

Gabriola Streamkeepers (GSK) Minutes and Notices of Meetings 2016

Meeting notices have been included when they include meeting agendas not otherwise available.

December 2016: Meeting notice

No meeting. ◇

November 16, 2016: Minutes

Gabriola Streamkeepers Minutes from Meeting:
Gabriola Island, BC
November 16, 2016

In attendance: Marilyn Heraty, Bob Andrew, Christy Wilson, Kyle Clifford, Deb Ferens, Natalie Lissimore,
John Switzer

Meeting called to order at 7:05pm

1. **Water Quality Monitoring** – Fall flush monitoring for Mallett Creek (as part of the RDN Watershed Monitoring Program) is now complete. Kyle sent copies of all the data from summer and fall sampling to the RDN. This is part of a larger provincial program and we will be invited to meet in the spring to review data analysis with RDN and Province.

Action --> Christy will take equipment back to RDN

2. **Home for Minutes**

Waiting to hear from Chris as to GaLTT decision for approval on storing minutes/data on GaLTT website

Action → Ask Chris to follow up with GaLTT re: storing minutes on their website. Also, can we set up a data backup (spreadsheet?) on the GaLTT site.

3. **Field Books and Equipment Inventory**

Field books are still missing. Kits need to be moved to storage. Kyle has the Streamkeepers tablet and is using it to sort out mapping and assessment app for Mallett Creek.

Action → Bob to ask Jethro where the books are

Action → Christy to get new field book for Mallett

Action → Bob and Kyle to return streamkeeper kits to Tom Cameron for storage in GaLTT storage shed on his property.

4. **Presentation by Elke Wind:** GaLTT was interested in our proposal that we co-sponsor a presentation about amphibians and wetlands by Elke Wind sometime in the spring. We are awaiting a response from Elke re: availability and cost.

Action → Group agreed to help GaLTT to make this happen if Elke is interested. Chris to report back on this at the next meeting.

5. **Baseline Assessment of Mallett Creek:** At the end of September, Dave Clough (Fisheries Technician on contract with DFO) came and showed members how to use GPS-enabled APP for mapping and assessment of Mallett Creek. We used Dave's equipment the day of the training and by the time we sorted out our own equipment a week later the rains began. We cannot complete this full baseline assessment until the dry season. Dave suggested a modified SCHEMA if we want to do a survey during the wet season. This might be necessary before we move forward with any restoration work.

Action → Christy to ask Dave if he will write a SCHEMA for Streamkeepers to use. If so, Kyle will get our tablet to Dave. Christy to check with DFO Community Advisor if full assessment must be completed before we apply to PSF (next round mid Feb) for funding to do restoration (i.e. adding spawning habitat/gravel at the mouth of the creek). Report back at the next meeting.

6. **Revisiting the Gabriola Streamkeepers Mission and Vision:** Everyone agreed it is time to review the Mission and Vision and Goals of our group. We need to set aside a specific session to work through this with our members (at least a couple of hours).

Action → Deb to send out current Streamkeepers Mission and Vision Statements all members. ALL to review in preparation for a group session dedicated to revisiting our Vision and Mission. Set date for this special forum at the next meeting so we can spend some time setting priorities for the near future.

7. **Review who gets notifications of meetings and events:** there seems to be some confusion as to which email list to use for the CORE members and the larger membership. Two lists are currently:

streamkeepers-org@npogroups.org (this is the core group)

streamkeepers@npogroups.org (this is the broader membership)

Action → We need to take care to ensure that ALL members receive invites to meetings, minutes from meetings and other important notifications.

Action → Someone will ask Howie if we can change the email lists to:

Streamkeepers-CORE and Streamkeepers-ALL to make it easier for emailing to the correct group.

8. **Child related liability insurance –** GaLTT has raised a question as to whether or not their insurance (which we are covered by) would cover activities when we are working with children. Christy is trying to get more info about what sort of coverage we can get with the Pacific Streamkeepers Federation (they offer a group policy). Some present were not worried about this but it was agreed that we should try to find out more info from GaLTT and Pacific Streamkeepers.

Action → Tabled to next meeting to clarify any concerns that GaLTT may have. Chris to check if we are covered by GaLTT liability insurance for working with children.

Action → Christy to talk to Pacific Streamkeepers Federation to see what coverage they offer and cost.

9. **Forage Fish Sampling on Gabriola**

Ruby Chapman coordinated with Ramona De Graaf and Sea Watch Society to coordinate a Forage Fish “Egg Hunt” to kick off Forage Fish sampling on the island. As part of a new Biologist on the Beach program, biologist Ricky Belanger came to the island to begin collection of samples. He invited Ruby and interested community members to join in at Brickyard Beach site for an

example of what this involves. Samples from various sites on the island were collected by Ricky for analysis to determine where forage fish are spawning.

Action → Deb to ask Ruby what is the next step regarding Forage Fish sampling program. Information will be distributed to members.

10. Fisheries Act Review – Part One: In follow-up to emails forwarded to members earlier on, Christy informed us that the last time for submitting to the first phase of the review of the Fisheries Act is tonight (November 16, 2016). She encouraged everyone to submit a comment so their name would be on record for the next phase of the review.

11. Dragonfly List: Bob will share his dragonfly species list with Nick (as per request) and the whole group at the next meeting.

12. Minutes and Next Meeting:

All agreed to cancel the Dec 21st meeting for the holidays. Next meeting is Jan 18th.

Action → Marilyn will type up minutes, Christy will review them and distribute to ALL the membership along with a reminder of the next meeting.

UPDATE: we cannot use the Arts Centre for the January meeting (renovations). Anyone with suggestions for alternative location, please advise!

Meeting adjourned shortly after 8pm. ◇

October 19, 2016: Minutes

Gabriola Streamkeepers Minutes from Meeting:
Gabriola Island, BC
October 19, 2016

Meeting called to order at 7:05pm

1) **Water Quality @ the Commons;**

Action --> Christy to e-mail Bob Andrews to see if there is interest in having us continue to monitor

2) **What to do with our minutes?** “Post provisional (not officially “approved”) minutes” to be posted on GaLTT website, if that works with GaLTT.

3) **Clarify Data storage;** where and how to consolidate Nick’s data (which can be found here <http://www.nickdoe.ca/gabriola.html>) and the data Marilyn has compiled from field notes during assessments. This data too could potentially be stored on the GaLTT website. According to David Clough, we should continue to use the short form/field notebooks to collect data as the data will be more in line with provincial data collection standards. This makes it easier to pull info. for analysis/restoration recommendations/etc.

