



## Litter Intelligence Data Governance Group (DGG) Stormwater Methodology Review Meeting Agenda

### Minutes Data Governance Group (DGG) Meeting 26 April 2022

**DATE:** Tuesday, 26 April 2022

**TIME:** 1.00 - 2:30 pm

**Attending:** Richard Leckinger (BATK), Ben Knight (SC), Christine White (KNZB), David Harris (StatsNZ), Jonathon Hannon (PPC/Massey University), Camden Howitt (Chair - SC), Carla Fonseca Paris (Secretary, Non-Voting - SC), Bella Herbison (Observer, Non-Voting - SC), Josh Borthwick (Observer, Non-Voting - SC)

**Apologies:** Shawn Elise Tierney (SC), Harry Allard (DoC), Amanda Valois (GWRC)

#### ACTIONS FROM THIS MEETING

ACTION	Owner	Status
TORs will be shared again via email for any comments. Please make comments in the document or email to Carla.	Carla/ Bella	Completed <a href="#">link here</a>
If no comments/changes are received, final ToRs will be circulated for all members to sign.	Carla/Bella	Pending signatures of Richard Leckinger, Amanda Valois, and Jordi Tablada
All DGG members provide nominations for the chair role via email to <a href="mailto:carla@sustainablecoastlines.org">carla@sustainablecoastlines.org</a> . Nominations open until Monday 16 May, after which we will circulate a poll for voting.	All	Ben to be interim chair
Add a snapshot of the results / progress to the next agenda.	Carla/Bella	Completed
StatsNZ to deliver a workshop/meeting with SC on data use and data quality	David/Ben	In progress
SC to discuss how to incorporate back of the beach recommendations into training/tech.	Ben	In progress
Coordinate with citizen scientists to run pilot 'lake beach' surveys, and circulate link to data and any learnings to DGG.	Ben	Completed
Jonathon to share freshwater training materials with DGG	Jonathon	Completed Link <a href="#">Here</a>
Investigate the cost for changing 'freshwater' to 'streams' across the LI platform	Ben	In progress
Send categories to Rick to share proportional numbers for categories that can't be merged between KNZB and LI. This data will be then shared with David for STATS NZ to	Ben	Not completed



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StatsNZ to deliver a workshop/meeting with SC on data use and data quality	David/Ben	In progress
SC to discuss how to incorporate back of the beach recommendations into training/tech.	Ben	In progress
Coordinate with citizen scientists to run pilot 'lake beach' surveys, and circulate link to data and any learnings to DGG.	Ben	Completed
look at next steps.		
Update litter categories and keywords on the paper data sheets, website and technology as per decisions made.	Carla/Bella	Completed <a href="#">link here</a>

**Meeting starts:** 1:05pm

Introductions:

- Bella Herbison new LI admin
- Ben Knight has taken the role as a LI Manager (Shawn Elise on maternity leave)

### 1. Review ACTIONS from the last Meeting.

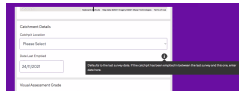
#### **Discussion:**

Cam gave an update on all pending actions from the two previous DGG meetings (held in September and October 2021) as shown on the tables. Action updates are included in the table (with the corresponding links and information). Other items that require further action are included in this agenda.

