

## COWICHAN ESTUARY ENVIRONMENTAL MANAGEMENT PLAN **COMMITTEE MEETING**

### FRIDAY, FEBRUARY 6, 2015 AT 1:00 P.M.

### COWICHAN VALLEY REGIONAL DISTRICT, BOARD ROOM 175 INGRAM STREET, DUNCAN, BC

	AGENDA				
1.	APPROVAL OF AGENDA				
2.	ADOPTION OF MINUTES				
	M1	Adoption of the Minutes of the Cowichan Estuary Environmental Management Committee Meeting of September 29, 2014.	2 - 3		
3.	BUSINESS ARISING F	ROM THE MINUTES			
4.	CORRESPONDENCE				
	C1	Letter from Cowichan Estuary Restoration & Conservation Association (CERCA) dated January 26, 2015 regarding Mariners Island Salt Marsh Recovery Project.	4 -10		
,	C2	Letter from Cowichan Tribes to Dr. Goetz Schuerholz dated January 27, 2015 regarding Mariners Island Salt Marsh Recovery Project.	<sub>.</sub> 11		
	C3	Email from Barb Bliss (MFLNRO) regarding tenure replacement of stilt home leases - Cowichan Bay. File No.'s 0110065 & 0109790. (see attached email)	12 - 14		
5.	REPORTS				
6.	UNFINISHED BUSINESS				

7. **ADJOURNMENT** 

The next regular meeting of the CEEMC is scheduled to be held February 17, 2015.

Cowichan Estuary Environmental Management Plan Committee
Ron Diederichs, Chair, MFLNRO ron diederichs@gov.bc.ca
Rob Conway, CVRD roomway@cvrd.bc.ca
Rob Conway, CVRD right Nary Omark harvey MFLNRO mark harvey@gov.bc.ca
Kate Miller, CVRD kmiller@cvrd.bc.ca
Mike Tippett, CVRD miller@cvrd.bc.ca
Tracy Fleming, Cowichan Tribes tracy.fleming@cowichantribes.com

Lori lannidinardo, Area Director, CVRD <u>llannidinardo@cvrd.bc.ca</u>
Bridgid Reynolds, North Cowichan <u>Revnolds@northcowichan.bc.ca</u>
Ann Kjentif, CVRD <u>aktentif@cvrd.bc.ca</u>
Larny George, Cowichan <u>Tribes larny.georne@cowichantribes.com</u>
Helen Reid, Cowichan <u>Tribes lenen.reid@cowichantribes.com</u>
Laura Robertson, CVRD <u>irobertson@cvrd.bc.ca</u>

MI

Minutes of the Cowichan Estuary Environmental Management Committee Meeting held on Monday, September 29, 2014, at 2:00 p.m. in the Cowichan Valley Regional District Board Room, 175 Ingram Street, Duncan, BC V9L 1N8

PRESENT:

Chair Ron Diederichs, Ministry of Forests, Lands & Natural Resource Operations

Ann Kjerulf, Cowichan Valley Regional District

Lori Iannidinardo, Cowichan Valley Regional District, Cowichan Bay Director

Brigid Reynolds, Municipality of North Cowichan

Tracy Fleming, Cowichan Tribes

OTHER:

Laura Robertson, Cowichan Valley Regional District, Recording Secretary

APPROVAL OF AGENDA

It was moved and seconded that the agenda be approved.

**MOTION CARRIED** 

**ADOPTION OF MINUTES** 

**M1** 

It was moved and seconded that the Minutes of the Cowichan Estuary Environmental Management Committee Meeting of September 11, 2014, be adopted.

MOTION CARRIED

**BUSINESS ARISING** 

BA1

Chair Ron Diederichs reviewed the Draft Motion regarding the renewal of Western Forest Products (WFP) intertidal log storage.

Action: Chair to revise the motion on the Decision Note for the Minister of Environment regarding the issue of renewal of Western Forest Products' intertidal log storage leases. To be distributed amongst the committee via email by tomorrow (September 30<sup>th</sup>) for their approval

**REPORTS** 

R1

Staff report dated August 28, 2014, from Dana Leitch, Planner II regarding Development Permit Application 23-D-13DP/VAR for Pier 67 Marina Ltd. was received for information purposes.

The CEEMC discussed the application and came to the following response.

Response:

The committee would support the approval of this application subject to the proponents receiving authorization for the lease revision from FLNRO-Lands, as long as the additional buildings and floats will not increase shading of the sea bottom beyond 40% total of the water lot, and that grounding of floating structures is avoided. Also, that any floatation materials used underneath are consistent to DFO best practice, and if Styrofoam is used that it be properly encapsulated to ensure it won't release the Styrofoam into the environment over time.

Action item:

Chair will send a brief letter to Dana Leitch of the CVRD Planning Department regarding the decision of the committee.

