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DP-32-11 – Pollock

**REPORT TO THE JUAN DE FUCA LAND USE COMMITTEE  
MEETING OF TUESDAY, JANUARY 17, 2012**

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**SUBJECT**      **DEVELOPMENT PERMIT WITH VARIANCE FOR LOT 6, SECTION 44, SOOKE DISTRICT, PLAN 1958**

**ISSUE**

The purpose of this report is to request a steep slope and riparian development permit with variance for the purpose of legalizing an addition and for the construction of new decks.

**BACKGROUND**

The 0.96ha property is located at 7726 Davidson Road in Otter Point and is zoned Rural Residential 3 (RR-3). The property is adjacent to RR-3 zoned properties to the east and west, Kemp Lake to the north and Davidson Road to the south (Appendix 1). There is an existing legal non-conforming dwelling on the property and Building Inspection staff were made aware of recent construction on the property including an addition of 16.5m<sup>2</sup> of living space, a new 47m<sup>2</sup> deck on the northwestern side of the dwelling, and a new 41m<sup>2</sup> deck is proposed to be constructed over an existing patio (Appendices 2 & 3).

The existing structure, including covered porch, is within the 6m side yard setback of the RR-3 zone. The new attached deck also encroaches into the side yard setback. Therefore, a variance is required to relax the side yard setback to permit the construction. Both the existing and proposed structures are entirely within the 30m riparian development permit area of the Otter Point Official Community Plan Bylaw No. 3354. Therefore, the owners are requesting a development permit with variance to legalize the proposed construction.

**ALTERNATIVES**

- 1) Approve the steep slopes and riparian development permit with variance to:
  - a. Relax the side yard setback from 6m to 0.42m to permit the 16.5m<sup>2</sup> addition to the dwelling including a 0.42m overhang and 47m<sup>2</sup> attached deck;
  - b. Permit the construction of the proposed 41m<sup>2</sup> detached deck.
- 2) Deny the steep slopes and riparian development permit with variance to:
  - a. Relax the side yard setback from 6m to 0.42m to permit the 16.5m<sup>2</sup> addition to the dwelling including a 0.42m overhang and 47m<sup>2</sup> attached deck;
  - b. Permit the construction of the proposed 41m<sup>2</sup> detached deck.

**LAND USE IMPLICATIONS**

*Steep Slope and Riparian Development Permit Area:*

As the new construction is not within an area on the property exceeding a 20% slope; a report from a geotechnical engineer was not requested. As a requirement of the riparian development permit, the applicant has submitted a Qualified Environmental Professional's (QEP) report pursuant to the *Riparian Areas Regulation* (RAR) (Appendix 4). The report describes the existing conditions of the site prior to the new construction; the existing dwelling, covered deck, patios, paths and wharf all encroach within the Streamside Protection and Enhancement Area (SPEA) as defined by the RAR assessment. The area of original encroachment totals 4.7m<sup>2</sup> and the area of the new encroachment would be 60.9m<sup>2</sup> for a total encroachment area of 65.6m<sup>2</sup>. The report recommends a "flexing" of the SPEA around the encroachment and addition of an equal area outside the standard SPEA including restoration work in an area of approximately 95m<sup>2</sup>.

The report recommends flagging of the SPEA during construction and installation of permanent markers along the SPEA to ensure no future encroachment occurs. Restoration measures are outlined and are to include removal of stored materials, debris and non-native species within the SPEA and replanting of native species including mulching, irrigation and maintenance for a minimum of three years. Sediment

and erosion control measures are outlined in the report and are recommended to be implemented prior to construction to ensure no sediment laden water enters Kemp Lake, a drinking water supply area. Regular monitoring of the construction by a QEP is required by the RAR; the report recommends monitoring of erosion and sediment controls, marking of the SPEA, restoration activities and regulating the use of heavy machinery. A post-construction report will be filed after the development is complete.

In order for the RAR assessment report to be accepted by the Ministry of Environment (MOE), the local government has been asked to submit a letter confirming support of the proposal to "flex" the SPEA. Therefore, should the development permit with variance be approved, a letter will be submitted to MOE and the final RAR assessment will be submitted. Staff recommend that should the development permit with variance be approved, to ensure the restoration of the SPEA as required under the RAR, a security bond be collected for 150% of the value of the restoration and monitoring in order to ensure the work is carried out.

*Variance:*

The existing dwelling with covered deck was constructed 0.5m from the east property line on the subject property. The side yard setback established by the RR-3 zone is 6m and, as the structure was built prior to establishment of the zoning and CRD Building Inspection records, is considered to have legal non-conforming status. Recent construction to the dwelling, including a 16.5m<sup>2</sup> addition of living space and 47m<sup>2</sup> attached deck, was done without benefit of a building permit. The owners are now requesting a variance to legalize the construction within the 6m side yard setback. The new construction encroaches further within the setback as the corner of the addition is 0.42m from the property line; however, the roof overhang currently extends 0.11m into the neighbouring property. There may be concerns regarding the additional living space located in close proximity to the eastern property line. The roof overhang should be reduced at least to the property line so as to not encroach onto the neighbours property and issues such as drainage and access to this area may also need to be addressed. The attached deck is within the 6m side yard setback but is oriented away from the neighbouring property and may pose less of an impact. Therefore, staff recommend the variance be considered subject to public notification.

**LEGISLATIVE IMPLICATIONS**

The Sooke Land Use Bylaw No. 2040 specifies setback requirements for the RR-3 zone. To vary these requirements, a development variance permit is required.

The Otter Point Official Community Plan (Bylaw No. 3354) outlines development permit guidelines. The property is within the Steep Slopes and Riparian Development Permit Areas; therefore, a development permit is required.

**PUBLIC CONSULTATION IMPLICATIONS**

Pursuant to the *Local Government Act*, Section 922(4), if a local government is proposing to pass a resolution to issue a development variance permit it must give notice to each resident/tenant within a given distance as specified by bylaw. Capital Regional District Bylaw No. 3110, Fees and Procedures Bylaw, states that the Board at any time may refer an application to an agency or organization for their comment. In addition, it states that a notice of intent must be mailed to adjacent property owners within a distance of not more than 500 metres. Any responses received from the public will be presented at the January 17, 2012 Land Use Committee meeting.

**CONCLUSION**

There is an existing legal non-conforming dwelling on the property located within the 6m side yard setback and riparian development permit area. Construction to the dwelling has commenced without benefit of a permit. The owners are requesting a development permit with variance to legalize the construction. A report has been submitted from a Qualified Environmental Professional recommending a setback from Kemp Lake, a drinking water supply area, and outlining mitigation measures for construction, monitoring and restoration. Staff recommend the development permit with variance be considered subject to public notification.

