

**JOHN HENDRY (TROUT LAKE) PARK MASTER PLAN
and
STORMWATER MANAGEMENT STUDY**

TERMS OF REFERENCE FOR CONSULTANCY

JUNE 14th, 2013

INTRODUCTION

The Vancouver Park Board is looking for a dynamic and creative multi-disciplinary consultant team with specialization in park planning, urban water resources management, biodiversity enhancement and natural habitat restoration to lead the public engagement process and collaborate with various City departments to develop a long-range master plan for John Hendry (Trout Lake) Park. The project includes three inter-related components:

1. Leading and facilitating a multi-faceted public process; engaging with stakeholders, community groups and citizens about the future of John Hendry (Trout Lake) Park.
2. Developing an overall master plan that addresses recreation use, stormwater management, natural habitat restoration, and emerging use of the park.
3. Assessing opportunities and options for incorporating stormwater features into the park to improve water quality and enhance biodiversity (refer to Appendix 1).

The successful consultant team will have demonstrated strong facilitation, public engagement, graphic presentation and communication skills, as well as a high level of technical expertise and experience in the following areas:

- landscape architecture and park master plan preparation;
- urban stormwater management including water quality; and
- natural habitat restoration and biodiversity enhancement.

OBJECTIVE

The project goal is to ensure John Hendry Park continues to be a vibrant and well-loved community gathering space and that future park renewal projects will serve to meet the needs of the present and future generations.

Project objectives include engaging with the community to consider potential park elements and upgrades that will increase recreational opportunities and the variety of park experiences

while preserving and enhancing the natural beauty, ecological health, function, and benefit of the park.

The master plan is intended to establish an appropriate spatial arrangement for future park uses and establish a guiding vision for cost-effective park development over the next 10-15 years. The consultant team is expected to engage with the community to identify priorities, articulate a design programme, and develop a concept plan that can be used to provide guidance for future Capital Plan projects.

Approval of the John Hendry (Trout Lake) Park Master Plan by the Vancouver Park Board is anticipated in early summer 2014.



MAP 1 John Hendry (Trout Lake) Park

BACKGROUND

The Vancouver Park Board is committed to excellence in resource management, engaging with people, delivering high quality universally inclusive and accessible parks, encouraging active living, and being a leader in greening.

John Hendry (Trout Lake) Park is located in East Vancouver's Cedar Cottage neighbourhood and is a premier destination park with the only accessible freshwater lake in Vancouver. The park was created in the 1920's and expanded to its current 27.3 hectares (67.5 acres) over the following 40 years. The park, with Trout Lake as its central feature, is very popular and attracts in the order of 750,000 visitors per year.

The park is surrounded by mostly single-family houses and duplexes, with medium density housing located northwest of the park (near the Broadway-Commercial SkyTrain station) and southwest of the park in the Commercial-Welwyn area.

Eikos Planning and Environmental Design Group Ltd., under the late Art Cowie's direction, developed the concept plan for John Hendry Park in 1978, (see Appendix 2). The park's inspired and environmentally sensitive layout and design has remained largely unchanged for over thirty years.

In 1995 an artist-led study was undertaken; the Trout Lake Restoration Project included oral history accounts and an interpretive map, (see Appendix 3).

The landscape architecture firm, Phillips Farevaag Smallerberg led a community consultation process in 2008 which culminated in the design and construction of Walter Francl Architecture's award-winning Trout Lake Community Centre and Ice Rink (awards include, Excellence For Green Building: Globe Foundation and World Green Building Council). The new centre and rink are a vital hub of social, recreational and cultural activities and serve the needs of the community well.

Recently a portion of the combined sewer in the Trout Lake catchment area was separated; providing new opportunities for improving stormwater quality and enhancing natural habitat for biodiversity in John Hendry Park and Trout Lake.

The park currently includes the following features:

- Trout Lake (about 4 hectares/10 acres) with a freshwater swimming beach at its south end and naturalized edges on its east and west banks;
- Trout Lake Community Centre and Ice Rink, completed in 2012 and 2009 respectively, (located in the southwest corner of the park near Victoria Drive and 19th Avenue);
- Peat soils (present throughout the park);
- A perimeter walking path around the lake, and the B.C. Parkway bicycle route;
- Large grassy areas, some with panoramic views of the North Shore mountains, especially in

the southern portion of the park;

- One fieldhouse at the south end of the lake with washrooms, change rooms, a food concession and a caretaker's suite;
- One picnic shelter at the southeast end of the lake;
- Two children's playgrounds (a new and inclusive playground immediately east of the community centre and a 30+ year old playground east of the fieldhouse)
- Three tennis courts and three multi-use sports courts (all located in the southwest corner of the park);
- Two grass playfields, one all-weather field and six ball diamonds;
- Clubhouse for the Trout Lake Little League (located on the eastside of the park);
- Four parking lots located at the periphery of the park, with a total of about 350 spaces (the northern lot hosts a seasonal farmers market); and
- A dog off-leash area located at the north end of Trout Lake.

Additional background, reports and information on related Vancouver Park Board and City of Vancouver initiatives and strategic plans can be found at vancouver.ca.

OPPORTUNITIES

A variety of important opportunities have led the Park Board to make preparations for a master plan for John Hendry (Trout Lake) Park; the master plan process will explore these and other suggestions and make recommendations.

Opportunities associated with existing uses in the park:

- The dog off-leash area at the north end of the lake is one of Vancouver's most popular dog off-leash areas; its interface with the perimeter walking path has resulted in conflicts with other park users.
- The extensive trail system in the park is well used year round and consideration is needed regarding drainage improvements, expansion, and appropriate surfacing.
- In recent years concerns have been raised regarding the water quality in Trout Lake and its future potential for swimming.
- The existing (30+ year old) playground at the south end of the lake is in need of replacement.
- There is a desire by the Vancouver Farmers Markets, to expand the size of the Trout Lake Farmers Market. A review of the operational requirements of the market as well as potential parking and traffic impacts is needed.

- John Hendry Park hosts a handful of major festivals (including Illuminares Lantern Festival) as well as a number of smaller events, including picnics. Improvements may be needed to better host both large and small events and festivals in the park.

Opportunities associated with the design programme, new recreational uses and facilities:

A diversity of opportunities focused on enhancing the social, cultural and environmental well-being of the community is expected to emerge during the public engagement process, including:

- key community values about the park;
- overarching park principles;
- the ecological integrity of Trout Lake and other significant natural features in the park;
- options for the stormwater quality improvements and rainwater restoration;
- areas and strategies for increased naturalization and biodiversity;
- opportunities for advancing environmental sustainability;
- location of the field house and public washrooms;
- location of playing fields and ball diamonds;
- location of sport courts and children’s playgrounds;
- size and layout of dog off-leash area;
- layout of walking paths and B.C. Parkway bicycle route, including park entrances;
- possible addition of new recreational uses (e.g. skateboarding facility, volleyball courts);
- hosting of community events and festivals, including picnics and the farmers’ market;
- location of parking lots;
- vehicular traffic patterns on streets surrounding the park; and
- priorities for improvements.

