



## DECISIONS AND ACTIONS

**Steering Committee**  
 Tuesday, December 08, 2015  
 Colwood Municipal Hall

**Present:** Jody Watson, Phil Lambert, Nancy Wilkins, Judy Nault, Jason Nault, Joe Richardson, Judith Cullington, Beth Mitchell, Kitty Lloyd, Ivo van der Kamp

**Guest:** Sandra Russell, Colwood Communications; Michael Baxter, Colwood Engineering; Eric Morris, Kerr, Wood Leidal Engineering

DECISIONS				
1	Send info on any events to Sandra at Colwood for posting on Colwood events page			
<b>Next Meeting: 2:30pm Tuesday February 9, 2015</b>				
ACTIONS			ACTION BY	DUE
1	Send new display photos for committee review and comment		Kitty/All	Mid-Jan
2	Ask DND how the bio-control on Scotch broom worked		Jody	Next meeting
3	Send Sandra Russell the contact info for people interested in helping with signage proposal		Kitty	ASAP
4	Contact owner/developer at Ocean Grove to request permission for fish trapping in the fire pond on Selleck Creek		Kitty	Winter
5	Request that Dwight School developers come to next ELSI meeting to talk about their plans		Kitty/Ivo	Next Meeting

### INFORMATION

All action items from last meeting have been completed or are on this meeting's agenda.

**Presentation: Colwood's plan for waterfront signage**

Sandra Russell, Communications Manager, Colwood

- Design for new "welcome to the waterfront" sign to replace the empty sign kiosk near the pump station was shown
- Idea is to design/install a sign that is beautiful and natural, fits with the lagoon and of a size to fit the scale of the waterfront
- Design concept is for a large 4" thick cedar slab, with 14" x 14" posts set in a concrete pad. Sign would have wave shaped curve along the top, 8 ft high on the left and 4 ft on the right. The Colwood logo and "Welcome to the Waterfront" would be etched into the wood
- Sandra met with Kitty in November to discuss the new sign, review historic and First Nations signs that are waiting to be installed and to review sign strategy developed by ELSI and Colwood in the past for signage at the lagoon
- Suggestion that the back of the sign could have an angled surface and the First Nation sign designed by Darlene Gait be placed there

- Committee reaction: Not appropriate for First Nations' sign to be placed on the back of the Welcome sign
- The other sign about lagoon history was also meant to be in the same kiosk. This sign also needs to be considered.
- Colwood would like to incorporate First Nation language into the welcome sign.
  - Committee: There needs to be conversation with First Nations about this first. ELSI has already had the discussion about placement for sign and mural when artworks were created; if Colwood wants to place them somewhere else, need approval and agreement from Nations first.
- City is appreciative of the ELSI signage that has been brought to the area, and wants to work with ELSI on this project
- Victoria Natural History Society funded the existing interpretive signs
- Would eventually like to have series of signs along the lagoon to interpret the history and ecosystems at the lagoon, signage on a scale for pedestrians, i.e. low and angled for easy reading
- Want to incorporate the Colwood brand on new signage
- Lots of potential ideas about interpretation, suggestion from the artist Gary McCarty who is designing the welcome sign, is to incorporate the shape of Colwood municipality
- Discussed the signage that ELSI has completed and is waiting to install. May want to incorporate the First Nation sign into the Welcome sign, acknowledged that there is work to be done to heal the relationship with the Nations.
- Is there any way to put something up on the mound by the pump station to stop vehicles from driving up there? The mound is midden material from excavations to build the pump station. Original agreement was for Colwood to install a white picket fence around this mound.
- This project has allowed them have discussions with First Nations which is a good start
- Sandra has spoken with Chief Thomas of Esquimalt Nation, and Christina Clark from the Songhees Nation. There is shared regret about how that process has gone on so long

**Questions** from committee:

- What about the history sign?
  - Would like to incorporate content from that sign on series of smaller signs around the lagoon
- Like the idea of having lots of interpretive signage, and renewing information from old signs. Can all the signage down there be coordinated together?
  - Absolutely
- Will there be ways to incorporate the signage all the way around the lagoon?
  - Hopefully, that is the vision, depends on funding etc
- Where is the money coming from?
  - There is funding in 2015 budget for the welcome sign
- This will establish a standard for how Colwood would do signage in the long term
- Colwood wants to remove/replace the existing signs eventually, but does not have the budget for it this year. Vision is to inspire pride of place at the lagoon
- Can we meet at the waterfront to look at potential sign locations?
  - The conversations are still ongoing with First Nations, so would likely happen afterwards
- Welcome sign will be installed by the end of December, conversations are underway with Esquimalt and Songhees Nations, the installation of ELSI signage and mural will come later and will involve further conversations with the Nations
- Who is interested in these discussions?