**RECOMMENDATION**

That the Land Use Committee recommends to the Capital Regional District Board:

1. That the steep slopes and riparian development permit (DP-32-11) for Lot 6, Section 44, Sooke District, Plan 1958 for the proposed construction of a 16.5m<sup>2</sup> addition to the dwelling, a 47m<sup>2</sup> attached deck and a 41m<sup>2</sup> detached deck as shown in Appendices 2 and 3 and the request for:
    - a. relaxation of the side yard setback from 6m to 0.42m for the purpose of constructing an attached deck and addition to the dwelling with a 0.42m overhang to the property line
- be approved, subject to the following conditions:
- i. that the Qualified Environmental Professional's report prepared by Swell Environmental Consulting Ltd. dated November 26, 2011, as shown in Appendix 4 be submitted to Ministry of Environment for final approval prior to construction;
  - ii. that the proposed development comply with the recommendations outlined in the Qualified Environmental Professional's report prepared by Swell Environmental Consulting Ltd. dated November 26, 2011, as shown in Appendix 4, including site monitoring, restoration and submission of a final report;
  - iii. that a bond in the value of 150% of the monitoring and restoration work, as determined by a qualified professional, be secured prior to construction and held for three years and until a final report is submitted from the QEP confirming the monitoring and restoration works are complete.



Emma Taylor, MA  
Planner



June Klassen, MCIP  
Manager, Local Area Planning



Robert Lapham, MCIP  
General Manager, Planning & Protective Services



Kelly Daniels  
Chief Administrative Officer  
Concurrence

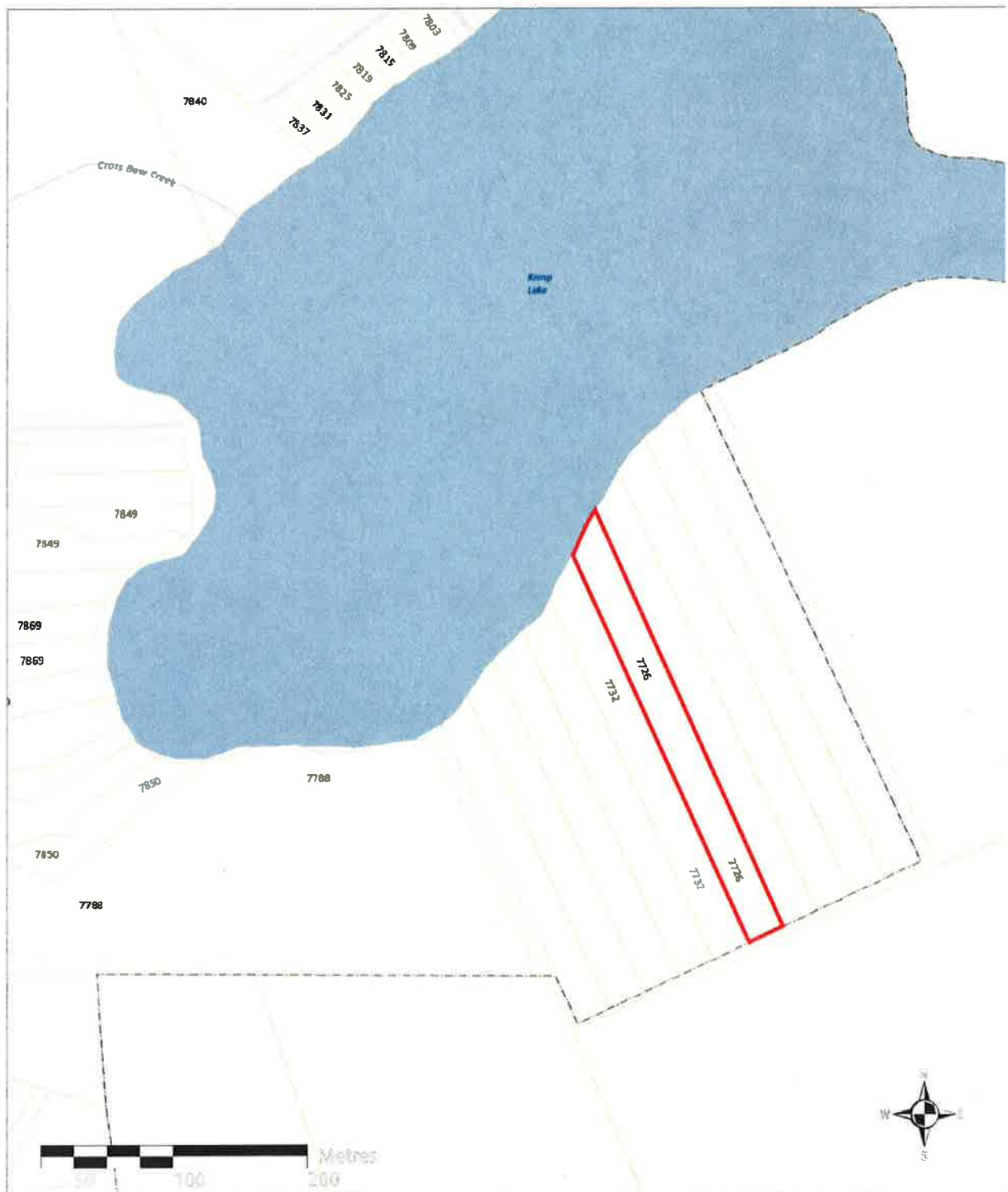
Appendix 1: Location Map

Appendix 2: Building Plans

Appendix 3: McIlvaney Riley Land Surveying Inc. Survey, December 12, 2011

Appendix 4: Swell Environmental Consulting Ltd. Report, November 26, 2011

Appendix 1: Location Map



**Important**

This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. This map is not for navigation. The CRD will not be liable for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