Opportunities associated with stormwater quality improvements, biodiversity enhancements, and naturalization in the park:

Over the years, there have been proposals for increased naturalization of the park, including the planting of indigenous vegetation and the daylighting of culverted streams.

The long-term goals of the current Greenest City 2020 Action Plan include enhanced biodiversity, improved ecological health, reduced combined sewer overflows, and increased access to nature.

Additional information and the scope of work related to the stormwater management study is attached, (see Appendix 1).

SCOPE OF WORK

The scope of work includes three main parts:

- the public engagement process
- developing a park master plan and associated written report
- a technical study and report on stormwater management, biodiversity enhancement and habitat restoration options (refer to Appendix 1).

The components are described separately in the RFP but are expected to be undertaken by a single multi-disciplinary team. The stormwater management study is expected to be integral and help to inform the master planning work.

The successful consultant team will be responsible for:

- collecting, organizing, digitizing and printing all planning, landscape and facility information relevant to the preparation of a master plan for John Hendry (Trout Lake) Park; recording and meeting up to **ten** times with an inter-departmental steering committee consisting of representatives from a variety of Vancouver Park Board and City departments, including: Communications, Community Planning, Engineering Services, the Sustainability Office, Park Development, Park Planning, Facility Development, Recreation, and Operations;
- leading, facilitating, recording and presenting at all public engagement events with neighbourhood residents and interested community groups - to hear ideas, answer questions, listen to feedback, and discuss options. (The expectation is that public engagement opportunities will include **three to four** public open houses as well as **15** meetings/workshops with small groups of interest-based stakeholders);
- preparing questionnaires and comment forms to glean public input and gauge support as well as analyzing, synthesizing, summarizing and reporting back on feedback received from respondents;
- providing to Park Board staff digital files of comment forms and materials prepared for and presented at public events in a format suitable for uploading to the Park Board's website - 3 weeks in advance of events;
- preparing three and up to five conceptual master plan options to be presented to the public at a variety of events – display boards including photos, sketches, aerial perspectives and cross-sections to further assist public understanding of options and choices. Based on feedback received, the master plan options will be developed and refined incrementally, between public open house events;
- preparing and presenting a recommended park master plan and stormwater management report to the Vancouver Park Board for approval;
- preparing 2-D and 3-D visual material for presentations at public events and at Vancouver Park Board meetings;
- identifying an order of magnitude cost to implement the master plan and priorities for phasing and upgrades based on public feedback;

- providing two hard-copy and one electronic version of the Vancouver Park Board approved master plan and stormwater management report;
- minutes of all meetings.

Vancouver Park Board staff and the City’s Communication team will:

- assist with organizing public events, including identification of stakeholders, public notification and advertising, event space booking and set-up, translation/interpretation services, review questionnaires and upload on-line, gather public feedback, create and maintain a dedicated John Hendry Park project page on the City of Vancouver’s website;
- write reports to the Vancouver Park Board and its committees; communicate with the media.

DELIVERABLES

John Hendry (Trout Lake) Park Master Plan:

- concise report (15-20 pages) presenting the recommended park master plan, planning process, consultation methods, and results;
- stormwater management report, including options for biodiversity enhancement and habitat restoration;
- implementation strategy and priority projects; and
- phasing and cost estimates (Class D)

SCHEDULE

- | | |
|---|----------------------|
| • Awarding of Consultant Contract | Aug 2013 |
| • Preparation of Master Plan options | Sept 2013-April 2014 |
| • Master Plan Public Engagement Events: | Sept 2013-May 2014 |
| Open house #1 (with on-line questionnaire) | September 2013 |
| Open house #2 (with on-line questionnaire) | November 2013 |
| Open house #3 (with on-line questionnaire) | March 2014 |
| Open house #4 optional (w/on-line questionnaire) | May 2014 |
| • Community Stakeholders Meetings/Workshops (15) | Sept 2013- Mar 2014 |
| • Staff and Staff Steering Committee Meetings (10) | Sept 2013- June 2014 |
| • Preparation of recommended John Hendry Park Master Plan | April 2014- May 2014 |
| • Completion of Report | June 2014 |

- Presentation to and Vancouver Park Board approval of John Hendry (Trout Lake) Park Master Plan

July 2014

SUBMISSION REQUIREMENTS

The consultant proposal should include the following:

- a description of innovative and unique approaches to the work offered;
- a description of the firm and project team, including identifying team members, their experience and project role, for both prime consultant and all sub-consultants;
- a description of the consultant team's ability to design and produce creative presentation material (hard copy and digital) in a timely fashion;
- a description of the work program, including a timeline for each phase of work;
- a fee schedule which includes:
 - a) a breakdown of fees for the consultant and sub-consultants;
 - b) a breakdown of fees for the various project phases; and
 - c) a list of hourly rates for possible additional work beyond the agreed upon scope of work.

Note: The prime consultant may, at their discretion, submit separate (optional) proposals from up to three sub-consultant teams for the preparation of the Stormwater Management Study – (refer to Appendix 1).

PROPOSAL SUBMISSION DEADLINE

The consultant is to submit 5 copies of their proposal to _____, by **Thursday, July 26, 2013, 3:00 pm**. Inquiries should be directed to _____.

Park Board may or may not award the contract to the lowest qualified bidder.

APPENDIX 1

JOHN HENDRY (TROUT LAKE) PARK STORMWATER MANAGEMENT STUDY: Options for Stormwater Quality Improvement and Biodiversity Enhancement

PURPOSE

A key and foundational component of the John Hendry (Trout Lake) Park master planning work is the development of options for stormwater quality improvement and biodiversity enhancement.

The prime consultant team is expected to hire sub-consultants to lead a stormwater management study for John Hendry (Trout Lake) Park which will:

- develop options for improving stormwater quality including the capture or removal of fine sediment, fecal coliforms, and other contaminants associated with urban stormwater;
- explore options to maintain or enhance park use including recreational swimming;
- identify opportunities to create or restore watercourses and/or wetlands to improve stormwater quality;
- enhance biodiversity and increase access to nature by creating or restoring wetland, watercourse, and riparian habitats;
- demonstrate innovation in meeting Greenest City targets (<https://vancouver.ca/files/cov/Greenest-city-action-plan.pdf>); and
- create resilient infrastructure that helps the City adapt to climate change;

The study and options explored will be presented during the park master plan public engagement events and are expected to inform the design programme; a separate public engagement process for this specific and technical portion of work is not required of the sub-consultants.

