



BOARD OF DIRECTORS MEETING 04 17

MINUTES

A meeting of the Conservation Halton Board of Directors was held on Thursday, May 25, 2017, beginning at 11:30 with a Watershed Tour followed at 4:30 pm in the Kelso Museum building for the Business meeting.

Members Present:	Rob Burton	
	Mike Cluett	
	Joanne DiMaio	
	Cathy Duddeck	
	Rob Duvall	
	Stephen Gilmour	
	Davd Gittings	depart 5:40
	Gord Krantz	depart 6:15
	Bryan Lewis	
	Gerry Smallegange	
	Jim Sweetlove	
	Marianne Meed Ward	
	John Vice	
	Jean Williams	

Absent with Regrets:	Allan Elgar
	Moya Johnson
	Sue McFadden
	Ed Wells

1. Acceptance of Agenda as distributed and amended.

CHBD 04 01	Moved by:	Cathy Duddeck
	Seconded by:	Bryan Lewis

THAT the Conservation Halton Board of Directors **accept the Agenda as distributed and amended.**

Carried

2. Disclosure of Pecuniary Interest for Board of Directors

There was no disclosure of pecuniary interest

3.0 Consent Items

The Consent Items were approved.

4.1 **Budget Variance Report for the period ended March 31, 2017**
Report #: CHBD 04 17 01

THAT the Conservation Halton Board of Directors receive for information the staff report dated May 25, 2017 on the Budget Variance Report for the period ended March 31, 2017;

Carried

Following further discussion, it was:

THAT the Conservation Halton Board of Directors approve entering into a formal agreement with Accesso for the provision of electronic commerce services to be funded as noted in the staff report dated May 25, 2017.

Carried

Following further discussion, the Recommendation was amended as follows:

THAT the Conservation Halton Board of Directors award the *Kelso Dam, Urgent Repairs and Rehabilitation Projects* to Dufferin Construction Company at an estimated cost of \$3,548,545.00 plus HST and an additional \$85,050 plus HST for Optional Items, subject to an actual contract award contingent on National Disaster Mitigation Program (NDMP) funding initiation and subject to receiving approval for all required permits.

Carried

4.4 **Green Infrastructure Feasibility Study – Administration Building, Kelso CA and Crawford Lake CA Land Holdings**

Report #: CHBD 04 17 04

CHBD 04 0

Moved by: Rob Burton
Seconded by: Jean Williams

THAT the Conservation Halton Board of Directors **direct Conservation Halton to develop a Green Infrastructure Feasibility Study for the Administration Building, Kelso Conservation Area and Crawford Lake Conservation Area that will address stormwater quality and quantity at the lot level that will include specific tasks, who will accomplish them and when they will be implemented, estimated costs and an implementation and monitoring strategy.**

AND FURTHER THAT the **Conservation Halton Board of Directors commit \$13,444 of in-kind staffing costs from the existing operating budgets for 2017/18 towards the costs of this initiative.**

AND FURTHER THAT **Conservation Halton staff be supported to work with member municipalities on this initiative to demonstrate municipal commitment.**

Carried

5.0 **Other Business**

Barbara Veale, Director, Planning & Regulations provided a brief update on the changes to the OMB, Coordinated Plan Review and Municipal Act. A more detailed report will be provided at the June Board meeting.

Following further discussion, B. Lewis advised he would ask Halton Hills staff to provide a copy of their Fill Plan Policy to CH.

Mr. Pat Moyle facilitated a strategy session with the Members on the use of Development Contributed Funds for park capital projects.

