Water Quality Data Analysis Tool - User Response – Option A

Welcome to the survey. Please ensure that you have opened the Instructions document and completed Step 1. The first three questions do not involve any interaction with the tool.

1 Please select the best description of your role as it relates to community-based water quality data (select all that apply).

☐ As a community member (1)

☐ As a volunteer (2)

☐ As a data analyst (3)

☐ As part of an environmental consulting company (4)

☐ As a representative of government/leadership (local, municipal, provincial, territorial, or federal) (5)

☐ As a scientist or researcher (6)

☐ As an outreach coordinator or other representative (7)

☐ Other (please specify) (8) _____

2 Please briefly describe your experience working with CBM data, and how often you typically encounter community-based water quality data.

_____

3 Please indicate the main motivations behind your/your community's/your organization's engagement with community-based water quality monitoring (select all that apply).

○ Personal interest (1)

○ Resource management (2)

○ Planning and decision-making (3)

○ Personal growth (4)

○ Scientific research (5)

○ Market research (6)

○ Environmental awareness (7)

○ Social or cultural motivations (8)

○ Other (please specify) (9) _____

4 If you/your organization/ your community collects water quality data, please describe the main motivations that drive the data collection.

_____

5 Do you have any specific questions that you would like an analysis of community-based water quality data to answer?

_____

6 Thank you for continuing with this survey. Please return to the Instructions document and continue with Step 3.

7 In/with your community/organization, do you typically deal with large data files?

    ○ Yes (1)

    ○ No (2)

    ○ It varies (3)

8 Select all the parameters from the following list that are regularly handled by your community/organization as part of the Community-Based Monitoring (CBM) process. This list is not exhaustive.

- ☐ Site Code (1)

- ☐ Site Name (long description) (2)

- ☐ Month (3)

- ☐ Day (4)

- ☐ Year (5)

- ☐ Time of Day (6)

- ☐ Method of Collection (7)

- ☐ Units (8)

- ☐ Latitude (any coordinate system) (9)

- ☐ Longitude (any coordinate system) (10)

- ☐ Method of Analysis (11)

- ☐ Waterbody Type (river, lake, stream, etc) (12)

----

9 Please indicate the most common file type(s) used by your community/organization for data management purposes (select all that apply).

- [ ] .csv (1)

- [ ] .xlsx (2)

- [ ] .txt (3)

- [ ] .jpeg (4)

- [ ] .png (5)

- [ ] .docx (6)

- [ ] Other (please specify) (7)

Water Quality Data Analysis Tool - User Response – Option B

Welcome to the survey. Please ensure that you have opened the Instructions document and completed Step 1. The first three questions do not involve any interaction with the tool.

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1 Please select the best description of your role as it relates to community-based water quality data (select all that apply).

- ☐ As a community member (1)

- ☐ As a volunteer (2)

- ☐ As a data analyst (3)

- ☐ As part of an environmental consulting company (4)

- ☐ As a representative of government/leadership (local, municipal, provincial, territorial, or federal) (5)

- ☐ As a scientist or researcher (6)

- ☐ As an outreach coordinator or other representative (7)

- ☐ Other (please specify) (8)
  _____

---

2 Please briefly describe your experience working with CBM data, and how often you typically encounter community-based water quality data.

_____

3 Please indicate the main motivations behind your/your community's/your organization's engagement with community-based water quality monitoring (select all that apply).

○ Personal interest (1)

○ Resource management (2)

○ Planning and decision-making (3)

○ Personal growth (4)

○ Scientific research (5)

○ Market research (6)

○ Environmental awareness (7)

○ Social or cultural motivations (8)

○ Other (please specify) (9) _____

4 If you/your organization/ your community collects water quality data, please describe the main motivations that drive the data collection.