**7726 Davidson Road**

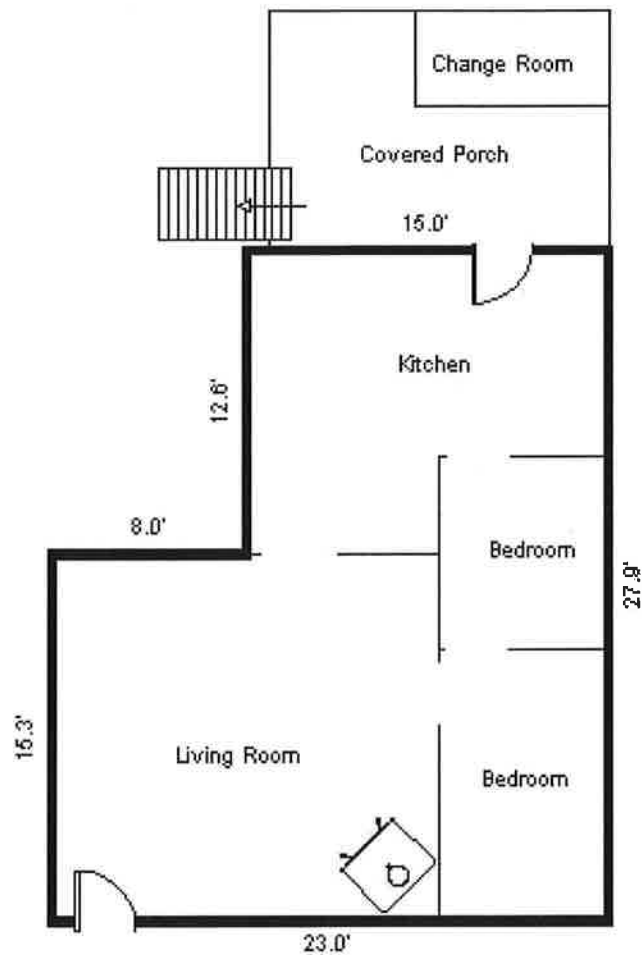
**DP-32-11 with variance**

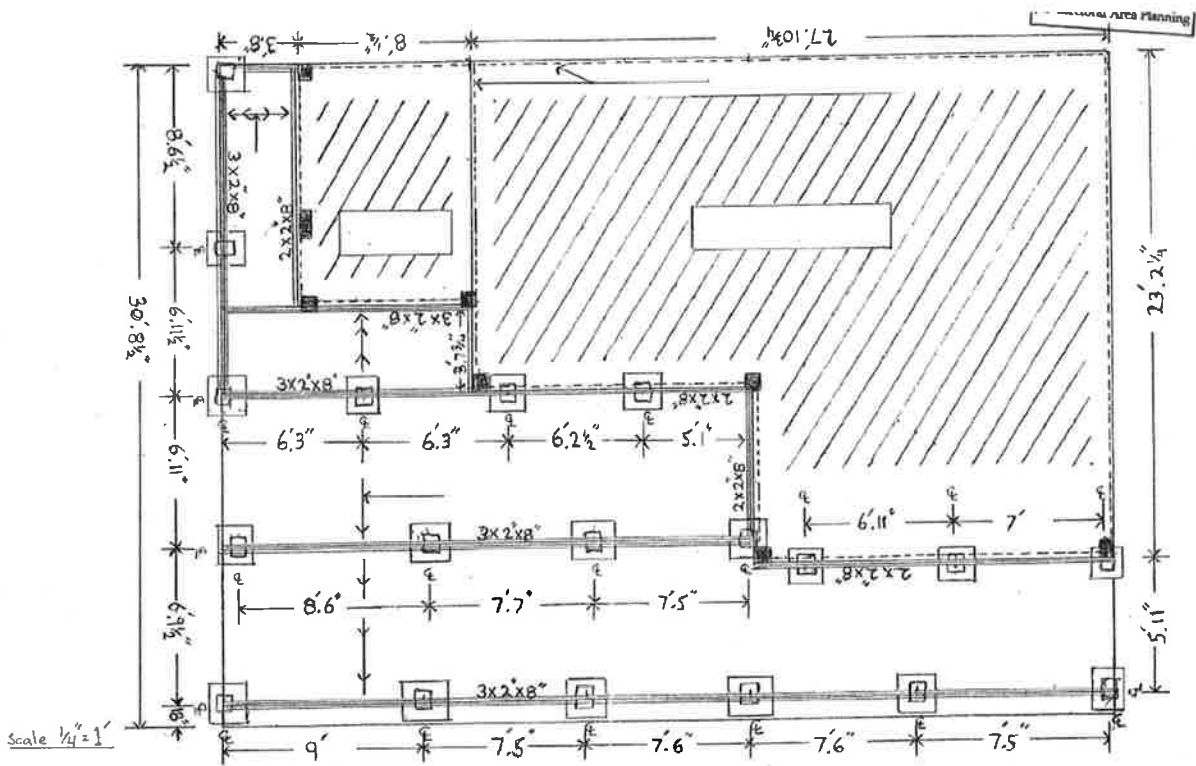
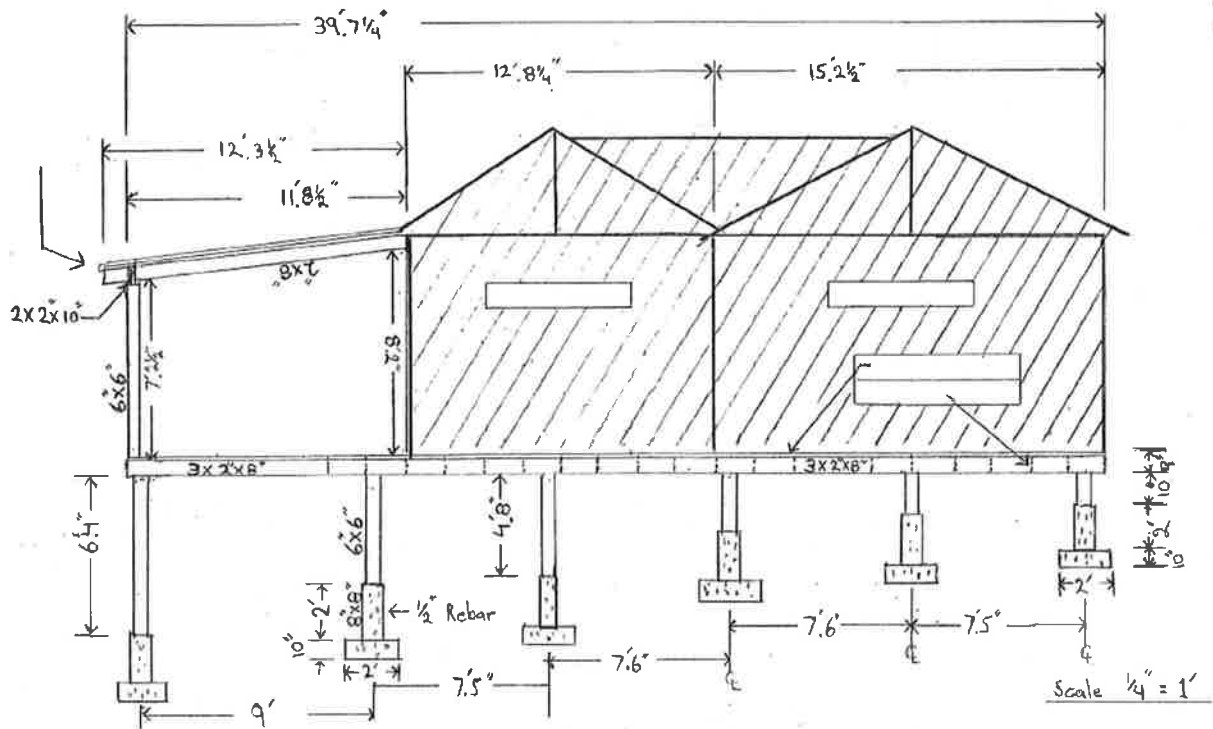
**Intramax 2.0**