**PREVIOUS ACTIONS from Stormwater Methodology meeting (21 October 2021):**



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ACTION	Owner	Status
Check that photo metadata is stripped from the file, to secure privacy of information for all Stormwater photos taken	Shawn Elise	Done. SET emailed Enlighten to ask/reply <a href="#">HERE</a> files don't have any meta data
Scope tech development costs / solutions to add a checkbox in the stormwater app to indicate when there is litter overflowing in a trap.	Shawn Elise	Pending on budget / To arrange meeting with Enlighten in the future
Investigate adding wording on when traps are removed to 'Date Last Emptied' tooltip.	Shawn Elise	Done. Tooltip says "Defaults to the last survey date. If the catchpit has been emptied in between the last survey and this one, "enter date here." 
Add to the next DGG meeting agenda a discussion about data ethics, privacy and sovereignty.	Carla	Done. Included in agenda
The stormwater methodology document will be finalised incorporating all changes/comments agreed by DGG and the final designed version will be made available for the public.	SC/Camden	Done. Completed/shared via email to all DGG members
Start the new approved survey verification process and add change to changelog on the website.	SC/Shawn Elise	Needs further tech dev budget.
Include "Unidentifiable fragments" category discussion/clarification in the next DGG meeting agenda.	Carla	Not progressing at this stage.
New keywords accepted by DGG will be added to the LI app, to the LI dog record and the website.	Carla	Done
Send a doodle poll to schedule the next meeting.	Carla	Done

### ACTIONS from DGG meeting (15 September 2021):

ACTION	Owner	Status
<b>Freshwater Methodology:</b> Provide a clear definition for "stream bank". Shawn	Amanda / Don	Don emailed comments on this



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Elise and Carla to follow this up.		<a href="#">LINK</a> . He suggests for Amanda to provide guidance. On agenda
Scope tech needs & cost for including the real area surveyed of the stream (only bank, or bank plus stream) and any other stormwater site-specific information required.	Shawn Elise / Camden	1- DGG to define what are the tech needs. On Agenda 2- Pending on budget/ proceed to meeting with Enlighten
Discuss what tech and metadata needs to be captured for Freshwater and Stormwater surveys in the next DGG meeting.	Shawn Elise/Camden	On Agenda
Add to the methodology a definition of the purpose of the document. Include that Health and Safety will be delivered as part of official training.	Shawn Elise	Completed. Documents here: - <a href="#">Summary of all Methodologies pdf file</a>
After the inclusion of the training/purpose clause SC to circulate the Methodology document with the additional clause to request all DGG members provide written comments on the document before final approval of version 1.0.	Shawn Elise / Carla /Cam	Approved. Carla added the new documents in the agenda under item 4
<b>Stormwater Methodology:</b> Circulate privacy statement	Shawn Elise	<a href="#">At this link</a>
Include permission required and consents (private landowners, traffic control) as part of the training for stormwater surveys.	Shawn Elise	Discussing as part of stormwater training development.
Discuss and define the wider area dimensions for visual assessment and photographs to be entered into the app. SC (Shawn Elise) to include these instructions on the document and in the training.	DGG / Shawn Elise	Discussing as part of stormwater training development.
Shawn Elise to communicate with Monique from Tread Lightly that the photo requirement is preferred to record any changes observed.	Shawn Elise / Monique (Tread Lightly)	Discussing as part of stormwater training development.
Circulate a Doodle poll to schedule a follow-up meeting to complete the revision of the stormwater methodology.	Carla	Completed
Share updated terms of reference for meeting membership for Year 4.	Camden	<a href="#">LINK here</a>
Share via email the revision of Categories & Keywords and any other agenda item pending that can be	Shawn Elise/Carla	Completed.



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covered via email.		
Share via email Survey Verification Proposal for approval	Shawn Elise/Carla	Completed. Proposal <a href="#">at this link</a>

**Pending items from previous meeting not covered due to time (15 September 2021)**

AGENDA ITEM	Owner	Status
<b>Methodology Clarifications / Proposals</b> <ul style="list-style-type: none"> <li>- How do we standardise the definitions for “Back of Beach” (captured in survey area metadata). Interested in recommendations from DOC.</li> <li>- How to define “open coast” and “closed coast” survey areas. Interested in DoC’s recommendations.</li> </ul>	Don  Don	Don has provided advice via <a href="#">email here</a>  Done, as above.
<b>Quality Assurance and Quality Controls</b> <ul style="list-style-type: none"> <li>- FYI only: Initial QAQC results are with StatsNZ for review.</li> </ul>	Ben / Amanda	<a href="#">Data here</a> and <a href="#">commentary here</a>
<b>Geographic/bioregion spread -- Bioregions vs LINZ regions</b> For Operational planning, the SC team would prefer to operate using LINZ regions rather than bioregions, as per initial direction from DoC to set-up 12 sites for each of the 9 mainland bioregions. This will enable us to plan work with local stakeholders (like Councils, Kahui Ako/COLs, etc) and also work more smoothly with our tech platform. Does DOC support this shift? For discussion.	Don	Completed. Don has indicated via email that LINZ regions can be used <a href="#">email here</a>

