



**Litter Intelligence
Minutes Data Governance Group Y3M4**

DATE: Thursday 28 January 2021

TIME: 10:30 am - 11:30 pm

Attended: Emma Hill (DoC), Heike Schiele (PPPC), Camden Howitt (SC), Shawn Elise Tierney (SC), Carla Fonseca Paris (*minute notes*)

Apologies: Amanda Valois (NIWA), Christine White (KNZB), David Harris (StatsNZ), Rick Leckinger (BATK).

ACTIONS For Next Meeting

ACTION	Owner	Status
Confirm if TORS require signatures (besides approval).	Shawn Elise	Done: they do not require signature. At this link.
Share the Facebook group link to members.	Carla	Done
Data Governance remembers to approve and second the previous meeting minutes (via email before they are published)	Carla to circulate again via email	Amanda approved and Heike seconded
Enter the new approved keyword into the Litter Intelligence app.	LI team	Done
For Heike and Amanda to discuss stormwater and freshwater methodology offline and then update the group.	Heike and Amanda	Done
Camden to follow up on David possible participation at the UN conference.	Camden	Done
To ask NZ STATS How do we include data submitted to the ad-hoc feature for data visualization.	SET	Done
For all members to agree on the best platform to use for the next meeting	Carla to confirm before next	Done. Microsoft Teams



	meeting	
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Meeting Starts: 10:32

Discussion: Carla (the New Litter Intelligence Programme Administrator introduced herself to the participants

1. Review of Actions:

Discussion: Actions reviewed

ACTION	Owner	Status
Circulate TOR for signatures by members.	SET	Done & At this link.
Methodology session for stormwater/freshwater monitoring	Heike/Amanda /Cam	In progress
Discuss how to go about survey verifications at next methodology catch up	Cam/Amand/Heike	In progress
Ask Developers to quote a “is this a re-audit?” tick box for ad-hoc to use for QAQC. Also explore the best way to link re-survey to original.	SET	Pending for next Sprint.
Share QAQC spreadsheet.	Amanda	
Circulate QAQC document for approval from everyone before operationalising.	SET	Done & At this link.
Circulate ‘Proposal on survey area set up’ methodology change over email for final comments and approval.	SET	Done & At this link.
Invite everyone to Facebook Citizen Scientist group	SET	Done & At this link
Include in CitSci training to add dumping food or organic items in the comment field	SET	In process.
Design new version of data sheet, update categories/keywords, and circulate.	SET	Updated & At this link.
Brief and quote edit audit data functionality with developers.	SET	Done \$25-50k.

Discussion:

- Camden update on the action items from last meeting:



- TORs have been approved but not physically signed. **Action: Shawn Elise to confirm if they require signatures.**
- Tech work: The tick box for ad-hoc to use for QAQC has been quoted but it won't progress due to budget.
- Document for QAQC is now available in the Litter Intelligence website, on About page, [Methodology](#) section.
- Camden invited all members to join the Citizen Science Litter Intelligence Facebook Group. **ACTION: Carla to share the Facebook group link to members.**
- Edit Data functionality developer cost is high and unlikely to be done at this stage.

2. Review / Approve Minutes from Last Meeting

Discussion:

- Minutes from 28th of September Data Governance meeting could not be approved as not enough members attended today's meeting. It was agreed that the approval was going to be requested by email. Carla emailed all members on the 1st of February 2021. Amanada replied with her approval (1 Feb 2021). **Action: Data Governance remember to approve and second the meeting minutes before they are published (Carla to circulate again via email)**

[LINK TO MINUTES HERE](#)

3. Review of Current Methodology and Litter Categories:

1. Methodology Change Proposals

- a. Proposal on survey area set up [at this link](#) shared at last meeting. Document now includes further clarification per discussion with DOC, which is included here. Accepted as "Passed" by DGG.
 - i. When setting up a new survey area, the debris aggregation zone of the beach being surveyed is the area we are aiming to focus our survey effort on.
 - ii. The debris aggregation zone is defined as the area of beach between the beach head (as defined in UNEP guidelines) and the lowest strandline on the beach.
 - iii. If the aggregation zone is less than 20m wide, the survey area should follow the contour of the beach head along the length of the survey area
 - iv. If the aggregation zone is wider than 20m, the survey area should be located along the length of the beach spanning the



width of beach with the highest litter debris aggregation using a visual assessment to determine the most suitable location. Note that an historic knowledge of the site helps to inform this decision as the debris aggregation will likely be different at different times of the year/tidal cycle.