WORK PROGRAM

1. Meet at Park Board along with staff from COV Engineering Services and Sustainability Office to confirm scope of work, communication requirements, and schedule, and to transfer existing information (GIS data, background reports, etc);
2. Review existing information on stormwater discharge and quality in the Trout Lake catchment (see Map 2 approximate catchment boundaries), and fill data gaps as required;

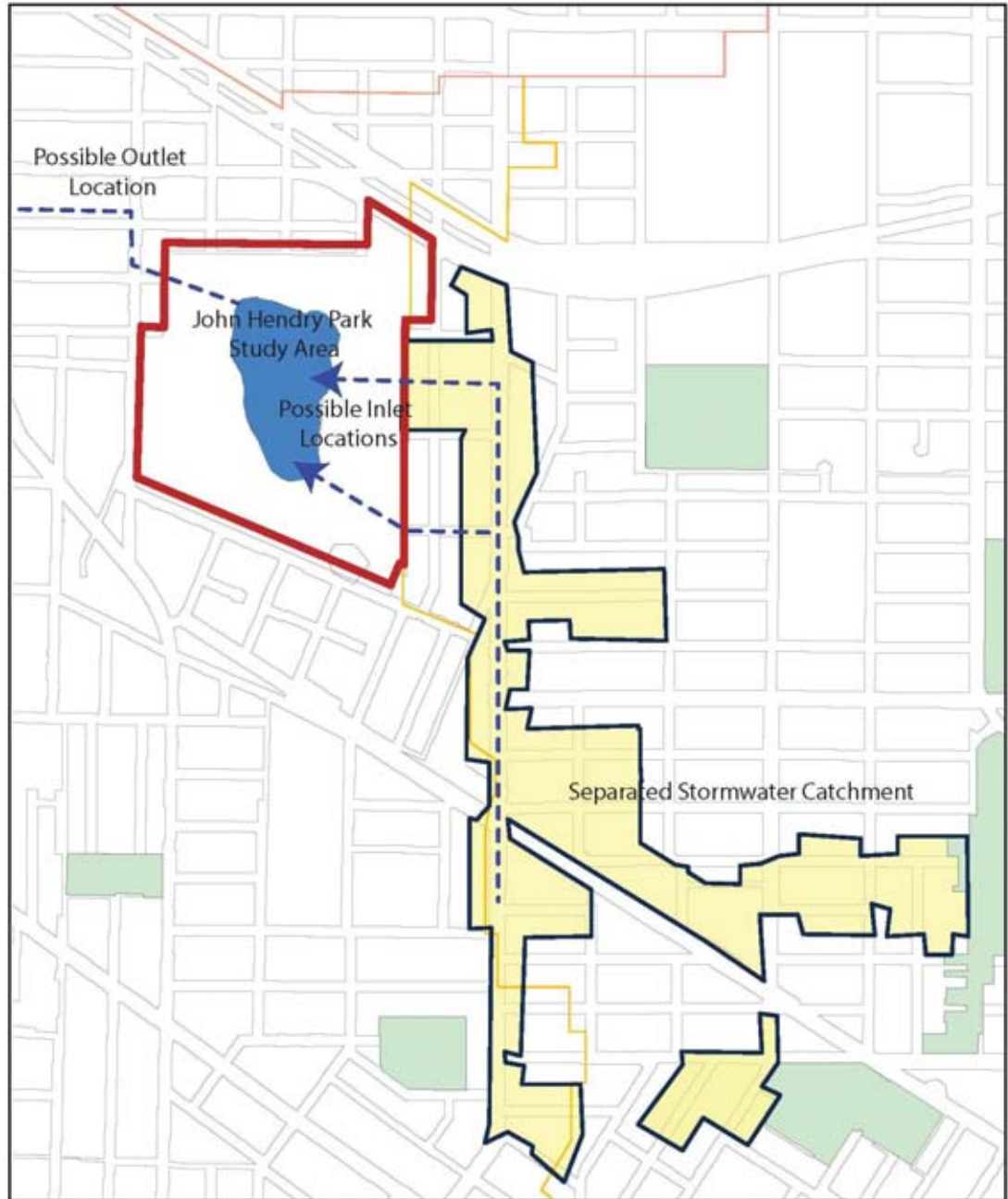
3. Identify options for meeting the stormwater management study objectives that may include but are not limited to: creating biofiltration wetlands, chamber-based filters or sediment traps, UV-based treatment systems, new or restored watercourses and riparian areas, seasonally flooded areas, diversion/bypass structures, and low-energy pump systems to circulate water. These options are expected to create a “toolbox” that can be assembled to create an overall water management system;
4. Provide maps, illustrations, text, tables, and data analysis to illustrate and compare the different options to the level that they can be presented to staff and the public;
5. Summarize the opportunities and challenges of each option in meeting the project objectives;
6. Provide preliminary costs estimates (Class D) for each option; and
7. Develop a compelling project summary for engaging the public and potential funders.

Stormwater Management Study Area

See attached MAP 1 (John Hendry (Trout Lake) Park), MAP 2 (Stormwater Catchment), and MAP 3 (Overall Trout Lake – China Creek System).

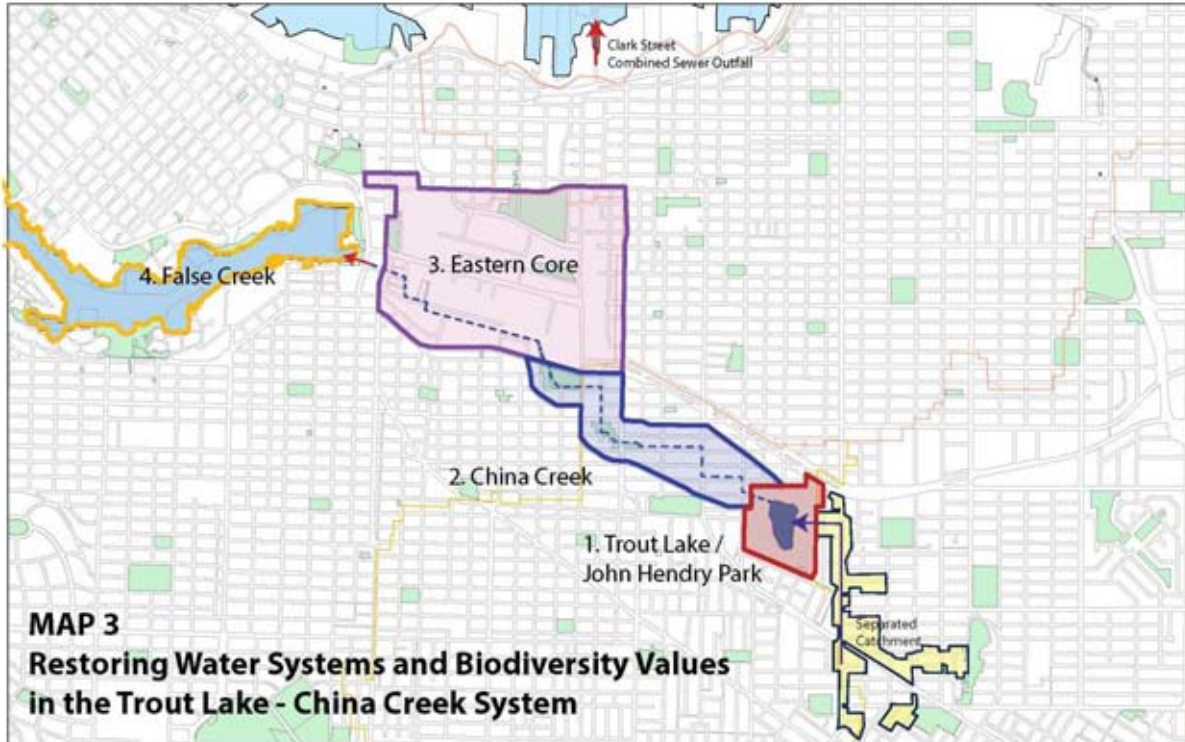


MAP 1 John Hendry (Trout Lake) Park



MAP 2: Approximate boundary of separated stormwater catchment adjacent to John Hendry Park