As a follow up to the Tour, the following links and documents have been provided:

Red Side Dace: https://www.youtube.com/watch?v=vof6LORXpdQ&feature=em-upload_owner

2016 Watershed Stewardship Award winners:
(<http://www.conservationhalton.ca/watershed-stewardship-award>)

Twenty Years of Restoration at Kelso Quarry Park – email attachment
Kelso Quarry Restoration Fact Sheet – email attachment

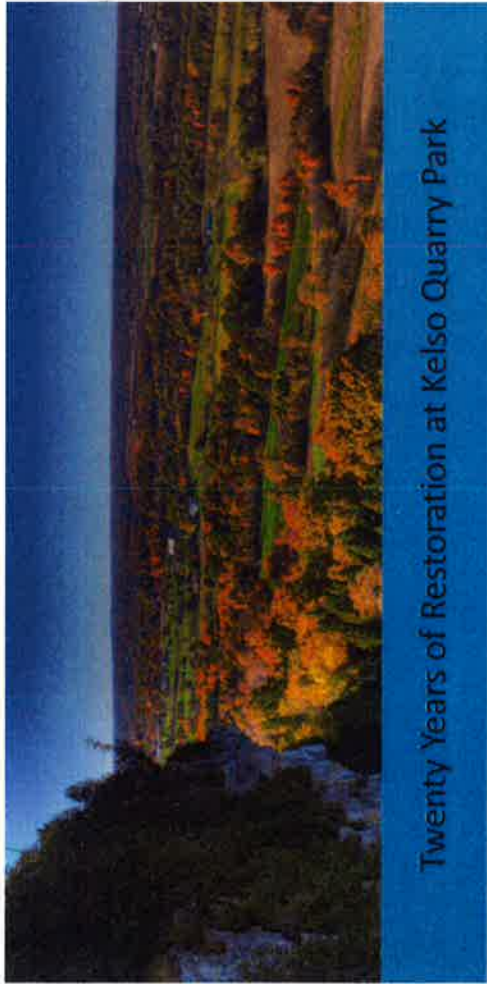
6.0 **Adjournment**

CHBD 04 08

Moved by: Jim Sweetlove

THAT the Conservation Halton Board of Directors **adjourn at 6:35 pm.**

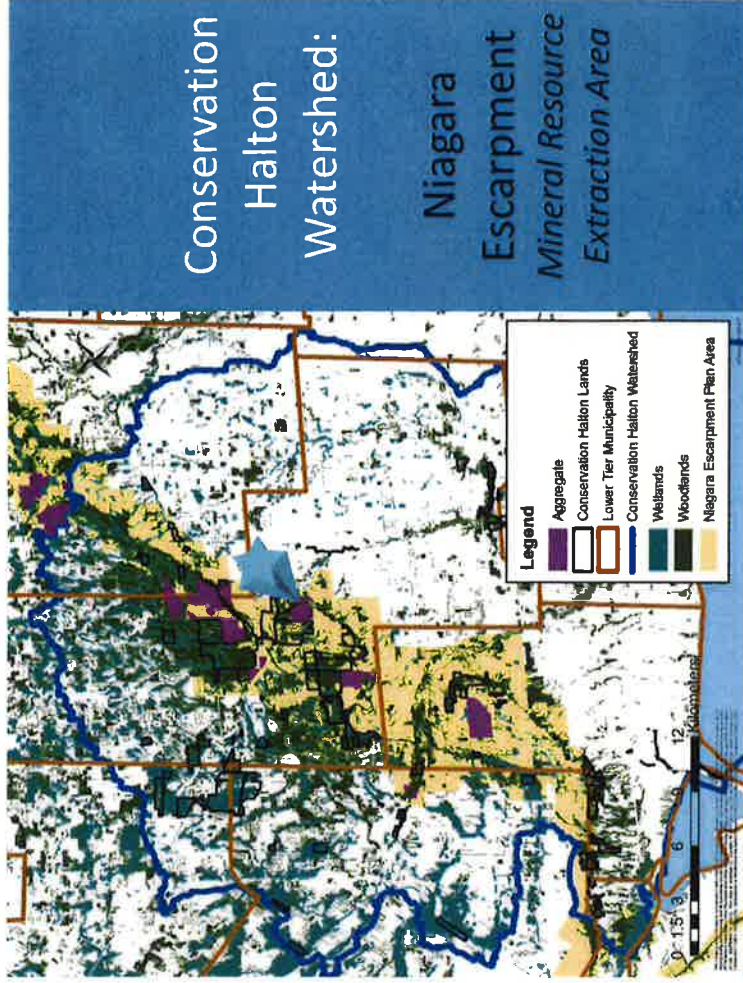
NEXT MEETING: June 22, 2017 @ Kelso Conservation Area, Museum building



Twenty Years of Restoration at Kelso Quarry Park

Nigel Finney

Watershed Restoration Planner
Conservation Halton



Conservation
Halton
Watershed:

Niagara
Escarpment
Mineral Resource
Extraction Area

The Milton Limestone Quarry (Barrick Gold Corp.)

