

Lafontaine Shoreline Restoration Study Phase 2 - Municipal Class EA (Schedule B)



Aqua
Solutions
Judy Sullivan,
P. Eng.,



Natural Resource
Solutions Inc.
Erika Renecker , B.Sc. R.P.bio.,



Coldwater
Consulting Ltd.,
Mike Davies, Ph.D.,P.
Eng.,



August 25, 2012

Contacted Approval Agencies:

Adherence to the MOE Municipal Class EA (MCEA) process & Additional approvals required by the various agencies

Key approval agencies that have been contacted & continued on-going discussions.

- Ontario Ministry of the Environment (MOE);
- Ontario Ministry of Natural Resources (MNR);
- Fisheries and Oceans Canada (DFO);
- Canadian Environmental Assessment Agency (CEAA); and
- Transport Canada (Navigable Waters Protection Program (NWPP)).
- Beausoleil First Nation



Discussions with Approval Agencies & Public

Initial Contact During development of the Master Plan Process & Phase 1: Feasibility Groyne Study:

- **July 10, 2010** – 1st Master Plan Public Meeting The focus was on the land area above the Dynamic Beach Zone and the development of a Draft Master Plan(approx 100 people attend)
- **Aug. 13, 2010** , MNR had a site meeting w/Tiny Township Staff & coastal consultants. Willing to move ahead with concept to next stage of studies, as long as studies are carried out in accordance with their requirements. A key issue is no updrift & downdrift impacts, (i.e. sediment transport, coastal processes studies)



- DFO – Discussions w/staff were initiated in July of 2010, staff was aware of site situation, are willing to look at concept, but all required environmental studies must be carried out before they can consider project [e.g. Fisheries studies, ecological studies, sediment transport impacts (coastal processes study)]

Discussions with Approval Agencies & Public

November 6, 2010 – 2nd Master Plan Public Meeting (approx 35 people attend) conducted by Genus Loci Ecological Landscapes Ltd.

- Review the Draft Master Plan concept for the Park
- Review findings of Coastal Feasibility Study carried out by Coldwater Consulting (presented 3 options)
 - Do nothing
 - Trim groyne(s) in Lafontaine Park area
 - Completely remove groyne(s) in Lafontaine Park area
- Informal Motion to see show of hands for Options
 - Option 1 – Do Nothing (0 votes)
 - Option 2 – Partial Removal (35 votes)*
 - Option 3 – Full Removal (35 votes)*



* An ordered approach was preferred where the 1st step would be understanding the studies as required to perform partial groyne removal and monitoring. The 2nd step would be for a complete removal if the partial removal was not sufficiently effective. (Taken from Pg. 5, Meeting Minutes Public Meeting #2 Nov. 6, 2010)

Discussions with Approval Agencies, Council and Contact with additional Stakeholder Groups

Draft Coldwater Consulting report was put on Tiny Township Web site for Public comments/review , (none were received) Coldwater Consulting report was finalized Feb. 2011



February 14, 2011 – Presentation to Council

- Review of Project Status and Next Steps
- Since the Coldwater study found it was feasible to make improvements to water quality and beach and there was support from the Public to do further study Council decided to go ahead with the next Phase and carry out more detailed study to look at options

Further discussions with approval agencies [e.g. MOE, MNR, DFO, TC, CEAA, Beausoleil,] and contact with other shoreline stakeholder groups [e.g. Severn Sound Environmental Association (SSEA), Southern Georgian Bay Coastal Initiative (SGBCI), The Lake Huron Centre for Coastal Conservation (LHCCC)] was made.

Continued Approval Agency Discussions

Oct 13, 2011 : Site visit was attended by MOE, MNR, DFO, Tiny Township and the consulting team.



- Alternative options of partial removal were being considered and were discussed for any issues/concerns the agencies might have
- DFO supported Letter of Advice Approach, so would not be a need for HADD
- There was support for the preliminary proposed approach by agencies at the site meeting (MNR, MOE, DFO) but agencies will need to see details

January 30, 2012 : Presentation to Council

- Review of Project Status and where we are in the Approval Process
- Update of coastal and environmental results

Municipal Class EA Schedule B Process

The Process: The study being carried out in accordance with the Schedule B requirements of Phases 1 and 2 of the Municipal Engineers Association *Municipal Class Environmental Assessment (MCEA)* process. A component of the study is the consultation with agencies, residents and interested stakeholders