MAP 2 Stormwater Catchment



MAP 3 Overall Trout Lake – China Creek System

Vancouver Park Board staff will make available:

- in-house expertise and advice to the consultant with regards to park planning and design, recreation services, maintenance and operational issues;
- a digital base map which includes topography, services and park features;
- basic statistics for park area, building footprints, park usage, etc.;
- existing aerial and any ground level photographs;
- data, reports and information from other civic agencies (e.g. Engineering Services, Community Planning, Sustainability Office); and
- any available geotechnical information
 - spatial data (orthos, pipe network, 1 m contours, etc)
 - Estimates of flow volume from City of Vancouver Engineering staff
 - Previous Trout Lake studies including 2012 Greenest City Scholar Report

Other Relevant Studies and Projects

- Eastern Core: Stormwater management and climate change adaptation study (anticipated start January 2014)
- City-wide Integrated Stormwater Management Plan (ISMP) (anticipated start July 2013)
- Greenest City Scholar from 2012 on Trout Lake

SCHEDULE

Stormwater Management Study	Aug-Nov 2013
Staff and Staff Steering Committee Meetings (5)	Aug-Nov 2013
Draft Report (including class D cost estimate)	Nov 2013
Final Report	Dec 2013

DELIVERABLES

Stormwater Management Study:

- Concise report (35-40 pages) presenting the methods and results of the study;
- Data analysis and other technical analyses provided as appendices;
- Report must present options and document anticipated benefits using maps and other graphics for presentation to the public and potential funders;
- Separate summary document (2 to 4 pages) summarizing options, key findings, and recommendations including graphics and maps;

APPENDIX 2

Concept Plan for John Hendry Park (1972)

JOHN HENDRY PARK

an urban demonstration project

A Concept Plan Presentation

This Conceptual Plan for the redevelopment of John Hendry Park, has been presented and received by the Vancouver Board of Parks and Recreation. The Plan, prepared by the Trout Lake Conceptual Planning Team, is the outcome of a six month process involving citizen and professional expertise. The Park Board will hold a meeting on Thursday, November 23rd at the Trout Lake Community Centre, 3350 Victoria Drive, at 7:30 p.m. and invites residents of the Cedar Cottage Neighbourhood and surrounding areas to hear a presentation of the Plan, at which time citizens are welcome to comment. For further information, phone the Park Board Office at 681-1141, local 47.



The Opportunity

The opportunity to redevelop John Hendry Park has come at a time when the traditional aspects of public use of parks in Vancouver are undergoing a major change. It is also a reflection of the increased citizen interest and involvement in local community affairs and activities made possible through certain neighbourhood programs.

The need for redevelopment of John Hendry Park as a focus for the local community was clearly identified during the 1974-'78 Cedar Cottage Neighbourhood Improvement Program. In November 1977 a list of recommended improvements was submitted to the Parks Board by the NIP committee.

On December 1, 1977, the Federal Ministry of State for Urban Affairs and the City of Vancouver signed an agreement allocating financial support of one million dollars for redevelopment of John Hendry Park. It was agreed that the reconstruction would include a swimming facility and rehabilitation of Trout Lake. The following objectives were specified in the agreement:

- to preserve and enhance the natural environment and ecology of Trout Lake, as well as to upgrade the swimming facilities;
- to demonstrate how two conflicting demands on the use of Trout Lake can be integrated and provide for more intensive community recreation use, without destroying the natural environment and ecology.
- to evaluate the effectiveness of the public objectives and implementation.

In accepting the agreement the City undertook to be responsible for:

provision of the land, the completion of John Hendry Park swimming facility, Trout Lake rehabilitation and for all costs in excess of \$1,000,000 needed to make the project operational.

On January 28, 1978, the Parks Board advertised in the local papers for consultant teams of Landscape Architects, Architects and Engineers to undertake a study and report on proposed development work in John Hendry Park.

The Public Process

On April 13, 1978, the first public meeting to discuss the scope of the project took place at Trout Lake Community Centre. On May 11 the Community Planning Committee was elected. At its regular meeting on June 5, the Parks Board resolved to hire the EIKOS Design Team to undertake the John Hendry Park Urban Demonstration Project concept plans, and on June 8, the Consultant Group met with the Planning Committee to start work.

During the summer months over twelve public meetings were held with an average attendance at each of more than twenty persons. These meetings discussed and debated technical inventory, site analysis, community needs and priorities, and eventually concept plan recommendations. On October 5, a concept plan and budget were unanimously endorsed at a public meeting at Trout Lake Community Centre. The study findings were then presented to the Parks Board on October 23 for their consideration.



Existing Model Boat Area

Master Plan Recommendations

At an early stage in the study, the Planning Group resolved that the first charge against the \$1 million federal grant should be for upgrading Trout Lake and related environs and park facilities. After this basic park develop-

ment has been implemented, consideration should then be given to a swimming facility in keeping with the terms of reference. The plan therefore strives to maximize the natural potentials of the site. Allowance has been made for an increased range of activities so that the park will be attractive to a wider range of people.

- The south end of the lake will be expanded by provision of an exciting aquatic playground designed to enable children to enjoy water play in safe conditions. The edge of the lake will be altered by dredging and bank stabilization, and lagoons, islands, decks and bridges will be created.
- A nature area with an interpretation centre will be located at the north end of the lake and will include a fitness track, paths, viewpoints and rest benches.
- Most of the parking will be located around the edge of the park. This will free the interior areas from this kind of intrusion and so enhance passive activities and lake related activities.
- Sports fields will be reconstructed for maximum use and ease of maintenance.
- Picnicking facilities will be organized so as to appeal to family gatherings as well as large ethnic groups.
- Many trees and shrubs will be planted, including native trees from various countries. Within five years the Park will have taken on a mature atmosphere resulting from the growth of these plantings.
- Hopefully, new buildings will be eventually incorporated into the Plan along with a 7,000 to 8,000 square foot swimming lagoon.