Land Use Planning

- Niagara Escarpment Plan Area
- Ontario's Greenbelt

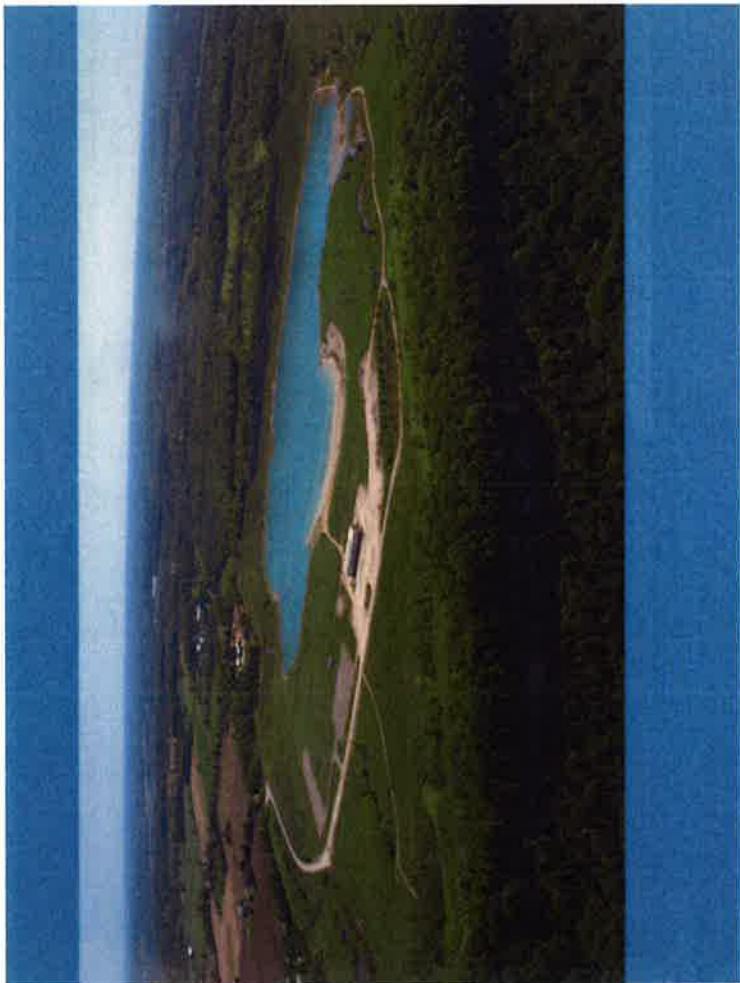
Quarry – Est. 1958, 71 hectares

- Over 40 years of operation
- Construction material for the new provincial Highway 401
- 1 million tonnes of high quality aggregate

Rehabilitation

- 1995 - Conservation Halton partnership regarding future park lands and collaborative rehabilitation plans
- 2001 - Extraction complete
- 2006 – Rehabilitation conditions met
- 2006 - Donated to CH





Fish Habitat: Developing a Restoration Objective

Biophysical Baseline Conditions

- **Water Clarity**
- **Soil**
- **Water Temperature**
 - Water Temperature: 22.7 °C Coverage
- **Dissolved Oxygen**
 - The lake is supersaturated with oxygen
 - 9.0 milligrams per liter
 - Not be a limiting factor
- **Water Depth**
 - 3 - 5.5 m
- **pH**
 - 7.58 - 8.18
 - Max productivity for fish: 6.5 - 8.5



Fish Community

Existing Aquatic Community

- 426 Fathead Minnows
- 1 Brook Stickleback
- Large Mayfly hatch



Smallmouth Bass Habitat

Requirements

- Temperature: 19.4 – 21.7 °C
- Depth at spawning: 0.6 – 6.1 m
- Spawning substrate: Sand, gravel & rock