Recording Secretary

R2	Discussion regarding Zoning Bylaw No. 3773.				
	Ann Kjerulf noted that the CVRD will bring Bylaw No. 3773 back after 3 <sup>rd</sup> reading to the committee for a decision.				
NEXT MEETING	TBA				
ADJOURNMENT	It was moved and seconded that the meeting be adjourned.				
	MOTION CARRIED				
	The meeting adjourned at 3:30 p.m.				
¬ .					

Chairperson



26th January 2015

# Mariners Island Salt Marsh Recovery Project

# **Project Proposal**

### Introduction:

The "Cowichan Estuary Restoration and Conservation Association ---CERCA" is registered under the BC Society Act as a Non-Profit Organization. CERCA is composed of Cowichan Valley citizens concerned about the Cowichan Estuary's environmental health and ecological integrity which continues to be threatened by non-compatible uses. CERCA has adopted a holistic approach for its Mission and long-term Vision aiming at the restoration of one of BC's 10 most important estuaries. CERCA addresses the Cowichan-Koksilah Estuary, marshes and floodplain as one single ecological entity to be rehabilitated in order to re-enable proper ecosystem functioning.

The proposed salt marsh rehabilitation of Mariners Island has been identified as a priority project resulting from a comprehensive participatory SWOT analysis implemented by CERCA in 2012. A funding proposal had been submitted by CERCA to the DFO in August of 2014 with subsequent approval --in full.

# **Executive Summary:**

The project rationale is to rehabilitate approximately three hectares of prime salt marsh interspersed with inter-tidal pools and water channels currently covered by a solid layer of logs in different stages of decomposition. Once restored the target area will provide food and shelter to a wide spectrum of fauna including Chinook, Coho and Chum smolts thriving along some of the still un-disturbed sections of shoreline, intertidal pools, and side channels of the Cowichan Estuary.

The Cowichan Bay salt marshes are of key importance to a large number of overwintering shorebirds and waterfowl forming part of a registered "Important Bird Area". The Cowichan Estuary is considered an international destination for birders and tourists who play an important role for the local economy. The planned restoration will significantly enhance the carbon sequestration capacity of this ecosystem recognized as one of the most effective carbon sinks.

## Project Description:

The project focuses on the removal of logs and woody debris washed up over time onto the marshes located to the south of the WFP mill pond in the heart of the Cowichan Estuary. A large section of these highly productive marshes is currently covered by a solid layer of logs in different stages of decomposition releasing CO2 in the process and destroying valuable habitat.

Logs and woody debris moved around by tidal changes and storms in the Cowichan Estuary and marshes prevent and disturb the growth of riparian- and marshland vegetation, most visible and pronounced on Mariners Island, the target area for this rehabilitation project.

## Methods and Approach:

- i) Prior to the removal of logs and large woody debris from Mariners Island the woody debris will be inventoried using a geo-referenced linear transect sampling design successfully employed for similar projects by Ducks Unlimited (see attachment 2). The same sampling design will be used following to log removal in order to establish baseline data for follow-up monitoring.
- ii). Two light weight excavators using bio-degradable hydraulic fluid and bio-diesel will be transported via the log transport channel of the Western Forest Products Mill (WFP) to Mariners Island by a landing barge. The excavators will yard the logs to be removed from Mariners Island in five strategic locations next to the Mill Pond of WFP. A barge-mounted crane will be used to lift the logs onto a second barge inside the mill pond from where they will be lifted by a second crane operating from the mill site onto the WFP property.

The logs will be sorted on the mill site according to their allocated use. Sound logs will be chipped by the mill, logs not suitable for chipping will be used for energy production.

Logs and debris in an advanced stage of decomposition will be piled to be mixed with topsoil and left for re-vegetation. Natural logs, roots and tree stumps will be anchored in the marsh as habitat enhancement measure.

- iii) The log removal will be followed by a site cleanup collecting all plastic and other garbage to be stock-piled at the WFP site and transported to the Bings Creek waste disposal site of the CVRD.
- iv) A vegetation survey will be conducted in May along the geo-referenced linear transects used for the large woody debris inventory. The to-be geo-referenced vegetation plots will be monitored for four consecutive years at the same time of the year (June) in order to record the vegetation recovery process.

## Responsibilities and Partnerships:

CERCA is the originator of the project and fully responsible for its timely and environmentally sound implementation. CERCA will closely cooperate with the Western Forest Products Mill as Key partner.

The Research and Monitoring program related to the project will be implemented by CERCA in cooperation with Ducks Unlimited, Cowichan Tribes, and the Vancouver Island Conservation Land Management Program.

Financing for the project has been provided by the DFO through its *Recreational Fisheries Conservation Partnerships Program*. In-kind contributions will be provided by CERCA, Western Forest Products, Ducks Unlimited and Cowichan Tribes.