All of the preferred needs, and most of the desired needs will be provided within the framework of the Plan and within the \$1.8 million projected first priority budget. The redevelopment envisaged in the Plan, the improvement and added features and amenities will benefit all users of John Hendry Park. The Park will offer a variety of activities for all age groups and a range of facilities for participants in the sports, from those actively playing to those participating by watching and encouraging. It will be a pleasant outdoor gathering place and a place to stroll and enjoy the visual satisfactions of trees, water, plants

The Present Situation

Needs and Trends

1) The Site - Location and Characteristics
John Hendry Park lies between 1200 Avenue East and 1265 Avenue East, and Victoria and Thompson Drive. It lies in one of the old single family areas of Vancouver and primarily serves the communities of Cedar Cottage and Kinsmen although it also draws users from a wider area.

It is the largest of a series of parks in this area and may be described as a community park while the others, many of which have been redeveloped under the RFP program are essentially small neighbourhood parks. The Park is 36.28 acres in extent.

Trout Lake is the main natural element in John Hendry Park. Today, the lake is a small and shallow pond, a remnant of a much larger deeper lake, formed during the last Ice Age. The continuing process of silt growth and decay along the lake edge has been gradually filling the lake and creating the poorly drained, spongy-like soil with boulders in the park. Silted heavily that below the present ground level lies the original lake bottom of a much deeper lake. The soils of the lower level are glacial deposits of siltstone rather than organic composition offering much better bearing capacity. They rise toward the edges of the park to form the beach to attract Trout Lake and the east side to the Community Centre, parking lot and sports fields around the edge of the park have been built upon these firmer soils.

The study team has identified the following character zones in the park:

The Water - 1
Trout Lake is a unique shallow fresh water lake with sunny exposure. There is turbidity and there are potential eutrophication and algal bloom problems.

2
Discharge of the lake edge is poor and the edge is easily deteriorated by trampling. Better plans are required to human impact and regeneration potential is good.

3
Soils are mainly poor, drainage is variable but generally poor. A few trees provide good canopy. The existing park visually separates this area from the surrounding.

4
This area basically forms the edge or transition zone to the park.

The Building Development - 5
This comprises the buildings of the Community Centre, parking lots, tennis courts and service sections.



1) Current Use Features

The natural conditions of the park have strongly influenced its pattern of use and development. The water related zone has been developed as playing fields for baseball, soccer, grass tennis, football and other organized field sports, while the central wooded zone with its pond soils and poor drainage has been used for picnicking, un-structured play, strolling, fishing, swimming and various passive activities.

The Community Centre area includes health club, tennis courts, ice rink, washrooms, meeting rooms, cafe, showers and parking.

As mentioned earlier, the RFP Committee submitted to the Parks Board a list of suggestions for improvement of the Park in November, 1977. The features recommended, along with general and specific notes per lot, are presented in the following table. The results from a public consultation conducted by the Planning Group, indicated the following needs and desires. It should be noted that these are not listed in any order of priority or cost.

- replacement of north end of park
- more facilities with shade
- barbeques and picnic tables
- opening around water
- better drainage in park, or playing fields in general
- improve playing fields
- better access to water features to make a more of a beach
- new trees
- better lighting areas along the shoreline
- improved drainage of wet areas
- new picnic tables
- structure playground in association with the new water
- surfboard and skis on concrete base
- replacement of low water area exposure
- removal of parking to create more open space
- better access to water features for gas powered boat movements along the coast
- better for water fishing activities for gas powered boat movements along the coast
- opening of the environment for wildlife
- walkways at north end of park
- use of existing lawn
- opening of lake with fish
- better access to water features
- better access to water features

Discussions with Parks Board recreation staff indicated that the growth in the level of participation in field sports at various times during the year has put a heavy strain on the Vancouver playing field system. While that system is complete and highly developed, it is nevertheless subject to shortage and over-use in the demand for both adult and young people groups.

Parks Board staff also noted that fitness is a trend not a fad. More people than ever are becoming and are doing sport that concern the use of John Hendry Park as a jogging area has increased greatly since the opening of the health club in the community centre. Related current planning should reflect this and should maintain the use of what exists now and provide present surroundings for participation in these activities. Tennis continues to grow as a popular and growing heavy demands on the existing facilities in the Park.

The concept shown by the many groups in our city is using parks for gathering for non-structured or semi-structured activities that facilitate such events. Open play areas combined with simple picnic and performance areas could meet this need.

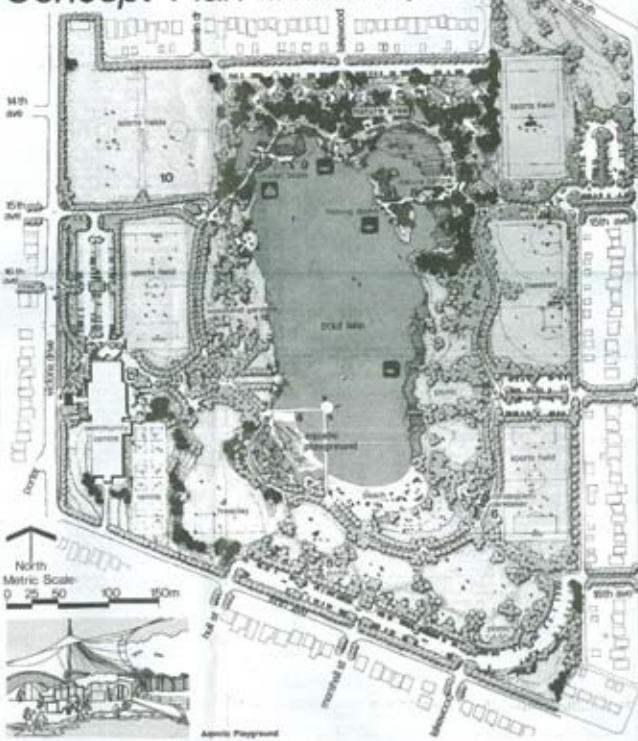
It has been noted that John Hendry Park is not only used by citizens from the immediate vicinity but by people from all over the Vancouver.

Following consultation discussion and debate of planning group members, and work sessions with the Parks Board staff, the consultant team assisted the above stated needs and priorities in light of park standards, site characteristics and the terms of reference of the urban demonstration project. This assessment formed the basis for preliminary review for a master plan for the Park.

The concept is essentially concerned with the provision of more diverse recreation activities for the various primary suitable park zones. It provides for upgrading the existing picnic areas and sports fields, and vigorous parking and entry arrangements in the updated zone. The main change lies in the reestablishment of the beached, integrated and water zones to more positive features of the park.



Concept Plan for John Hendry Park



A Walk Through the Park

The Plan can best be described by taking an imaginary north-south walk around the park.

The walk will start in the court (1) adjacent to the Community Centre. This area will be a focus for scheduled activities such as concerts, festivals, picnic, outdoor games, gymnastics exercises and games, and will serve as a convenient meeting place for groups of all ages.