2015-16 Project Summary

Objective: Enhance fish habitat to help establish a future recreational fishery within Kelso Quarry Lake

- Funded by the Federal Department of Fisheries and Oceans
 - *Recreational Fisheries Conservation Partnership Program*
- 4,000 m³ of new spawning shoals constructed
- 7 large fish habitat structures
- 6 floating wildlife logs
- Planted vegetation
 - 3500 wetland plants
 - 1000 trees & 1200 shrubs
 - 6 kilograms of tree nuts and wetland seeds

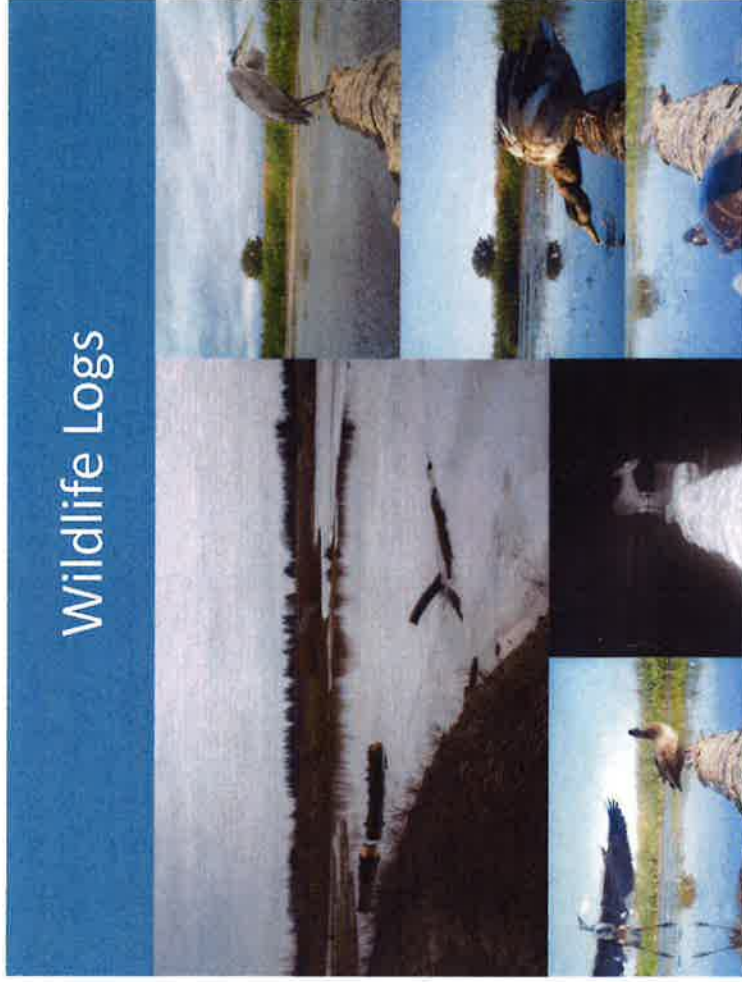


Marsh Planting



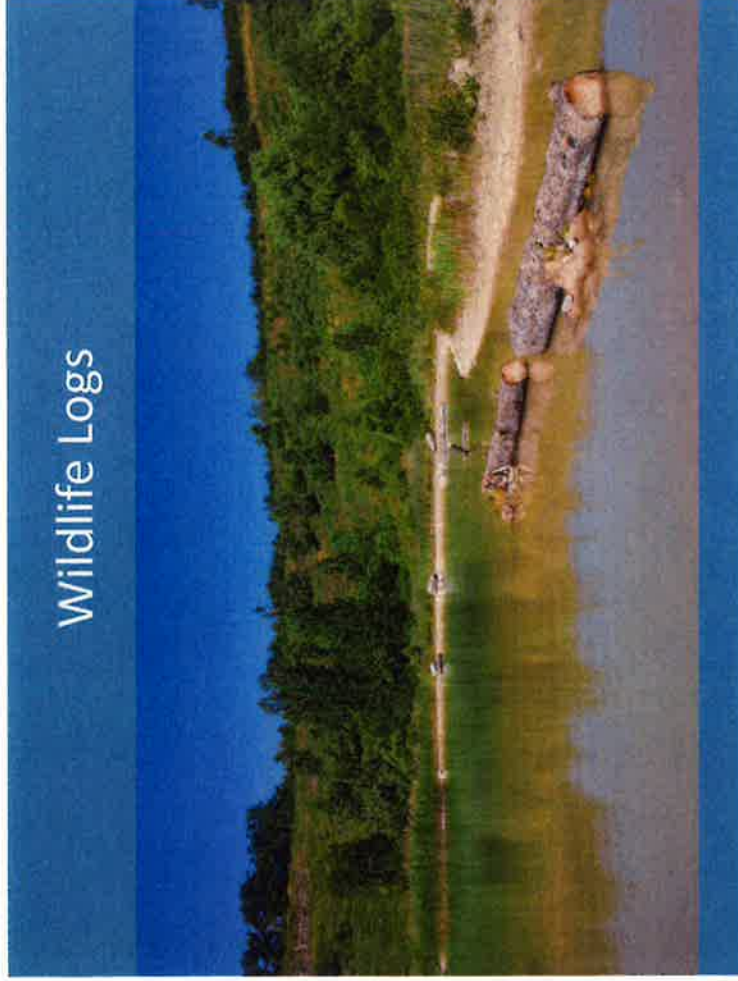


Coconut Coir Logs and
Fabric
*Ensuring Success to Riparian and
Wetland Planting*



Wildlife Logs

Wildlife Logs



Fish Habitat Structures



Shoal Installation



Shoal Installation



order to reach their goals, they need to try out open, questioning mind as an alternative to the old way of thinking. The small round tables in this chapter are representative of the questioning mind. Cooperation is encouraged. Study hard to encourage open reproduction.

Participate in restoring native vegetation on shorelands and wetlands which sustain fish habitat. Support organizations like Conservation Nation in their efforts to create and protect local ecosystems.

Abstracts and Comments



Halton Conservation Area

Quarry Lake
Enhancement Project
2015/16

DFO Recreational
Fisheries Conservation
Partnership Program

Legend

Restoration Features Shoal Creation

Region	Depth in Feet
Region A	10
Region B	15
Region C	20
Region D	25
Region E	30
Region F	35
Region G	40
Region H	45
Region I	50
Region J	55
Region K	60
Region L	65
Region M	70
Region N	75
Region O	80
Region P	85
Region Q	90
Region R	95
Region S	100
Region T	105
Region U	110
Region V	115
Region W	120
Region X	125
Region Y	130
Region Z	135
Region AA	140
Region AB	145
Region AC	150
Region AD	155
Region AE	160
Region AF	165
Region AG	170
Region AH	175