# Time-line:

The site clean-up has to be completed within the current fiscal year in order not to lose the DFO funding.

Dr. Goetz Schuerholz
Conservation Ecologist
Chair CERCA
1069 Khenipsen Road
Duncan BC, V9L 5L3
Tel: (+1) 250 748 4878
cerca@shaw.ca
wwww.cowichanestuary.com



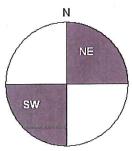
# **Large Woody Debris Surveys**

Excessive rafts of washed up Large Woody Debris (LWD) is though to be one of the limiting factors on the Grauer site, and a large component of the habitat enhancement works is the removal of this accumulated debris. Additional surveys were conducted along the vegetation transects (see above for details) to gain information on the distribution and density of the LWD, so both the removal of LWD, and any subsequent re-accumulation, could be accurately quantified. In addition, information was collected about the age, source, size, and orientation of individual pieces of LWD.

### Methodology

LWD surveys were conducted along the same transects as the vegetation surveys. Samples were taken every 75 m (i.e. at every third vegetation plot; however, as LWD surveys were conducted on different days than the vegetation surveys locations are not exact) in a 5 m radius circular plot. The first plot was located 25m seaward of the transect start point, to capture the LWD that frequently aggregates near the Richmond West Dyke; plots were repeated at 75m intervals thereafter. At each plot, a GPS waypoint and a 8-photo, 360° panoramic series (starting north and proceeding clockwise; the photos were aimed low to capture ground conditions) was taken. A transect tape was staked in the center of the plot and extended 5m due north to provide a visual reference for the plot boundary and the percent cover of LWD within the 5m radius plot was estimated visually to the nearest 5%.

Data was then collected on each piece of LWD within the plot. The 5m transect tape was carried clockwise or counterclockwise around the plot, with data taken on each piece of LWD the tape encountered within the 5m-radius sweep. To be counted, the LWD only had to extend into the plot, not be contained completely within the plot. LWD was defined as all pieces of wood >10 cm diameter and >1 m length.; if the number of measurable logs in the plot was estimated to be >50, only the NE and SW quadrants of the plot were sampled, as shown below:



Data collected on individual logs is as follows:

#### Size

Length (to 0.1m) and diameter (to 0.01m); for squared-off sawn boards collect length, width & thickness so that volume may be calculated.

#### Orientation

Take a compass bearing along the long axis of the wood, from 0-180 degrees.

#### Type

o NW - natural wood

The log is naturally-derived. It was a root wad and/or branches attached and no cut ends.

o CR - cut root wad

The wood is a root wad with only a short bole attached; the bole has been cut.

o CL - cut log

The wood is a processed log. It usually has no roots or branches, and has been cut at one or both ends.

o P – processed

Processed timber that has been squared off into beams or boards. The wood will be square/rectangular in cross-section (not round), and may have nails, bolts, etc. within it or have been treated with creosote or painted.

#### Condition

- 1 fresh, bark on (>25% bark covered)
- o 2 no bark (or trace, <25%) but the wood is still sound
- 3 no bark, the surface wood getting soft or exhibits signs of decay but the log is still whole
- 4 advanced decay, the wood soft and disintegrating and the log would break apart if moved or has already broken apart

### Mobility

o F-free

The wood is laying on the surface and is free to move (e.g. roll, float)

ER – embedded (root)

The wood has roots which are embedded in the substrate (applies to cut root wads & natural wood only)

o ET - embedded (trunk)

the tree trunk is embedded in the substrate and cannot move freely even if inundated with water. Natural wood and cut root wads with the trunk/bole within the sediment fall into this category as well.

#### Distance

Record the distance from the center of the plot to the nearest part of the wood (to 0.1m). This is so that existing data can be used (rather than having to re-collect) if the size of the 5m radius plot is reduced after field-trialing the proposed methodology.

Date:	Transect Name:	Starting waypoint:	Bearing:	· ·
Plot #	Distance from start:	Plot waypoint:	Photo series:	· · · · · · · · · · · · · · · · · · ·
% LWD (10m	n radius):	% LWD (5m radius):		

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Log ID	Length	Diameter	Orientation	Туре	Condition	Mobility	Min. dist	Notes
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Type

NW Natural wood

**CR** Cut root wad

**CL** Cut log

P processed timber

# Condition

1 New fresh log, >25% bark

2 Sound, <25% bark

**3** Surface decay, soft, spongy

4 Highly decayed, unsound or crumbling

# Mobility

**F** freely mobile

ER embedded by roots (NW and CR only)

embedded by the trunk (overrides ER)

