Project Title
STREAMED – A community-based online water clarity monitoring tool
This question is read only.

Please provide a short summary of the work that was completed as part of this project / research *
Community groups who monitor water clarity of their local waterways now have an online platform and tool for entering and storing their data and for the wider community to understand it. "Streamed.co.nz" will help to improve awareness and understanding of the health of waterways, promote the efforts of community groups and encourage other groups to connect with the health of their waterways and undertake monitoring.

The Streamed website gives water quality monitoring a purpose and a platform for community-driven communication and targeted action. The interactive tools on the website will allow users to better visualise the bigger picture and determine some possible solutions for better long-term management. Streamed can be used by community groups, schools and by regulatory authorities to take an evidence-based approach to waterway management and improvement.

Describe the 'who, what, where, when and why' of your initiative

Timing

Is your project / research complete? *
◉ Yes ○ No
If your initiative is still in progress, pick 'no'

Start Date
01/02/2018
Finish Date
31/08/2020
Must be a date.
Must be a date.

Milestones

What have been the major steps / stages (i.e. milestones) involved in delivering your initiative to date?

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Description</th>
</tr>
</thead>
</table>

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| Develop the structure for the website, and design/populate key pages for phase 1 | The complete website structure has been developed using ArcGIS Hub. We were able to develop this in-house and have the ability to edit and maintain the site.

A Streamed brand has been developed and design parameters have been establish for all website pages.

Key pages as well as additional website pages have been populated. |
|---|---|
| Analyse existing six-year water quality data set to determine environmental triggers, graphing requirements, and summary statistics. | The six-year water quality dataset from the Cashmere Stream Care Group has been analysed and added to the Streamed website.

Environmental triggers for water clarity have been determined and graphing requirements decided on.

Graphical representations of the data have been developed and linked with the data in real-time. The graphs are interactive and help the viewer to interpret the data within a wider context.

Summary statistics are displayed on the website and can be viewed for a number of different variables and parameters based on what the viewer choses to view. |
Other milestones achieved beyond funding from Internet NZ

Using ArcGIS Online as the secure spatial database, and ArcGIS Hub site has been setup for Streamed and is publicly accessible.

Water quality datasets from two additional monitoring groups have been analysed and added to the Streamed website.

Online data entry forms have been developed that autopopulate the database and the maps and graphs in real-time.

Existing data has been added to the database and interactive graphs and maps have been developed that visualise the data in various ways including over time, compared with other sites, compared with the catchment landuse etc.

The Cashmere Stream Care Group have been trained to enter data into the database and have begun entering data.

There is interest by at least two additional groups to set up a new community monitoring group linked with Streamed.

Regional Councils have expressed interest in sharing links to Streamed and utilising the data for complimentary monitoring.

Using Google Analytics we are able to evaluate site use.

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**Outcomes**

**What outcomes were generated as a result of this project / research?**

Outcomes are the changes that have occurred for the beneficiaries of your initiative. Generally outcomes can be framed as an increase or decrease in one or more of the following:

- Skills, knowledge, confidence, aspiration, motivation, (these are generally **immediate** or short-term outcomes)
- Actions, behaviour, change in policy (these are generally **intermediate** or medium-term outcomes)
- Social, financial, environmental, physical conditions (these are generally **long-term** outcomes)

Immediate outcomes occur directly following an activity (e.g. within 1 month); intermediate outcomes are those that fall between the immediate and long-term (e.g. between 1 month and 2 years); and long-term outcomes are those we expect to see years later (e.g. 2, 5, 10 or 50 years after the activity).
We also want to learn more about how you tracked the outcomes of your initiative - what you measured and how.

If you need more help understanding what outcomes are, read the help sheets at www.ourcommunity.com.au/evaluation

List your initiative’s outcomes and attached information in the following table. Leave blank any fields that do not apply to your project.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Were these outcomes anticipated?</th>
<th>Timeframe</th>
<th>Indicator</th>
<th>Verification Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased accessibility to community water clarity data</td>
<td>Anticipated</td>
<td>Immediate</td>
<td>Data is publicly available online instead of on paper datasheets</td>
<td>online data displayed</td>
</tr>
<tr>
<td>Greater community understanding of local water clarity</td>
<td>Anticipated</td>
<td>Immediate</td>
<td>Graphical representations of data</td>
<td></td>
</tr>
<tr>
<td>Community groups are able to enter their monitoring data online and for real-time display of graphical interpretations to be displayed</td>
<td>Anticipated</td>
<td>Immediate</td>
<td>Community group member entering data</td>
<td>online data entry</td>
</tr>
<tr>
<td>More groups wanting to undertake water clarity monitoring</td>
<td>Anticipated</td>
<td>Intermediate</td>
<td>New community groups</td>
<td>Meetings</td>
</tr>
<tr>
<td>Empower communities to take an evidence-based approach to action for their local waterway</td>
<td>Anticipated</td>
<td>Long-term</td>
<td>Action taken for waterways using the data on Streamed</td>
<td></td>
</tr>
</tbody>
</table>

Outcomes are the changes that you believe were generated or influenced by your initiative. See information above.