Region AI	180
Region AJ	185
Region AK	190
Region AL	195
Region AM	200
Region AN	205
Region AO	210
Region AP	215
Region AQ	220
Region AR	225
Region AS	230
Region AT	235
Region AU	240
Region AV	245
Region AW	250
Region AX	255
Region AY	260
Region AZ	265
Region BA	270
Region BB	275
Region BC	280
Region BD	285
Region BE	290
Region BF	295
Region BG	300
Region BH	305
Region BI	310
Region BJ	315
Region BK	320
Region BL	325
Region BM	330
Region BN	335
Region BO	340
Region BP	345
Region BQ	350
Region BR	355
Region BS	360
Region BT	365
Region BU	370
Region BV	375
Region BW	380
Region BX	385
Region BY	390
Region BZ	395
Region CA	400
Region CB	405
Region CC	410
Region CD	415
Region CE	420
Region CF	425
Region CG	430
Region CH	435
Region CI	440
Region CJ	445
Region CK	450
Region CL	455
Region CM	460
Region CN	465
Region CO	470
Region CP	475
Region CQ	480
Region CR	485
Region CS	490
Region CT	495
Region CU	500
Region CV	505
Region CW	510
Region CX	515
Region CY	520
Region CZ	525
Region DA	530
Region DB	535
Region DC	540
Region DD	545
Region DE	550
Region DF	555
Region DG	560
Region DH	565
Region DI	570
Region DJ	575
Region DK	580
Region DL	585
Region DM	590
Region DN	595
Region DO	600
Region DP	605
Region DQ	610
Region DR	615
Region DS	620
Region DT	625
Region DU	630
Region DV	635
Region DW	640
Region DX	645
Region DY	650
Region DZ	655
Region EA	660
Region EB	665
Region EC	670
Region ED	675
Region EE	680
Region EF	685
Region EG	690
Region EH	695
Region EI	700
Region EJ	705
Region EK	710
Region EL	715
Region EM	720
Region EN	725
Region EO	730
Region EP	735
Region EQ	740
Region ER	745
Region ES	750
Region ET	755
Region EU	760
Region EV	765
Region EW	770
Region EX	775
Region EY	780
Region EZ	785
Region FA	790
Region FB	795
Region FC	800
Region FD	805
Region FE	810
Region FF	815
Region FG	820
Region FH	825
Region FI	830
Region FJ	835
Region FK	840
Region FL	845
Region FM	850
Region FN	