_____

5 Do you have any specific questions that you would like an analysis of community-based water quality data to answer?

_____

6 Thank you for continuing with this survey. Please return to the Instructions document and continue with Step 3.

7 In/with your community/organization, do you typically deal with large data files?

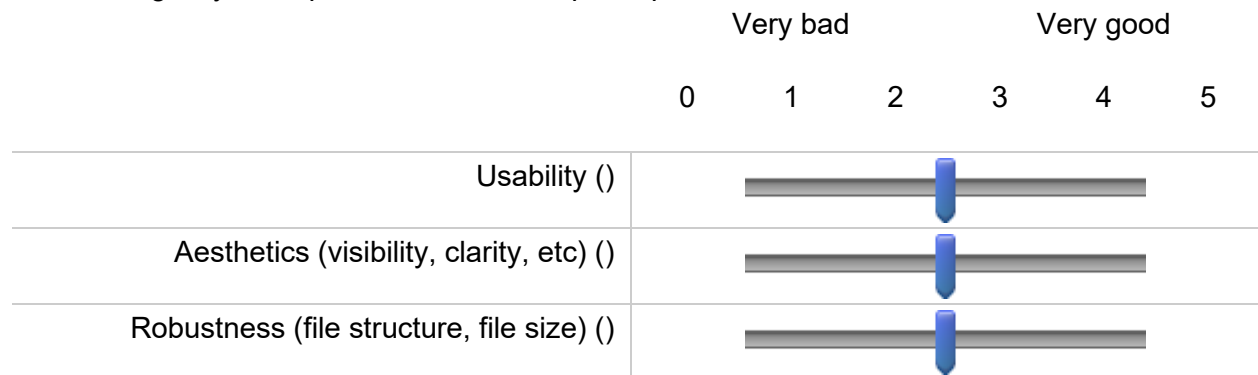○ Yes (1)

○ No (2)

○ It varies (3)

8 Select all the parameters from the following list that are regularly handled by your community/organization as part of the Community-Based Monitoring (CBM) process. This list is not exhaustive.

- [ ] Site Code (1)

- [ ] Site Name (long description) (2)

- [ ] Month (3)

- [ ] Day (4)

- [ ] Year (5)

- [ ] Time of Day (6)

- [ ] Method of Collection (7)

- [ ] Units (8)

- [ ] Latitude (any coordinate system) (9)

- [ ] Longitude (any coordinate system) (10)

- [ ] Method of Analysis (11)

- [ ] Waterbody Type (river, lake, stream, etc) (12)

----

9 Please indicate the most common file type(s) used by your community/organization for data management purposes (select all that apply).

☐   .csv (1)

☐   .xlsx (2)

☐   .txt (3)

☐   .jpeg (4)

☐   .png (5)

☐   .docx (6)

☐   Other (please specify) (7)

---

10 Please give your impression of the file upload process.

	Very bad			Very good		
	0	1	2	3	4	5
Usability ()						
Aesthetics (visibility, clarity, etc) ()						
Robustness (file structure, file size) ()						

---

11 Please describe any concerns your have with the data upload process. Do you have any suggestions for improvement?

_____

---

12 Thank you for completing Section 1. Please return to the Instructions document and proceed to Step 5.

13 Before completing this Section, please ensure that you have read and completed the steps outlined in Step 5 of the Instructions document.

---

14 Please select, from the following, the data quality/ data validation errors you have encountered through your experiences interacting with community-based water quality data, or with water quality data from other sources.

☐   Blank entries (1)

☐   Duplicated observations (2)

☐   Non-realistic values (3)

☐   Inconsistent naming conventions (for example, in terms of site names or codes) (4)

☐   Other (please describe) (5)

_____

---

15 Please describe any CBM data validation measures currently used by yourself, your community, or your organization.

_____

---

16 Please rank the following tool capabilities, as demonstrated in Step 5, in terms of their ability to address the questions you have for your water quality data.