Action → Chris to check with GaLTT for approval on storing minutes/data on GaLTT website

4) **Elke Wind:** Received GaLTT approval to initiate a conversation with her and how we can get her to the island to do a talk/presentation.

Action → Christy to e-mail Chris with Elke’s contact info

5) **RDN Water Quality Monitoring:** 5 weeks of data were collected (Mallett Creek, south side of Taylor Bay Road) during the driest period (July-August 2016) and then again during the fall flush (Oct 11th and 18th.) DFO data logger has been in this location since the beginning of August. During the fall flush, active erosion was witnessed. 3 weeks remain; the next field day will be Oct 25th @ 1:45pm. There have been problems calibrating the equipment and on a few occasions equipment had to be sent back and swapped out for another.

Action → Kyle to remind Natalie (and anyone else who would like to attend) of the next date

6) Dave Clough from Pacific Streamkeepers Federation was on the island Saturday Sept. 17th to help train us with the GPS enabled phone APP (using Avenza maps) to help us more easily perform stream assessments. We’d hoped to do a follow up (on lower Mallett) the next day to finish working out some of the kinks that Kyle encountered with his i-pad, but he had been needing more time to work on the issues. The tablet purchased by us and used more regularly by Nick does work so can use this to continue the assessment. Also learned that when doing an assessment using Avenza, certain areas have to be done all at once or we’ll have to piece together different reaches/pools/riffles if done on separate occasions. Christy videotaped the process/session with Dave, so have that for reference.

**Christy received this e-mail (edited by me; underlined areas for emphasis are mine as well) Oct 20th, just after our meeting:

“The USHP Level 2 survey requires a Pool and Riffle count based on low flow

Its to calculate the real living area of fish -

If you do these surveys in the winter data on water characteristics is then erred significantly

But you can carry on in winter

I would suggest an abridged survey similar to the Streamkeepers level 1 survey

(do you have a volunteer or us?)

A schema for that data could be written and entered on the ipad

It would identify the alterations, erosion, barriers or other features in a lineal fashion with location and photos

Thus you can get adequate information to move ahead with plans for restoration activities.

You would be quicker and maybe see something for the feb PSF app

Dave <><

Save the habitat assessment for summer – it is an important measure of success so it still needs to be done”

**

- 7) **Restoration on Mallett:** can't ask for money until baseline assessment is done
- 8) **Visioning session for Streamkeepers:** tabled at least until next meeting
- 9) Nick wanted history of Coat's Marsh; Christy sent Nick some contacts.
- 10) Motion passed to adopt the 3rd Wed. of each month as our new meeting date.

Meeting adjourned shortly after 8pm.

Next meeting Wed Nov 16th, 2016, 7pm ◇

September 29, 2016: Meeting notice

No information.

August 2016: Minutes

No information.

July 21, 2016: Minutes

Gabriola Streamkeepers Minutes July 21st 2016

In Attendance - Marilyn, Bob, Nick, Kyle, Jethro, Christy

GaLTT representation

- Chris expressed concern over email about his inability to make ALL GaLTT Board Meetings. We all agreed that we are happy with the efforts he makes to ensure he stays in touch on email reviewing minutes from both groups and communicating anything pertinent in each direction.

Action – Tell Chris that we are very happy with his level of participation as our GSK representative on the GaLTT Board. Ask if he is happy to continue in this way (ie. attend every second meeting or so, emails in between), Chris can confirm all is well on the GaLTT side with this arrangement.

Update: Christy passed this along to Chris on the ferry last week and he seems OK with continuing – thank you Chris!

Action Remaining– **Chris** will check what our obligations are under the Partnership Agreement....is this OK with GaLTT?

GaLTT opinions

- There was also some concern expressed by the group that GaLTT was putting out political opinions that might be interpreted as being supported by us. Is this the case?

Action – table this discussion on relationship to the next meeting.

Density Potlatch Transfer

- We discussed if there would be some value in asking the planner to put our group on the list of referrals, but we decided not to for now. We would not want to be included as supportive at any point due to lack of opposition, so seems better that members respond personally with letters of support or concern.

RDN Water Quality Monitoring Mallett Creek

- Christy, Natalie and Kyle met for the recent trainings session at Mallett Creek

- 5 weeks of sampling starts next Tuesday, Kyle and Christy are booked and are happy to have others help if there is interest. **Action** – All interested in participating should contact Christy and Kyle.

- Kyle is getting a replacement meter as one is not working right now. Meter will get dropped at Christy's office.

- Christy, Nat and Kyle also put in a data logger downstream of the culvert (the one upstream of Taylor Bay Rd)....we can leave it in until we want to look at the temperature data that it will collect daily. Need to connect with DFO (Erica Blake) to have data downloaded at some point.

Additional Monitoring at Mallett Creek

- Nick suggested it might be useful to collect ongoing measures of the lake height. This will help him determine inputs and outputs in the watershed.

- ~~Action~~ Christy will ask Bob Rooks if we can set up a post in the lake to measure the height every Tuesday (and perhaps at other times too)? Also, ask if perhaps there is already a measuring post.
- If we get permission, Nick will help set it up and Jethro said Arbutus would probably donate the post/rebar. [Nick later withdrew interest due to access difficulties]

Mallett Creek Stream Assessment

- We revisited the discussion of how to proceed with assessment of the creek (using the standard Streamkeepers methodology and data forms).
- Summer is the best time to do the assessment (low water) but seems to be too busy for most members now.
- RDN staff mentioned an APP that is GPS enabled that will allow us to take photos and measure/mark reaches and add comments all via phone or tablet. Apparently we can record the date for each reach on this App too. **Action – Christy to follow up with Dave Clough and Julie Pisani** on how this App works and if the data collection is compatible with the Streamkeepers forms or if it is just mainly for mapping (measuring reaches and keeping track of benchmarks) and photos. Both useful but if just for mapping and photos, we would still have to fill in the data sheets as we go.
- could we do a weekend intensive (4 hours a day) and get it done?
- Kyle, Jethro, Bob and Christy are interested (we should ask Natalie too) but after September long weekend (we all have guests right now and baby on the way for Jethro). **Action – Kyle, Christy**, to set a meeting in advance to prep and try to make it happen after September Long Weekend!