**2. Review / Approve Minutes from Last Meetings:**

[Minutes for Data Governance Group \(15 September 2021\)](#)  
[Minutes Stormwater Methodology Review Meeting \(21 Oct 2021\)](#)

Approved: Ben Knight  
 Seconded: Christine White

**3. Governance:**

- a. **Updated Terms of Reference Year 4 (TORs):** [TORs YEAR 4 document here](#). Any changes or questions?
- b. **Nominations and Voting for Chair role.**
  - 1. Nominations. Any voting member can make a nomination, including self-nominations. Nominations do not require a second.
  - 2. Voting. To be conducted following nominations, either during this meeting



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or via email following. **To be discussed.** Notes on voting:

1. Election of the Chair requires a majority of those voting. If a majority is not reached, the incumbent Chair may remain in place or call for an additional election.
2. If only one member is nominated, the nominee will still need to receive a majority of votes cast to be elected. If no majority is reached, the incumbent Chair continues to serve until the next annual review of the DGG.
3. If two or more members are nominated for Chair, the member receiving a majority of the votes cast is elected. If there is a tie or no one receives a majority of votes cast, a second vote must be taken. Additional votes must be taken as necessary to elect one candidate. If no candidate is elected, the incumbent Chair continues to serve until the next annual review of the DGG.

### **Discussion:**

#### **Terms of Reference Year 4 (TORs):**

**ACTION:** Terms of Reference (TORs) will be shared again via email for any comments. Please make comments in the document or email to Carla/Bella

**ACTION:** If no comments/changes are received, final ToRs will be circulated for all members to sign.

#### **Nominations and Voting for Chair role:**

**ACTION:** All DGG members provide nominations for the chair role via email to [carla@sustainablecoastlines.org](mailto:carla@sustainablecoastlines.org). Nominations open until Monday 16 May, after which we will circulate a poll for voting.

#### **4. Membership:**

- a. **Department of Conservation:** Don Neale has changed roles within DOC and now Harry Allard will be joining the DGG meetings from next meeting onward.
- b. **Sustainable Coastlines:** Carla will be stepping down from the Secretary role and Bella will be taking her place from the next meeting. Welcome to Bella, who is observing today. Ben Knight takes Shawn Elise Tierney's role. Shawn Elise is on maternity leave.

#### **5. Quality Assurance and Quality Controls**

- a. Initial QA/QC results are with StatsNZ for review. [Data here](#) and [commentary here](#).  
**Update from StatsNZ.**

### **Discussion:**

David: The team at STATS NZ has received and the QA/QC data has been initially reviewed, however David himself has not yet due to other work demands and time constraints.

Ben proposed to coordinate a meeting or workshop with STATS NZ with the purpose of getting Stats NZ advice. David proposes to do a meeting/workshop at the end of May. He indicated that possibly 2 colleagues would be interested in facilitating a workshop for the use of data and data quality with SC. Jonathon said he would be interested in attending this workshop. It was also suggested by Cam that Amanda could be interested.

**ACTION:** StatsNZ to deliver a workshop/meeting with SC on data use and data quality (Ben/David)

Cam: LI data is being used as a proxy for one of the wellbeing indicators in Indicators Aotearoa.



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David: Shared that the Environmental Reporting Act is currently being reviewed. He also shared that there isn't any government database like the LI dataset. LI is the only dataset that Stats NZ is using that is generated by citizen scientists.