	Not at all useful (1)	Slightly useful (2)	Moderately useful (3)	Very useful (4)	Extremely useful (5)
The ability to filter a dataset by date and value (1)	○	○	○	○	○
The ability to interact with a map (2)	○	○	○	○	○
The ability to identify unusually small or large values in a data set prior to analysis (3)	○	○	○	○	○
The ability to generate and download graphs based on your data (4)	○	○	○	○	○

17 The current version of the tool does not allow users to directly edit the file. Would this capability be beneficial?

○ Yes (1)

○ No, I would prefer to edit data outside of the tool (2)

○ Maybe, but I would have to see how it works (3)

18 Please describe any difficulties or concerns you experienced while navigating the Spatial Visualization page. Do you have any suggestions for improvement?

_____

19 Please describe any additional capabilities or displays that would help you better understand the spatial coverage and spatial patterns in your data - what are the important questions you would like to address?

_____

20 Thank you for completing Section 2. Please return to the Instructions document and proceed to Step 6.

End of Block: Section 2

Start of Block: Section 3

21 Before completing this Section, please ensure that you have read and completed Step 6 of the Instructions document.

22 Does your community/organization have a regular sampling schedule (eg once per month)?

○ No (1)

○ Yes, we try to (2)

○ Some sites are sampled more regularly than others (3)

○ I don't know (4)

23 How useful to you would be the ability to generate graphs like those shown in Step 6?

_____

24 Please discuss any questions you have for your data regarding its temporal coverage.

_____

25 Did you encounter any difficulty with the processes outlined in Step 6? If so, please describe.

_____

26 To address your concerns in the previous question, do you have any suggestions for improvement?

_____

27 Please rank the following aspects of the Temporal Coverage Summary Page

	Bad (1)	Neutral (2)	Good (3)	Very Good (4)
Ability to address the questions I have for my data (1)	○	○	○	○
Ability to provide relevant, actionable information (2)	○	○	○	○
Ability to be communicated to other groups/individuals (3)	○	○	○	○

28 Thank you for completing Section 3. Please return to the Instructions document and proceed to Step 7.

29 Before completing this Section, please ensure that you have read and completed Step 7 of the instructions document.

---

30 In general, do you think that graphic visualizations would help you/other stakeholders understand the collected data?

○ Yes (1)

○ Maybe (2)

○ No (3)

○ Perhaps, but it would be helpful to display the data in other ways too (4)

---

31 Based on your response to the previous question, please discuss or describe any means of communication that would help you or other stakeholders share and understand the collected data.

_____

---

32 In your community/ within your organization, how do you currently communicate and share the results of community-based water quality monitoring? Have you identified any particular challenges that this tool could eventually address?

_____

---

33 Please rank the following aspects of the Graphic Visualization Page

	Bad (1)	Neutral (2)	Good (3)	Very Good (4)
Ability to address the questions I have for my data (1)	○	○	○	○
Ability to provide relevant, actionable information (2)	○	○	○	○
Ability to be communicated to other groups/individuals (3)	○	○	○	○
Intuitiveness of the interface (4)	○	○	○	○

34 Which of the following graphic design interfaces would be best suited to the needs and preferences of your community/organization (select all that apply)

☐ Highly customizable graphs (1)

☐ Selectable templates of basic graph formats (2)

☐ Downloadable reports containing multiple graphics (3)

☐ Other (please describe) (4)

_____

35 Thank you for completing Section 4. Please return to the Instructions document and complete Step 8.

End of Block: Section 4

Start of Block: Section 5

36 Prior to completing this Section, please ensure that you have read and completed Step 8 of the Instructions document.

---

37 Did you encounter any difficulties during the completion of Step 8? If so, please describe.

---

38 How likely is this tool (or another version of it) to help facilitate collaboration and cooperation with your community/organization?

○ Very likely (1)

○ Somewhat likely - the general concept is good (2)

○ Not likely (3)

○ Unsure (4)

---

39 Do you have any suggestions to improve the tool's ability to assist in information communication and collaboration?

_____

---

40 Thank you for completing Section 5. Please return to the Instructions document and complete Step 9.

End of Block: Section 5