Some specific functions could be contracted out to private or public sector entities.

7.2.2 Park Funding

Park funding will require detailed discussion among the park partners. Cost sharing among the partners will be the basis for these discussions.

Careful analysis is required to determine the most appropriate method of providing funds. A number of options will be explored including:

- provision of a one time, lump sum funding by the partners to establish a Rouge Park Trust Fund, with subsequent revenues from the Fund used to cover operating and capital costs;
- provision of annual capital and operations funding by the partners;
- adopt a hybrid form of funding including lump sum payment for certain activities and annual funding for others and revenue generation and retention options.

7.2.3 Partnerships

Partnerships are considered an essential component of the management approach to the Rouge Park. It is anticipated that these partnerships will involve the widest possible range of partners, including the federal, provincial and municipal levels, other public agencies, First Nations, groups, companies, landowners and individuals. The partnerships will provide for a broad range of types of involvement including:

- participation on special-purpose task forces, technical working groups, and advisory committees under the auspices of the Board of Directors.

- at the development level, many opportunities can be created for individuals, groups and agencies to undertake such tasks as landscape restoration, trail building, planting operations, bank and slope stabilization, general cleanup, and so forth. Young people, in particular school classes, can be challenged by such opportunities to "make a difference". They should be organized in a manner to encourage pride of accomplishment and a continuing interest in the park;
- in park operations, one of the greatest needs will be for general stewardship of the Rouge Valley and all of its features. General cleanup will be a need, as will a degree of surveillance to ensure that rules are kept and visitors informed of the consequences of their actions. Local community groups and individuals, as well as nature interest groups, could become involved in these function;
- in planning and keeping the plan current, a major function will be ongoing environmental monitoring and research. Here, academic and scientific institutions, including government institutions, should be encouraged to help. Universities are the first to consider, but colleges and high schools should not be overlooked.

7.3 Interim Management and Issues

It is the intent to move as quickly as possible toward establishing the park management entity. Environmental assessment requirements at both the Federal and Provincial levels related to the park will need to be addressed.

In the interim, the province will continue to work cooperatively with the area municipalities and other public agencies in protecting park values.

All public land owners within the park boundary will be encouraged to manage their lands in accordance with this plan. Private land owners are also encouraged to adopt appropriate land stewardship techniques which protect park values.

8. IMPLEMENTATION

8.1 *Phasing and Priorities*

Protection and enhancement of this important natural area is the over-riding objective in the park management plan. However, many initiatives included in the plan relate to park management, vegetation restoration and habitat enhancement, trail construction and closing, people management and education facilities which require financial commitment and consideration based on implementation priorities.

A general task outline by phase is identified as follows. All phasing priorities can be reviewed and re-evaluated in terms of their feasibility at any time throughout the process.

8.1.1 *Phase 1*

Administration/Management

- negotiate agreements with park partners in order that their lands can be managed as part of the park;
- discuss the issue of taxes with Municipalities and the Province;
- initiate the process for the establishment of the park management entity, including legal investigations and proposals;
- confirm basic partnership arrangements regarding park operations, funding requirements;
- secure funding from park partners;
- select Board of Directors;
- establish initial contact with non-partner agencies, ie. Ontario Hydro;
- review leases for provincially owned lands;
- select and set in motion the core staff requirements;
- prepare an operations plan for that portion of the park between Lake Ontario and Steeles Avenue.

Management/Development

- prepare access and trail development plans;
- rehabilitate trails in critical habitat or disturbed sites;

- start construction of new trails; .implement some trailheads; prepare a detailed vegetation management plan;
- renaturalize/plant, where required, lands that are primary restoration areas;
- conduct a heritage resources management study, including recommendations for adaptive-reuse of buildings;
- prepare a series of detailed management plans for fauna, aquatic ecosystem, and land form/geology;
- implement restrictions of certain park uses i.e. horseback riding;
- explore planning issues with the municipalities related to guidelines for the lands adjacent to the park boundary;
- establish a network of groups and individuals interested in participating in the park volunteer program; establish a park stewardship program and initiate contacts with landowners;
- prepare a detailed land acquisition plan with acquisition funding strategies;
- provide input to and review resource and planning documents which affect the park, as appropriate;
- establish an interim park administration office/maintenance yard;
- prepare a park management plan for that portion of the Rouge Park from Steeles Avenue northward.

8.1.2 Phase 2

Administration/Management

- continue to secure management and financial partnerships with park partners.