### 6. Beach Monitoring

- a. Standardise the definitions for "Back of Beach" (captured in survey area metadata). Thanks to Don (DoC) for providing recommendations. [Communication is here](#). SC team to incorporate into training and technology when capacity allows.
- b. [Summary of all Methodologies pdf file](#) final version (V1.6)

Cam: Would it be useful to see a snapshot of the results / progress under these sections (beach, stormwater, streams)?

David: Yes, keen to see monitoring progress.

**ACTION:** SC to add a snapshot of the LI results / progress to the next agenda (Carla/Bella)

**ACTION:** SC to discuss how to incorporate back of the beach recommendations into training/tech (Ben)

### 7. Stormwater Monitoring

- a. FYI [Stormwater Methodology](#) document final version version 03 Nov 2021
- b. [Stormwater hui](#): On Wednesday 16 March, we kicked off the development of a national stormwater litter monitoring training programme. This covered:
  - We mapped out the landscape of current/potential use of stormwater litter data
  - Identified the key knowledge points we would require trainers to know
  - Benefits of a standardised training programme for stormwater litter monitoring.
  - The working group has begun work on developing the content for the training programme, which will be hosted on a virtual learning management system. Some action items from previous meetings will be covered by this group.
  - Working group members: Stormwater 360, Mountains to Sea Wellington, Northland Regional Council, Tread Lightly, Nelson EnviroSchools, Greater Wellington Regional Council, NIWA.
  - [Streams and Stormwater](#): We had a previous action requesting detail on what meta-data is captured for Streams and Stormwater surveys in the admin platform. Current meta data fields are shown in the email correspondence at this [LINK](#).

#### **Discussion:**

Cam: LI secured funding from Auckland Council Healthy Waters to develop the training materials for the stormwater methodology. This information will be available in the LI online learning platform in the future (LMS). Implementing the training programme has not yet been funded.

### 8. Freshwater (Stream) Monitoring

- a. FYI [Stream Litter Methodology](#) document final version 03 Nov 2021
- b. [Streams](#): We are unclear on how best to define streambanks. Don Neale emailed some suggestions for stream bank definition on this [LINK](#), interested in further





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discussion/input.

- c. **(Ben) Lakes:** We have inquiries from groups wanting to do lake beach surveys. I would recommend the beach methodology is used in a lake front litter survey context given the morphology is largely the same but keen for DGG input into this?
- d. Sustainable Coastlines does not currently have funding to develop official training resources or deliver/support an ongoing training programme. Any ideas or linkages to funding are much appreciated.

### **Discussion:**

Cam: Acknowledged Jonathan and Amanda for leading the work on stream water monitoring methodology development. No funding has been granted for the training development nor for the rollout of the training programme.

Ben: In Te Anau a college has funding for SC to develop a monitoring programme for lakes. Ben believes that beach litter monitoring is an appropriate methodology to monitor lakes. However in the platform there is no data collection option (technology) for lakes meaning we cannot filter lakes from the beach when downloading data. He asked the DGG for advice: Can beach monitoring be used for lake monitoring?

David: Proposed to test if the use of beach methodology works for lakes (pilot this)

Ben proposes to submit data as 'Official', but record data in the 'Survey Area' name that is a LAKE survey. The survey will remain 'Unverified'.

David agrees this naming convention can help differentiate this data for analysis by STATS NZ and other users while technology is available not yet. This lake data should be a test and not verified in the database.

Ben: Tech development will be needed to be developed further to create filters that can include lakes.

**ACTION:** Coordinate with citizen scientists to run pilot 'lake beach' surveys, and circulate link to data and any learnings to DGG (Ben)

Jonathon: shared that PPC created a booklet (Freshwater monitoring training manual with their methodology at Palmerston) and a video as part of the 2021 plastic pollution project. This could be a starting point for upscaling nationally.

