

Final report template for Community Projects and Internet Research - to be sent to gertrud@internetnz.net.nz on the date specified in your contract

Grant reference number:	PRS2201600006
Name of recipient	<i>Corrina Gestro-Best</i>
Name of organisation (<i>if applicable</i>)	Westland Rural Education Activities Programmes Inc. (WestREAP)
Title of project/research	Community Project: WiFi Connection for Bruce Bay in South Westland
Amount of funding received	\$35,086.50
<i>Budget details</i>	<p>Budget with expenditure to date Attached</p> <p><i>Have you achieved what you expected to achieve with this spend? (If "No", please provide more details)</i></p> <p>As reported at mid-point, we exceeded the budget anticipated for 'in-kind' donations and community support. Weather conditions and the remoteness and altitude of the location where the main poles were positioned in South Westland (Bruce Bay) meant that planned activity in building the structure at Karangarua Ridge was delayed, this had a knock-on effect on concrete and helicopter flights. However, the community absorbed the cost themselves, as willing and excited as they were to see the internet capability in their community.</p> <p><i>Please account for any areas of overspend or underspend.</i></p> <p>The expenditure of funds received to date is as expected. There is no under or overspend of funding allocated.</p>
	<p><i>How far along your timeline are you? Are there any significant changes to your timeline?</i></p> <p>With the support of Chorus in upgrading the school internet at Fox Glacier school outside of their normal work schedule for South Westland, we were able to complete the South Westland project as close to time as weather and isolation conditions allowed. The day scheduled for the launch of the Internet in South Westland was achieved albeit with a little creative time management support on behalf of the community – it was a very dramatic and exciting launch as the men working on the Mountain range were unable to be collected at the appointed time as weather conditions closed in – the helicopter was forced to fly to alternative route and the team walked to meet it. As a result, the helicopter landed in a field beside the hall halfway through the presentation and two WiFi Connect executives arrived wet, bedraggled and looking nothing like a team of ISP providers. It appealed to the community as they gave their presentation fresh from the top of a mountain.</p>

	<p>One of the team had connected a shore signal cellular network on his way in the door and asked in the middle of the keynote for people to turn on their cell phones if they had them. The moment when 20 phones all went off ringing different tones at the same time, the local police officer heard his work-phone ring for the first time and it was communications calling to see that he was safe as his phone had been 'out of range' for some time and was now suddenly active – was priceless. People were crying; as they took photographs of the children, and of the WiFi Connect team and the party going on in the Bruce Bay hall – then sent them to friends and family, using technology they had never had access to at home.</p> <p>All household and business installations in South Westland were completed well before the completion of the project.</p>
<p>Achievements</p>	<p><i>Please outline your positive outcomes</i></p> <p>Installation of Equipment (Receivers, Transmitters and Routers are all in place) – by Bruce Bay Community Centre Te Tauraka Waka a Maui 4 Bruce Bay Businesses 25 Households Are all connected</p> <p><u>Reported at mid-point</u></p> <p>Further negotiation to complete an installation of equipment at a new Power Station being built around Fox (in the Cook Saddle area) that will deliver power, wifi and cellular service to those parts of the Fox community, farms and isolated communities that we were not able to include in the connection to Karangarua Range. The additional work in is progress now to be completed along with the final launch of the WiFi feed from Fox Primary School through the whole area.</p> <p><i>This work was completed by September 2017 in excess of the planned project. This increased the number of installations and the range of connectivity northward to Franz Josef, into the Cook Saddle area.</i></p> <p><u>Reported at Mid-point</u></p> <p>WiFi Connect with Te Runanga o Makaawhio will begin to walk through a process of investment partnership with Development West Coast to achieve this phase of delivery to South Westland.</p> <p><i>This work was abandoned as the National RBI Phase 2 was announced and the work was to be undertaken by Vodafone and Crown Fibre Holdings who will now erect towers throughout the South Westland area to connect main centres. Work is to be completed by 2023. Crown Fibre Holdings are currently negotiating with WiFi Connect to deliver WiFi access to remote farms and communities in South Westland including Haast and Jacksons Bay, and north to Paringa.</i></p> <p>In addition; WiFi Connect has formed a partnership with JV Electronics in South Westland. JV has access and arrangements with both DOC and the Crown with regard to high sites capable of holding structures and equipment for radio that has been in place since Coal Mines,</p>