Mallett Creek Restoration

- should we proceed with restoring spawning gravel below the road (at the mouth)?
- the benefit is that it gives us a pilot project of something we could do in other creeks where salmon fry have been found, something for the community to SEE us DOING
- **Action – Christy** to ask Erica for more info to help us discuss this at the next meeting.

Coats Marsh

- Nick asked Christy to check around at DFO to see who might have info. on sticklebacks. Coats Marsh was once drained and so no fish live there now, but a rare species of stickleback live in Hoggan Lake, so might have once also lived in Coats Marsh. Given that the Hoggan Lake stickleback species is highly endangered, the question would be what are the pro's and con's of introducing or possibly re-introducing them to the marsh.

Next Meeting

- All busy on August 18th so agree next meeting should be August 25th
- Action – Christy** will try to change date with the hall. Keep an eye on emails, if we are not able to use the space due to Theatre Fest, we may have to set an alternate location.

See notes for next meeting on following page.....

Next Meeting Agenda Items – for August 25th

1. GaLTT
 - Update from Chris on his level of participation
 - Discussion about GaLTT opinions and recommendations, do they affect our optics?
2. Mallett Creek
 - how is the RDN sampling going?
 - plans for a depth monitor?
 - plans for assessment?
 - plans for restoration?
3. Plans for Fall Fair
4. Any update on presentation plans for Elke Wind -- wetlands
5. Next Meeting Date and Agenda plans. ◇

June 16, 2016: Minutes (2 versions)

Minutes (Kyle)

Stream keepers Meeting Minutes
Thursday June 16, 2016

Attendance:

Deb Ferens
Christy Wilson
Marilyn Heraty
Chris Hills
Kyle Clifford (minutes)
Bob Andrew Nick Doe

Meeting began with a review of the previous meeting action items.

Purchase of batteries for equipment - Nick reported GaLTT is covering these costs.

Shed for storage of Streamkeepers and GaLTT equipment - Kyle - no news.

Inventory of Stream keeper equipment. Unclear as to where and how much equipment we have. Nick believes there are three stream keeper kits. He has one. We had agreed to centralize our equipment at one location - Tom Cameron's attached garage. He lives at 190 McConvey phone 247-7587.

Key to Rooks property seems to have gone missing from last years box of equipment from the RDN. Jethro has cut additional keys. Assume he has them.

Letter regarding trail development at Coats Marsh not necessary to send to POSAC.

Grade 7 class school presentation - not yet set up by Christy.

Volunteer Update - Chris completed this item and sent it to the island's Trust (Melanie) and RDN(Howard).

Agenda Items

Coats Marsh -Nick made a presentation to GaLTT and a letter was sent to the RDN - Wendy Marshall. - **ACTION ITEM** - Chris to get a copy of the letter that was sent.

Wetlandkeepers - Christy found out they would be happy to host a workshop on Gabriola for interested people. Want to find out more and see how much it may duplicate the Streamkeepers workshop before we make any commitment.

Education Future talk on Amphibians. - Suggest Elke Wind be invited to give a talk on this topic to Streamkeepers and GaLTT - **ACTION** - Christy to contact Elke

Oceans Day Yay Yay - the stream keepers booth worked well. Good Flow. Ran out of forage brochures. Thank you all who participated and attended.

Solstice Bio-mapping at the Commons. Set for June 25th from 10 to 1. **Action** Bob to contact Carrie. Let us know if additional help needed.

Farmers Market - GaLTT sets up their table some weeks. Streamkeepers could join. If anyone wants to this they would be welcomed.

Summer Survey Mallett Creek - Would like to complete this project this summer. Action - Kyle to talk to Jethro to set up a date and let others know when this will take place.

Restoration - Jethro has had some discussion with Erica Blake and Dave Clough regarding spawning gravel for Mallett Creek. Any other restoration ideas? Possibly plantings (trees and shrubs) along creeks such as Wynthuysen. **Action** - confirm with Jethro about restoration discussions. Deb to check with RDN about vegetation planting along Wynthuysen for riparian improvements

Fall Fair source for trees for planting?

Stickleback - general discussion - carry forward items for future investigation

Community Watershed Monitoring Program - Kyle, Nick and Christy attended this presentation on May 26th - Kyle provided a report back. Nick questioned the value of the program. **Action** - retraining for 2016 monitoring on Gabriola - Christy to get hold of the RDN to confirm at training date. Kyle and Christy to attend. Others to be advised and those able, to attend.

Fry Salvage - Nanoose Bay streamkeepers- program “rescues” stranded fry in pools in the local stream and relocates them to flowing water. Christy’s father-in-law involved. Chris interested.

Mallett Creek Invasives. - GaLTT subcommittee looking at the issue of Hogweed on a small island on the reservoir for Mallett. Reviewing means of control. Chemical. Manual. Chris was looking for feedback. General discussion ensued.

Outreach - Intertidal walk Christy involved with Katherine Gilroy’s grade 6/7 class First Nations involvement. Seine netting at Twin Beaches . June 23 at 8:30 am.

Meeting adjourned at approx. 8 pm.

Next meeting July 21st at 7 pm

Minutes (Nick)

Streamkeepers Meeting Minutes
Thursday, June 16, 2016. WI (GAHC) Hall at 7.

Attendance: Deb Ferens
Christy Wilson
Marilyn Heraty
Chris Hills
Kyle Clifford (minutes)
Bob Andrew
Nick Doe (amended minutes)

Meeting began with a review of the previous meeting action items.

Purchase of batteries for equipment — Nick reported GaLTT is covering these costs.

Shed for storage of Streamkeepers and GaLTT equipment — Kyle - no news.

We had agreed to store our equipment at one location, Tom Cameron's attached garage. He lives at 190 McConvey phone 247-7587.

Equipment not going into storage would be equipment and chemicals that need to be kept in a temperature/humidity-controlled environment and requiring regular maintenance. The HANNA pH meter and PASport Optical DO sensors, for example, must not be allowed to dry out which is liable to happen if they remain in storage with nobody in particular responsible for them. Agreed that Nick should hang on to these.

Inventory of Streamkeepers equipment. Unclear as to where the equipment we have is.