**ACTION:** Jonathon to share freshwater training materials with DGG

Cam: Amanda has suggested using the word streams instead of freshwater. Cam proposed to rename "freshwater methodology" as "streams". However, to progress this change the LI team will need to investigate the tech cost of this change.

**ACTION:** Investigate the cost for changing 'freshwater' to 'streams' across the LI platform

## **9. Terrestrial Monitoring**

- a. (Ben) Update in regards to KNZB and LI category concordance project

### **Discussion:**

Ben: LI started a concordance process for categories. Most categories match both KNZB and LI, however a small number of categories cannot be matched. How can we overcome the blockage? Ben and Christine (KNZB) proposed that where there are for example two LI categories and only 1 KNZB category, that the average proportion of items on each category in the LI dataset be used to split the KNZB data proportionally. For example KNZB has one category for non-plastic utensils while LI has two (Wooden Utensils and Metal Tableware). In this case the proportion of Wooden and Metal





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utensils in the LI data would be used to split the KNZB single category data into the two LI categories. David: Using the real material split on site is the most ideal response to this issue. The second option is to use proportions calculations (which is called a model) However, assumptions behind this calculation need to be put forward (example: one assumption is that this only applies to marine litter) Whichever the way use to make this categories concord, there will be uncertainties and LI needs to list these uncertainties (on whatever agreement made).

Rick: Can provide 6 years of terrestrial litter data to show proportion calculations for these categories, as has been using LI categories.

Ben: Proposes for David to advise LI on the best approach. David agrees to provide support.

**ACTION:** Send categories to Rick to share proportional numbers for categories that can't be merged between KNZB and LI. This data will be then shared with David for STATS NZ to look at next steps.

Jonathon: Is there a similar methodology to LI beach for terrestrial litter that captures all data across Aotearoa (not only public spaces for example)? It would be great to work into a strong litter picture in New Zealand.

Christine: Shared that the methodology (KBNZ) has been developed with sister orgs in Australia on their litter auditing.

Rick: BATK also adapted Australian methodology but changed categorisation to UNEP/LI.

### 10. Category & Keyword Review (Ben)

- a. New approved keywords (from last meeting) have been entered into the Litter Intelligence app.
- 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:**

Keywords and categories changes:

Ben: Remove the Category condoms RB07 and categorise condoms in the Sanitary items category instead. Condoms are a biohazard item LI propose category to be removed and the keyword "condom" added to the category "Other: sanitary item"

David: He would like to have the detail so it can be filtered for data analysis.

Cam: Indicated that all biohazards listed items can not be weighed, this could be an indirect way of filtering this data. He also shared that condoms do not have a significant weight in the litter audited, with a small amount of condoms recorded

This keyword change was approved by Rick and seconded by the DGG

Ben: move the keywords bubble wrap and shrink wrap from unidentifiable soft plastic PL07.02 to PL16: Plastic sheeting

Rick: shrink wrap should move (agreed). What about Cling wrap?

Ben: (answering Rick) It goes on its identifiable category

Ben: Remove keyword "rags" from CL.06 Other clothes

Ben: Other keywords suggested to be added: "carton" and "flavored milk" and "juice" to PC03.01: Tetrapack

Ben: Other keyword suggested to be added: "unidentifiable" as a keywords added to CL.06.01 for clarity in " unidentifiable cloth fragments" category

All changes were approved.

**ACTION:** Update litter categories and keywords on the paper data sheets, website and technology as



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per decisions made (Carla/Bella)

### 11. Data ethics, privacy and sovereignty:

Looking at this from an SC organisational perspective. No further updates for now.

### 12. Platform/Technology Updates

- a. Undertaking some improvements after Regression testing on 30 September 2021. Focusing on a few features to improve user experience, specifically when in low-service areas and the app is taking some time to load.

**Discussion:**

No development funding to improve the user experience on data use for now.

### 13. General Business:

- a. **All DGG members. Please add any agenda items here.**

Meeting ended: 2.32pm