Grant reference number:	#CP170036
Name of recipient and contact details	EOS Ecology Shelley McMurtrie shelley@eosecology.co.nz
Name of organisation (if applicable)	EOS Ecology
Title of project/research	STREAMED - A community-based online water clarity monitoring tool
Amount of funding received	\$20 000 (Internet NZ Fund) \$18,680 (in-kind support from EOS and KuWT)
Budget details	List a breakdown of any expenditure to date and compare it with your expected expenditure  NOTE: only those phases funded by Internet NZ are included here.  Phase 1 milestone 0: Initial programme development. \$9750 (100%) funded by EOS/KUWT. COMPLETED  Phase 1 Milestone 1: website structure and populate key pages for phase 1. \$11,345 (100%) funded by Internet NZ Fund.  • no progress on this milestone as we have decided that we first need to complete Milestone 2.  Phase 1 Milestone 2: data analysis of community water clarity data to dtermine triggers, graphing and summary stats to present. \$8,300 (100%) funded by Internet NZ Fund.  • EOS Staff Hours: 47 (114% of budgeted 41 hrs, which exceeds the amount covered by Internet NZ Fund)  • KuWT Services: No expenditure as first need to have undertaken analysis in house.  • Volunteer hours: 25 volunteer hours to enter remaining hard copy data into the dataset prior to data checking and analysis. This was not accounted for in the original project budget.  Phase 1 Overall Management: Overall project management. \$355 (3%) funded by Internet NZ Fund, \$1980 (18%) funded by

EOS staff hours: 3.5 (6% of budgeted hours, which exceeds the 3% coverage by Internet NZ Fund) Have you achieved what you expected to achieve and with this spend? (If "No", please provide more details) We would like to be more progressed but it took longer than expected to collate the existing data from the Cashmere Stream Care Group. As there was significant data yet to be entered, which we hadn't envisioned, a volunteer offered to enter the data from the Group, but was only able to do this at a certain time, which meant there was an extended time to obtain the entered data set. Given the large size of the dataset, it then took longer than expected to collate the data and check the data. There was also a surprising number of data entry errors and disparities (from the data entry into excel by the group and/or data entry by the group into the original hard copy forms) that we needed to clear up. What it did do however, was to reconfirm the importance of the STREAMED programme, where the app and online forms will rid us of all the problems of data entry and hard copy data sheets. Please account for any areas of overspend or underspend. We have spent more time than allocated on the data analysis portion of the programme, and still have more analysis to do, for the reasons given above. Timeline update How far along your timeline are you? Are there any significant changes to your timeline? We are not as far along as we would like as we have been spending more time trying to get funding for the rest of the STREAMED programme. In addition, it has taken some time to obtain the existing data records, collate them and check them for validity prior to analysis. However, we see no reason why we cannot still meet the final deadline of November to complete the Internet NZ funded portion. Achievements to date Please outline your positive outcomes We have collated and started to analyse a dataset with over 4000 entries – this is an astounding community monitoring dataset to have and will mean that the graphing and interpretation that we can develop from it will be well advanced. We have had positive indications that we will receive some funding from Environment Canterbury in the next financial year (i.e., after June 2018). This will allow us to complete another milestone within Phase 1 of STREAMED. Difficulties to date Please outline any difficulties you've had so far and how you're

	managing them  We have found it difficult to secure sufficient funding to complete the planned STREAMED programme (ie phase 1 and 2). However, we are continuing to apply to funds. By having the programme broken into milestones we can apply for funding for specific milestones within the wider programme, which makes is better for funders with less finances.
Findings/learnings to date	What are you learning? What findings have you made so far?  We discovered a large number of errors and disparities in the existing community water quality dataset (i.e. the Cashmere Stream Care group's data) that forms the existing dataset for the initial phases of STREAMED. We have resolved these issues during our 'data analysis'milestone (Phase 1 Milestone 2), but it has also helped to further cement the need for STREAMED — an online and portable app for the entry of water clarity monitoring data - as it will effectively resolve all these data entry and hand written data recording errors. It has also been useful for the community group to see this as well, as they value even more the potential for the STREAMED app.
Do you anticipate their being anything mediaworthy in your project/research*	Any outstanding discoveries, good-news stories or unique work (in your opinion?) *Please note we may use this information in a media release.  Ideally to make the most of a media release we would like to have at least been able to complete Phase 1 of STREAMED, which requires securing additional funding. We currently have a short fall of \$26,551.50