



DECISIONS AND ACTIONS

Steering Committee
 Tuesday, February 10, 2015
 Colwood Municipal Hall

Present: Jody Watson, Joe Richardson, Beth Mitchell, Gayle Johnston, Judy Nault, Judith Cullington, Lilja Chong, Jason Nault, Ivo van der Kamp, Kitty Lloyd

Guests: Helen Lockhart, Michael Baxter

DECISIONS			
1	Joe Richardson will organize spring broom pull at the lagoon		
2	Following any new reports of bird strikes, ELSI will write a letter to BC Hydro and CWS requesting bird diverters on utility wires, or move wires under the bridge		
Next Meeting: 14 April 2015 2:30pm Colwood Municipal Hall			
ACTIONS		ACTION BY	DUE
1	Organize Broom Pull, request help from ELSI as needed	Joe	Spring
2	Take photos of any dead birds that may have hit the wires at the bridge	All	If/when this occurs
3	Explore the idea of holding a couple of events on summer weekends where the road is closed at the lagoon	Judith	Summer
4	Let ELSI members know when tour with Patrick Lucey has been confirmed	Kitty	ASAP
5	Organize a sign for the dune grass planting plots at the lagoon	Sue/Cynthia	ASAP
6	Send new RRU 5-year Sustainability Plan to ELSI for review	Nancy	When available

INFORMATION

Helen: Planted 500 trees along Colwood Cr in Colwood Cr Park in October 2014; there is some funding left over from the Trees for Tomorrow funding, will plant more trees later this year

Presentation: Monitoring of erosion on Coburg Peninsula by Helen Lockhart

- Has been monitoring five sites along peninsula, all points are measured every month
- One site is near duplex at south end, no noticeable erosion at road edge, but in big storms lots of debris gets strewn onto road
- Sewer lift station: photos are taken every two months, no apparent change in 2-3 years
- Near DND property, 2.6m of erosion since November 2010; another spot has eroded by about 4.5m and is getting close to the road bed, measurements showed no erosion at these locations in the past year

- North of DND property, eroded about 5m since 2010, although stable for past 2.5 years, very well-compacted – used to be a parking lot
- Jody: Around 2007 ELSI did some monitoring of dune erosion, based on original beach profile transects done by Thurber Engineering; could share that information with Colwood engineering
- Map showing elevations taken below and to the north and south of the bridge in 2013; first time such a comprehensive survey of area was done and this will be used as a baseline for future elevation measurements in area;
- There's a survey marker that's used to measure height relative to chart datum. (Detailed map provided.)
- Bridge is inspected every five years; 2018 will be next inspection
- Michael Baxter: only sure way to protect bridge abutments would be to construct a groyne on south side of the bridge
- Question: Now that the DND Ranger house has been removed, can the riprap that was put in to shore up the waterfront in front of the house be removed?
 - No engineer would sign off on that as being a safe option
- Q: Has septic field or tank there been removed?
 - Not sure
- Some erosion has occurred on NE corner of DND property
- Deepest area of the channel under the bridge has moved north compared to 1930 survey
- Gravel channel below the bridge changed more over the years between 2008 and 2013 than in previous years, and will be surveyed again 2018.
- Q: What's the status of the bridge?
 - Michael's presentation will make that clear, small repairs were done in 2014, possibly looking at repairing some of the piles in 2015, could be about \$80,000 this year.

Presentation: Colwood's Coastline – Glorious Asset: Continuing Challenge

by Michael Baxter

- Presentation is aimed at a variety of audiences including Colwood council, committees and general public
- Background information needed for Planning and Land Use Committee and other committees to make decisions, based on latest information about Colwood's responsibility to prepare for climate change
- Coastal bluffs have been eroding for centuries
- Gravel mining started at Royal Bay in 1909; excess sand was dumped into the ocean, making the amount of material available to cause accretion on Coburg Peninsula greatly increased; this practice stopped post-war and since then the peninsula began to shrink
- Sand deposition patterns changed again when the causeway to Fisgard Light Station was built in 1950-51
- 2008 Seabulk Systems engineering report looked at options for preserving the peninsula (6 scenarios, including riprapping the whole peninsula, building a series of islands in front; all considered too expensive)
- Nov 12th 2007 event was a huge storm that took off the end of the peninsula; much larger storm events are predicted for the future
- Apparent situation post 2008: bridge approaches are at risk of erosion, road is at risk from overtopping, sewage pump station at risk of failure; Colwood council has decided not to spend money to add protection to the road