Management/Development

- prepare natural and cultural heritage interpretive plan;
- implement more trailheads with signage;
- implement the remainder of the main trail route and the bicycle route; some secondary loop trails may be implemented if funding or volunteer efforts are available;
- complete the park signage system;

- complete all marketing and educational literature and information for distribution purposes;
- secure funding and construct a permanent park administrative office/maintenance yard;
- complete all special management policy area agreements with agencies, i.e. Ontario Hydro, CP and CN railway companies, the Metropolitan Toronto Zoo.
- conduct a main park interpretive centre site selection/feasibility study and ensure the protection of the chosen site;
- secure, through either agreement or purchase, the main park interpretive centre site.

8.1.3 Phase 3

Management/Development

- finalize secondary trail system implementation;
- complete all trailhead implementation;
- secure funding and construct the main park interpretive centre and associated site development.

Some tasks may not be implementable for a variety of reasons in the short term, but could be implemented in an interim form in the initial park years. For example, an interpretive or volunteer centre could be established in an existing structure until the main park interpretive centre is completed in Phase 3.

8.2 Communications

There are four main principles that will guide the communications efforts of the park, as noted below:

- there should be sufficient awareness of the values and benefits of the park to ensure continued public support,
- efforts should be oriented only to those activities which are compatible with the park's vision, goal, objectives and principles. That is, promotion will be confined to the natural and cultural values and generally, low-volume, low-impact recreational uses;
- there should be an emphasis on fostering research activity in the park and programs oriented to environmental education;
- a high priority should be placed on communications with the residents and landowners in and adjacent to the park boundary to encourage their active involvement in and support for park programs and objectives.

9. MANAGEMENT PLAN REVIEW AND AMENDMENT

The park management entity will have a sound park management plan to start initially, but the plan should be seen as a continually evolving living thing, just as the Rouge system itself is alive and evolving.

A comprehensive formal process to review and amend the document should be established. This process should be closely linked to an ongoing monitoring program. The first review should not occur until the park has had a chance to become operational. Subsequent reviews should occur at 5-10 year intervals. Future reviews must embody the goal and objectives of the original Rouge Park Management Plan.

10. PROPOSED ROUGE PARK NORTH OF STEELES AVENUE

10.1 Strategy and Timeframe

The Rouge Park from Lake Ontario to Steeles Avenue largely consists of a triangular block of land containing well defined valley systems and a sizeable area of tableland.

The future park extension from Steeles Avenue northward to the Oak Ridges Moraine is notably different in that it is more linear in nature, centering around the main valley systems.

While recognizing the differences, the overall park concept, vision, goal, objectives and principles are valid and apply to the entire Rouge Park from Lake Ontario to the Oak Ridges Moraine.

A detailed park management plan will need to be prepared for the northern portion of the park starting at Steeles Avenue. Such a park plan will examine the natural and cultural features of the area and develop appropriate policies and programs based on the park concept and directions established in this park management plan.

The park management planning process for the proposed northern portion of the Rouge Park should commence as an early initiative of the park management entity.

10.2 Planning Area

The park planning area for the proposed northern portion of the Rouge Park will include:

- the valley systems of the Rouge River, Little Rouge Creek, Berczy Creek, Bruce Creek, and the Morningside Creek. The limits of the planning area for these systems will be based on the park boundary criteria identified in section 3.3 of this plan with the exception of the Little Rouge Creek system,
- park corridor along the Little Rouge Creek approximately 600 metres in width from Steeles Avenue through the provincially owned lands (i.e.±300 metres on either side of the watercourse). This would provide a component of the major regional linear park link with the Oak Ridges Moraine;
- to the north of the provincially owned lands, two options to link with the Oak Ridges Moraine will be explored:

- a) a 100-200 metre corridor along the remaining portion of the Little Rouge Creek. This option would require the securement of lands, privately owned, to complete this link;
- b) a continuous 600 metre link through Federal Airport lands and a 100-200 metre corridor along the remaining privately owned lands. This option would also require the securement of some privately owned lands (see Figure 7).

A number of transportation facilities such as the Highway 407/transitway corridor, Highway 7 realignment, Steeles Avenue/Taunton Road widening, etc. are being planned in this area. As a matter of principle, the park will not preclude these or other transportation and utility or pipeline projects from proceeding, subject to obtaining the necessary approvals.

10.3 Interim Protection

The Province is committed to protecting the integrity of the Rouge Watershed and the development of a regional linear park link from Lake Ontario to the Oak Ridges Moraine. To this end, the support and commitment of the Metropolitan Toronto and Region Conservation Authority, area municipalities and other agencies in protecting the ecological integrity of the Rouge River watershed is a necessity.

Until such time as a park management plan has been prepared for the proposed northern portion of the Rouge Park, area municipalities and public agencies are requested to apply the concept, directions and park boundary criteria identified in this park plan to land use planning and development studies and applications.

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