EXHIBIT A.1 KEY FEATURES OF THE MUNICIPAL CLASS EA

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA

	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5
BASIC PROCESS (See Exhibit A.2 for detailed flow chart)	PROBLEM OR OPPORTUNITY → ALTERNATIVE SOLUTIONS → ALTERNATIVE DESIGN CONCEPTS FOR PREFERRED SOLUTION → ENVIRONMENTAL STUDY REPORT → IMPLEMENTATION				
Consultation Requirements	Optional	Mandatory	Mandatory	Mandatory	Optional
SCHEDULE A/A* PROJECTS⁽¹⁾	✓ ⁽³⁾				✓
SCHEDULE B PROJECTS⁽¹⁾	✓	✓			✓
SCHEDULE C PROJECTS⁽¹⁾	✓	✓	✓	✓	✓
MASTER PLANS⁽¹⁾ (See Section A.2.7)	✓	✓ <small>(As a minimum Master Plans address Phases 1 and 2)</small>	✓ ⁽²⁾	✓ ⁽²⁾	✓ ⁽²⁾

NOTES:

✓ Actions required during relevant phase

(1) Schedule A, A*, B and C projects and Master Plans can also be integrated with the requirements of the Planning Act (See Section A.2.9)

(2) Complete Phases 3 and 4 for any Schedule C projects included in the Master Plan prior to implementation

(3) For Schedule A* projects, public to be advised. See Section A.1.2.2.

Municipal Class EA (MCEA) Schedule B Process

Schedule B- Phase 1 Problem /Opportunity:

- Low water levels and poor water quality have been a problem at Lafontaine Beach Park. The Township of Tiny is undertaking a Municipal Class Environmental Assessment (MCEA) to study the problem of low water issues and water quality.
- There is an opportunity to not only improve the water quality but also provide Restoration Opportunities for improvements to the beach.
- A feasibility study was completed in Feb 2011 by Coldwater Consulting for the Township where they examined whether or not changes to the groyne(s) could assist in improving water quality issues at the Park.
- The results indicated that partial or full removal of the existing groyne may improve water quality under certain water level situations.

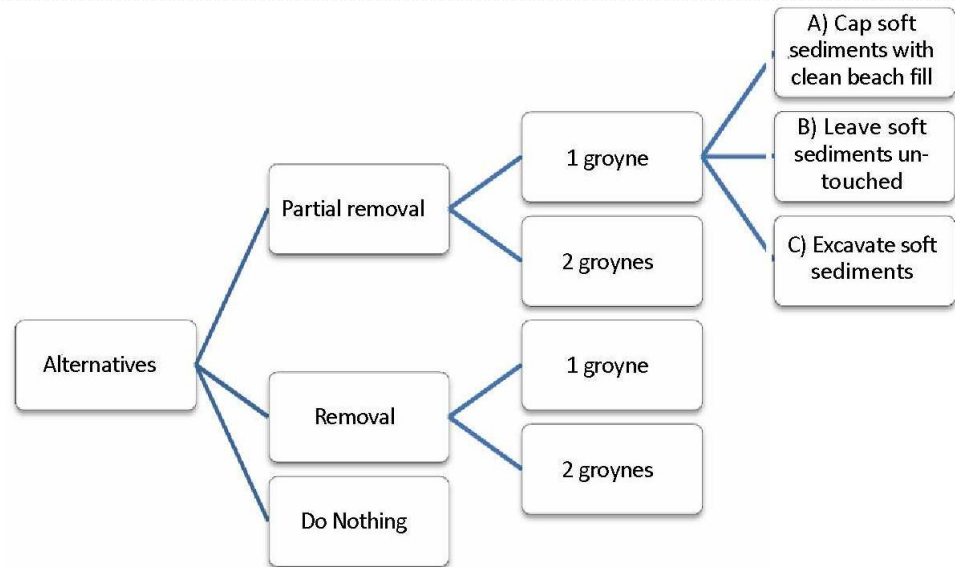


<http://MaryJudithSullivan.com>

www.nrsi.on.ca

www.coldwater-consulting.com

Development of Options & Alternatives



After Nov. 6 2012 Public Meeting which indicated there was support for further study, an additional study was initiated looking at possible options including the review of;

- do nothing,
- partial removal and capping of soft sediments with clean beach fill from existing groyne
- Partial removal and leave soft sediments untouched or
- Partial removal and removal of soft sediments and dispose off site

Municipal Class EA (MCEA) Schedule B Process

- The study looked at what the impacts of these options would have on a number of factors; [e.g. environmental (terrestrial & aquatic), coastal processes (sediment processes alongshore drift and on and offshore), water quality, social/cultural, and economic].
- These will be presented by the consulting team members
- A preferred approach is being recommended and is being put forward for review by the Public and the approval agencies for Lafontaine Beach Park.