Emergent Wetland 2

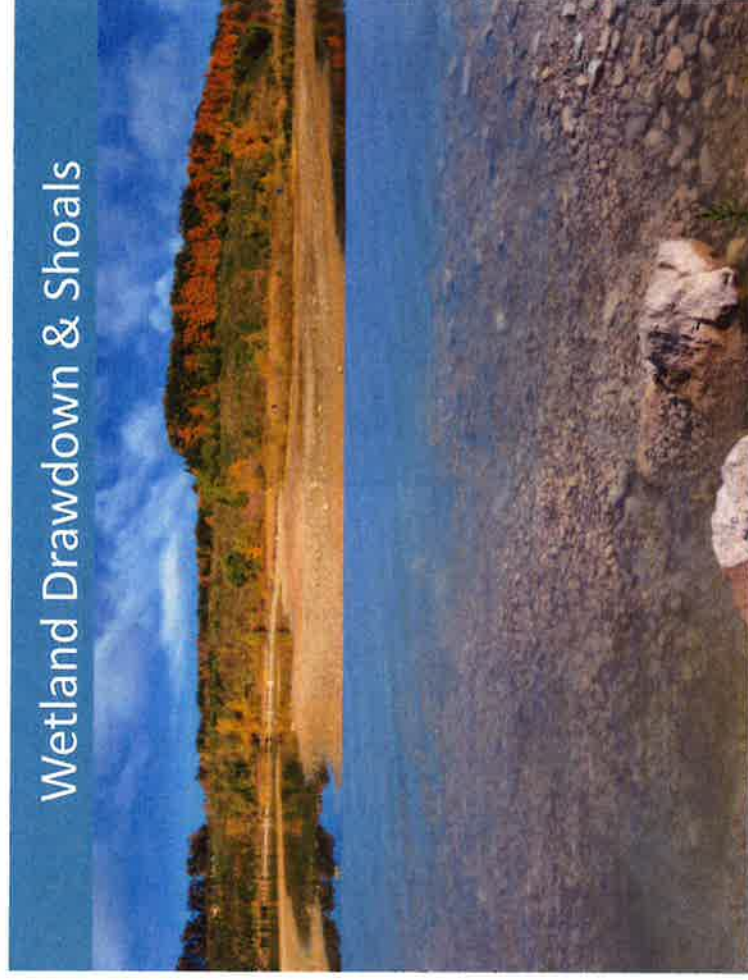
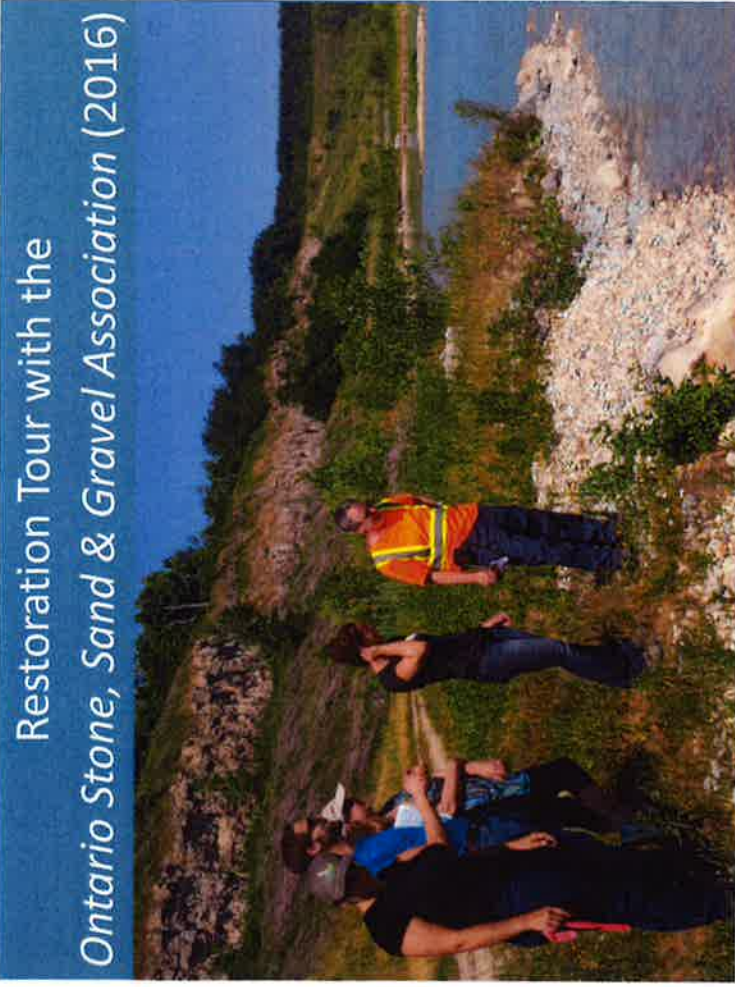
Fish Habitat Structure **4**

