



DECISIONS AND ACTIONS

Steering Committee
 Tuesday, August 09, 2016
 Fort Rodd Hill

Present: Joe Richardson, Jason Nault, Judy Nault, Beth Mitchell, Leanne Martin, Dave King, Nancy Wilkin, Kitty Lloyd, Jody Watson

Guest: Patrick Lucey, Reed Bentzen; Aqua-Tex Scientific Consulting

DECISIONS				
1	ELSI will not conduct a beach clean-up this fall			
2	ELSI will work with partners at RRU and FRH to create an educational walk from FRH through RRU to lagoon, focus on ecosystems of the area; part of Canada 150 th celebrations in 2017			
Next Meeting: 11 October 2016				
ACTIONS			ACTION BY	DUE
1	Send draft beach log signs to Colwood Parks for input and approval		Kitty	ASAP
2	Send updated Royal Bay environmental development permit to all when ready		Ivo	When available
3	Send draft of Urban Sanctuary project hand-out featuring 3 regional MBSs		Kitty	When available
4	Contact Marcy Lalande at Colwood about participating in Seaside Festival at Fort Rodd Hill		Kitty	ASAP
5	Send feedback about possible impacts of food truck events at the beach, and Eats & Beats festival to Jason Nault		All	ASAP
6	Advise ELSI of training and workshop opportunities through Green Shores program		Kitty	As available

INFORMATION

Review of Action Items from June meeting:

Historic and First Nations signs were delivered to Colwood in June

Presentation: Project #1 - Wetland and trail construction at Pacific Landing

Patrick Lucey, Aqua-Tex

- Bee Creek is in pretty good shape through Pacific Landing site, upper areas on DND lands are unchanged

- Issues with large driftwood at creek mouth, may impede upstream migration of adult salmon into creek
- Walked with several ELSI members at Bee Creek recently to talk about alignment of a new trail near creek
- Met Dale Fish and Jordan Royer yesterday (construction/site managers), walked the approximate alignment of trail, where road is coming in would like to see vegetation, trail, more vegetation, then fence, rather than having trail right beside the road. Lots of kids and families will use the site when all is built out, don't want trampling in riparian area, developer is okay with that
- Looked at growing native plants with ELSI, opportunities for plant salvage when the utility corridor is built. Lots of young conifers and *Mahonia* coming in, these would transplant well
- Lots of cedars coming in beneath alder canopy, could thin and transplant these near lower culvert, will probably construct a boardwalk near the circle of cedars by stone outbuilding; outside the Streamside Protection Area, but still in the riparian, will put a boardwalk through the edge of it, in front of Phase 1 to near property line, then down to water and across a small bridge (proposed) to the foreshore area
- Developers are pumping water from building site, will probably have to pump in perpetuity to handle the groundwater; so much water coming out, could be an emergency drinking water source
- Patrick asked developer about directing water overflow from building site through the to-be-constructed wetland then allowing overflow to go out to the lower area of the MBS, let the water disperse, would create good salt marsh habitat,
- Going to start work on wetland in next 10 days, will move soil from excavation site to create a berm around the wetland, it will be built on top of existing soil, not doing any excavation there (archaeological concerns)
- Beth – could be problems in the lagoon from the 5 houses being built on Ridley property, proposed housing at Seafield, Ocean Grove – all of these changes to water table could affect the lagoon by making it shallow and full of sediment, Colwood doesn't seem to be taking this issue seriously
- Patrick – This could be a case of accelerating natural process; need to consider what is desired future state of the lagoon? Could take the accelerated sediment load in the lagoon, dredge it out. Eventually the lagoon would gradually fill in with sediment over time anyway from natural input from streams
- Q: Wasn't Coburg Peninsula originally an island? Old maps show it as an island
- Development at Royal Bay and loss of sediment to Coburg Peninsula is accelerating the loss of the beach there. The dual tidal delta at the lagoon mouth is being reformed, flushing rate is being reduced
- Q: Can you share plans for the wetland?
 - Same as plans we've seen in the past; it's being "field fit", no engineering drawings
 - Will receive all rainwater from roofs, patios, this will not be put into Bee Creek, we have the land to keep it separate
 - Longer detention time by spreading as a sheet flow across the tidal meadow to the ocean
 - Invasive species being removed before wetland is constructed
 - Can work with Greater Victoria Green Team, use wetland budget to help with that
 - Can meet with ELSI volunteers on site next week to discuss these plans