Nick said the GSK Inventory includes one Streamkeepers kit plus three WQ (water quality) kits. Nick has one of the WQ kits (#3). Jethro probably has the one Streamkeepers kit, which includes fish traps and surveying equipment. The GSK Inventory is complete but will not be posted online.

Key to Rooks property Seems to have gone missing from last years box of equipment from the RDN. Jethro has cut additional keys. Assume he has them. Chris reported that GaLTT had learned that Dr. Rooks was sensitive to people being on his Mallett Creek property without his knowledge.

Letter regarding trail development at Coats Marsh Deemed unnecessary to send to POSAC as Coats is an RDN Regional Park and POSAC only deals with Community Parks on Gabriola.

Grade 7 class school presentation Not yet set up by Christy.

Volunteer Update Chris completed this item and sent it to the Islands Trust (Melanie) and RDN(Howard).

Agenda Items

Coats Marsh — Nick made a presentation to GaLTT expressing concern at the RDN intention of building a trail along the south side of the lake where it might disturb wildlife, particularly tree-cavity nesting ducks such as buffleheads and hooded mergansers. A letter was sent to the Wendy Marshall at RDN. **ACTION** — Chris to get a copy of the letter that was sent and distribute it.

Wetlandkeepers — Christy found out they would be happy to host a workshop on Gabriola for interested people. Want to find out more and see how much it may duplicate the Streamkeepers Workshop before we make any commitment.

Education — Future talk on Amphibians. - Suggest Elke Wind be invited to give a talk on this topic to Streamkeepers and GaLTT. **ACTION** — Christy to contact Elke.

Oceans Day — Yay Yay - the Streamkeepers booth worked well. Good Flow. Ran out of forage brochures. Thank you all who participated and attended.

Solstice Bio-mapping at the Commons — Set for June 25th from 10 to 1. **ACTION** — Bob to contact Carrie as she has been doing the water-quality testing for this project, and to let us know if additional help is needed.

Farmers Market — GaLTT sets up their table some weeks. Streamkeepers could join. If anyone wants to help with this, they would be welcomed.

Summer Survey Mallett Creek — Would like to complete this project this summer. **ACTION** — Kyle to talk to Jethro to set up a date and let others know when this will take place.

Nick reported that he continues to monitor the flow of Mallett and Winthuysen Creeks, has been measuring rainfall there, and occasionally does WQ tests. The results are posted online at <http://www.nickdoe.ca/pdfs/Webp672.pdf>.

Analysis of the results suggests that water flow in Mallett Creek in the late-summer is solely due to leakage from the footing of the dam at Peacocks Lake. There is no evidence of the creek being sourced from a spring. Last year, all surface water inflow to the lake, and flow in Winthuysen Creek, ceased long before the summer drought ended; yet, Mallett Creek continued to flow. However, certainty on this topic is not possible without a program to continuously monitor the level of the lake and to receive notification of water withdrawals throughout the dry season, which is not easy to arrange because the lake is privately owned and access restricted. The implications of this result however, if correct, is that water drawdown by the GVFD and the landscape managers of the Sitka Cove development could endanger all life in the creek in times of severe drought and users of this water should be aware of this.

Research at other creeks and wetlands — Nick who has been monitoring flows and doing WQ tests in up to 20 other locations on the island reported that he is not aware of any concerns.

The observations are posted online at <http://www.nickdoe.ca/pdfs/Webp675.pdf>.

Nearly all the creeks are intermittent or ephemeral, and the winter runoff is high-quality water, the only possible exception being Dick Brook where quality is sometimes somewhat reduced where it flows through farmland. No testing has been done for hydrocarbons, heavy metals, chemical, or biological contaminants because it would be expensive, and does not seem to be necessary.

Restoration — Jethro has had some discussion with Erica Blake and Dave Clough regarding spawning gravel for Mallett Creek. Any other restoration ideas? Possibly plantings (trees and shrubs) along creeks such as Winthuysen. **ACTION** — confirm with Jethro about restoration discussions. Deb to check with RDN about vegetation planting along Winthuysen for riparian improvements. Fall Fair source for trees for planting?

Stickleback species pairs — Jethro and Nick have been in contact with a researcher who has found one of these two species in Hoggan Lake. These are on the provincial red list category 1 (extremely rare and critically imperilled). General discussion. Carry forward item for future investigation. GOOGLE “stickleback species pairs” for interesting information on these fish, which are unique to the province. Finding them in Hoggan is confirmation that this lake has been there since the end of the ice age 10,000 years ago.

Community Watershed Monitoring Program — Kyle, Nick, and Christy attended this presentation on May 26. Kyle provided a report back. Nick questioned the value of this

5-year program to GSK. It does not include biological or year-round flow-rate monitoring, and GSK's research resources are very limited. **ACTION** — retraining for 2016 and monitoring on Gabriola. Christy to get hold of the RDN to confirm a training date. Kyle and Christy to attend. Others to be advised and those willing and able, to attend.

Fry Salvage — Nanoose Bay Streamkeepers program “rescues” stranded fry in pools in the local stream and relocates them to flowing water. Christy's father-in-law involved. Chris interested.

Mallett Creek Invasives — GaLTT subcommittee looking at the issue of giant hogweed on a small island in Peacocks Lake. Reviewing means of control. Chemical (including Roundup which is known to be effective). Manual. Chris was looking for feedback. General discussion ensued.

Outreach — Intertidal walk. Christy involved with Katherine Gilroy's grade 6/7 class. First Nations involvement. Seine netting at Twin Beaches. June 23 at 8:30 am.

Meeting adjourned at approx. 8 pm. Next meeting, July 21st at 7 pm. ◇

May 19, 2016: Minutes

Gabriola Streamkeepers Meeting

May 19, 2016

Attending – Chris, Kyle, Marilyn, Deb, Christy, Bob

1. GaLTT Agreement

- We do not need to report monthly on finances so that part was taken out of the agreement. We just need to let GaLTT know when we spend or earn any money.
- **Chris** keeps an eye on this at GaLTT meetings and will communicate between groups as necessary.

2. Equipment

- **Chris** will ask if GaLTT can reimburse for small purchases such as batteries
- The shed GaLTT is trying to secure (via donation by a local on Ross Way) needs some work on the roof before we can use it **Kyle** will keep us posted on this.
- **Kyle** took one SK kit to Tom Cameron's house where it will be stored until the GaLTT storage shed is available; Bob has the other kit.
- **Christy** will clarify where the inventory is right now. Is it on Nick's website?
- Chris has banner and brochures and will keep so he can take to Oceans Day; Tom has tent.

