Lake Erie Rangers: Increasing Community Participation in Citizen Science 

# STEP 1

## Tool 1a: Scoping the Case for Investment

**Purpose:** Set the stage for your Case for Investment by identifying the purpose, methods, and constraints of the analysis.

**Used in:** Tool 1c, 8a

What to do: Answer all the questions in the document to scope your Case for Investment

1. **Purpose**

*Why is the Case for Investment evaluation taking place?*

The purpose of the Case for Investment for the Lake Erie Rangers is to provide an example demonstrating the value of conducting a Case for Investment for a CBWM group, and to communicate the value of the Lake Erie Rangers project to community members, funders, and partners involved.

1. **Forecast analysis or impact evaluation**

*Are you evaluating the impacts your program has had or will have?*

This is to evaluate the impact that the project phase will have.

1. **Guiding question**

*What is your Case for Investment question?*

What is the overall value (social, environmental, economic) generated from every dollar invested in the Lake Erie Rangers project?

1. **Thematic constraints**

*Are you evaluating the entire program or specific parts?*

Specific parts of the program. The initial phase of the Lake Erie Rangers was launched in 2021 in partnership with the Freshwater Alliance. In 2024, the Lake Erie Rangers project was the recipient of a $330,000 grant from the Canada Water Agency (CWA) under the Freshwater Ecosystems Initiative. This funding will support the three-year project Lake Erie Guardians – Increasing Community Participation in Citizen Science, running from 2024 to 2027. This business case for investment will focus on the expected impact that the most recent phase of the project will have.

1. **Geographic constraints**

*Which areas/regions does your Case for Investment cover?*

The Lake Erie Rangers project focuses on communities within the Lake Erie basin, specifically the north shore of the lake in the Niagara region and the western basin near Point Pelee.

1. **Evaluation period**

CWA Project phase: March 31, 2024 - March 31, 2027

1. **Timeline**

*What is the timeframe for conducting your Case for Investment work? Refer to the Eight Steps to Building a Case for Investment to support defining your timeline.*

Working days per week: 0.5

Step 1 - 2: February 12 - 26 (2 weeks)

Step 3-4: February 26 - March 12 (2 weeks)

Step 4-6: March 12 - March 26 (2 weeks)

Step 7-8: March 26 - April 9 (2 weeks)

1. **Resources**

*What resources do you have for the Case for Investment? Consider human, financial, and technological resources.*

Staff: Kiersten (Community Data Coordinator) supported by Praise (Community and Research Coordinator) and Gabi (Director)

Key resources: [LER ECCC Workplan](https://docs.google.com/document/d/1TPOM-uCU9skO6BdXUpw8QU42dZ57Hhf1KaZN-pWGdRw/edit?tab=t.0), [Key project activities (2024 - 2027)](https://docs.google.com/spreadsheets/d/1NY6nk9NivJQVkvijgLtcz6EIIwa3aOetLOTgGsw7pnA/edit?gid=0#gid=0), [Key performance metrics 2024](https://docs.google.com/spreadsheets/d/1C8oTlJKNVrn-7EvJIu04QlavXz8NVFv6GchTcsTXe7o/edit?gid=983556125#gid=983556125)

Supporting resources: Lake Erie Rangers shared drive, [Lake Erie Rangers project page](https://waterrangers.com/lake-erie-guardians/?srsltid=AfmBOooh_f0o5ACC53EvHGm4f9AL5W-EpJa_KMAl-mOZ_r3hQSnSzFjy&v=5435c69ed3bc), [Lake Erie Guardians (historic page)](https://waterrangers.com/projects/erie-guardians/?v=5435c69ed3bc)

1. **Analysis and Reporting**

*How will you analyze and share your results (e.g., detailed report, a presentation, or an interactive webinar, all/other)?*

All the tools in each step will be filled out and shared in the appendix of the CBWM Business Case Toolkit. A summary report may also be created and shared with the parties involved in the Lake Erie Rangers project.

1. **Other Issues**

*Are there ethical or cultural issues/protocols that need to be identified upfront?*

Data sharing should respect all OCAP and FAIR principles, as members of Indigenous communities may participate in the Lake Erie Rangers program. Also, the Lake Erie Rangers project is funded by the Canada Water Agency, and all information about the project should be transparent and publicly available.