- v. Maximum survey area width is 20m.
- vi. All repeat surveys are to be conducted at exactly the same start and end point as marked in the app.
- vii. First survey width should be replicated for all repeat surveys to a maximum width of 20m.

Discussion:

- Camden thanked Emma for the input and that has been included in the survey area set up.

2. Category & Keyword Review

- a. Categories and keywords have been renamed and moved based on the decisions made at the previous meeting.
- b. **Want to request any changes? Refer to this document** and add in your comments in the column with your organisation name before the meeting. Make sure you're on the first tab, aptly named "**Feedback on this tab**"

Discussion:

- Camden reviewed the "keyword additions" with the members present. The suggested keywords were approved for inclusion into the app. Shawn Elise highlighted that these keywords will not be included in the paper version of the LI survey/audit material until a new batch of material needs to be ordered/printed. This motion was proposed by Shawn Elise and seconded by Camden. **Action: Enter the new approved keywords into the app.**

3. Hazardous Items (Heike's request to discuss)

- a. **Heike to add background information here.**
- b. Asbestos awareness card [at this link](#)
- c. Health & Safety brief [at this link](#).
- d. Health & Safety template [at this link](#).
- e. Asbestos recorded in the app as [at this link](#).

Discussion:

- Heike made the executive decision to follow Litter Intelligence programme Hazardous Items methodology

4. Quality Assurance and Quality Controls



- a. Reminder that approved QAQC for beach litter monitoring are available on the LI website here: <https://litterintelligence.org/about/>
- b. SC has started work on beach litter re-surveys and re-audits as per QAQC process.
- c. When QAQC for stormwater and freshwater are available, SC will publish these here to improve data transparency/rigor.

Discussion:

- Shawn Elise explained the validation / error methodology, it consists of 1) re-surveying a site again with the same people right after the first survey to identify if any litter that was missed by the first survey. 2) Also the audit is done again by recounting and reweighting again in simultaneous tables (to confirm weight and numbers). This data is then reported.

4. Freshwater / Stormwater Methodologies

- a. PPC / NIWA update on progress to align methodologies.
- b. When these are finalised, SC will publish these on LI website to improve data transparency/rigor.
- c. Strategy for training rollout -- discussion on initial thoughts including any existing plans.

Discussion:

- Camden mentioned that Amanda / NIWA has been working on QAQC methodology for Freshwater surveys.
- Heike explained there have been issues in finding places where to put the traps for stormwater surveys: the size of the litter traps is not suitable for some catchments and vary greatly in size and shape. Another challenge is working with a wide range of departments engaged in looking after the storm water system. They also have to submit traffic management plans and this can be a great challenge. Heike mentioned that they are not sure they wish to continue but since it's early days there will be more discussion when more data is collected.
- Heike sent a proposal for Amanda in freshwater sampling to do more QA and QC. Purpose of data is different for behavioural change and data reporting. They require different levels of data rigour for data collection/ sorting/ recording. Heike also shared that doing monthly or quarterly Freshwater data collection could be challenging, so flexibility with survey frequency will need to be agreed on.
- Heike discussed that since dried samples weigh less they need to engage with the public to make them aware of this. For behavioural change / education however the weighing is done on the same day. Heike commented that since there is only one data point in the LI app at the moment the "litter density" is not "meaningful" for freshwater data to be displayed in the website