3. Coats Marsh

- After a detailed presentation by Nick, GaLTT is in favour of holding off development of a trail on the south side and of adding a blind at one end of the Marsh.
- **Chris** will get exact wording of the motion by GaLTT (copy of the letter they will send to RDN) and share with GSK via email (we will add to the next meeting minutes).
- Detailed observations of Coats March that Nick shared with GaLTT can be found on his website <http://www.nickdoe.ca/pdfs/Webp673.pdf>

4. POSAC Update

- Parks and Outdoor Spaces Advisory Committee
- Kyle is a member and reported on the last meeting where Nick presented more info about why trails should not be expanded in Coats Marsh.
- POSAC was going to start building trails but thanks to the detailed submission of Nick they are going to put this proposal on hold (for now at least).
- **Chris** will ensure GaLTT letter to the RDN is cc:ed to POSAC.

5. Education Update

- Girl Guides Junior Streamkeepers session in April was well received. Carrie, Mel and Christy led the group in water quality testing and aquatic invert exploration after speaking about local creeks and watershed health with the group.
- Christy has tried again to secure a date for Junior Streamkeepers with the Grade 7 class. No luck yet, but will keep trying as the Commons would be a good place to run an interactive session (like the one we did for Girl Guides). Chris and Bob are keen to join in and Fridays

might work best (Chris has every second Friday off). **Christy** will try to organize a session in the coming weeks.

6. Outreach

- Spring Fair – Chris and Jethro hosted info table and new volunteers have signed up.

- Oceans Day – Sunday June 5th from 1 – 4 pm

- **Chris** will set up a GSK table at noon and stay until 2 pm

- **Marilyn** will come for the entire session (or at least 1 – 4 pm)

- **Anyone else** interested in helping, please contact Chris or Marilyn

Outreach Continued:

- **Christy** will print more GSK maps for Oceans Day and get them to Chris

- GaLTT Farmers Market table will only run on certain weekends; **Chris** will forward these dates to the GSK group and we **ALL** will respond individually with our availability to help GaLTT out (optional). * More info on how to sign up also added to the end of these minutes. **Chris** will make sure GaLTT has enough stream maps to share with interested community members.

7. Wetlandkeepers or Wetland Presentation

- Christy received some information from this organization which includes a possible offer for them to plan for their 2017 session on our island.

- We need more info to see if this is something we are interested in bringing to Gabriola Island community members. Questions include: will be too much duplication of what we have already received in our Streamkeepers training; will this provide new and useful knowledge to GSK and other community members; will there be costs involved or any commitment required to ongoing monitoring or assessment. **Christy** will get more info before the next meeting.

- In the meantime, an alternative to this formal program was suggested – perhaps we can have an Amphibian and Wetland expert do a presentation that would be open to the public. **Christy** will pass Elke Wind's contact info to Chris. **Chris** will forward it to GaLTT to see if this is something they might be able to support (ie. travel costs, honorarium). **Chris** will check if the covenant team might be interested in supporting this (as suggested by Deb).

8. Forage Fish

- An interested community member (Ruby) will host a Forage Fish info table at Oceans Day to help find volunteers to help her get something started.

- As decided at an earlier meeting, this is not something GSP can take on.

9. Stream Survey/Data Collection

- Chris, Christy, Kyle....and maybe Jethro and Natalie are interested in trying to do the basic Streamkeepers Assessment of Mallett.

- Kyle will speak with Jethro about this and send an email too these members. Once a date is reached we can invite other members of the core group to attend.

10. Volunteer Update

- **Chris** will update Mel and Howard with volunteers from Spring Fair and a couple found in the kit from earlier events.

11. RDN Community Watershed Monitoring Program Results Session

- This is happening in Lantzville on Thursday, May 26th in Lantzville at Costin Hall (7232 Lantzville Road) from 1:30 pm until 3:30 pm.
- As usual this session is open to everyone and will include a quick overview of the CWMN program, recap of the 2015 monitoring season and results of the data collected in 2015. Snacks and refreshments will be provided.
- **Nick and Kyle** are planning on attend. Please contact them if you are interested in joining in.
- **Christy** will be trying to get there (but cannot guarantee timing of arrival so cannot help with carpooling)
- We will add planning/scheduling for this year's monitoring session to the agenda for next month.
- Question – will retraining be provided?

Next Meeting – June 16th

Agenda Items for next meeting

- print these minutes so we can check Action items
- Coats Marsh – copy of letter from GaLTT to RDN; any other updates – Chris, Nick
- More info on Wetlandkeepers – Christy
- More info on a presentation by Elke Wind on amphibians – Christy
- Update on Oceans Day – Deb
- planning for Solstice Biomapping session (shall we invite keen youth from Girl Guides, homeschoolers etc).
- Planning for Farmer's Market GaLTT table – all
- Summer survey plans (Mallett?)
- Possible restoration plans for Mallett or other creeks
- RDN Community Watershed Monitoring Program – retraining and scheduling; report from last year
- possible fry salvage with Nanoose Bay Streamkeepers - Christy
- other items

*** Update from GaLTT re table at Farmers Market**

Hi all,

The opening Market was really successful – \$155 taken in for memberships and maps. The next planning dates are in the list and please let me know where you would like to sign up to help.

June 4, 18

July 2, 9, 16, 23, 30

August 6, 13, 20, 27

Sep 3, 17
Oct 7

In addition, if folks are motivated to go more often, to fill in the missing weeks, feel free. Everything is at Tom and Charlotte's and super easy to explain.

Thanks!

Kerry Marcus, please contact her to sign up at ktmarcus@telus.net

April 21, 2016: Minutes

Gabriola Streamkeepers

Minutes from Meeting:
Gabriola Island, BC
April 21st, 2016

Present: Deb Ferens (chair,) Marilyn Herarty, Carrie Culbard, Nick Doe, Bob Andrews, Chris Hills (minutes,) Christy Wilson, Jethro Baker, Kyle Clifford

Meeting called to order at 7:05pm

Minutes from March's meeting, adopted, agenda read for the evening:

1. **GaLTT subcommittee agreement;** are we responsible for tracking funds/reporting monthly to GaLLT? Agreement to be signed upon clarification of this point. Nick abstains from the vote.
2. **Rainy Season update:** Open invite to the public to attend a water quality survey at Winthuysen, March 26th. Christy and Deb only ones present, did water quality assessment.