Midland Coir Logs 6

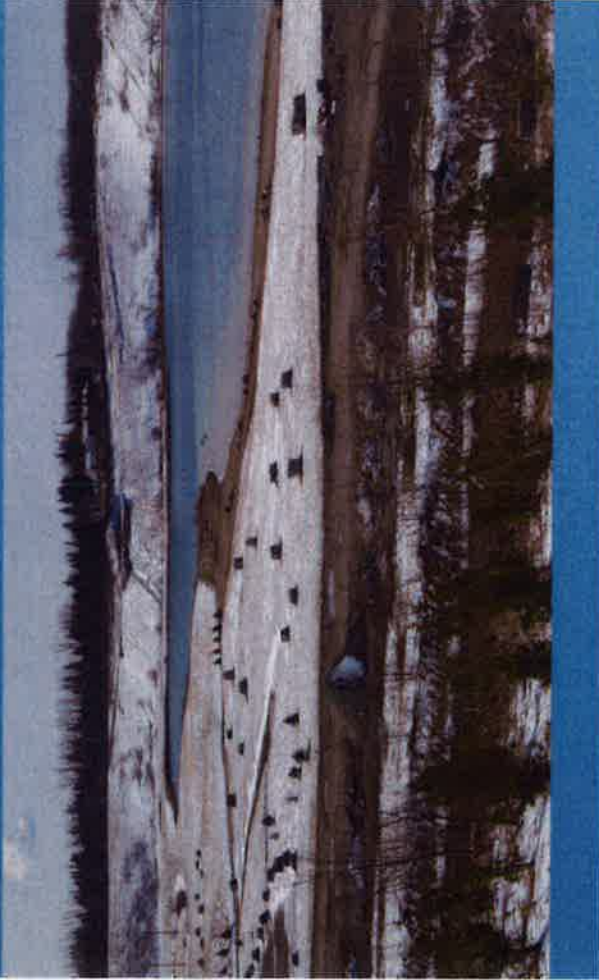
HIGH SCHOOL

Root Words:

100



Winter Landscape



Next Steps

Fish Stocking

- 2016/18 – Trial

Shoal Enhancements

- Evaluation & refinement

Invasive Species Management

- Common Phragmites

Park Master Plan

- 2017-18





Gravel uhoal creation for bass and sunfish species spawning



Marsh planting to provide nursery habitat for minnows



Introduction of woody debris and habitat structures to provide habitat and shelter for fish