C2



# Cowichan Tribes

5760 Allenby Road Duncan, BC V9L 5J1 Telephone (250) 748-3196 Fax: (250) 748-1233

Dr. Goetz Schuerholz Cowichan Estuary Restoration and Conservation Association **CERCA** 

Via Email: taesco@shaw.ca

Tuesday, January 27, 2015

Dear Goetz;

Re: Mariner's Island Salt Marsh Recovery Project

This letter can be appended to your project funding application(s) to add support from Cowichan Tribes for restoring the estuarine habitat of Mariner's Island. Cowichan Tribes supports projects that will result in improved conditions in fresh-water and marine habitats of the Cowichan River and Cowichan Bay. The estuary is known to be an important rearing habitat for many juvenile species, including Chinook, Coho and Chum salmon. Estuarine health is vital to improving numbers of returning salmon to the Cowichan River system.

Over the past several years the Western Forest Products (WFP) operation, specifically their log booming and mill pond operations, have resulted in hundreds of rogue logs being deposited by wave action onto sensitive estuarine habitats. During tidal fluctuations and particularly via storms, these logs roll over and pound these habitats on Mariner's Island, and elsewhere, causing destruction.

Cowichan Tribes supports this project to remove logs from Mariner's Island. We also support any future work with WFP to mitigate the source of these rogue logs in the estuary.

Yours truly,

Larry George Smaaltun

Manager, Lands and Governance

Mormon Thom

LG/tf

#### Laura Robertson



From:

Diederichs, Ron FLNR:EX <Ron.Diederichs@gov.bc.ca>

Sent:

Tuesday, January 27, 2015 2:50 PM

To:

'Tracy Fleming'; Lori Iannidinardo; Laura Robertson; Ann Kjerulf; 'Brigid Reynolds' FW: Tenure Replacement of Stilt Home Leases - Cowichan Bay Files 0110065 &

Subject:

0109790

Attachments:

Cowichan Bay Survey.pdf

Information for the tenure replacements only.

Ron Diederichs Section Head Ecosystems Section Ministry of FLNR 2080A Labieux Road

Nanaimo, BC V9T 6J9 Ph: 250-751-3223 Fax:250-751-3208

From: Biss, Barb FLNR:EX

Sent: Wednesday, January 21, 2015 8:55 AM

To: Diederichs, Ron FLNR:EX

Subject: RE: Tenure Replacement of Stilt Home Leases - Cowichan Bay Files 0110065 & 0109790

Ron

There are two addresses. DL Lots 199 and 200 are 1781 Cowichan Bay Road and District Lots, 207, 208 and remainder of District Lot 209 are 1789 Cowichan Bay Road.

Mr. Fitzpatrick has NOT made any application to this office to modify either of his tenures. These tenures have to be replaced before we will considered Mr. Fitzpatrick's applications for modifications to his tenures. The two existing tenures expire March 31, 2015.

Barb

From: Diederichs, Ron FLNR:EX

Sent: Wednesday, January 21, 2015 8:18 AM

To: Biss, Barb FLNR:EX
Cc: Wallace, Bonita FLNR:EX

Subject: RE: Tenure Replacement of Stilt Home Leases - Cowichan Bay Files 0110065 & 0109790

Do you have a street address for these properties? The CEEMC has received a proposal from Peter Fitzpatrick that involves demolishment and replacement of the structure (expanded) and filling of the foreshore at 1789 Cowichan Bay Road, but did not provide a legal description or Lands file.

Ron Diederichs
Section Head
Ecosystems Section
Ministry of FLNR
2080A Labieux Road
Nanaimo, BC V9T 6J9 Ph: 250-751-3223 Fax:250-751-3208

From: Biss, Barb FLNR:EX

Sent: Tuesday, January 20, 2015 4:14 PM

**To:** Diederichs, Ron FLNR:EX **Cc:** Wallace, Bonita FLNR:EX

Subject: Tenure Replacement of Stilt Home Leases - Cowichan Bay Files 0110065 & 0109790

Ron

As per OIC #1652 dated September 12, 1986 Ministry of Forests, Lands and Natural Resource Operations is requesting approval from Cowichan Estuary Environment Management Committee to replace the following tenures:

File 0110065 - District Lots, 207, 208 and remainder of District Lot 209, Cowichan district

File 0109790 - District Lots 199 and 200, Cowichan District

Owner:

Peter Fitzpatrick and Cheryle Henry

1781 Cowichan Bay Road Cowichan Bay BC VOR 1N0

These tenures both for residential purposes.

The length of tenure would be 30 years.

There are no changes planned to either of these tenures in size or structure.

I have attached a survey plan that shows the 2 sites in question.

I look forward to your reply. If you require any further information please contact me.

Barbara Biss
Land Officer
Ministry of Forests, Lands and Natural Resources
142 – 2080 Labieux Rd
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