Action → Christy and Jethro to update Winthuysen data book, copying Marilyn in on the e-mail

Nick's report (copied from e-mail shared with Streamkeepers list serve): *"Winter is over as we've all observed. All the creeks classified as "ephemeral" are now dry, and those classified as "intermittent" are running at least an order of magnitude, sometimes two orders, less than they were in early March. All creeks that I've seen and measured are down to less than 10 litres/second.*

Mallett is no longer receiving surface water from Peacocks Lake, but there is still some drainage from the lower valley. Both of the major tributaries, upper Mallett Creek and River Place Creek have stopped flowing. Let's hope draw-down of Peacocks Lake this summer by the GVFD and Sitka Cove landscape managers leaves enough to keep the lower part of the creek alive.

The pond leveller on Coats Marsh is still running at a few litres a second, but fortunately it is only draining the weir bay. Thanks to the beavers, the main lake is holding steady at its maximum capacity which is good news for the coming summer. If the pond leveller had worked as probably intended and pulled down the level of the whole marsh, there's a good chance the marsh would be dry at the end of the summer, which would be a disaster. Conductivity measurements and flow measurements have confirmed once again that there are no springs running into the marsh. It relies on surface run-off from lands to the east.

A red-listed (extirpated, endangered, or threatened) species of spring flower was found thriving on the island in drying out meadows and wetlands in several locations including ones in the 707CP, Coats Marsh RP, and adjoining private lands.

Despite technical difficulties with the GSK Water Quality (WQ) equipment, I've managed to assess water quality now at 20 separate locations. In general, the measurements confirm what we all know, that almost all of the water in Gabriola's creeks is winter rain water. Very high in dissolved oxygen, very low in conductivity (dissolved solids), and close to neutral pH.

The full 20 locations are: 1. Chapple Creek 2. Wagg Brook 3. Dick Brook (pit) 4. Dick Brook (Peterson) 5. Dick Brook (N. Rd.) 6. East Path Creek 7. Stoney Creek (N. Rd./Tait) 8.

Winthuysen Creek (campground) 9. Upper Jenkins Creek 10. Castell Brook (Daniel Way) 11. River Place Creek (bridge in park) 12. Columbia Creek (Taylor Bay Road) 13. Coats Marsh 14. Coats Marsh Creek 15. Goodhue Creek (golf course) 16. Commons Pond 17. Mallett Creek (Taylor Bay Road) 18. Maples Bay Spring (beach) 19. Fiddlehead Creek 20. Descano Creek.

I'm continuing to monitor closely Coats Marsh and land in its catchment, and to a lesser extent Mallett Creek although it's harder to access.

Rainfall was highest on record in March, but has already abated. El Nino? El Nino modified by climate change? Climate change alone?

Impossible to tell with simple observations. Everyone's theory is probably partially right.

*other notes: rainfall received in March 2016 was highest amount of rain in March since 1944? Descano Creek is still running strong (though most other creeks are dry,) perhaps due to ground water, not only rain?

*Nick has built a data summary file available online at:

(<http://www.nickdoe.ca/pdfs/Wepb677.pdf>). This points to more detailed data that GSK has collected. Some of this data is contained in the Orange books and Marilyn's spreadsheet, some in Nick's notes on lesser creeks and wetlands (<http://www.nickdoe.ca/pdfs/Wepb675.pdf>), some in the rainfall file (<http://www.nickdoe.ca/pdfs/Wepb674.pdf>), and some in the files recording more detailed observations together with interpretations and discussions of the observations for Mallett, Coats Marsh, and Dick Brook (<http://www.nickdoe.ca/gabriola.html> scroll down to Gabriola Streamkeepers). The collected data is characterized as being B Biological; F Flow rate and water level; M Map; Q Water quality; T Topographical, hydro-geological, and habitat survey; and W Weather.

* PSF has standardized forms to enter data online however there hasn't been space for streamside observations until now. Zo-Ann Morton of PSF has added a "comment" section as well as an "action" ("*we need to do do a clean up; ivy needs removal*" as examples) section. We can ask her to update the online form with other data collecting columns as need be. There is a possibility that PSF might be interested in making a trip to the island in the next year.

Action → Need to spend time on how to collect data. Friday May 6th postponed, will regroup at a later date to do stream survey/streamline data collection. Carrie will e-mail Christy with the forms to use.

3. **Equipment update:** Software update Nick received in the mail didn't solve the problem; he has still been able to do accurate field readings. Nick will train us on the equipment.
Action → Christy and Jethro to look for missing standard solutions for water quality kits
4. **Coat's Marsh walk/update (Nick:)** has monitored the marsh (as well as Mallett Creek) every 3 days since July 2015. Sees problem with RDN management plan, the whole marsh area could become public territory to the detriment of a delicate ecosystem and all its inhabitants. Also the

marsh as an important water catchment area. Suggests leaving woods on southside undeveloped, cites nesting area for normally transient buffleheads. Has contacted GaLTT, RDN and Howard Houle but has not heard back.

Action → Chris to request this as an agenda item for the next GaLTT meeting; will e-mail Streamkeepers to remind everyone of the GaLLT Board's meeting date.

5. **Education Update:** Christy has not heard back from Grade 7's. Carrie, Christy and Mel to meet Girl Guides Mon. April 25th (6:15-7:15pm) at the Commons.

Action → Jethro to set a fish trap the night before

Gabriola Elementary Grade 2/3 will release fry in Millstone Creek (as part of their project) on Friday April 29th, AM.

Action → Christy to e-mail Streamkeepers as a reminder for those that wish to attend

6. **Outreach update:** Spring Fair at the Commons, Saturday May 7th, 10-2pm.

Action → Chris and Jethro to staff a table with GaLLT; will both cover morning until early PM.

**discussion surrounding Farmer's Market table/staffing and Ocean's Day tabled to next meeting*

7. **Streamkeepers Training update:** 3 people from the island attended two different sessions (Kyle and Natalie were at the 2nd at the Nanaimo River Fish Hatchery.) As a group we need to determine: why we are collecting data? May not have fish spawning streams, however with developmental pressures it's important to know what characteristics need to be preserved during and after development. Question: which streams do we prioritize?