Improving riparian vegetation

Nigel Finney
 Watershed Restoration Planner
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Kelso Quarry Lake Fish Habitat Creation

Restoration Project Fact Sheet

PROJECT DESCRIPTION:



Kelso Quarry

Since taking ownership in 2006, Conservation Halton has been restoring the landscape of Kelso Quarry Park. Wildlife is already beginning to use the rehabilitated areas of the quarry as a result of initiatives to create new and unique habitats.

Fisheries and Oceans

Canada's Recreational Fisheries Conservation Partnerships Program awarded Conservation Halton a grant to enhance fish habitat in 2015-16 to support a future recreational fishery in Kelso Quarry Lake.

The project focused on the following goals:



The enhancement of fish habitat in the quarry lake will ensure there is suitable fish habitat present in the lake for all life stages of the desired sport fish, Smallmouth bass. Shoals have been built for adults to spawn and deposit their eggs upon, a wetland has been enhanced for juvenile rearing, and structures placed in the lake provide cover for all life stages of fish throughout the lake. The lake will be stocked with fish in the future and the enhanced fish habitat will help maintain a sustainable fish population that can be angled.



Smallmouth Bass



LOCATION

North of Steeles Avenue West, in Milton

WATERSHEDS

Sixteen Mile Creek Watershed

PROJECT TIMELINE

2015–present

SIGNIFICANT FEATURES

In 2016 1480m² of fish spawning area was created

PROJECT STATUS

The initial phase of the project is complete although opportunities for enhancement still exist.

NEXT STEPS

- Shoal Evaluation and Refinement
- Smallmouth Bass Stocking
- Invasive Species Management

FUNDING PARTNERS

- Conservation Halton
- Fisheries and Oceans Canada
- Kelso Glen Eden Conservation Area

PROJECT HIGHLIGHTS

To create fish habitat that provides food and shelter, this project planted a shoreline ecosystem with species such as bur oak and red osier dogwood, along with marsh plantings of dark green bulrush and buttonbush shrubs. In total over 5,700 trees and plants were planted in Kelso Quarry Park.

Stones and tree logs have been placed throughout the lake to create ideal conditions for fish to lay eggs. Smallmouth bass redds, otherwise known as nests, can be found up to 6.5 m deep but preferred depth is 30-90 cm from water's surface. Without these stone additions, the groundwater fed lake would be too deep for fish to reproduce. Around 1500 m² of fish spawning area was created while there was an addition of 13 habitat structures and wildlife logs to the lake to provide cover to fish and perches for birds.

13 habitat structures
were created



Clockwise from top: Common Arrowhead, Wool (Sedge) Grass and Buttonbush



Diagram of shoal structure

VOLUNTEERS

This significant undertaking would not have been possible without the dedicated work of community residents. Volunteers came out from community members, Halton Sportsmen's Association, Niagara College, and Field and Stream Rescue Team. Participants gained hands on experience with this environmental stewardship initiative by building habitat structures and planting vegetation. Engagement in these projects not only educates participants but also encourages them to become ambassadors for healthy watersheds and natural areas.



Mother and son tree planting

THE BIG PICTURE

This project is a good example of how former aggregate lands can be restored to provide enhanced natural spaces. These restored natural spaces can offer many ecological benefits to the environment and many uses to local community members.

FUTURE PUBLIC ACCESS

With continued restoration efforts, this lake will provide valuable fish habitat and will provide a great example of rehabilitation. This will set the stage for the land to become a spectacular regional escarpment park

HOW CAN YOU HELP?

Participate in restoring native vegetation on shorelines and wetlands which sustain fish habitat. Support organizations like Conservation Halton in their efforts to create and protect local ecosystems.

FUNDING PARTNERS

This project was generously funded through the Recreational Fisheries Conservation Partnerships Program supported by Fisheries and Oceans Canada.



Fisheries and Oceans
Canada

Pêches et Océans
Canada



Conservation
Halton