- Some planting this fall, trails probably won't be built until next year
- Berm for wetland will be built with buried logs
- Trail will be laid out with a landscape architect, Colwood does not have a trail standard, good opportunity to start a discussion about that

Project #2: Valuing natural capital as a municipal asset

- Time is right to do this, there is social willingness for this approach, Patrick is now working in 2 sub watersheds in Shawnigan area on this initiative
- Trying to put hard values on riparian areas
- Want to help prevent installation of filtration plants on every drinking water system
- In logged landscapes – wants to lease a riparian area from Timber West logging company, set up a remote sensing system to monitor water quality and quantity, lots of work being done in Washington, also UBC Forestry
- There are many unlicensed, unregulated industrial soil dump sites, soils is dumped from everywhere and effects are not monitored
- Research Q: How wide does the riparian area need to be to be effective in maintaining clean water?

Project #3: Sewage treatment options for Colwood

- Building up a profile of Colwood Creek, calculating the discharge rating curve, also monitoring Latoria Cr, part of looking at radical alternative to sewage treatment; conducting water quality studies on these creeks as part of background study
- Trying to look at sewage as a resource, use it to recharge ground water, key is to protect lagoon; needs to be thoroughly studied
- About 100 l/s would be discharged from sewage treatment plant
- Colwood and Langford are contemplating this alternative, but if the Macaulay Pt option is chosen, and sewage is sent out of Colwood, it will never be piped back, a lost resource
- Could future-proof ourselves from a drying environment with climate change, extend the life of Sooke drinking water reservoir
- Colwood is funding the study, did a field trip to Sedro-Woolley WA, very high tech facility there to treat sewage water to drinking water standards.
- Peer review to be done by Natural Systems Utility, hired to do independent peer review of all this work; will confirm the very low cost projected by Aqua-Tex (\$34/year per household in Colwood, \$100 without federal and provincial inputs; \$50/year/household in Langford)
- Once a decision is made for location of the Core area treatment plant(s), Colwood and Langford will have 30 days to really look closely at this alternative proposal before a decision needs to be made to opt out of a regional system
- Will present to the CRD Core Area Wastewater Treatment Project Board after presentations to Colwood and Langford councils
- What would be the temperature of discharge water into Colwood Creek?
 - Typical temp of sewage discharge is 22-24°C, but the heat is a resource that would be removed before the sewage is treated

Project #4: Dwight School

- No news on that, still waiting for finalization, land transfer has been delayed
- Structural engineer is looking at the dam at the lower end of the property, could see taking the dam out and replacing with a 'staircase', creek wouldn't have a pond there anymore

- Jason – Dwight School now has the approvals, needs to register the covenants, final reading will not happen until registration complete

Development Updates *[Provided by Ivo van der Kamp via email 10 Aug]:*

- **Royal Bay:**
 - Temporary privately owned waterfront park construction underway.
 - Permit issued for Commercial (Neighbourhood House) unit at corner of Latoria Blvd and Ryder Hesjedal Way.
 - Multiple single-family units under construction.
 - Rezoning application for Latoria North underway, expected Committee date September 20th.
- **Ocean Grove:** Nothing new to report. Rezoning application completed. Developer to submit DP application for first building(s) at their convenience.
- **Pacific Landing:**
 - Works are occurring on Heatherbell Road to install services to the development.
 - Protection of the Creek along Heatherbell Road is under the QEP's direction (Patrick Lucey); Ministry Approvals have been obtained for this work.
 - Developer is planning to start construction on onsite servicing in the next month.
 - DVP has been received to vary the parking standards in the Land Use Bylaw. Staff are working on this at this time.

CRD Harbour Program updates:

- **Natural Capital Management** – initiative has reached the political level, trying to incorporate them into municipal financial planning, waiting to see what direction is to staff on that
- **Regional climate action strategy**, impacts of sea level rise, vulnerability analysis, how to mitigate and adapt to changing weather and climate
- **Harbour ecological inventory** –
 - Will re-do bird surveys this year, working on terms of reference for that study, did a survey in 1997 – 1999, specifically look at the migration coming through lagoon and other harbours, trying to get some funding from DND for Esquimalt Harbour and spill response capacity
 - Working with IT department to get Harbours Atlas back to former functionality and usability
 - Next step will be to update the ecological inventory for harbours, intertidal and subtidal, could have a time series of different layers, gains/losses since first surveys
 - 67km of shoreline between Esquimalt Lagoon to Victoria Harbour (inclusive)
 - Patrick – catalogued everything from Alan Austin's lab (retired seaweed researcher) at UVic, all bound and into UVic archives, could be a useful resource for intertidal marine life inventory and distribution
- **Water Quality Objectives:** Still waiting to hear back from the province on draft, but have done a big project to re-draw the watershed boundaries incorporating the municipal stormwater infrastructure; this information was sent back to the municipalities to make sure everything categorized correctly, this will form the basis for the water quality objectives for each harbour area