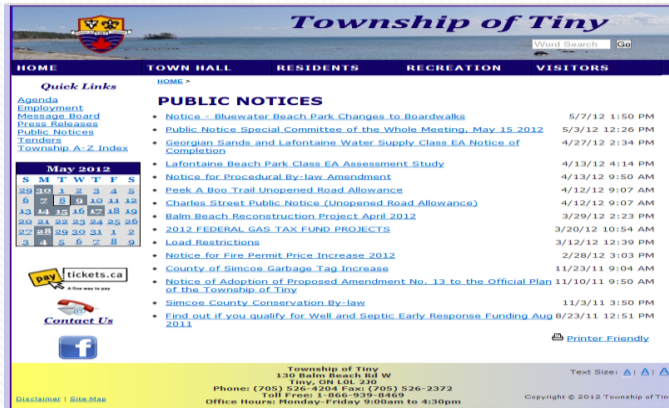


Class EA Schedule B Process

Schedule B: Phase 2

First - Public Contact

- 1st - Notice of Study Commencement Announcement – Issued on April 11, 2012
 - Existing Project Information has been Made Available on the Town Web site (Background materials ; Development of Master Plan and supporting information, Coldwater Study from Feb. 2011,)



<http://MaryJudithSullivan.com>

www.nrsi.on.ca

www.coldwater-consulting.com



Township of Tiny Notice of Study Commencement Lafontaine Beach Park, Beach Water Quality Improvements Schedule B- Class Environmental Assessment Study

The Study

The Township of Tiny is undertaking a Class Environmental Assessment (EA) Study to establish the preferred approach for the Lafontaine Beach Park, Beach Water Quality Improvements. The Township of Tiny is studying the problem of low water issues and poor water quality at the Lafontaine Beach Park. Consequently, the Township is examining alternative solutions which may assist in improving water quality issues at Lafontaine Beach Park. Options included the review of, do nothing and the partial or full removal of two existing groynes. A feasibility study carried out in 2011 indicated that changes to the groynes may improve water quality under certain water level situations.

The Process

This study is being carried out in accordance with the Schedule B requirements of Phases 1 and 2 of the Municipal Engineers Association *Municipal Class Environmental Assessment* (2000, as amended in 2007). A key component of the study will be consultation with agencies, residents and interested stakeholders.

Information has been posted on the Township web site at: [www.tiny.ca/Residences/ Master Plans/ Lafontaine Beach Park Master Plan](http://www.tiny.ca/Residences/MasterPlans/LafontaineBeachParkMasterPlan). Information will continue to be updated on the web site as the study progresses.

Comments Invited

Public input and comments are invited as part of this Notice of Study Commencement under the Class EA process.

If you have any questions or comments, wish to receive additional information on the study or wish to be added to the mailing list to receive further notifications of the study, please contact either of the following Study Team members:

Mr. Henk Blom
Manager of Public Works
Township of Tiny
130 Balm Beach Road West
Tiny, Ontario L0L 2J0

Phone: (705) 526-4204
Fax: (705) 527-8767
Email: dmcconnell@tiny.ca

Ms. Judy Sullivan P.Eng.
Project Manager
Aqua Solutions 5 Inc.
15 Woodglen Way
Markham, Ontario, L3R 3A8

Phone: (905) 604-1295
Fax: (905) 604-1295
E-mail: aquasolutions5@rogers.com

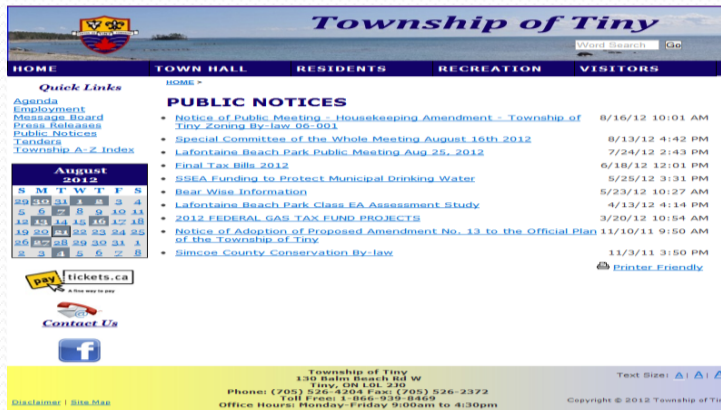
Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record. This Notice first issued on April 11, 2012.