From the court we can look through the woodland gardens (2) to the lake or watch the children at play near the play area centre (3). As we move along the wooded main walk to the beach, we pass on our left the existing aquatic playground (4) with its splash and shallow pools of water for children and party area for parents as well. Later, as we become available, the facility will be expanded by construction of a swimming lagoon and tent the shelter at the edge of the lake.

To the south, there are a number of picnic areas (5) which flow into a series of treed open grassed spaces.

The walkway takes us along the beach. Here we can see the water, play at the water's edge, sit in the sun, or stroll along the beach. This area is well serviced by parking along the edge of the park and by well planned streets for local residents.

The concession and the caretaker's residence (6) is now located. Here we can stop for a coffee and watch a soccer game at an end view of the background. At this point the walk is closed, closing the picnic area and lake view from the more active sports area. The sports fields have been constructed with quality drainage and irrigation to provide maximum use.

The reconstructed sports fields have been moved further to the westward from their present site to create a landscape perimeter to the park. One on the east side of the park, there are two parking lots to provide for people using the sports fields as parking is not allowed along the lake.

At the north end of the beach area the walk becomes narrower as we enter the nature area (7). Here we can see our path leading off a dock or pier of the nature interpretation centre (8) to view about the wildlife that inhabits the park. From here there are several possible paths to follow, each leading through meadow of attractive native trees and shrubs that provide a home for many upland warblers and shorebirds as well as for small mammals. The use has been designed at this northern end to support fish through a regular monitoring program.

At the north west corner of the lake we can stop and watch the model sail boats (9) demonstrating in the light breeze. This is one of the best views in the lower mainland for this activity.

From here we can return to the Community Centre along the main walk. On our right are two sports fields. The scenic appearance of the Centre has lighting for evening games (10). We note that especially there are really two picnic areas and Community Centre related activities. This other is an inner park setting strongly to the lake and having a more naturalistic character.

The outer perimeter of the park is designed to integrate the park and the adjacent neighbourhood.

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From here we can return to the Community Centre along the main walk. On our right are two sports fields. The scenic appearance of the Centre has lighting for evening games (10). We note that especially there are really two picnic areas and Community Centre related activities. This other is an inner park setting strongly to the lake and having a more naturalistic character.

The outer perimeter of the park is designed to integrate the park and the adjacent neighbourhood.

The walkway takes us along the beach. Here we can see the water, play at the water's edge, sit in the sun, or stroll along the beach. This area is well serviced by parking along the edge of the park and by well planned streets for local residents.

The concession and the caretaker's residence (6) is now located. Here we can stop for a coffee and watch a soccer game at an end view of the background. At this point the walk is closed, closing the picnic area and lake view from the more active sports area. The sports fields have been constructed with quality drainage and irrigation to provide maximum use.

The reconstructed sports fields have been moved further to the westward from their present site to create a landscape perimeter to the park. One on the east side of the park, there are two parking lots to provide for people using the sports fields as parking is not allowed along the lake.

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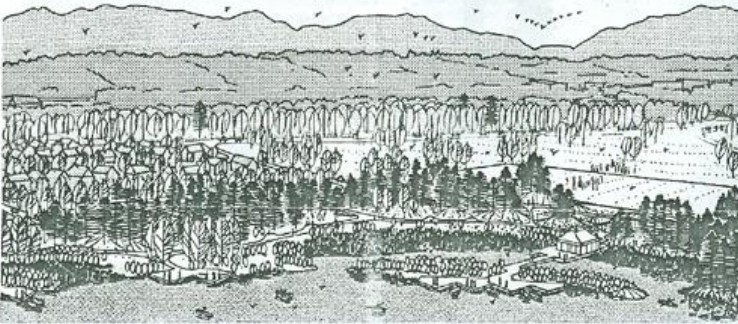
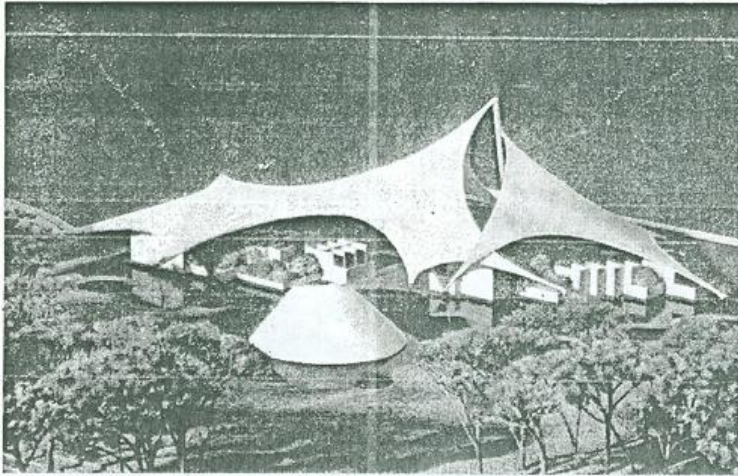
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The Aquatic Playground

The Aquatic Playground, designed primarily for children's play, will be an ideal extension of the existing beach and will serve as an overflow use to the swimming lagoon. Children will be able to control or adjust water features such as water nozzles and spray pumps. The water supply will come from the city system and will be heated by specially designed heat pumps. It will drain into the lake. In this manner filtration and chlorination systems may be avoided.

The swimming lagoon will be located directly adjacent to the lake, although separated from it by a dock like pier. It will be fed by city water and chlorinated in the usual manner. The lagoon is designed to be a completely separate body of water from the lake and will be very much like an outdoor swimming pool floating at the lake's edge.

The depth of the lagoon will vary from five feet to zero inches at the shallow end.

A Nature Area

A nature area will be created by dredging lagoons and forming low mounds to provide a visual example of the natural conditions that existed at Trout Lake in past times. Native plants will be featured and there will be frequent small trails and lookout points from which to view waterfowl, shorebirds and upland bird species, fish, and possibly mammals, amphibians and reptiles that will frequent the area. This will be a unique urban freshwater environment for interpretation and educational opportunities. In this area, platforms at the water's edge will be constructed for fishing, model boat sailing and viewing.

Budget

The budget estimates are divided into first, second and third priorities. Generally, first priority items are aimed at upgrading the natural environment of the park, providing a safe aquatic playground, and establishing a framework into which second priority items, such as the nature interpretation centre and swimming lagoon, can be fitted as funds become available. The third priority item is the acquisition of property in the north west corner of the park and the future development of extra playfields there.

Present federal funding received for park development under the urban demonstration program is \$250,000. On April 1st, 1979, the Parks Board will receive an additional \$550,000. The balance of \$200,000 is to be received upon completion of the project. The total federal contribution is \$1,000,000.