Capital Regional District  
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<http://www.crd.bc.ca>



## Lot 6 Davidson Road





Site Plan of Part of Lot 6, Section 44,  
Sooke District, Plan 1958.

Scale 1:150  
1.5 0 1.5 3.0 4.5 6.0 7.5

The intended plot size of this plan is  
432 mm in width by 555 mm in height (B size)  
when plotted at a scale of 1:150

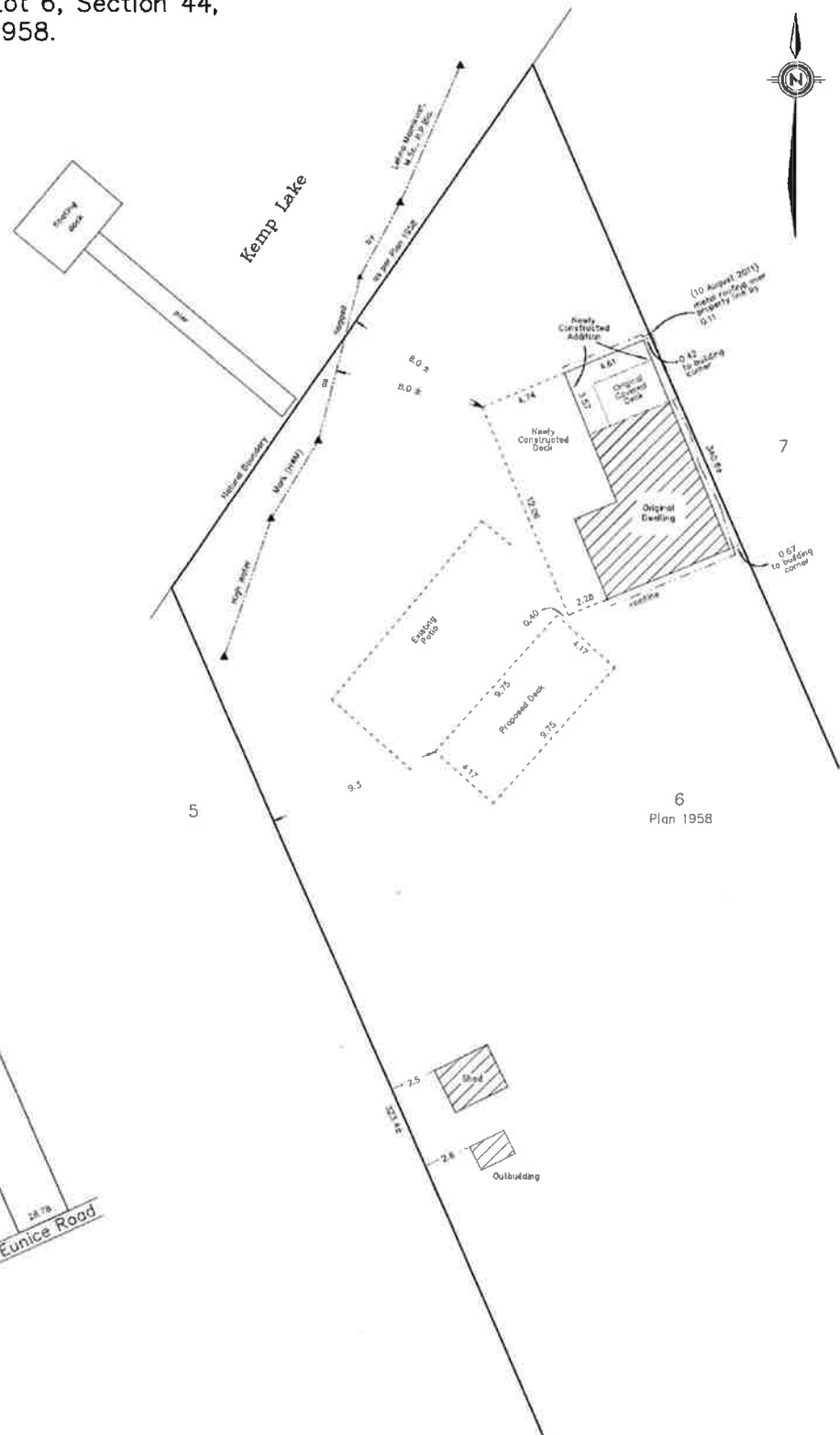
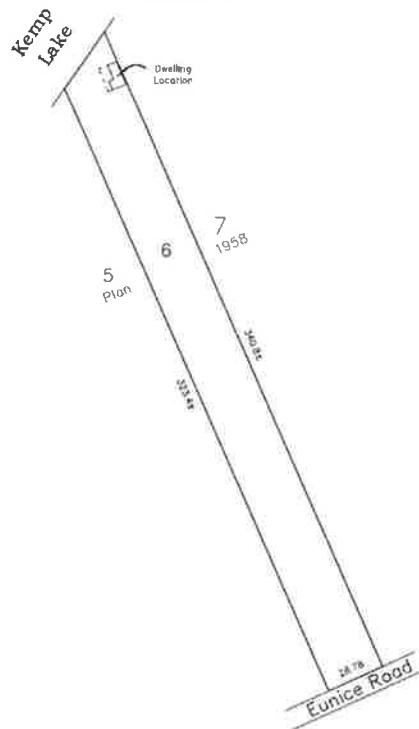
Legend:

All distances are in metres and decimals  
thereof unless otherwise indicated.  
Dimensions are derived from Land Title Office records

▲ denotes High Water Mark (HWM) as determined  
by Leina Malmkvist, M.Sc., R.P.Bio  
▲ denotes flagging set on HWM by  
Leina Malmkvist, M.Sc., R.P.Bio.