Action → Christy to find out more about Wetland Keepers

8. **Storage Space:** GaLTT board member Tom Cameron is offering storage space for equipment, tent/awning at his house.

Action → Chris to e-mail Tom to confirm, include Jethro in the conversation, arrange for transfer of equipment. Bob will talk to Tom as well as he has a Streamkeeper's kit at his place.

→ Chris also to e-mail Tom about Hall rental and whether it has been paid for (as well as in advance for the forthcoming months.)

9. **Tabled for next meeting:** Other ideas for getting out and about (ie: group picnic at a stream?)

10. Deb mentions Community Forum at GES Thurs April 28th; talking about freighter traffic/LNG

Next meeting Thurs May 19th, 2016, 7pm ◇

March 17, 2016: Minutes

Streamkeepers Meeting
Thursday, March 17, 2016
7-8 pm WI Hall

MINUTES

Present: Jethro Baker, Christy Wilson, Marilyn Heraty, Judith Roux (welcome to first meeting), Deborah Ferens (chair & minutes)

Regrets: Kyle Clifford, Nick Doe, Chris Hill

1. Minutes of Feb 18 (thanks to Kyle) – accepted
2. Water Quality Testing – Nick – no report – sensors being fixed
 - thanks to Nick for leadership and work on this file.
3. Streamkeepers Workshops (March & April)
 - free
 - 2 spots are available
 - contact NALT if you are interested
4. Rainy Season Survey Plans
 - 'tis the season NOW!!
 - Nick has found new streams (due to heavy spring rains)
 - Christy will send out an invite for water quality testing at Winthuysen Creek at Descanso Bay Regional park on Sat March 26 at 1:30
 - the kits will be at Arbutus for pick up
5. School Programs – Christy
 - Christy & Chris had a super fun day with the Jr Streamkeepers at Coats Marsh
 - no further plans at present – kids are on 2 week spring break
 - Christy will contact Grade 5 & Grade 7 teachers to schedule future dates.
6. Commons Bio-mapping
 - Sat Mar 19 10 to 3pm
 - Jethro and helpers will do water testing & fry traps at 11 am.
 - Deb will send out invite to larger Streamkeepers group to join Jethro.
7. Mandate/Vision/Executive Governance Discussion
 - table until Fall when we are doing less Field Work.
8. Public Event Planning
 - upcoming events at which Streamkeepers can have a table depending on volunteer help & time:
May 7 Spring Fair at the Commons; GaLTT table at the Farmer's Market (throughout summer);
June 5 Oceans Day, Fall Fair in early Sept at the Commons
9. Other:
 - Gabriolans Against Freighter Anchorages has invited SK to attend meetings
 - Jethro referred them to GaLTT for further information re: ecosystem that could be impacted by freighter anchorages.
- 10: Frog Reports – Judith
 - Judith shared information about a frog expert who came to Gabriola several years ago. The name of the scientist leading the study on frogs, particularly bullfrogs is Purnima Govindarajulu. Her study is accessible through Google.

11. Next Meeting

- Our regular April Thurs evening meeting will be replaced by a field trip on Sat April 23 (1:30-4pm) at Mallett Creek.
- Christy will send out RSVP

FOR INFORMATION: To Clarify the use of the two Streamkeeper listserves

streamkeepers@npogroups.org

This is the complete list of all individuals who have signed up for streamkeeper information. Use only to notify the larger group regarding upcoming special events and regular monthly meetings or special messages.

streamkeepers-org@npogroups.org

This is the shorter list of subscribers with a focus on the organizational & administrative needs of Streamkeepers.

Use only for meeting planning and organizational emails.

As usual, you can unsubscribe from any SYMPA email list by sending the command UNSUBSCRIBE <listname> to sympa@npogroups.org.

For more info about Gabriola Streamkeepers, visit the GaLTT website:

<http://www.galtt.ca/gabriolastreamkeepers.html>

To submit a message to StreamKeepers, send your email to: StreamKeepers@npogroups.org.

To unsubscribe, send a blank email to: StreamKeepers-unsubscribe@npogroups.org.

To get other instructions, send HELP in the body of an email to sympa@npogroups.org.

This list is private: please do not forward content of StreamKeepers email without the prior consent of the originator.

Need help? Send a message to Watercolour@shaw.ca (list manager).

◇

February 18, 2016: Minutes

Thursday, February 18, 2016

Meeting began shortly after 7 pm at the WI with Deb Ferens chairing and Kyle Clifford recording secretary.

Attendees: Deb Ferens Carrie Culbard, Bob Andrew, Chris Hills, Marilyn Heraty, Kyle Clifford
Regrets: Jethro Baker and Christy Wilson.

Review Previous Minutes and Agenda

Thanks to Christy for taking and circulating January minutes which were used as the basis for this months agenda. Items added - Water Day and Leap Day.

Inventory of Streamkeepers Assets

Thanks to Nick Doe for completing the Streamkeepers inventory of equipment. This is on file ad can now go to GaLTT. Chris to confirm.

Stream Survey Data Records

Marilyn recently completed data entry of all the information collected for each of the orange coloured stream field notebooks. She had some issues understanding handwritten notes and technical jargon but for the most part it went well. Data was entered on Excel Spreadsheets; broken into three types 1) Observations, 2) Water Quality, and 3) Invertebrate Study. For each spreadsheet, data was recorded for each stream where it had been gathered and the date it was collected. It was felt that a hard copy of the spreadsheet should be kept in the streamkeepers equipment kit.

The group thanked Marilyn for all the work she had accomplished. Marilyn indicated she wanted to “play around” with the format of the spreadsheets to make sure titles, headings, date of the spreadsheet, and page numbers appear when printing out the spreadsheets.

Streamkeepers Workshop (Course)

Christy to confirm. Jethro and Kyle may attend depending on dates and their availability.
Anyone else?

Rainy Season Survey Plans

Need to follow up from previous meeting minutes. Jethro and Christy mentioned possible future meeting at one of our streams and taking some measurements at that time. Chris will be talking to Christy about this topic.

GaLTT AGM Report

Chris, Christy, Jethro, and Deb all attended the recent GaLTT AGM. A presentation was made by the Campbell River Greenways Trust and the local environmental work they are doing. They have a similar sub-group to our Streamkeepers under the auspices of their Trust. The group has a budget and paid staff. Funding from the local municipality, and various grants from other levels of government.