Coordinator Updates:

Bee Creek water quality monitoring:

- Bloom of green algae (*Ulva intestinalis*) at the mouth of Bee Creek prompted a request to do some water quality monitoring in the creek
- CRD Stormwater Program lent ELSI volunteers some meters for a month to do a series of 5 in 30 samples for nitrate, phosphate and turbidity. Dean Lacey, sampling technician, trained volunteers on 22 July and did the first set of samples at two sites above and below the construction site at Pacific Landing. Dean also took samples of creek water for fecal coliform, and sediment samples for PAHs and heavy metals. Results: both sites were slightly above (580 and 590 CFU/100ml) the Island Health guidelines (400 CFU/100ml). The metals and PAHs were well below guidelines. These results are similar to past readings at the creek.
- Sampling will continue for two more weeks to complete the dry season 5 in 30 sampling, then this will be repeated in the rainy season
- This 5 in 30 sampling regime is done by the CRD every 5 years, this data will fill in the gap between 2014 and next one in 2019. Single wet and dry season samples are taken in intervening years.

Beach log signs (see drafts in Appendix 1 attached):

- Add: “Don’t feed the wildlife” on both signs
- Could include an early photo of lagoon before erosion
- Send drafts to Colwood for their input/approvals

Urban Sanctuary Project:

- Several groups working in the 3 migratory bird sanctuaries in the region are planning activities to celebrate the centennial of the North American Migratory Bird Treaty (1916) and Migratory Bird Act (1917).
- Besides Esquimalt Lagoon, other MBSs are Victoria Harbour and Shoal Harbour (in Sidney and North Saanich)
- Several meetings have been held, Bateman Centre is spearheading the initiative and applying for funding from Victoria Foundation for mobile display to be taken to events in 2017
- CRD Harbour Program will contribute by creating a brochure/handout highlighting features of the 3 MBSs; GIS staff are working on maps, Kitty working on wording for handout – will send draft to ELSI members when available
- Events being planned:
 - All Bufflehead Day, October 14th, Urban Sanctuary Project will be officially launched; Robert Bateman is painting a Bufflehead, to be unveiled then
 - Speakers Series (GWI/ELSI) to be held at Bateman Centre sometime this fall
 - Celebratory events to raise awareness about MBSs, habitats, needs of birds will be held throughout 2017, coincides well with Canada’s 150th

Green Shores initiative:

- Stewardship Centre of BC received 3 years of funding from Real Estate Foundation to create a local government working group to promote Green Shores concepts and provide training opportunities
- CRD’s Climate Action Program and Harbours Program have joined the working group, contributing funds to this project and participating in monthly teleconferences with the WG members (including North Vancouver, Powell River, Cowichan Valley)
- Green Shores will offer 2 -3 workshops/year for community and professional groups, tailored to individual community.

- Looking for Green Shores demonstration sites
 - What about using Pacific Landing as a GS demonstration site? Patrick will look into this and ask Dale Fish
 - Royal Bay would be another good demonstration site
- Priorities – GS should be expressed in Natural Capital terms for municipal politicians, and tap into accreditation credits, opportunities for having a targeted workshop for local politicians to get them familiar with the language and thinking
- Kitty will provide regular updates to ELSI, and advise of workshops

Partner updates:

Parks Canada (Leanne and Dave):