First Priority Items with \$1,000,000 Federal Funding

ITEM	ESTIMATES
• Lake -	\$200,000
Upgrade water supply including fountains	
Revise drainage	
Bank stabilization	
New lagoon and dredge	
Decks & bridges	
• Areas Surrounding Lake -	202,000
Nature area including fitness track	
Paths & walks	
Trees & shrubs	
Rest benches	
• Picnic Areas -	228,000
Grassed area	
Trees & shrubs	
Paths & walks	
Shelters	
Tables & benches	
• Two Sports Fields	160,000
• New Parking -	160,000
• Lighting - General park lighting	50,000
One sports field lighting	
TOTAL:	\$1,000,000

In 1979 a grant application will be submitted to the Provincial Recreation Facilities Assistance Program for \$400,000. The Parks Board may consider a request to City Council in its 1979 Supplementary Capital Budget for additional matching funding of \$400,000.

A total of \$1,800,000 is therefore anticipated for first priority items.

First Priority Items with \$400,000 Provincial Funding

• Complementary picnic areas	100,000
• Repair to 1 Playfield & Baseball area	54,000
• Creative Playground & First phase of Aquatic Playground	246,000
TOTAL:	\$400,000

First Priority Items with \$400,000 City Funding

• Completion of nature area	\$213,000
Completion of trees and shrubs	
2nd phase of Aquatic playground	
• Additional parking areas	165,000
Court and patio areas	
• Signage and graphics	22,000
TOTAL:	\$400,000
First Priority Total:	\$1,800,000

An estimated 15% is included in the above estimates for detail design, supervision fees and contingencies including Conceptual Master Plan Studies.

Second Priority Approximate Value

Items	\$2,190,000
Swimming lagoon (7000-8000 sq. ft.)	
Future phasing of Aquatic Playground	
Nature Interpretation Centre & Display Improvement & Landscaping of NE corner	
Tennis	
Upgrade lanes and 19th Avenue	
New Park buildings - Changing rooms	
Concession	
Washrooms & caretaker	
Additional parking and lighting	
Additional park signage	
Design, Supervision and Contingencies for above Items	
Total 1st & 2nd Priority Budget:	\$3,990,000
Third Priority Item	
Future renovation, and expansion of playfields: \$600,000 to \$800,000.	

NOTE: All estimates based on 1978/79 rates

The Next Step

The Parks Board have instructed staff to proceed with detail design and working drawings for priority one budget items.

During the winter 1978/79 the City Engineering Department will be asked to install sewer, water and electrical utility hook-ups for new and improved services in the park.

In the spring of 1979 the Parks Board will undertake contract work — for example, sports field construction, utility construction, and relocation of parking lots; in early summer they will proceed with other improvements in phase one priority, probably starting with dredging and shoreline improvements.

Credits

TROUT LAKE CONCEPTUAL PLAN TEAM

Community Planning Committee Executive

- Don Jang, Chairman
- Flo Simatos, Vice-Chairman
- Baird McLean, Secretary

Public Questionnaire Members

- Philip Rankin
- Gloria Hosen

Parks Board Representatives

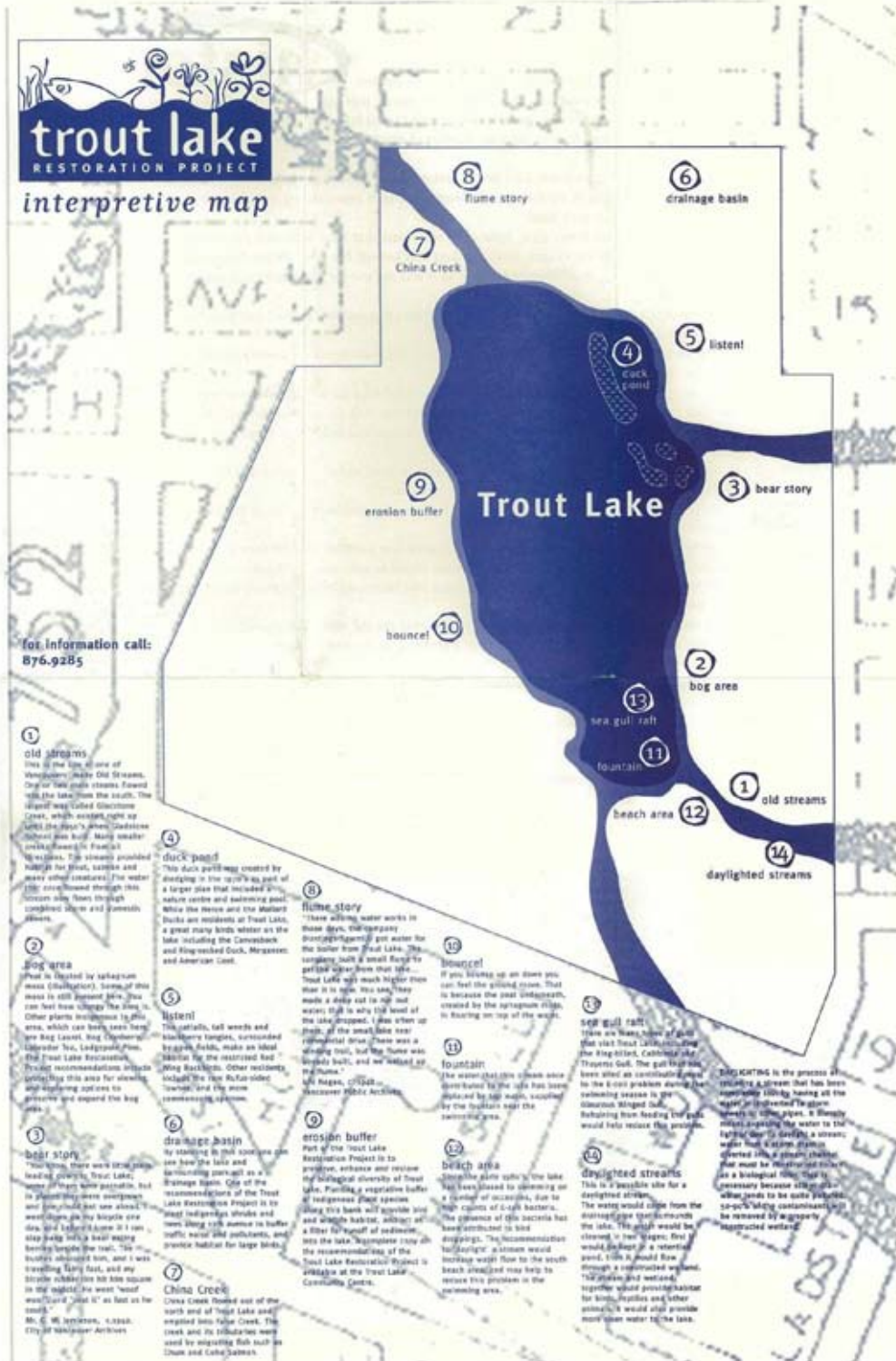
- Larry Foster, Director, Planning & Development Division
- Stephen Cripps, Parks Development Manager
- Kevin Pike, East Area Recreation Manager

Consultant Groups

- Elkos Planning and Environmental Design Group Ltd.
- Art Cowie, Project Manager & Planning
- Kevin Tribble, Park Design & Landscape Architecture
- Randy Sharp, Graphics
- Hilda Symonds, Editorial Advice
- Phillips Barratt Engineers and Architects
- Don McCoy, Engineering Services & Facilities
- Roger Hughes Architects
- Heger Hughes, Architecture & Urban Design
- Golder and Associates, Geotechnical Consultants
- Robert Wilson, Soils Assessment

In addition to the above, many citizens, Parks Board Staff and Consultant Staff, participated in the planning process. Their names are recorded in Committee and Consultants' minutes.