<table>
<thead>
<tr>
<th>Choose from the list</th>
<th>Choose from the list (see description above)</th>
<th>What you used to measure this outcome - e.g. 'change in teenage pregnancy rates from x to y'</th>
<th>e.g. survey; interviews; focus groups</th>
</tr>
</thead>
</table>

What (if anything) did you change in your approach and practices as your project research proceeded, and why? *
We changed the development of the website and database from a custom development to using an existing software package (Esri ArcGIS) that is well supported and user-friendly. We may use this information to help inform others undertaking similar work.

**What did you learn as a result of undertaking this project/program?** *

More time was required to develop the functions of the website that converted the data into graphs that help people to interpret it.

We are particularly interested in lessons that may help others undertaking similar work. Think about what you learned about your inputs (money, skills, personnel, time - too much; too little; about right?); your assumptions (were they 100% right, only partly right, or were the results a complete surprise?); and the context of the project/program (timing; targeted beneficiaries; geographic settings - were they right; wrong; about right?)

**How will you share your learnings from this project/research?** *

Give presentations to councils, community boards, community groups and schools about Streamed.

Talk with other groups about setting up a group on Streamed and train them in monitoring.

Have the website link shared on regional council websites.

What mediums were used to share the learnings? Have you reached the audience you expected?

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**We'd love to see some visual and audio representations of your work. Please share below.**

**Upload files:**

*No files have been uploaded*

and/or

**Provide web link:**

*http://www.streamed.co.nz/*

Must be a URL

and/or

**Provide additional details:**

Please include captions, if relevant

**Can we use your media content in our own communications?**

◉ Yes ○ No ○ Please contact us first\n
e.g. in our annual report

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**Financial Report**

* indicates a required field

**Project Income & Expenditure**

Please provide details of any project income (funds received) and project expenditure (funds spent) to date.
Use the 'Notes' column to provide any additional information you think we should be aware of.

### Income and Expenditure Totals

<table>
<thead>
<tr>
<th>Income Description</th>
<th>Income Type</th>
<th>Confirmed Funding?</th>
<th>Income Amount ($)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOS Ecology</td>
<td>Other Income</td>
<td>* Confirmed</td>
<td>$136,000.00</td>
<td>In-kind contribution</td>
</tr>
<tr>
<td>Internet NZ</td>
<td>Other Income</td>
<td>Confirmed</td>
<td>$20,000.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditure Description</th>
<th>Expenditure Type</th>
<th>Expenditure Amount ($)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of website,</td>
<td>Salaries and Wages</td>
<td>* $156,000.00</td>
<td></td>
</tr>
<tr>
<td>analysis of data,</td>
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<td></td>
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<tr>
<td>creation of spatial</td>
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<td>database and online</td>
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<tr>
<td>data entry forms and</td>
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<tr>
<td>other staff time</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

### Income and Expenditure Totals

- **Total Income Amount**: $156,000.00
  - This number/amount is calculated.
- **Total Expenditure Amount**: $156,000.00
  - This number/amount is calculated.
- **Income - Expenditure**: $0.00
  - This number/amount is calculated.

**Have you experienced any issues with your intended project budget to date? If so, please explain reasons for any major variances or for providing incomplete information:**

We had anticipated funding from additional sources in order to achieve the outcomes for Streamed however after five unsuccessful funding applications, EOS Ecology decided to undertake the project inhouse and provide staff time as inkind funding.

### Certification and Feedback

**Feedback**
You are now nearing the end of this form. Before you review your application and click the SUBMIT button please take a few moments to provide some feedback. (If you would rather provide anonymous feedback, please go to {{ Grantmakers: provide a link to an anonymous survey or delete this sentence }})

Please indicate how you found the acquittal process:
○ Very easy  ● Easy  ○ Neutral  ○ Difficult  ○ Very Difficult

How many minutes in total did it take you to complete this form?
80
Estimate in minutes (i.e. 1 hour = 60 minutes)

Please provide us with your suggestions about any improvements and/or additions to this form that you think we need to consider:
The financial report did not really fit our particular situation, so hopefully what is entered is OK.