- Private assets along coastline that are at risk, need to talk with those landowners first
- Ministry of Forests, Lands and Natural Resources Operations is responsible for flood prevention activities of the province, there are grants available for flood prevention works, must take into account the information about predicted sea level rise in our region
- Province commissioned work to find best curve for sea level rise (SLR) predictions on BC coast, 1m average rise predicted by 2100
- SLR is the net of earth's crust movements, land is rising at same time; highest predicted tides must be considered; storm surge increases with decreasing atmospheric pressure
- Province outlines a method to model the coastline in 2100; buildings are supposed to be built minimum of 1.5 m above sea level, so must know the predicted height in the future
- Have to allow for the waves to reach 4.3m by 2100
- Almost all of the peninsula is under 3.5m; therefore erosion will increase steadily, we must assume that the road will be regularly overtopped in winter long before 2100; detailed study could predict more accurately
- Erosion does not happen evenly, closest Baxter has observed is 2.5 m from road shoulder
- Not a lot of point protecting the peninsula (ie armouring with riprap – that would substantially change the nature of the beach), other option is to raise the road. This would be very expensive
- Despite bad outlook for Coburg Peninsula, Colwood is not nearly as badly off as some of the areas of North America (e.g. areas in far north where temperatures are expected to rise dramatically)
- Institute for Catastrophic Loss Reduction (ICLR) was established following a spike in insurance claims in 1996; even higher claims in 2005, 2013
- ICLR created by insurance community to confront rising disaster losses; multi-disciplinary, science based
- MRAT: computer program used for infrastructure planning based on three data streams: municipal data (zoning, etc), insurance claims, climate data
- We know where our problem is – the coastline; in other areas (e.g. Alberta) cannot move elsewhere to avoid things like catastrophic hailstorms.
- Losses are rising due to variety of factors (e.g. aging infrastructure, more people and property at risk) but climate change is definitely a factor that must be considered
- We have the knowledge and tools to prepare for climate change
- For big projects, there are climate science experts that analyze location of a proposed project and make predictions about stormwater, etc
- Climate models can inform design decisions, but uncertainty is a fact of life now
- Design professionals need to weigh the risks associated with a project, no hard and fast guidelines to use
- Members of professional associations such as the Planning Institute of BC and Association of Professional Engineers and Geologists of BC are expected to stay informed about changing climate and consider potential impacts on their professional activities; review existing laws and policies to ensure that climate change is considered during decision-making process
- Large insured losses from extreme weather appear to be the new normal, according to ICLR. This will force the costs to increase, may get a scenario where people start opting to not get insurance.
- Public awareness: think and act locally; can't prevent it, but can plan for it
- Need changes to engineering, planning and finance departments

- Building code work should be done – e.g. requiring hurricane straps on roof trusses – inexpensive way to possibly prevent roofs from blowing off
- What are we doing already to prepare for climate change?
 - Urban forest strategy, requirements for energy efficiency during re-zoning process, supporting use of electric vehicles, working with BC Transit to improve service
- Q: Why is Colwood allowing Pacific Landing to build a condo where the parkade is 2ft below grade?
 - No approvals will be given until they answer the question of SLR accommodation
 - No bylaw in place to question developers on basis of climate change, but Baxter is requiring that the engineer for this project submit plans that account for SLR
- Q: Used to be the province that designated flood zones, but some of that responsibility has been relegated to lower levels of government. What's the responsibility of the municipalities? Is Colwood planning for that?
 - Need to talk with waterfront owners first before going to the general public.
- Q: New developments: can always deny permits, but what about established homes on endangered lands?
 - Responsibility lies with municipality to warn people about this
- Judith: gets asked frequently about what is the risk to the Migratory Bird Sanctuary from SLR?
- Q: Is the sewage lift station at risk?
 - Colwood is putting out an RFP to assess effects of SLR on the sewer lift station, also budget costs to look at the other assets (bridge, road) and 2 or 3 private properties that are at risk in near future; 20 – 30 properties on inside of lagoon could also be affected by SLR
 - Decisions regarding the lift station will be made this year following the budget process

Development Updates: Ivo van der Kamp

- Royal Bay – nothing new, moving ahead on what's already been approved
- Ocean Grove: draft bylaws for land use, OCP amendment and frontage improvements are going to council tonight for 1st and 2nd reading
- Pacific Landing: application for development permit is already on the books; earliest to go in front of council would be March

Discussion of Ocean Grove and plans for Selleck Creek through Pit House Park; can only enforce what is actually in the development agreement

Mural and Interpretive Signs: nothing new on that front

Note on this from M. Baxter:

In a recent budget meeting, there was an item about waterfront promotion, would involve interpretive signage, wayfinding signs for Esquimalt Lagoon. First Nations will be partners in that, Colwood hopes they will get engaged in that process, and get the discussion going about the other signage

Coordinator Updates:

- Tour of the lagoon area hydrology and wetlands with aquatic ecologist Patrick Lucey tentatively scheduled for March 4th; will send information as soon as this is confirmed

Outreach events:

- Broom Pull? Joe offered to organize a broom pull; ELSI will support as needed
- Other events for ELSI outreach in 2015:
 - Canada Day at Fort Rodd Hill
 - Off the Grid event at Royal Roads

Partner updates:

Joe: This afternoon DFO Community Advisor Shona Smith was at the Bee Creek for a tour of our fish monitoring program. Traps were set out yesterday, no coho but several cutthroat to show her. Recommended that we continue to collect data as has been done over past 10 years.

Gayle: There's something happening with the swans at the lagoon, Al saw a dead one recently, two juveniles have been lost in last 6 weeks. Could be due to the wires overhead at the bridge. Last year someone from VNHS saw a swan hit the wire; asked Canadian Wildlife Service to talk to BC Hydro about putting bird diverters there.

Jody: We've gone through this with the Gorge Waterway Initiative, eventually got municipalities to put bird diverters on overhead wires, and when new bridges are built, put utility lines under the bridge deck. Should take photos to show if there's signs of birds being singed; should not be a problem to get some action about the issue as this is a MBS. Let Jody and Kitty know, send us the photos. ELSI could write a letter to BC Hydro about reported deaths requesting bird diverters. Case would be stronger if there are photos to go with a letter.

Judith: There was an article about "Don't feed the birds at Esquimalt Lagoon" in Goldstream Gazette recently. [The link is <http://www.goldstreamgazette.com/news/289043841.html>]

An idea presented by Judith is to work our way towards closing the bridge to traffic on weekends. What about finding a way to have a couple of events/year where no cars are allowed; leave the parking intact, but no through traffic. Would have to get RCMP and Fire Department on board for these events; start slowly with one or two events per year. This may get people used to the idea of a future where the road is no longer viable there. Might be good timing with Baxter's presentation; tie in with climate change awareness-raising at the lagoon; might be good for it to be an event that Colwood sponsors.

Meeting adjourned: 4:45pm