- Bioblitz in Gulf Islands this weekend, more info at website: <https://www.eventbrite.ca/e/parks-canada-bioblitz-2016-gulf-islandsiles-gulf-tickets-25494510768> Next year, Bioblitz will involve more of the Gulf Islands Park
- In 2017 there will be free entry to all national parks for Canada's 150th anniversary, several special events being planned
- Federal infrastructure funding secured for concrete restoration work to the battery (barracks, canteen, upper battery fortifications); massive undertaking, biggest construction at FRH since 1897. Investigations were done over last 2 years, lower battery complex now completely closed off to public, will probably take 2 more years to finish, buildings should be good for another 100 years
- Lighting has been installed, may be able to hold evening events next year (star gazing, etc); Fisgard Light looks quite different now, downward effect lighting, lighting will provide some security for Otentik camping program
- Interpretive program underway, including "beach roves" – staff interacting with visitors at the beach, tying in ecological integrity messages with general communication with public
- Species at risk work continues in Garry oak Learning Meadow, next project is a carved archway; First Nation carver Tom Lafortune is carving the poles, working in an enclosure near the site, great connection with local First Nations
- Colwood Seaside Festival, being held at FRH Sept 18, 11am – 4pm (details: <http://www.colwood.ca/news-events/community-calendar/event/community/colwood-seaside-festival>), line-up of activities, free entry to the park, community event; lantern tour – 22 Sept, Fab Forts day 20 August
- Opportunity for ELSI to participate? Probably, contact Marcy Lalande at Colwood city hall
- Had a great horned owl onsite recently, also an unconfirmed cougar sighting, bear scat found on site
- Suggestion by Leanne: what about creating a walk in 2017 highlighting the ecology of the lagoon area, trail connecting through Cavendish property to RRU and on to new development at Pacific Landing; would tie in with 150th celebrations at FRH. ELSI will work with partners to help this happen for 2017
- Patrick – Are you seeing any long term drying trend here in terms of vegetation changes?
 - Species at risk group may be able to speak to that, weather monitors don't show any difference
 - Maples seem to be turning colour and looking dead/fall-like early, lots of rain in winter followed by early heat wave is a stressor

- Patrick – seeing groundwater changes recently, don't know what long term effects on soil ecosystem is of drying trend; need to learn more about this to know how to manage this change
- Should talk with province, they do more monitoring of weather patterns
- Beth – any change in swan population?
 - Seems to be fewer here at FRH, based on just last couple of years
 - One mute and one trumpeter, one tundra
 - Food supply in lagoon? Maybe large herbivore population (e.g. Canada geese), means more competition for existing vegetation
- Joe – has observed big crabs in the small estuary at small creek near Colwood Cr
- Patrick noted that Yogi Carolsfeld (World Fisheries Trust, works in the Gorge) has noticed similar trend with marine wildlife in Gorge and Portage Inlet

RRU (Nancy): Students have created a guidebook called “Experience RRU Beyond the Classroom” now in print and will be online soon, copies provided to all, aim is to encourage instructors to use RRU grounds as outdoor classroom; Sustainability Plan has a stewardship component, want to instill a sense of stewardship of national historic site, students need to know they have special responsibility to take care of ecosystems at RRU; guidebook covers 6 walks on campus, full of interesting historical and ecological facts about the site, copy to each core faculty and all new staff and faculty – want to encourage faculty to take students outdoors, learn more about the site, develop a sense of place

Beth: Not too much fish trapping lately, did Bee Creek last week, finishing up the 5 in 30s there, then will move to Selleck Cr; Colwood Cr will be next.

- Patrick: has electroshocking equipment, willing to use it on these creeks if anyone is interested

Jason:

- Complaints from the public in the spring about mosquitoes in Colwood Creek Park, council chose to go biological route, worked with Habitat Acquisition Trust to install bird and bat houses, help with outreach;
- Food trucks on lagoon were an experiment, interested in feedback on impacts on birds, other effects; also wants feedback about Eats & Beats event; when they review this Jason will bring up concerns about the picnic tables in the dunes.

Meeting adjourned: 4:30pm

4:30 – 6pm: Volunteer Appreciation Barbeque - Thank you all for your help with ELSI!

Appendix 1: Draft signs for beach logs at Lagoon

These dunes need your help!



Erosion and sea level rise are threatening the dunes and the beachfront. Preserving the remaining dune vegetation is crucial to maintaining beach integrity.

YOU can help by:

- Staying on designated trails
- Not walking through the dunes
- Keeping your dog leashed (it's the law in the Migratory Bird Sanctuary!)



www.colwood.ca

www.elsi.ca



You're in a federal *Migratory Bird Sanctuary*

Esquimalt Lagoon is one of only 7 federal Migratory Bird Sanctuaries in BC, and one of the few in Canada that includes the surrounding land. The lagoon is an important place for birds to rest and feed.



Here's how you can help:

- Don't feed or disturb the birds
- Keep pets leashed (off-leash area is west of public washroom)
- Stay on designated paths