- Nancy, Beth, Judy, Joe, Kitty

**ACTION:** Send contact info for these members to Sandra to arrange further consultation

**Presentation: Ocean Blvd Pump Station Protection Plan**

Eric Morris, Kerr Wood Leidal Engineering

- KWL is a coastal engineering firm, hired to develop a protection plan for the Ocean Blvd pump station
- Scope: 1) Assess risk of flooding; 2) Develop hazard mitigation options; 3) Identify preferred option and develop some design concepts
- Reasons – existing flooding, sea level rise and concerns about tsunami
- Sewage from 200 dwellings is piped here then conveyed to McCauley Pt outfall
- Pump station was built in 2000, wet wells and odour control kiosk are south of the station, station is currently protected by a row of lock blocks and rip rap
- Elevations all from geodetic mean (approximately 2 m above chart datum), most of the elevations are between 2.4 and 2.8 m
- End of life of the station is projected at 2065
- Storms – concerned about astronomical tides compounded by storm surge (caused by winds and low pressure systems); plan for up to 1 m of storm surge. For example this past weekend storm surge increased wave height to 0.6 m above the high tide
- High tide at site is 1.5m, tide plus storm surge is 1.8m, tide plus storm surge plus wave is 2.9, 5 yr return period is 2.45m
- Tsunami concern – most likely source would be subduction earthquake caused by Juan de Fuca plate sliding under the North American plate; this is gradually pushing up Vancouver Is. and building stress, when it releases the island will sink, seabed will pop up and cause a tsunami wave
- Modelling of the tsunami coming into Juan de Fuca Strait shows that predicted run-up of the tsunami will affect some properties at the lagoon. Likely that the pump station will be destroyed in a tsunami
- Sea Level Rise (SLR) – province of BC established guidelines which engineers must use, by the year 2050 need to plan for ½ m of SLR, by 2100 plan for 1 m SLR
- Analyzed tides, surges, wave run-up and modelled all these to look at options for protecting the pump station
- Currently storm waves reach up to the wet well every 5 years, by 2050 this will happen every 2 years, by 2065 will be multiple times per year
- 37% chance that the pump station will be an island by 2065
- Consequence summary: wet well will be unsafe for operators to reach for maintenance, seawater could enter pumps, electrical equipment in shed will be vulnerable; tsunami will likely destroy the station

Pump Station is exposed to 3 different flood hazards, mitigation options suggested for each are:

1. “White water” or storm wave flooding (tide plus surge plus waves) - station is periodically flooded by storm waves
  - building up the berm and wet flood-proofing the building, kiosk and wet well
2. “Blue water” flooding (tide plus surge) – station is below still water level and is inundated
  - diking and wet flood-proofing the building, kiosk and wet well, raise or move the pump station
3. Tsunami wave flooding – for planning purposes, building is destroyed, station is inoperable