and asked if this could be switched off. Camden noted that this is accurate, but is high because there is only one data point -- with more data points this average would likely reduce significantly. Heike asked if for stormwater this value might also not be meaningful, Camden said that for stormwater there isn't a good methodology for standardising the drainage area (they are hard to measure consistently), so for stormwater, the units are 'items per catchpit'. He discussed the possibility of the user to select the value that they want to use to standardise their data with a drop down menu, but this would require further investment in technology if decided upon. Camden also clarified that this way of standardising data to 1,000m² was used by other groups and explained that this value provides numbers of litter that are more meaningful -- particularly when filtering the dataset down to individual product categories, Camden used as an example that 5 items in 1000 m² instead of 0.5 in 100m² is easier to visualise. Camden asked Heike if providing a drop down menu that could be tailored with different density areas would be preferable. Heike mentioned that she and Amanda are in communication around finalising the standardisation between their stormwater and freshwater methodologies. She will include discussion of the display units (1000m² vs 100m² vs user-selected) in this conversation. **Action: For Heike and Amanda to discuss methodology standardisation offline and then update the group.**

5. Governance

No updates.

6. Platform/Technology Updates:

1. Insights Page redeveloped, view [at this link](#). Budget to integrate stormwater/freshwater insights/filtering approx \$15-20k.
2. First Freshwater Survey on website, view [at this link](#).

Platform/Technology Future Updates:

1. Team is currently testing new functions before release, including:
 - a. Tooltips across the app
 - b. User improvements, such as viewing own completed surveys within the app and "Completed Surveys" on the Monitoring Group page
 - c. LI website has a button to login to the app
 - d. Volunteer hours instead of citizen scientists displayed on the website
 - e. Admin Dashboard & functionality improved, including automating reports
 - f. The Admin can determine, in the Admin Platform, which litter items must have AI photos uploaded (intended to be the "Other" types).

Discussion:

- Shawn Elise shared the [insights](#) page that has been developed, and showed the new LI webpage filters for data visualization. Shawn Elise also shared



with the participants the data visualization for the first Freshwater Survey data point done on the 14th of December 2020. SC will facilitate a press release when there is more data and at least one stormwater data point entered, to promote this advancement publicly

- Shawn Elise shared that UAT testing of new features being built in is being taken by the LI staff members and this feedback will be sent to Enlighten before the release of the new functions. When the new features are revised and are ready to be released there will be an official launch advertised that will be shared on the newsletter, via Facebook and the LI webpage.

7. General Business:

1. **NEW ITEM (Added SC 27 Jan):** United Nations Statistical Commission “Better Data Better Lives” Virtual Conference (15 Feb side event) > StatsNZ to speak?

Discussion:

- Camden would like to see StatsNZ to present the programme at the United Nations Statistical Commission “Better Data Better Lives” Virtual conference. This Conference is aimed at reporting Sustainable Development Goals (SDGs) for National Statistical Officers. **Action: Camden to follow up on David possible participation.**
- Shawn Elise mentioned that the way to treat ad-hoc data needs to be consulted with StatsNZ. If ad-hoc data should be allowed to be entered with the purpose of making this data available for reporting **Action: To ask StatsNZ How do we include data submitted to the ad-hoc feature for data visualization.** The Litter intelligence team feel that this data be available for use in training or practise.
- Shawn Elise shared that the methodology training (classroom component) will be delivered online via Zoom meeting or Videos. Part of this material has already been developed and there are videos available filmed with a 360 camera. Shawn Elise asked the participants if this online delivery seemed appropriate to the participants or if they have any objections to let our team know (also in line with the current COVID19 situation). Heike said that this is a common approach.
- Camden received a message from David indicating that he has problems accessing Zoom meetings and requested if the upcoming meeting could be scheduled via Microsoft Teams. Emma said she would be happy to use this other meeting software. Heike indicated that their team does not currently have access to Microsoft Teams and to please check with them before the next meeting. Another suggested alternative by Shawn Elise is Google Meets **Action: For all members to agree on the best platform to use for the next meeting.**

Meeting ends: 11:30