	<p>Forestry and SAR had a requirement to develop communication in the remote black-spots. When the work was abandoned as the industries closed or moved away, JV had the sites but lacked the technology knowledge to create a more updated solution to the lack of communication in those areas. Following media coverage of the launch of the WiFi solution in South Westland, JV made contact with WestREAP and we were able to connect the two organisations. Their work is now in partnership delivering to communities and remote locations on the West Coast that will not be accommodated under the terms of the RBI roll-out.</p> <p>Further; WiFi Connect has employed 3 technicians locally; 2 having been trained by them to maintain and develop the technology in place and installations into homes.</p> <p>Further; West Coast Tasman Police has begun a pilot project using the WiFi Connect structures in both South Westland and a new initiative North of Hokitika (built with JV Electronics at Mount French) to install shore signal systems into strategic spots along the Marsden Valley where a Black Spot prevented access for Search and Rescue. The work will be rolled out in the East Coast. This interest has come as the sole charge police officer based in Haast covering the area to Fox Glacier was able to connect via the WiFi Connect System with both phone computer. It was recognised as the new infrastructure was placed at Mt French which services a further 80 homes in the Marsden and Mitchells Valleys that a similar concept could be used to find a solution to the remaining black spot issue on the West Coast. When the NZ Police recognised that WiFi Connect was based also in Tairāwhiti, it was decided to explore the areas of Uruwera and Kaiangaroa in a similar way. WestREAP is not involved in that part of the project.</p>
Difficulties	<p><i>Please outline any difficulties you've had so far and how you're managing them</i></p> <p>Reported at mid-point. Difficulties related more to weather conditions and the difficulties we expect in moving material around our remote locations. The communities and the WiFi Connect team were able to work together to resolve minor issues. Chorus came in to support the installation and switch on of the additional infrastructure in South Westland. Community organisations and agencies stepped up to encourage community leaders to get involved and support the project as they recognised the benefits to their clients, learners and collaborative partners. Chorus used the opportunity to develop practice they would use during the upcoming UFB work in Westland.</p> <p>There have been a couple of fierce storm in the area during the Spring season that have 'taken out' the internet for brief periods of time, locals report the WiFi team have been able to restore connection within 24 hours mostly by remote – the one occasion that didn't happen was caused by a complication with Chorus equipment feeding into the structure, not the structure itself. The word is that while</p>

	<p>there may still be outage – these are not as frequent, nor are they as catastrophic as they have been in the past.</p>
<p>Findings/learnings</p>	<p><i>What are you learning? What findings have you made so far?</i></p> <p>We cannot underestimate the life changing effect on people gaining access to communication. We continue to hear positive feedback about the installations.</p> <p>With the new team (3 technical staff, one administrator and a collaborative partner in electronic equipment) in place in Westland, more installations are being completed in areas we hadn't previously identified as being affected. People can afford the new technology.</p> <ul style="list-style-type: none"> • This has been significant for families living and working on remote farms, it has enabled farmers to attract and retain good staff as they are less isolated now they have access to the technology to maintain contact with family living away. • It has supported the development of small businesses for young families who are able to live and work on their own land at home. Tourism industry opportunities have been taken up, WestREAP has supported this growth by brokering opportunities for new businesses to build their resources in; online administration, bookings, web and social media design and in managing health and safety for their business. • Families are taking up the opportunity to purchase new technology for the home that is enabling them to complete online learning for themselves and their children, keep abreast of news and weather information and maintain contact with family and friends around the world. • The WiFi has enabled families and households to access shore signal mobile technology and VOIP systems that are more reliable for them than the previous system they had where it was dependant on unreliable and slow technology that was more expensive to maintain. • We heard the story of a West Coast provider from the Department of Internal Affairs who was travelling South to work and came upon a serious accident involving a tourist family in a van. She was surprised and relieved to find that as she automatically reached for her cell phone, thinking that she would be out of range – she had access to a shore signal from the area and was able to contact emergency services easily. <p>Local businesses in Bruce Bay have had cause to work through the issue of seeing campervans and tourist numbers increase as people found their technology going off as they drove through the community. One family were against leaving the technology available in the community hall citing; increase in vehicles parking along the road outside of her lodge and blocking traffic coming in or being a danger to local children by reducing visibility. They insisted on disabling the technology each day so that there was no consistent free signal that would create a pattern of freedom camping in the grounds</p>

	<p>of the community hall.</p> <p>The community resolved it by posting signage stating ‘No Freedom Camping’ and promoting free internet for the tourist community between given times and opening up the library offering coffee and cake with the proceeds going to support community events. Over time the issue settled down and the local community are reporting no issues with traffic danger or exploitation.</p> <p>We have delivered Practical Computing classes in the community for local people who have never participate before and have (until now) appreciated being in an environment where there was no internet. We introduced them to social media, online trading and movies. They’re now buying and selling; hobby crafts, collectables, trading skills and joining interest groups. We’ve had requests to come back with our bus and deliver more internet programmes, we’ve introduced people to online study, Te Kura and extra-mural tertiary education and to Ted Talk!</p> <p>We are invited to the wedding of a young couple who met in the Rotorua as the young local man travelled up to learn to carve. His partner couldn’t work or study or keep contact with her family from South Westland and the two would travel back and forth, most often living apart. With the new technology in town, the young woman has picked up two, part time roles in administration; supporting the growing cultural tourism business, managing the bookings, manaakitanga and the website and making sure the WiFi Connect team are on top of installations and maintenance of the equipment in the South Westland community.</p> <p>A group of young men from the community have returned home from around New Zealand and wider, bringing new skills and energy to the marae community. They are engaged in building the cultural tourism business with the iwi o Makaawhio on their land (carving, weaving and caring for the marae) and in hunting and fishing guiding as well as engineering (contracting for local farms and industries). The four are living in Bruce Bay caring for a family lodge business while their cousin and her whanau have moved South to Haast to manage another iwi led business.</p>
<p>Do you anticipate their being anything media-worthy in your project/research*</p>	<p><i>Any outstanding discoveries, good-news stories or unique work (in your opinion?) *Please note we may use this information in a media release.</i></p> <p>South Westland is always ‘Media ready’. The people in the community are humble, but the changes they have made, and the benefits identified in the communities from Fox Glacier to Bruce Bay in the short time since the internet was connected have been powerful. WiFi Connect continues to maintain a watching brief on the community and visits occasionally to keep in touch. Largely, the work is handled locally. It will be interesting to see how the future of the project works out in South Westland as the remaining communities will now be serviced by other mainstream providers.</p>