Field work completed August 10, 2011

Key Plan  
Scale 1:1500



12 December 2011

Michael J. McIlvaney, BCLS

McIlvaney Riley Land Surveying Inc.

#113 - 2244 Sooke Road  
Victoria, B.C. V9B 1K1  
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File: 45786LCS



Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report

**DRAFT**  
**Riparian Areas Regulation Assessment Report**  
**for**  
**Lot 6 - 7726 Davidson Road**  
**Sooke BC**



November 26, 2011

For John & Lynn Pollock  
3211 Loledo Place, Victoria, BC V9C 3W6

By: Lehna Malmkvist, MSc, RPBio #1613  
Swell Environmental Consulting Ltd.  
3345 University Woods, Victoria, BC V8P 5R2



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## Riparian Areas Regulation: Assessment Report

Please refer to submission instructions and assessment report guidelines when completing this report.

Date December 7, 2011

### I. Primary QEP Information

First Name	Lehna	Middle Name	Kathleen
Last Name	Malmkvist		
Designation	RPBio	Company	Swell Environmental Consulting Ltd.
Registration #	1613	Email	lehna@swell.ca
Address	3345 University Woods		
City	Victoria	Postal/Zip	V8P 5R2
Prov/state	BC	Country	Canada
Phone #	250-217-9190		

### II. Secondary QEP Information (use Form 2 for other QEPs)

First Name		Middle Name	
Last Name			
Designation		Company	
Registration #		Email	
Address			
City		Postal/Zip	
Prov/state		Country	
Phone #			

### III. Developer Information

First Name	Lynn and John	Middle Name	
Last Name	Pollock		
Company			
Phone #	250-478-6240	Email	johnpollock@shaw.ca
Address	3211 Loledo Place		
City	Victoria	Postal/Zip	V9C 3W6
Prov/state	BC	Country	Canada

### IV. Development Information

Development Type	Single Family Residential		
Area of Development (ha)	0.02	Riparian Length (m)	35
Lot Area (ha)	1.1	Nature of Development	Redevelopment
Proposed Start Date	June 1, 2010	Proposed End Date	September 30, 2012

### V. Location of Proposed Development

Street Address (or nearest town)	7726 Davidson Road, Sooke		
Local Government	Juan de Fuca Electoral Area	City	Sooke
Stream Name	Kemp Lake		
Legal Description (PID)	006-740-286	Region	1 – Vancouver Island
Stream/River Type	Lake	DFO Area	18- Vancouver Island
Watershed Code	930-026-700		
Latitude	48	22	29
Longitude	-123	46	47

## **1. Description of Fisheries Resources Values and a Description of the Development Proposal**

### ***1.1. Watershed Context and Fisheries Values***

The property is on the south shore of Kemp Lake east of Sooke, in the Juan de Fuca Electoral Area. Kemp Lake drains at the eastern end through Kemp Stream to the marine environment of Sooke Bay.

Kemp Lake is approximately 25 ha in size and is a community drinking water supply. It also provides habitat for cutthroat trout, rainbow trout, steelhead, threespine stickleback, and prickly sculpin (FISS Report November 2011). The location of the project is shown in Figure 1.



Figure 1. Location of 7726 Davidson Road on Kemp Lake.

## 1.2 Existing Condition

The site at 7726 Davidson Road had structures (cabin, patios, deck, path and wharf) existing prior to the recent development which extended into the standard SPEA. The owners renovated the cabin, adding a small enclosed area over a former deck and building a deck over top of what was historically a rock footpath (see site plan and photos).

The SPEA prior to any work consisted of a sandy/gravelly shoreline beach and wharf, existing patios, path, cabin and deck. The SPEA vegetation consists of an overstory of western redcedar (*Thuja plicata*) and Douglas-fir (*Pseudotsuga menziesii*) with scattered young red alder (*Alnus rubra*), arbutus (*Arbutus menziesii*). The understory is salal (*Gautheria shallon*), bracken fern (*Pteridium aquilinum*), and red huckleberry (*Vaccinium parvifolium*), s. The shoreline vegetation also consists of some willow (*Salix scouleriana* and *S. lasiandra*), salmonberry (*Rubus spectabilis*), Nootka rose (*Rosa nutkana*), lady fern (*Athyrium filix-femina*), silver weed (*Potentilla pacifica*), hardhack (*Spirea douglasii*), horsetail (*Equisetum arvense*) and sedges (*Carex* sp.), additionally a small population of reed canary grass (*Phalaris arundinacea*) is establishing and should be removed by hand. Underlined species are dominant.



Figure 2. Aerial photo (2009) of the property prior to any of the recent work, including decks, wharf and cabin.



### **1.3 Proposed Development**

In the summer of 2011, the owners added to the existing structures (which were all partially within the "standard" SPEA). They:

- added onto the cabin over the pre-existing deck
- built a new deck over the pre-existing walkway and stone stairs

In addition to the work that was done in the summer of 2011, the owners are proposing to build an additional small deck and stairs to access the new deck from the existing patio - this is proposed to be built partially within the SPEA over an area that is already an existing patio area.

A table on the site plan shows the amount of the original encroachment, the new construction and the proposed additional construction. The new deck and addition to the cabin (on top of the pre-existing deck) are encroaching into the SPEA. The current encroachment is 51 m<sup>2</sup> and the proposed additional deck is 14.6 m<sup>2</sup> (over an existing patio).

To mitigate for the historic, recent and proposed encroachment we propose:

- a "flexing" of the SPEA around the encroachment and addition of an equal area outside the standard SPEA (65.6m<sup>2</sup>)
- restoration within the "standard" SPEA area (approx 30m<sup>2</sup>) and the area added to the SPEA by the "flex" (65.6m<sup>2</sup>) for a total of approx 95 m<sup>2</sup> restored.

The SPEA will be closer than the usual standard of 10 metres from the High Water Mark (at approximately 8 metres) where the new deck has already been built. However, it is recommended to leave this portion of the deck and accommodate the encroachment in the "Flex". The area is not steep and is within upland vegetation.

During the work done in the summer of 2011, the contractor took care to make sure he did not disturb any vegetation (e.g. the footings were carefully poured within some salal, but the plants were not cleared and are not damaged), they also made sure that the decking was spaced to allow water to drain from the deck to the ground below.

The previous owners also had a small shed and cleared an area in the SPEA to store wood and other items - the new owners have started moving this material out and storing it outside the SPEA. This cleared area (approx 30m<sup>2</sup>), in addition to the area where the SPEA is proposed for expansion 65.6m<sup>2</sup>) to compensate for the "Flex" (which is partially cleared, as well) are proposed for restoration plantings.

Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report

## 2. Results of Detailed Riparian Assessment

Description of Water bodies involved (number, type)		Date: July 25, 2011
Stream		(1) Lake
Wetland		
Lake	X	
Ditch		
Number of reaches	1	
Reach #	1	

**Channel width and slope and Channel Type** (use only if water body is a stream or a ditch, and only provide widths if a ditch)

### Site Potential Vegetation Type (SPVT)

Yes No

SPVT Polygons	<input checked="" type="checkbox"/>	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes  I, <u>Lehna Malmkvist</u> , hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i> ; b) I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Lynn &amp; John Pollock</u> ; c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and d) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.
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### Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	1	If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons					
LWD, Bank and Channel Stability ZOS (m)	15						
Litter fall and insect drop ZOS (m)	15						
Shade ZOS (m) max	30	South bank	Yes	X	No		
Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)						
Ditch Fish Bearing	Yes	No	If non-fish bearing insert no fish bearing status report				
SPEA maximum	15-30	(For ditch use table 3-7)					

I, Lehna Malmkvist, hereby certify that:  
 I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the Fish Protection Act;  
 I am qualified to carry out this part of the assessment of the development proposal made by the developer Lynn & John Pollock;  
 I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and  
 In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report

**Comments**

The SPEA vegetation consists of an overstory of western redcedar (*Thuja plicata*) and Douglas-fir (*Pseudotsuga menziesii*) with scattered young red alder (*Alnus rubra*), arbutus (*Arbutus menziesii*). The understory is sala (*Gautheria shallon*), bracken fern (*Pteridium aquilinum*), and red huckleberry (*Vaccinium parvifolium*), s. The shoreline vegetation also consists of some willow (*Salix scouleriana* and *S. lasiandra*), salmonberry (*Rubus spectabilis*), Nootka rose (*Rosa nutkana*), lady fern (*Athyrium filix-femina*), silver weed (*Potentilla pacifica*), hardhack (*Spiraea douglasii*), horsetail (*Equisetum arvense*) and sedges (*Carex* sp.), additionally a small population of reed canary grass (*Phalaris arundinacea*) is establishing and should be removed by hand. Underlined species are dominant.



### 3. Site Plan

#### Site Plan of Part of Lot 6, Section 44, Sooke District, Plan 1958.

Scale 1:150  
1.5 0 1.5 3.0 4.5 6 7.5

The intended plot size of this plan is 432 mm in width by 359 mm in height (B size) when plotted at a scale of 1:150.

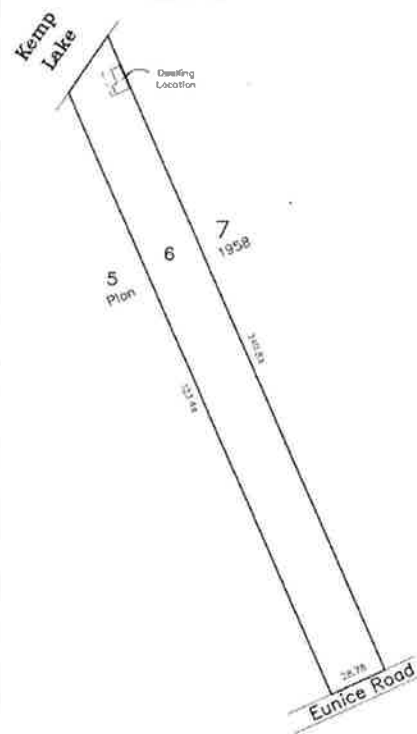
#### Legend:

All distances are in metres and decimals thereof unless otherwise indicated. Dimensions are derived from Land Title Office records.

- ▲ denotes High Water Mark (HWM) as determined by Leina Malmqvist, M.Sc., R.P.Sk.
- ▲ denotes Proposed addition to HWM by Leina Malmqvist, M.Sc., R.P.Sk.
- denotes 20% for Leaf Fall and Upper Drop and Lower Access Gains (LWD) 15m setback from HWM
- denotes ZOS for Shrub - 30 m South of HWM
- ZOS denotes Zone of Sensitivity
- SPEA denotes Streamside Protection and Enhancement Area (outmost entirety of all Zones of Sensitivity combined)
- RAA denotes Riparian Assessment Area
- HWM denotes High Water Mark
- LWD denotes Large Woody Debris
- denotes standard SPEA
- denotes RAA SPEA as per Leina Malmqvist, M.Sc., R.P.Sk. (to mitigate encroachment)

Field work completed August 10, 2011

#### Key Plan Scale 1:1500



Areas of Encroachment into SPEA setback	
Original covered deck	3.9 m <sup>2</sup>
Original building (2 areas)	(1.2 m <sup>2</sup> + 0.5 m <sup>2</sup> ) = 1.7 m <sup>2</sup>
Newly constructed addition (not including original covered deck)	60 m <sup>2</sup>
Newly constructed deck	36.5 m <sup>2</sup>
Proposed deck and support area	14.4 m <sup>2</sup>
<b>Total Encroachment Area</b>	<b>65.6 m<sup>2</sup></b>

Area of Proposed SPEA Addition 65.6 m<sup>2</sup>

23 November 2011

Michael J. McIlvaney, BCLS

McIlvaney Riley Land Surveying Inc.

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File: 457851E

## **Section 4. Measures to Protect and Maintain the SPEA**

### **4.1 *Danger Trees***

No clearing of trees is proposed adjacent to the proposed development, and as discussed with the owners, no trees appear to be of concern, therefore no tree assessment report was required.

### **4.2 *Windthrow***

No tree removal is proposed as part of the development activities, therefore no additional risk of windthrow is expected due to the development activities and no tree assessment was required.

### **4.3 *Slope Stability***

The development activities are renovations and addition of a deck to an existing structure, which has been in place since approximately 1980, therefore no additional risk is expected to the stability of the SPEA and a geotechnical assessment was not completed for the RAR Report.

### **4.4 *Protection of Trees***

No trees are proposed for removal and most of the development has already occurred. The remaining proposed development is not adjacent to any trees. Therefore no tree assessment was required. The SPEA will be marked with high visibility flagging during the construction to ensure the SPEA is protected.

### **4.5 *Encroachment***

The cabin that existed on the site prior to the recent development encroached within the standard SPEA, as determined by the RAR methods. The owners undertook renovations and a deck addition without a permit, which have resulted in an additional encroachment.