## Tool 1b: The “Who” Matrix

**Purpose:** Identify who should be engaged in the development of the business case for your CBWM program, their degree of involvement, and consider what engagement tools to use.

**Used in:** Most steps in this guidebook have some aspect of audience engagement. In Steps 3 to 6, the audiences identified as Involving/Collaborating should be included in the analyses.

**How to use this tool:** Read through the introduction and fill out Table 4, Table 5, and write your engagement statement

### Engagement Spectrum

To help guide your approach, consider the following Engagement Spectrum, adapted to the collaborative nature of CBWM programs. This framework helps define each stakeholder's involvement level, how to engage them, and their potential influence on the program’s outcomes.

##

### Definitions

**Potential impact from program activities:** Refers to how much the CBWM program’s activities could affect a stakeholder’s well-being, interests, or operations. For example, communities located near water sources might experience direct benefits from the CBWM program. Similarly, organizations or agencies that rely on water data for policymaking or regulatory compliance might also be significantly impacted.

**Interest in the outcomes of the business case analysis:** Focuses on how invested or concerned a stakeholder is in the results and conclusions of the business case analysis. High interest might indicate stakeholders with strong motivations to influence or understand the outcomes because it directly relates to their priorities or strategic goals.

### Figure 3: Engagement Spectrum

| Potential Impact from Program Activities | High | Involve | Collaborate |
| --- | --- | --- | --- |
| Medium | Inform or Consult | Consult or Involve |
| Low | Inform | Inform or Consult |
| Low | Medium | High |
|   | Interest in the Outcomes of the Business Case |

### Engagement Levels and Definitions

**Inform:** Provide information to help stakeholders understand the Case for Investment and what it means for your CBWM program. This is for parties who may not be directly involved in the development of the case but should be aware of the business case’s progress and purpose.

**Consult:** Gather feedback on elements of the business case—such as information on inputs and activities, identifying benefits, and ranking the relative importance of benefits. This is for parties with a vested interest but without direct influence over decision-making.

**Involve:** Ensure that the perspectives and priorities of stakeholders are reflected in the business case. These parties may be involved in activities like evaluating the CBWM program’s outcomes or providing data to inform the case.

**Collaborate:** Actively work with stakeholders to co-create values and identify the benefits and costs of the CBWM program, incorporating their interests and priorities into the valuation. These parties will participate in the brainstorming sessions for the business case and the valuation and ranking activities.

### The “Who” Matrix

Use this matrix tool to determine “who” should be considered in the Business Case, and determine their level of involvement using the Engagement Spectrum.

### Table 4: “Who” Matrix

| **Partners, interested parties, or affected communities**  | **Type of Involvement** **F = Funder****R = Research****I = Implementation****O = Other** | **Potential Impact / Level of Interest** | **Priority Areas** | **Level of engagement (Inform, Consult, Collaborate, Involve, Empower)** |
| --- | --- | --- | --- | --- |
| *Lake Erie Rangers volunteers* | *I* | *High impact / Medium interest* | *Community involvement, ecosystem health*  | *Collaborate* |
| *Niagara Coastal Community Collaborative* | *I* | *Medium impact / High interest*  | *Community involvement, ecosystem health* | *Involve* |
| *Indigenous communities* | *I* | *Medium impact / High interest* | *Community involvement, ecosystem health* | *Consult* |
| *McMaster University* | *R* | *Medium impact / High interest* | *Scientific accuracy, technological development*  | *Consult*  |
| *Lake Erie Volunteer Science Network* | *O* | *Medium impact / High interest*  | *Community involvement, ecosystem health*  | *Consult* |
| *Swim Drink Fish* | *O* | *Medium impact / Medium interest* | *Community involvement, ecosystem health* | *Consult* |
| *Canada Water Agency (CWA)* | *F* | *Low impact / High interest* | *Supporting community-based science, ecosystem health* | *Inform*  |
| *Ministry of Conservation and Parks (MECP)* | *F* | *Low impact / High interest* | *Supporting community-based science, ecosystem health* | *Inform*  |
| *Niagara College* | *O* | *Low impact / Medium interest* | *Education, community involvement* | *Inform*  |
| *Essex Region Conservation* | *O* | *Low impact / Medium interest* | *Ecosystem health, regulations* | *Inform*  |
| *Niagara Peninsula Conservation Authority* | *O* | *Low impact / Medium interest* | *Ecosystem health, regulations* | *Inform*  |
| *Private industry/ business* | *O / F* | *Low impact /* *Low interest* | *Business and investment* | *Inform* |
| *General public / community members* | *O* | *Low impact /* *Low interest* | *?* | *Inform* |