A Thank-You letter to GaLTT from our Streamkeepers group was presented at the meeting

thanking them for their ongoing financial and administrative support.

School Programs

Chris went with the Grade one class recently to talk about streams and the water cycle. Nothing else planned upcoming although Carrie will contact Christy to consider the Grade 6&7 class at the Gabriola public school.

Commons Bio-mapping Project

Deb mentioned the upcoming ongoing bio-mapping project is scheduled for Saturday March 19. She expects a good turnout. She will send out a reminder and ask if any members of the streamkeepers group would like to attend.

Mandate/Vision/Executive governance discussion tabled.

Public Event Planning

Discussion regarding upcoming Oceans Day in June. Deb to circulate information as it is forthcoming. We have the necessary hardware available (tent, banner, display material).

Water Day

The RDN (Lauren) provided copies of a poster advertising the upcoming Water Day event in Nanaimo on March 20th. Emails were sent to most core members regarding this event.

The group discussed the merits of the event to our group and felt it was mainly a good networking opportunity from our perspective, but not particularly useful to getting our message out considering the primary audience. Deb asked if anyone wanted to volunteer to attend and take our tent and display and will send out an email to our distribution list; however, the group did not feel it was a priority.

Rental Receipt

Carrie had received a receipt for two months rental of the WI for our group. We determined that the rental was prepaid for the year ending May 2016. The receipt was a little confusing, but seems to be part of the WI administration and is not an outstanding invoice.

Leap Day

Deb discussed the SOS (Save our Shores) group plans for Leap Day. She related the recent good turnout for the movie *This Changes Everything: Capitalism vs the Climate* by Naomi Klein. The "Leap" manifesto is global in nature having to do with leaping forward to sustainability. SOS will be having a leap day event at the commons Feb 29 from 7-9. Other environmental groups will be invited. All welcome.

Meeting Adjourned 8:10. ◇

January 21, 2016: Minutes

Streamkeepers Minutes January 21 2016

Present: Marilyn, Bob, Kyle, Jethro, Chris, Nick, Christy (minutes)

General Business: Tawny and Phyllis no longer regular members but may be contacted for specific activities. Natalie will not be able to make the meetings due to family commitments but would like to maintain participation otherwise as best she can.

Inventory of Assets: Nick still collecting info on total assets. He needs info on what the asset is, cost, how we paid for it and where it is being stored. **Action: ALL** to send info to Nick before next meeting. Specifically **Chris** will get info on the tent, **Jethro** will get info on the banner and **Marilyn** will get info on the data/field books.

Stream Surveys/Data:

- Marilyn has been creating a spreadsheet with data from the field note books
- Nick's reports are already online.
- **Action – Nick** will forward his info to Marilyn to be combined with the data she is collating
- **Action – Marilyn** will bring spreadsheet to the next meeting
- Next step – finish entering data into SK Database, still need more info on how to get there.
- Action: Christy** will ask Zoann again if the Pacific Streamkeepers will input data into their data base as it does not seem user friendly. Also, ask Zoann again what do they use the data for.
- **Action – Jethro** to bring info from Dave Clough for review at next meeting (and re-email to the group)
- **Action – Jethro** will video the falls at Mallett and send to Dave Clough as per his recent request.
- **Action – Christy** to ask Lauren at RDN if the \$50 honorarium that Kyle received was for the entire group or if individuals are receiving the funds.

Streamkeepers Course

- this is being offered again in Nanaimo in the spring
- there is some interest for members to take this course again as a refresher (Bob and Jethro and ?), Christy thinks Natalie may also be interested. **Action: Christy** will bring info re: courses to the next meeting.

Rainy Season Survey Plans

- the group agreed we should try to do some actual baseline stream surveys in March, when we still have high water but we have warmer weather.
- possible survey spots:
 - Dick Brooke by North Rd
 - Goodhue by Golf Course
 - Goodhue at Carrie's property
 - Goodhue Commons
 - Winthuysen at Descanso Park
 - Mallett at Rooks
 - Coats Marsh

- survey priorities for our group = how much water; what is the baseline of the creek and habitat now so you can monitor any changes due to future development; water quality is just a snapshot in time so may not be a priority for now?
- Mallett might be priority given the healthy status now and possible development in future, we need to get a baseline first AND then work on restoration. **Action** - speak to Dace Clough about next steps.
- **Action: Jethro/All?** has Winthuysen baseline assessment been completed?
- **Action: ALL** decide on survey plans at next meeting; we will use spreadsheet Marilyn brings to help us decide what has been done and what needs to be done

- **Action – Christy** to ask Zoann if she ever does field visits to help with survey methodology. Determine name of woman that taught a session at the Community Workshop.

GaLTT reporting and AGM: GaLTT has requested a Streamkeepers report before their upcoming AGM (Feb 3rd). **Action: Chris** will complete a summary of what we have been up to this year. **Action: Nick** will send Chris info and report from the work he has been doing (ie. flow rates and rainfall 2 x week). **Action – Christy** will make a thank you card/letter to give to GaLTT before the AGM. She will send to the group to review on email before the AGM. ALL welcome to GaLTT AGM, guest speaker will be from 7 – 8 pm and will be a streamkeepers groups from Campbell River speaking about their experience. **Wed Feb 3, 7-9 pm at the Haven, Pheonix Auditorium**

School Programs – **Action -- Chris and Christy** will lead a program at Coat's Farm tomorrow January 22nd. **Anyone** interested in helping with aquatic invert collection and ID and basic stream walk are welcome to join them at 9:30 am. More programs being planned for Grade 7 and Grade 5 Junior Streamkeepers.

Commons Biomapping – Winter Solstice – we tried 3 times and were weathered out or could not access equipment. Nick did some sampling though. **Action – Nick** to send info to Bob and **Bob will** forward to the Commons.

Mandate/Vision/Executive – the discussion regarding revisiting the Mandate and Vision of the group and whether or not to create an Executive (treasurer, secretary etc) has been postponed until the next meeting.

Public Event Planning – TBD next meeting

Next meeting: Thursday Feb 18, 7 pm at the WI Hall

Next Meeting

- revisit Action Items from last meeting - all
- inventory of assets - Nick
- data report and review of SS by Marilyn
- GaLTT AGM report – Chris
- report back from PSK - Christy

- survey plans for March
- Mandate/Vision/Executive discussion
- public event planning
- school program updates
- other? ◇