Class EA Schedule B Process

Schedule B: Phase 2

2nd - Public Contact

- Notice of Public Consultation Centre Meeting Issued – July 26, 2012
 - Existing Project Information continues to be available on the Town Web site (Background materials ; Development of Master Plan and supporting information, Coldwater Study from Feb. 2011,)



Township of Tiny Notice of Public Information Centre Lafontaine Beach Park, Beach Water Quality Improvements Class Environmental Assessment Study

The Study

The Township of Tiny is undertaking a Class Environmental Assessment (EA) Study to establish the preferred approach for the Lafontaine Beach Park, Beach Water Quality Improvements. The Township of Tiny is studying the problem of low water issues and poor water quality at the Lafontaine Beach Park. Consequently, the Township is examining alternative solutions which may assist in improving water quality issues at Lafontaine Beach Park. Options included the review of "Do Nothing" and "The Partial or Full Removal of the Existing Park Groyne". A feasibility study carried out in 2011 indicated that changes to the groynes may improve water quality under certain water level situations.

The Process

This study is being carried out in accordance with the Schedule B requirements of Phases 1 and 2 of the Municipal Engineers Association *Municipal Class Environmental Assessment* process. A key component of the study will be consultation with agencies, residents and interested stakeholders.

Members of the Public are invited to attend the PIC, the purpose of which is to outline the study progress and to provide an opportunity to review and comment on the study information and the alternatives being considered.

Date: August 25, 2012 (Saturday)

Time: 10:00 am - 11:00 am **Open House Presentation**
11:00 am - 12:00 noon **Questions and Discussion**

Place: Township of Tiny
Council Chambers
130 Balm Beach Road West, Perkinsfield

Information has been posted on the Township web site at: www.tiny.ca/Residences/MasterPlans/LafontaineBeachParkMasterPlan. Information will continue to be updated on the web site as the study progresses.

If you cannot attend the PIC, but would like to provide comments, please provide your comments to one of the following contacts by September 25, 2012.

Mr. Henk Blom
Manager of Public Works
Township of Tiny
130 Balm Beach Road West
Tiny, Ontario L0L 2J0

Phone: (705) 526-4204
Fax: (705) 527-8767
Email: dmcconnell@tiny.ca

Ms. Judy Sullivan P.Eng.
Project Manager
Aqua Solutions 5 Inc.
15 Woodglen Way
Markham, Ontario, L3R 3A8

Phone: (905) 604-1295
Fax: (905) 604-1295
E-mail: aquasolutions5@rogers.com

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record. This Notice first issued on July 26, 2012.

Class EA Schedule B Process

Schedule B: Phase 2 Public Contact

3rd Public Contact – Hold Public Open House: August 25, 2012

- Present options and Preliminary Preferred Approach: Bring forward the results, options (coastal and environmental information is presented to the public) and preferred alternative.

NEXT STEPS IN THE PROCESS:

- Comments Invited from the Public: After the public meeting allow for 30 days to receive the public's input/comments by Sept. 25, 2012.
- Circulate the Information/Reports and Recommended Preferred Alternative to the Approval Agencies and get their comments. Address any outstanding agency comments/concerns or issues if they arise from the review
- If approval agencies have any major issues/changes then will go back to the Public for review with these changes
- If the project is accepted by the Public and Approval Agencies go to Council for Project Approval



Class EA Schedule B Process

Phase 2 - Notices of Completion

4th Public Contact - Notice of Completion
Announcement would be issued.



- At this point documentation of the planning process followed through Phases 1 and 2 shall be finalized. A Project File will be available for the Public, approval agencies or other interested persons/parties for review.
 - The project File information will contain; (e.g. Background and earlier studies, reports, identify the problem, alternative solutions considered, the evaluation process followed to select the preferred solution, public consultation process and how concerns raised were addressed, communications, notices, letters, copies of reports prepared by consultants, any relevant information of key activities and/or decisions/conclusions made throughout the process).
- The public will be allowed 30 calendar day period during which documentation may be reviewed and comment and input received.



Lafontaine Beach Park Shoreline Restoration

25 August 2012

Coldwater Consulting Ltd.
5510 Canotek Rd. Suite 203
Ottawa, ON
613 747-2544
info@coldwater-consulting.com
www.coldwater-consulting.com



NATURAL RESOURCE SOLUTIONS INC.

Aquatic, Terrestrial and Wetland Biologists

Lafontaine Beach Park Class EA Natural Environment

Erika Renecker, R.P.Bio, B.Sc.