To mitigate for the historic, recent and proposed development we propose:

- a “flexing” of the SPEA around the encroachment and addition of an equal area outside the standard SPEA (65.5 m<sup>2</sup>)
- restoration within the “standard” SPEA area (approx 30 m<sup>2</sup>) and the area added to the SPEA (65.5 m<sup>2</sup>) by the “flex” (approx 95 m<sup>2</sup>)

The owners are aware, via this report that the following restrictions exist for activities within the SPEA:

- Planting native plants only
- Removal of non-native species is permitted
- Tree removal is only permitted for hazard trees, which must be identified by an ISA certified arborist
- No other development activities (e.g. clearing, buildings, road building, etc.) are permitted within the SPEA

Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report

- Temporary marking of the SPEA with high visibility flagging is required during construction to protect the SPEA
- Permanent markers along the SPEA are required to ensure that no future encroachment occurs. The SPEA crosses an existing patio area and is immediately adjacent to the cabin, therefore it is not suitable to install a fence along the SPEA line, the SPEA will be marked by installing a fence along the proposed SPEA addition and placing a sign on the deck indicating that the area between the deck and the lake is in the SPEA, as shown below.



The restoration of parts of the SPEA are shown on the site plan and will consist of:

- approx 95 m2 of restoration divided into 2 areas
- removal of stored materials, debris and non-native species (e.g. lawn)
- minimum of 3 plants per 1 m2, the plants must be minimum 1 gallon sized pots
- The planted species must be native and the following list is recommended, based on the existing vegetation on the site:
  - salal (*Gaultheria shallon*)
  - snowberry (*Symphycarpos alba*)
  - sword fern (*Polystichum munitum*)
  - bracken fern (*Pteridium aquilinum*)
  - Nootka rose (*Rosa nutkana*)
  - other native species may be chosen subject to approval by the QEP
- 10 cm of composted mulch over restored areas
- Irrigation for a minimum of 3 years
- Weeding for a minimum of 3 years

The new additions (recent and proposed) have had no new negative effect on the SPEA over the historical development on the site and the "flex" of the SPEA, plus the restoration of the area added to the SPEA, and the cleared area within the "regular" SPEA will be a net benefit. The areas requiring restoration are upslope from the shoreline, so will not provide in-water fish habitat benefits, but will improve the condition within the SPEA.

The proposed work has been discussed via e-mail with P. Marlene Caskey, B.Sc., R.P.Bio, Senior Urban Ecosystem Biologist at MFLNRO and Steve Voller (RPBio) Habitat Management Technician Fisheries and Oceans Canada. The e-mail record is attached in Appendix 1.

#### ***4.6 Erosion and Sediment Control***

Minimal disturbance is expected as a result of these development activities. The contractor must implement erosion and sediment control measures to ensure that the no sediment laden water enters the Kemp Lake. These measures should include:

- No vegetation removal and summer construction period
- Covering exposed soils, if needed (e.g. tarps)
- Installation of sediment barriers (e.g. sediment fences), if needed
- Locations of SPEA, no-go zones and sensitive areas are marked and communicated to all personnel
- Spill response kits are on site if any heavy machinery is working, and operators trained in their use
- Equipment refueling at a designated location isolated from aquatic ecosystems
- Equipment is inspected for leaks prior to beginning work

#### ***4.7 Stormwater Management***

The roof drainage is collected into a holding tank and the water is used for irrigation and as a source of water in case of a fire. The overflow from the tank is released into the vegetation on the site.

#### ***4.8 Floodplain Concerns***

The proposed development is upslope and will take place outside of all ecologically-defined floodplains.

Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report

1. Danger Trees	
<p><u>I, Lehna Malmkvist</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Lynn &amp; John Pollock</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
2. Windthrow	
<p><u>I, Lehna Malmkvist</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Lynn &amp; John Pollock</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
3. Slope Stability	
<p><u>I, Lehna Malmkvist</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Lynn &amp; John Pollock</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
4. Protection of Trees	
<p><u>I, Lehna Malmkvist</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Lynn &amp; John Pollock</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
5. Encroachment	
<p><u>I, Lehna Malmkvist</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Lynn &amp; John Pollock</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
6. Erosion and Sediment Control	
<p><u>I, Lehna Malmkvist</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Lynn &amp; John Pollock</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
7. Stormwater Management	
<p><u>I, Lehna Malmkvist</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Lynn &amp; John Pollock</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
8. Floodplain Concerns (highly mobile channel)	
<p><u>I, Lehna Malmkvist</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Lynn &amp; John Pollock</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	

## 5. Environmental Monitoring

Monitoring of construction activities is required under the RAR to ensure the SPEA is protected and that the Erosion and Sediment Control Plan is carried out in an effective manner. Regular inspections (by the QEP or a designate) are required, the proposed activities are low risk (deck construction and restoration), therefore the environmental monitoring may be conducted at a schedule determined appropriate by the QEP, depending on the scheduling of activities and forecasted weather (likely pre-construction to ensure no encroachment occurs, during construction, during restoration and at completion). Items to be checked on these inspections include:

- Preventative erosion and sediment control measures are in place and being maintained;
- Locations of SPEA and other no-go zones and sensitive areas are marked and communicated to all personnel;
- Restoration activities are completed;
- Spill response kits are on site when any heavy machinery is working, and operators have been trained to use them;

Photopoint monitoring is the preferred means to document that proper construction and erosion/sediment control methods are carried out. Specific locations are chosen and marked by the QEP prior to construction, and photographs are taken from the same locations (with the same views through the camera) periodically throughout the construction period. Additionally, an environmental monitoring checklist must be completed for each visit to document the activities on site, weather and other observations. Water quality samples may be required to ensure compliance with local regulations and to ensure the protection of downstream aquatic ecosystems.

### 5.1 Post-Construction Report

The QEP will file a post-development report on behalf of the developer, submitted through the Ministry of Environment Notification System, after the development has been completed, at the cost of the owner. This report will document that the required measures and conditions outlined in this report have been implemented, as per Section 5(a) of the Riparian Area Regulation. A physical inspection of the site and the SPEA will be conducted, to ensure that no damage has occurred or is anticipated and the required management practices have been carried out. A checklist will be drafted, with each of the measures and monitoring requirements listed above, and accompanying documentation will be attached, such as a summary of the results of the monitoring and photographs.



## 6. Photographs



Photo 1. Looking south at SPEA and cabin, new deck and addition to cabin is visible on the left.



Photo 2. Looking southeast at the shoreline.



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Photo 3. Looking southwest at the shoreline.