**Questions to consider**

* *Who are the parties that are interested in, affected by, or targeted in the Case for Investment?*
* *Whose values, objectives or perspectives are important in this context?*
* *How do they think about impacts or investment?*
* *What are their key interests and priorities?*
* *Why does their involvement matter, and how important is it that they are involved?*

### Engagement methods and tools

The engagement methods you choose will depend on your stakeholders' needs and your organization’s capacity. You can use a range of approaches based on the level of involvement required, noting that lower levels of engagement (e.g., informing) can complement more intense engagement (e.g., collaborating).

### Table 5: Engagement methods and tools examples

|  | **Online Tools** | **Low-tech Tools** |
| --- | --- | --- |
| **Inform** | * Website updates
* Direct emails
* Newsletter updates
* Social media posts
 | * Community bulletins
* Fact sheets
* Informational briefings
* Brochures
 |
| **Consult** | * Surveys
* Polls
* Comment forums
* Social media discussions
 | * Focus Groups
* Interviews
 |
| **Involve** | * Online collaboration tools (Murals, Jam Boards, and Whiteboards)
* Interactive webinars
 | * In-person workshops
* Advisory sessions
* Community consultations
* Joint working sessions
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| **Collaborate** | * Co-creation platforms (Mural, Miro)
* Shared planning documents
* Virtual brainstorming
 | * Working Groups
* Advisory and Steering Committees
* Community-led sessions
 |

### Develop your engagement statement

Every engagement effort in building the business case should be underpinned by a clear statement of purpose, which describes:

* **Purpose of the Engagement:** Why are you involving the stakeholder?
* **Opportunities:** How can they help shape the business case?
* **Expected Outcomes:** What are the intended results from the engagement?
* **Stakeholder Role:** How will each party’s involvement shape the final business case?

**Example:** *“We are involving local communities to incorporate their experiences with local water quality into the development of the business case. Their input will help identify both the benefits of the CBWM program and the specific issues it seeks to address.”*

*“We are consulting with regulatory agencies to gather their input on compliance standards and to ensure that collected data is effectively used for environmental stewardship. Their feedback will help align our water monitoring program with regulatory requirements, enhancing credibility and securing regulatory support.”*

A strong engagement process has the following characteristics:

* **Meaningful and Transparent**: Ensure stakeholders understand how their input will shape the business case and what the expected outcomes are.
* **Inclusive and Intersectional**: Engage a diverse range of voices, particularly from underrepresented groups.
* **Accessible**: Use clear, concise language and accessible formats so that all stakeholders can participate meaningfully.
* **Culturally Appropriate and Respectful**: Ensure that engagement is sensitive to the local cultural context.
* **Provide Relevant and Timely Information**: Ensure all parties receive the necessary information to contribute effectively.
* **Build Stakeholder Capacity**: Help stakeholders develop the knowledge and skills they need to meaningfully engage in the process.

**What is your Engagement Statement? Write your engagement statement here:**

We want to incorporate the perspectives and experiences of various stakeholders in this business case. Input from local and Indigenous communities, volunteers and academic institutions will help identify both the benefits of the CBWM program and the specific issues it seeks to address. Regulatory agencies and the private sector will be informed of the business case for investment in CBWM.

## Tool 1c: Workplan and budget

[Google sheet](https://docs.google.com/spreadsheets/d/1fEun0kIjPnqYmm-w5ZWE__0UihZX4rOU/edit?usp=sharing&ouid=106947320299978318094&rtpof=true&sd=true)