Recommended Preferred Alternative Assessment

Alternatives Chart - Summary of Ranked Alternatives

Alternative → Criterion ↓	A Partial removal and capping	B Partial removal and leave fines in situ	C Partial removal and excavate for off-site disposal	D Do Nothing
1 - Alternatives Analysis: Physical Processes Considerations				
Long-term water quality	Good	Good	Good	Poor during all but high water conditions
Long-term sediment quality	Good	Good	Good	Poor
Short-term effects	Minor disturbance during construction	Turbidity and water quality problems after construction will dissipate following medium-high water level conditions	Major disturbance during construction	N/A
Downdrift effects	None	Fines will be transported naturally downdrift eventually dissipating in open water	None	N/A
Effectiveness on Fine Sediment Issues by re-establishing recreational beach use	Excellent	Good – gradual return to improved conditions as fines get washed away	Good – the existing fine sediments will be removed, but the resulting depression may re-accumulate fines.	Poor
Performance in sustained low waters	Excellent (acts as a cap)	Poor, fines remain in place	Poor, scraped area will have potential to re-fill with fines and organics.	Poor
PHYSICAL PROCESSES RANKING	BEST – PREFERRED	2nd	3rd	4th

Recommended Preferred Alternative Assessment

Alternative → Criterion ↓	A Partial removal and capping	B Partial removal and leave fines in situ	C Partial removal and excavate for off-site disposal	D Do Nothing
2- Alternatives Analysis: Environmental Considerations				
Possible Direct Impacts to Terrestrial Environment	Vegetation removal in SWH (sand barren) associated with construction equipment access	Vegetation removal in SWH (sand barren) associated with construction equipment access	Vegetation removal in SWH (sand barren) associated with construction equipment access	No change
	Vegetation and wildlife habitat removal in the wetland when capped by groyne substrates	Increased truck traffic to haul substrates off site may cause further substrate compaction, vegetation removals, etc.	Vegetation and wildlife habitat removal in the wetland when scraped to remove fine sediments and organic soils	No improvement or restoration of original natural Vegetation and wildlife habitat
Possible Direct Impacts to Aquatic Environment	Temporary disturbance to fish habitat immediately adjacent to the groyne during removal.	Temporary disturbance to fish habitat immediately adjacent to the groyne during removal.	Altering (removing) the substrates can have negative impacts to fish habitat (completely destroyed)	No change
	Overall neutral or positive impact to fish habitat in terms of overall area and habitat diversity	Temporary sediment suspension;	Temporary suspension of sediment	No improvements or restoration of original natural aquatic function and habitat
	Temporary sediment suspension;			
ENVIRONMENTAL RANKING	2nd - But best in terms of creation of a sandy shoreline	BEST -PREFERRED (in terms of minimal disturbance to existing shoreline)	3rd	No Change

Recommended Preferred Alternative Assessment

Alternative → Criterion ↓	A Partial removal and capping	B Partial removal and leave fines in situ	C Partial removal and excavate for off-site disposal	D Do Nothing
3- Alternatives Analysis: Social/Cultural Considerations				
Improvement of Recreation Issues & less stagnant, shallow waters which result in the inability to use beach for swimming	Best- Preferred	Some Improvement	Some Improvement	No Improvements
Improvement of Foul odors, water stagnate less	Best – Preferred	Some Improvement	Some Improvement	No Improvements
Improvement in overall Beach/ Park Use	Best – Preferred	Some Improvement	Some Improvement	No Improvements
SOCIAL/CULTURAL OVERALL RANKING	BEST – PREFERRED	Some Improvement	Some Improvement	No Improvements
4- Alternatives Analysis: Economic Considerations				
Cost of Works	Low	Lowest	Highest	No Cost
Improvement (more use and positive economic impacts for area bring people to community)	Best	Some Improvement	Some Improvement	No Improvement
ECONOMIC RANKING assuming works are to be carried out	BEST- PREFERRED	2nd	3rd	N/A
5- ALTERNATIVES ANALYSIS: OVERALL RANKING CONSIDERATIONS				
OVERALL RANKING	BEST/PREFERRED	2nd	3rd	4th

Approval Process – Where we are

- DFO
 - Project would NOT be a HADD, Letter of Advice will be required, will need study results and review
- MOE
 - Discussions confirmed the MOE Municipal Class EA Schedule B approach appropriate but will need to do a full review of Project and Final Design Alternative
- Canadian Environmental Assessment Act (CEAA),
 - undertaking a project summary and will document the process followed with various provincial, federal approval agencies and any aboriginal groups
- TC Approvals
 - Navigable Waters Act - Have spoken with staff / since materials will be removed from an existing site and not adding any new materials project is not expected to cause any navigation issues but project will need to be submitted for review/approval
- MNR
 - Addressing water circulation & coastal processes: e.g. sediment transport, ensuring no negative updrift & downdrift impacts, erosion or flooding issues (Coldwater finalizing report that addresses all these issues), will need to be reviewed
 - Environmental concerns (Aquatic and Terrestrial) will also need to be reviewed