APPENDIX 3
Trout Lake Restoration Project (1995) Interpretive Map



history

The history of Trout Lake begins with the receding glaciers approximately 12,000 years ago. An enormous pre-glacial lake was held together by ice stems. The ice stems broke, and the big lake drained into the ocean, in an estimated 7 days, leaving behind a number of smaller lakes, including what has become Trout Lake.

In those days it was probably a big gravel bottomed lake. Then, over thousands of years, a peat bog grew, filling in the lake and generating the peat deposits that surround the area today. (Extent of peat map)

Over time a hemlock forest grew. Some large mammals that have been seen around the area include black bears, cougar, deer, elk, wolf and beaver. The area around Trout Lake was used for hunting by aboriginal peoples, as it was too wet for permanent first nations settlements.

In the 1870's China Creek was made deeper to create a flume that carried logs from the area down to Hastings Sawmill.

The flume also provided water to the mills boilers. The creation of the flume probably caused the lake level to drop.

In the 1920's, parents complained of the danger of the high banks. The lake level was further reduced by connecting the outflow with the sewer line at 13th and Victoria. The banks were cut back to a slope by means of a drag line, and a beach was created at the south end of the lake.

In the 1940's, neighbours complained of the sewage being run from homes into China Creek, and so a culvert was built over the creek and buried.

The Trout Lake drainage basin was used for farming and pasture right up to the last account in the 1950's.

Although there is evidence that there was concern over bacteria in Trout Lake as early as the 1930's, the first report of Trout Lake being closed to swimming for health reasons was July, 1968. The water flow from the fountain was increased to full capacity to correct this problem.

As the area was further developed, the streams that fed the lake were covered over. In the late 1970's a citizens' action resulted in a clean up of the remaining bush area, and the installation, in the early 1980's, of drainage sewers, making the surrounding landscape less boggy. These also act as a catchment for overflow from the lake. It is possible that the lake level has been reduced further by these measures.

Trout Lake has been valued in the community for a long time for skating, swimming and for its natural beauty. Although questions about the suitability of the water quality for swimming have been raised since the 1930's, the more frequent closures to swimming since the 1980's have brought a greater awareness of the overall degradation of the lakes health due to human development.

A scrapbook of the history of Trout Lake can be viewed in the Snack Bar of the Trout Lake Community Centre.

NATIVE TO TROUT LAKE

- Mallard
- American Wigeon
- Common Merganser
- Ring-billed Gull
- Glaucous-winged Gull
- California Gull
- Rock Dove
- Tree Swallow
- Violet-green Swallow
- Barn Swallow
- Northwestern Crow
- Black-capped Chickadee
- American Robin
- European Starling
- Red-winged Blackbird
- Brewer's Blackbird
- House Finch
- House Sparrow
- Pumpkin Seed Finch
- Black Chappie
- Brown Bullhead Catfish
- Coho Salmon
- Rainbow Trout
- Chum Salmon
- Rough-skinned Newt
- Northern Caddisflies
- Damselflies
- Dragonflies
- Labrador Tea
- Bog Cranberry
- Buttress
- Roundleaf Sundew
- Bog Rush
- Bog Laurel
- Sphagnum Moss
- Hemlock
- Bats



Extent of the peat (original lake size)

How the water works



- 1 Drainage pipes: collect water from land surrounding the lake and overflow from the lake.
- 2 Water drained from the lake and park enters this combined sewage pipe.
- 3 The former China Creek outlet, now functions as an overflow outlet only.
- 4 Fountain and underwater pipe, supplies lake with city water.
- 5 Old drains that fed runoff into lake.

Changes due to human activity



ABOUT THE PROJECT

The map is a compilation of aerial, historical and present day photos and is part of the Trout Lake Restoration Project. The Trout Lake Restoration Project was initiated by a committee of citizens concerned about the health and future of the lake. The project, to enhance a community planning process, was sponsored by The Vancouver Community Centre Association, The Vancouver Parks Board Community Cultural Development Program, and the City Action Program of Environment Canada. Special thanks go to the Greater Cultural Centre for providing a venue for the Community Planning Workshops and to John, Dorian, Christopher, Peter, Katherine & Catherine, along with the staff of the Greater Cultural Centre for providing a venue for the Community Planning Workshops and to John, Dorian, Christopher, Peter, Katherine & Catherine, along with the staff of the Greater Cultural Centre for providing a venue for the Community Planning Workshops and to John, Dorian, Christopher, Peter, Katherine & Catherine, along with the staff of the Greater Cultural Centre for providing a venue for the Community Planning Workshops.

Action plan

MANAGEMENT AND PLANNING ZONES

- 1 Preservation zone Fragile peat bog remnant
- 2 Preservation zone Duck pond
- 3 Naturalization zone
- 4 Intensive Recreation zone
- 5 Beaches, lawns, playing fields and trees
- 6 Environmentally sensitive area



A walking water has been created in the Trout Lake Park where a way of the Trout Lake Restoration Plan, further meetings and actions are planned. The Trout Park has been enhanced by beautiful walkways, created by connecting walkways and other water features, as a way to bring greater awareness of the lake into the park. The walking water, around the lake has been created to help water be used by various fish species, Canada geese, Mallard ducks, and other waterfowl. The water course will use the water, generated by the City of Vancouver's Effluent Treatment Plant, Community Public Art Centre.

Project co-ordinator: Anne Marie Breen & Peter Johnson
Map co-ordinators and text: Peter Johnson, Dorian, Christopher, Peter, Katherine & Catherine
Illustrations: Anne Marie Breen, Peter Johnson, Dorian, Christopher, Peter, Katherine & Catherine
Print financing provided by Green Matters, with thanks to all who participated.

"But there were always gulls down there. There were a few ducks. But there were thousands of gulls and they would be down there all the time. Maybe people weren't swimming as it didn't make much difference. But I don't see how they can blame the gulls for all this (condition of Trout Lake). In the older days there must have been a really good creek going to push logs through. So if they would increase the circulation... but that would cost money."
-Ira Wallace

"There were people who lived south of there (Trout Lake) who had a farm, a goat farm and they lost six or seven goats cause they were in, gunk, gunk (to drink) and they went right in, got sucked into Trout Lake."
-Catherine Sustad

"They found cars in the lake. Somebody just drove them in, seemed that way. And people drowned in the lake. And they said there was no bottom to the lake at one time. I think there is a bottom. When kids used to go down there and swim, I guess it was algae, their hair would turn green. They didn't test it (the lake) or anything at that time."
-Elsie Nelson