- emergency planning, tsunami wall or barrier, move the station
- Most likely options (i.e. cost-effective, affordable) – berm, wet flood-proofing, moving the station, emergency planning
- Moving the station makes most sense at the end of its life (2065)
- Berm options include seawall, riprap, bioengineered slope protection
- Study priced riprap only, going forward into design phase, any of these options could be used
- Phase 1: 2016 - raise the berm by 4.2 m; need to ensure the waves do not make an end run around the wall (\$210,000)
- Phase 2: raise berm another 0.6 m (\$355,000). This would raise berm to about the height of the eaves
- Want to keep this as high as possible, design will be a trade-off between protecting the building and not affecting the aesthetics
- At high tide it may be impossible to walk along the beach in front of the station, but most of riprap would be above high tide line, so not as prone to scouring as riprap placed lower in intertidal area (e.g. what happened at opposite end of the peninsula)
- There could be some episodic erosion of the beach, and scouring around the berm edges - big hazard is to put in a rip rap slope
- Emergency plan – \$20,000, temporary equipment \$157,000, cost to move station \$2.6 million
- Moving the pump station – close to the corner of Ocean Blvd and Milburn Rd. Used SLR projections, storm surge elevations and local contour maps to choose likely location
- What is the effect if the sewage flows into the ocean?
  - Province can fine Colwood for an overflow
- What about raising the building?
  - Guesstimate of \$500,000, a lot of money to invest, and it could still be blown out; better to use those funds to re-build in new location; sooner or later it's going to go, need to plan and prepare for that
- Concerns:
  - Waves wrapping around and the scouring around the rip rap, how will it affect the rest of the beach?
  - Loss of longshore transport (loss is mainly due to termination of gravel extraction in Royal Bay)
  - What are the bioengineering options? Those options can be pricey, didn't cost those out, need to factor in views from neighbouring properties, would have to extend the riprap to accommodate planting at top of berm
  - ELSI members would like to see vegetation planted on top of the berm, could be incorporated into a walkway on top of berm, it would help soften appearance for adjacent residents
- Discussion about budget and how will that be allocated; could consider a surcharge on new development offset to cost of flood protection

**DECISION / ACTION:** Michael Baxter will take 3 recommendations to council from ELSI:

1. Look into bioengineering options for top of berm
2. Recommend including a public walkway along top of berm
3. Consider adding a surcharge on new developments to offset cost of flood protection

### **Development Updates:**

Summary report of lagoon neighbourhood developments was provided by Colwood staff in November. Staff is trying to balance ELSI timelines for providing comments with desire to provide most current information. Ivo provided more updates:

- **Royal Bay** – Staff report for zoning text amendment (to accommodate development of part of Meadows Neighbourhood, adjacent to Royal Bay High School) will be presented to council 21<sup>st</sup> Dec for 1<sup>st</sup> and 2<sup>nd</sup> reading; that would be the opportunity for public participation; public hearing will likely be during the second or third week of January.
- **Ocean Grove:** Development Agreement is in progress, no key dates
- Pacific Landing: Earliest date for the Development Agreement to go before council would be Dec. 21
- **Dwight School** (proposed for property adjacent to Royal Roads Café, on Colwood Creek): proponents want to get moving quickly, are wondering whether they could come to an ELSI meeting for a discussion of their proposal. They are tentatively planning either one 10 storey or 2 5-storey buildings for the dormitories/classrooms.

**DECISION/ACTION:** Request that Dwight School developers come to next ELSI meeting to talk about their plans

- **3273 Anchorage Avenue:** lots of concern about the tree removal there; erosion and sediment is going into the spring-fed seasonal creek between this property and Pit House Park; also the landscape cloth along waterfront was underwater during the recent high tides. Is there an environmental monitor? Ivo will check with project biologist; lagoon has turned turquoise from nutrient input from sediments entering the lagoon
- Colwood Public Participation report was also handed out. This document was also sent out to the committee in an email in November. It is available on the Colwood website: <https://colwood.civicweb.net/FileStorage/7C1443EA0B6940DFBAEDAD8988700762-Report%20-%20Public%20Participation.pdf>.
- ELSI thanked staff for attending the meeting

### **Coordinator Updates**

- Photos and map for ELSI display – new photos and updated map shown but didn't have time to discuss fully

**ACTION:** Kitty will send photos out for committee review.

- Aim to have a full size draft to bring to next ELSI meeting for final approval
- Draft Work Plan and meeting schedule for 2016 were discussed
- Additional projects to include in Work Plan:
  - Ask Ocean Grove developer if we could do some fish trapping in the ponds along Selleck Cr. to determine what fish are in there, maybe some work in Pit House Park, Colwood budget has a line item in budget for invasive species removal
  - ELSI could send a letter asking for support to work in Pit House Park on invasive species removal
  - Organize a Streamkeepers course, see whether local schools (e.g. Royal Bay High, proposed Dwight School) to train students and engage them in monitoring Selleck Creek health

### **Partner updates:**

RRU: an anonymous donor provided funds to restore the garden wall, work is underway now.

*We ran out of time to get all the partner updates.*

**Meeting adjourned:** 5:00pm