Photo 4. Looking west at the vegetation in the SPEA between the existing patio and lake edge.



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Photo 5. New deck was built over top of old stairs and pathway.



Photo 6. Care was taken when installing footings in the existing vegetation.



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Photo 7. Proposed restoration area within “standard” SPEA - remove remaining stored items and replant with native vegetation.



Photo 8. Looking north from the new deck (partially within the SPEA) at the SPEA and Kemp Lake.



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Photo 9. New deck over pre-existing walkway, with vegetation preserved (right side of photo) and pre-existing patio - this is the approximately location of the standard SPEA boundary.



Photo 5. "Flex" SPEA on the right side of the photo - over existing vegetation and part of existing patio (with the blue railing), restore area added to the SPEA with native vegetation.

## 7. Assessment Report Professional Opinion on the Development Proposal's Riparian Area

Date December 7, 2011

1. I/We Lehna Malmkvist hereby certify that:

- a) I am/We are qualified environmental professional(s), as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;
- b) I am/We are qualified to carry out the assessment of the proposal made by the developer Lynn & John Pollock, which proposal is described in section 3 of this Assessment Report (the "development proposal");
- c) I have/We have carried out an assessment of the development proposal and my/our assessment is set out in this Assessment Report; and
- d) In carrying out my/our assessment of the development proposal, I have/We have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation; AND

2. As qualified environmental professional(s), I/we hereby provide my/our professional opinion that:

- a) ☒ if the development is implemented as proposed by the development proposal there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in the riparian assessment area in which the development is proposed, **OR**

(Note: include local government flex letter, DFO Letter of Advice, or description of how DFO local variance protocol is being addressed)

**NOTE: Flex Letter from CRD needs to be attached BEFORE report can be submitted to the MoE Notification System.**

- b) if the streamside protection and enhancement areas identified in this Assessment Report are protected from the development proposed by the development proposal and the measures identified in this Assessment Report as necessary to protect the integrity of those areas from the effects of the development are implemented by the developer, there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in the riparian assessment area in which the development is proposed.

**[NOTE:** "qualified environmental professional" means an applied scientist or technologist, acting alone or together with another qualified environmental professional, if

- (a) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association,
- (b) the individual's area of expertise is recognized in the assessment methods as one that is acceptable for the purpose of providing all or part of an assessment report in respect of that development proposal, and
- (c) the individual is acting within that individual's area of expertise.]

## Appendix 1: E-mail record of discussion with MFLNRO and DFO staff

From: "Caskey, Marlene FLNR:EX" <[Marlene.Caskey@gov.bc.ca](mailto:Marlene.Caskey@gov.bc.ca)>  
Subject: RE: Question re: a deck built in the SPEA  
Date: 4 November, 2011 1:33:51 AM GMT+01:00  
To: "Lehna Malmkvist" <[lehna@swell.ca](mailto:lehna@swell.ca)>  
Cc: "Voller, Steve" <[Steve.Voller@dfo-mpo.gc.ca](mailto:Steve.Voller@dfo-mpo.gc.ca)>

I will support this encroachment based on your assessment of the modified SPEA and restoration plans resulting in a net benefit to fish habitat.

P. Marlene Caskey, B.Sc., R.P.Bio  
Senior Urban Ecosystem Biologist  
MFLNRO  
Nanaimo (250) 751-3220

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From: Lehna Malmkvist [<mailto:lehna@swell.ca>]  
Sent: Wednesday, November 2, 2011 12:06 PM  
To: Caskey, Marlene FLNR:EX  
Subject: Re: Question re: a deck built in the SPEA

Hi Marlene,

The additional SPEA area is equal to the encroachment (approx 60m<sup>2</sup>).

The restoration area will be 1.5 times (90m<sup>2</sup>) this amount - with the new area added to the SPEA, plus the cleared area within the existing SPEA.

I think that the new additions (recent and proposed) have had no new negative effect on the SPEA over the historical development on the site and I do think that the flex, plus the restoration of the area added to the SPEA, plus the cleared area within the "regular" SPEA will be a net benefit to the SPEA. The areas requiring restoration are upslope from the shoreline, so will not provide in-water fish habitat benefits, but will definitely improve the condition of the riparian zone.

Steve Voller also responded to the e-mail but didn't cc everyone, so I've attached that for your records.

If this seems like a good approach to you I will write up the RAR report proposing this and present it to Emma at the CRD for their support for the flex.

Thanks,  
Lehna

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Lehna Malmkvist, M.Sc., R.P. Bio.  
Swell Environmental Consulting Ltd.

Berlin ph: +49 176 99302605  
Victoria ph: (250) 217-9190  
f: 1-877-702-9190  
e: [lehna@swell.ca](mailto:lehna@swell.ca)

Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report

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Begin forwarded message:

From: "Voller, Steve" <[Steve.Voller@dfo-mpo.gc.ca](mailto:Steve.Voller@dfo-mpo.gc.ca)>  
Subject: RE: Question re: a deck built in the SPEA  
Date: 26 October, 2011 6:00:43 PM GMT+02:00  
To: "Lehna Malmkvist" <[lehna@swell.ca](mailto:lehna@swell.ca)>

Hi Lehna. DFO's involvement in RAR issues only comes into play if there is undue hardship considerations or if the proposal/works create a HADD under Section 35 of the Fisheries Act. As this site had already encroached upon the SPEA, presumably before RAR, then the proposed works will not be causing a HADD, just substituting one type of structure for another. In light of this, I don't see this as a HADD and have no concerns if works proceed within the previous footprint and the SPEA is bent to accommodate the intrusion into the SPEA and the replanting of a previously cleared area with natural vegetation proceeds.

Regards,

Steve Voller (RPBio)  
Habitat Management Technician  
Fisheries and Oceans Canada  
Habitat Protection and Sustainable Development  
5245 Trans Canada Highway, Duncan, BC V0R 2C0  
ph. (250) 746-9717, fax (250) 746-8397

Please note, when submitting a referral you must fill out either a  
Project Review Application Form

<http://www.pac.dfo-mpo.gc.ca/habitat/steps/praf/form-formulaire-eng.pdf>

or Notification Form

[http://www.pac.dfo-mpo.gc.ca/habitat/os-eo/pdfs/notification\\_form-eng.pdf](http://www.pac.dfo-mpo.gc.ca/habitat/os-eo/pdfs/notification_form-eng.pdf)

Go to our Working Near Water in B.C. and Yukon website for information.

<http://www.pac.dfo-mpo.gc.ca/habitat/index-eng.htm>